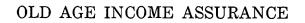
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A COMPENDIUM OF PAPERS ON PROBLEMS AND POLICY ISSUES IN THE PUBLIC AND PRIVATE PENSION SYSTEM

SUBMITTED TO THE

SUBCOMMITTEE ON FISCAL POLICY

OF THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

Part IV: Employment Aspects of Pension Plans



DECEMBER 1967

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LETTERS OF TRANSMITTAL

DECEMBER 14, 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 part IV, "Employment Aspects of Pension Plans," of the compendium of papers 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 13, 1967.

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

DEAR MR. CHAIRMAN: Transmitted herewith is part IV, "Employment Aspects of Pension Plans," of the compendium of papers on problems and policy issues in the public and private pension system, entitled "Old Age Income Assurance."

Part IV deals specifically with employment aspects of programs as these relate to labor mobility and employment opportunity and contains 14 papers contributed by invited specialists. The subcommittee is indebted to these authors for their excellent contributions which we believe will add much to a general awareness of the issues in retirement income policy, particularly as these relate to old-age and survivors' insurance and tax programs. The time and learning devoted to the preparation of these papers should do much to stimulate interest and to assist in policy decisions concerning future programs for old-age income assurance.

Dr. Nelson McClung, consultant to the subcommittee, is responsible for the planning and preparation of the compendium, with the editorial assistance of Anne McAfee, and the advice and suggestions of other members of the committee's professional staff.

As the executive director's letter indicates, the compendium should not be viewed as an expression of views or conclusions of the committee staff, nor should it be viewed as an expression of views of the subcommittee or individual members.

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

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

DEAR MADAM CHAIRMAN: Transmitted herewith is part IV, "Employment Aspects of Pension Plans," 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 the 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 IV contains contributions by the authors listed below. The

Part IV contains contributions by the authors listed below. The committee is indebted to these contributors who have given generously of their time and expertise to provide the latest available information and competent analytical perspective on this important subject.

Prof. Jack Barbash Mr. Harry Davis Prof. Hugh Folk Mr. Alan E. Fechter Mr. John M. Grogan Mr. William J. Howell Dr. J. J. Jehring Prof. Joseph Krislov Comdr. Allen J. Lenz, USN Prof. Melvin Lurie Mrs. Bette S. Mahoney Dr. Joseph J. Melone Mr. Walter P. Reuther

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National Foundation of Health, Welfare & Pension Plans, Inc.

The major work in planning and compiling this compendium was undertaken by Dr. Nelson McClung, consultant to the subcommittee, with the advice and suggestions of other members of the staff. He was assisted in the editorial work by Anne McAfee. Nothing herein should be interpreted as representing either the opinions of the staff or the members of the committee on any of the matters discussed.

JOHN R. STARK,

Executive Director, Joint Economic Committee.

OLD AGE INCOME ASSURANCE

Part IV: Employment Aspects of Pension Plans

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MANAGEMENT AND LABOR CONSIDERATIONS IN THE ESTABLISHMENT OF PRIVATE PENSION PLANS

BY JOSEPH J. MELONE*

The considerable interest evidenced in recent decades in this country in the problem of old-age income maintenance is attributable to many factors. Limited employment opportunities for the aged in a highly industrialized economy and the relatively low asset and nonpension income levels for many of the aged have combined to generate considerable interest in public and private pensions as mechanisms for oldage income assurance. Furthermore, improvements in longevity and shifts in birth rates in the 20th century has resulted in absolute and relative increases in the population of persons age 65 and over. In 1900, there were approximately 3 million persons age 65 and over, whereas there were about 18 million such persons in 1965. By 1975 and 1985, it is estimated that persons age 65 and over will number about 21 million and 25 million, respectively. The proportion of the U.S. population age 65 and over is currently about 9 percent, whereas the proportion of the population in these age brackets in 1900 was about 4 percent. The problem of old-age economic security, therefore, is of concern to an increasing number and percentage of the U.S. population.

Lastly, we should not ignore the impact that a sustained period of economic prosperity has had on interest in this issue. Fiscal and monetary policy questions, in a partially managed economy, the economic capacity to provide higher levels of old-age income assurance, increased concern in an affluent economy with the well-being of nonincome and low-income groups are factors that have directed our attention to this problem and to the various mechanisms designed to alleviate the problem.

One can undoubtedly add many additional reasons, or variations of the above points, in support of the significance of the issue of oldage economic security. However, further elaboration on this point is not fundamental to the analysis in this paper. Suffice it to say that the analysis here accepts the hypothesis that the problem of economic security for the aged is a serious and increasingly important problem.

RATIONALES OF PRIVATE PENSIONS

In the above discussion, the thesis was accepted that income security for the aged is a problem of significant proportions. However, the mere existence of the problem does not explain the phenomenal growth of private pension plans. The existence of the problem, while it is a necessary condition, is not a sufficient condition to account fully for the growth of these programs. Stated differently, given the existence

^{*}Research director, McCahan Foundation for Basic Research in Security, Risk and Insurance.

of the old-age economic problem, why did employees and employees choose to meet the need, at least in part, through the vehicle of private pension programs? 1

Many attempts have been made over the years to explain private pensions in terms of an underlying concept, rationale, or philosophy.² 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.

Some might express surprise that "social responsibility" is not included in the above list of rationales of private plans. The reasons for not including this alternative in the list are part semantical and part philosophical. The semantical problem derives from the lack of agreement as to the meaning of "social responsibility" as a rationale for these plans. For example, if the term means that such plans should contribute to the economic welfare of at least employees with relatively long periods of service with the employing firm, then all the above rationales incorporate some elements of a social responsibility criterion; this being particularly true under the human depreciation and deferred wage concepts. If the term means that macro or broad social welfare objectives should be the primary goals in the establishment and design of private pension plans, and motivations at the micro or firm level should be secondary, then it is my opinion that there would be philosophical objections on the part of most management people and a lesser, but still significant, number of labor leaders to the concept of social responsibility as the underlying rationale of private pensions. Many of the critics of private pension plans assume a set of plan objectives which is at variance, at least in degree, to the plan motivations at the level of the firm. It is little wonder, therefore, that there is such confusion in the current debate on this issue. More will be said on this point later in this paper. However, an awareness of this potential conflict in objectives is necessary to a fuller appreciation of the rationales and motivations offered below as explanations for the growth of private plans.

BUSINESS EXPEDIENCY CONCEPT

Early industrial pension plans were viewed as gratuities or rewards to employees for long and loyal service to the employer. Closely related to this view is the concept that private pensions constitute a systematic and socially desirable method of releasing employees who are no longer productive members of the employer's labor force. Regardless of the view taken, the fact remains that these early plans were largely discretionary, and management made it quite clear that employees had no contractual rights to benefits under the plan. Continuation of the pension plan was dependent upon competitive conditions and management policy. Furthermore, management reserved the right to terminate benefit payments to pensioners for misconduct on the part of the beneficiary or for any other reasons justifying such action in the opinion of the employer.

¹Major portions of this section and the following section of the paper are drawn from Joseph J. Melone and Everett T. Allen, Jr., *Pension Planning* (Homewood, Ill.: Richard D. Irwin, Inc. 1966). ch. 1. ²For an excellent discussion of pension philosophies, see Jonas and Mittelman, "The Vesting of Private Pensions" (Unpublished dissertation, University of Pennsylvania, 1959), ch. ii.

Thus, the growth of early pensions might be best categorized by a single concept: business expediency. 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.

HUMAN DEPRECIATION CONCEPT

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." 3 This rationale of private pensions has come to be known as the human depreciation concept. It was the point of view taken by the United Mine Workers of America in their 1946 drive to establish a welfare fund:

The United Mine Workers of America has assumed the position over the years that the cost of caring for the human equity in the coal industry is inherently as valid as the cost of the replacement of mining machinery, or the cost of paying taxes, or the cost of paying interest indebtedness, or any other factor incident to the production of a ton of coal for consumers' bins * * * [The agreement establishing the Welfare Fund] recognized in principle the fact that the industry owed an obligation to those employees, and the coal miners could no longer be used up, crippled beyond repair and turned out to live or die subject to the charity

of the community or the minimum contributions of the State.4 This analogy between human labor and industrial machines was also made in the report of the President's "fact-finding" board in the 1949 steelworkers' labor dispute in support of its conclusion that management had a responsibility to provide for the security of its workers: "We think that all industry, in the absence of adequate Government programs, owes an obligation to workers to provide for maintenance of the human body in the form of medical and similar benefits and full depreciation in the form of old-age retirement-in the same way as it does now for plant and machinery." 5 The report continues as follows: "What does that mean in terms of steelworkers? It should mean the use of earnings to insure against the full depreciation of the human body-say at age 65-in the form of a pension or retirement allowance." 6

³ Lee Welling Squier, Old Age Dependency in the United States (New York: Macmillan Co., 1912), p. 272 ⁴ United Mine Workers of American Welfare and Retirement Fund, Pensions for Coal Miners (Washington, D.C., n.d.), p. 4. ⁵ Steel Industry Board, Report to the President of the United States on the Labor Dis-pute in the Basic Steel Industry (Washington, D.C.: U.S. Government Printing Office. Sept. 10, 1949), p. 35. ⁶ Ibid., p. 65.

The validity of the human depreciation concept of private pensions has been challenged by many pension experts." The process of aging is physiological and is not attributable to the employment relationship. Admittedly, the hazards of certain occupations undoubtedly shorten the lifespan of the employees involved. In those instances the employer can logically be held responsible only for the increase in the rate of aging due to the hazards of the occupation. More importantly, the analogy between men and machines is inherently unsound. A machine is an asset owned by the employer, and depreciation is merely an accounting technique for allocating the costs of equipment to various accounting periods. Employees, on the other hand, are free agents and sell their services to employers for a specified wage rate. An employee, unlike a machine, is free to move from one employer to another. The differences between men and machines are so great that one must question the value of the analogy as a basis for a rationale of private pensions. As Dearing notes: "Any economic or moral responsibility that is imposed on the employer for the welfare of workers after termination of the labor contract should be grounded on firmer reasoning than is supplied by the machine-worker analogy."⁸

DEFERRED WAGE CONCEPT

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 are reduced accordingly. This theory of private pensions was expressed as early as 1913:

In order to get a full understanding of old-age and service pensions, they should be considered as a part of the real wages of a workman. There is a tendency to speak of these pensions as being paid by the company, or, in cases where the employee contributes a portion, as being paid partly by the employer and partly by the employee. In a certain sense, of course, this may be correct, but it leads to confusion. A pension system considered as part of the real wages of an employee is really paid by the employee, not perhaps in money, but in the forgoing of an increase in wages which he might obtain except for the establishment of a pension system.⁹

The deferred wage concept has also been challenged on several grounds. First, it is noted that some employers who pay the prevailing cash wage rate for the particular industry also provide a pension benefit. Thus, it can be argued that in these cases the pension benefit is of-

⁷ For example, see Dan M. McGill, Fundamentals of Private Pensions (2d edition; Home-wood, Ill.: Richard D. Irwin, Inc., 1964), p. 16. See also Charles L. Dearing, Industrial Pensions (Washington, D.C.: Brookings Institution, 1954), pp. 62-63 and 241-43; and Mittelman, op. cit., pp. 28-34. ⁸ Dearing. op. cit., p. 243. ⁹ Albert de Roode, "Pensions as Wages," American Economic Review, vol. III, No. 2 (June 1913), p. 287.

fered in addition to, rather than in lieu of, a cash wage increase. Second, the deferred wage concept ignores the possible argument that the employer is willing to accept a lower profit margin in order to provide a pension plan for employees. Third, it is sometimes argued that if pension benefits are a form of wage, then terminating employees should be entitled to the part of the retirement benefit that has been earned to the date of termination. In practice, one finds 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 This latter view of the deferred wage concept of private pensions. has sometimes been referred to as the wage differential concept; the differential in wage being paid to those employees who have presumably made an additional contribution to the economic well-being of the firm as a result of long-term service to the employer. The issue of vesting in the context of a deferred wage rationale of private pensions is commented on further in a later section of this paper.

In spite of the appeal of the deferred wage theory, it is questionable whether the private pension movement can be explained solely in terms of this concept. Indeed, there is probably no one rationale or theory that fully explains the "reason for being" of private pensions. This conclusion is not surprising in view of the fact that these plans are *private*, and the demands or reasons that give rise to one plan may be quite different from those leading to the introduction of another plan.

REASONS FOR GROWTH OF PRIVATE PENSIONS

The specific factors generally considered as having influenced the growth of private pensions are discussed below. It must be recognized that the reasons that give rise to the establishment of one plan might be different in the case of another plan.

INCREASED PRODUCTIVITY

A systematic method of meeting the problem of superannuated employees can be easily justified on sound management grounds. Practically every employee eventually reaches a point where, due to advanced 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 of 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. One, 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. For obvious reasons, this course of action is seldom followed by employers. Two, the employer can retain the superannuated employee in his current position and at his current level of compensation. The difference between the employee's productivity and salary is absorbed by the employer as a cost of doing business. This alternative is also undesirable. Such an approach would undoubtedly prove to be the most costly method of meeting the problem of superannuated employees. Furthermore, the longer range indirect costs that would be incurred from the resultant inefficiencies and poor employee morale among the younger workers would be, indeed, significant. Three, the employer could retain the superannuated worker, but transfer him to a less demanding job at the same or a reduced level of compensation. In the former case, the direct costs would be similar to alternative two, but the indirect costs would be reduced in that a younger and more capable person would now be staffing the more demanding position. If the employee's salary is reduced, the direct costs of superannuation would also be reduced.

Most employers who do not have a pension plan generally handle the problem of the older worker in the latter manner. The effectiveness of this approach to the problem has certain important limitations. First of all, a firm usually has only a limited number of positions to which aged workers can be transferred. For a larger or even medium sized firm, only a fraction of the superannuated employees can be efficiently employed. With automation and the increasingly higher levels of skill required in most jobs, the limitations of this solution are apparent. Furthermore, the superannuated employee is generally still overpaid in the less demanding jobs since, for practical purposes, reductions comparable to the decrease in employee productivity are seldom made. Lastly, 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. A pension plan permits employers to terminate superannuated employees in a humanitarian and nondiscriminatory manner. The inefficiencies associated with retaining employees beyond their productive years are, therefore, eliminated. Employees will know that they are expected to retire by a certain age, and they can make the necessary provisions for their retirement. Furthermore, the sense of security derived from the knowledge that provision is made, at least in part, for their retirement income needs should increase the morale and productivity of employees. Also, systematic retirement of older workers will keep the channels of promotion open, thereby offering opportunity and incentive to the young, ambitious employees—particularly those aspiring to executive positions. Therefore, a pension plan should permit an employeer to attract and keep a better caliber of employee.

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. Unfortunately, some employers assume that the pension plan solution is the only approach that carries a price tag. The hidden costs of the other alternatives must be recognized. 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.

TAX CONSIDERATIONS

The bulk of the growth in private pension plans has occurred since 1940. One reason for the growth of these plans during the World War II and Korean war periods was the fact that normal and excess profit tax rates imposed on corporations during these years were extremely high. Since the employer's contributions to a *qualified* pension plan are deductible for Federal income tax purposes, a portion of the plan's liabilities could be funded with very little effective cost to the firm. Furthermore, the investment income earned on pension trust assets is exempt from Federal income taxation.¹⁰

The tax advantages of qualified pension plans are even more impressive from the standpoint of employees covered under the plan. For example, the employer's contributions to a pension fund do not constitute taxable income to the employee in the year in which contributions are made. The pension benefits derived from employer contributions are taxed when distributed or made available to the employee. However, the employee is expected to be in a lower tax bracket when retirement benefits are received. In addition, under certain circumstances, lump sum distributions from a pension plan are taxed as capital gain rates rather than at ordinary income rates. Also, favorable estate tax treatment is accorded death benefits paid under a qualified plan.

Therefore, 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 decision 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. Lastly, tax advantages to employees are certainly one reason, although not the most important, why some labor leaders negotiate for establishment and liberalization of employee benefit programs in lieu of further wage increases.

WAGE STABILIZATION

The second wartime development that helped to stimulate the growth of pensions was the creation of a wage stabilization program as part of a general price control scheme. Employers, in competing for labor, therefore, could not offer the inducement of higher wages. Under these conditions, union leaders found it difficult to prove to their membership the merits of unionism. Therefore, 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.

UNION DEMANDS

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

¹⁰ For a complete discussion of the tax aspects of qualified pension plans, see Melone and Allen, op. cit., cbs. 5 and 6.

view that pensions represented an additional form of employer paternalism and were instituted to encourage loyalty to the firm. Labor leaders felt that the need would be best met through the establishment of a Government-sponsored universal social security system; and in the absence of that solution, unions should establish their own pension plans for their members. The former objective was achieved with the passage of the Social Security Act of 1935. By the 1930's, several unions had established their own plans. However, many of these plans were inadequately financed; a condition which became quite apparent during the depression years. Recognition of the financial burden of a pension program and enactment of wage controls led some labor leaders, in the early 1940's, to favor establishment of employersupported pension plans.

From 1945 to 1949 the rate of growth of new plans fell off markedly. During this postwar period, employee interest centered upon cash wage increases in an attempt to recover the lost ground suffered during the period of wage stabilization. In the latter part of the decade of the 1940's, union leaders once again began expressing an interest in the negotiation of pension programs. The renewal of interest in pensions was probably due to two factors. First, 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. The negotiation of fringe benefits was one way of possibly reducing pressures from this quarter. Second, 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 liberaliza-tions of social security benefit levels. Thus, pension demands became a central issue in the labor negotiations in the coal, automobile, and steel industries in the late forties. Although unions had negotiated pension benefits prior to this period, it was not until the late forties that a major segment of labor made a concerted effort to bargain for private pensions.

Labor's drive for pension benefits was facilitated by a National Labor Relations Board ruling in 1948 that employers had a legal obligation to bargain over the terms of pension plans. Until that time, there was some question as to whether employee benefit programs fell within the traditional subject areas for collective bargaining; that is, wages, hours, and other conditions of employment. The issue was resolved when the National Labor Relations Board held that pension benefits constitute wages and the provisions of these plans affected conditions of employment.¹¹ Upon appeal, the court upheld the NLRB decision, although it questioned the assumption that such benefits are wages.¹² The result of these decisions was that an employer cannot install or terminate or alter the terms of a pension plan covering organized workers without the approval of the authorized bargaining agent for those employees. Furthermore, management has this obligation regardless of whether the plan is contributory or noncontributory, voluntary or compulsory, and regardless of whether the plan was established before or after the certification of the bargaining unit.

¹¹ Inland Steel Co. v. United Steelworkers of America, 77 NLRB 4 (1948). ¹² Inland Steel Co. v. National Labor Relations Board, 170 F. (2d) 247, 251 (1949).

Labor was quick to respond to these decisions, and the 1950's were marked by union demands for the establishment of new pension plans, liberalization of existing plans, and the supplanting of employersponsored programs with negotiated plans. Undoubtedly, labor's interest in private pensions has been an important factor in the tremendous growth in plans since 1949.

BUSINESS NECESSITY

Employers hire employees in a free, competitive labor market. Therefore, as the number of plans increase, 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 if they are not convinced that the advantages generally associated with a pension plan outweigh the cost of the benefit. Admittedly, this is a negative reason for instituting a plan. In other words, these employers feel that there is little evidence that pension plans truly result in improved morale and efficiency among their work force; but they feel that there would clearly be an adverse employee reaction if they did not offer a pension. Also, in contrast to situations where a plan is established in response to labor demands, an employer may offer a pension plan as part of an employee relations objective of keeping the union out of the firm.

REWARD FOR SERVICE

There is a tendency to argue that employers never provide any increase in employee benefits unless they can expect an economic return in some form. Although this philosophy must prevail generally in a capitalistic system, the fact remains that 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.

EFFICIENCY OF APPROACH

Part of the growth of private pensions must be attributed to the fact that a formal group savings approach has certain inherent advantages. The advantages are not such that they eliminate the need for individual savings; but the merits of private pensions as a supplement to social security benefits and individual savings programs are indeed significant. First of all, the economic risk of old age derives from the fact that a point is reached when an employee is unable or unwilling to continue in active employment. A formal plan as an integral part of compensation arrangements and employment relationships, therefore, is quite logical. There is no additional wage cost to the employer to the extent that pension benefits are provided in lieu of other forms of compensation. If pension benefits are provided in addition to prevailing wage rates, the employer's extra wage costs resulting from the pension plan can generally be passed on to the consuming public in the form of higher prices. It has been argued that from a broad social point of view, the private pension system is the lowest cost method of providing economic security for the aged. 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. In other words, the burden of retirement security is spread over a large number of people and over a long period of time. The economic principle 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 would be borne by those individuals who would have inadequate retirement resources in the absence of pension benefits. Still another aspect to the argument is the assumption that private pensions increase consumption levels among the aged, which in turn helps to maintain a high level of economic activity.

Lastly, private pensions constitute a form of forced savings. This advantage is extremely important in view of the apparent desire of many people to maintain a relatively high standard of living during their active employment years. 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.

SALES EFFORTS OF FUNDING AGENCIES

For all of the above-mentioned reasons, there has been a considerable demand over the years for private pensions. However, in many instances, the advantages of these programs had to be called to the attention of specific employers. This function of creating effective demand for the pension product has been aggressively performed by those parties interested in providing services in this area. Insurance companies, through agents, brokers, and salaried representatives, were undoubtedly instrumental in the growth of pensions, particularly in the decades of the twenties and thirties. The trust departments of banks are also equipped to handle pension funds, and many corporate trustees have been actively soliciting pension business, particularly since the early 1950's.

MOTIVATIONS FOR MULTIEMPLOYER PLANS

Although a pension plan might be established for one or more of the reasons indicated in the previous section of this paper, it is pertinent to the discussion to note the motivations for establishing the plan on a multiemployer basis rather than a single-employer arrangement. Furthermore, 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 pensions.¹³

¹³ The following material on multiemployer plans is drawn from Joseph J. Melone. Collectively Bargained Multi-Employer Pension Plans (Homewood, Ill.: Richard D. Irwin, Inc., 1963), pp. 165–182.

A multiemployer pension plan is a plan which covers the employees of two or more financially unrelated employers. Pension contributions are payable into one common fund, and benefits are payable to all employees from the pooled assets of the fund. Plan assets are not earmarked or accounted for in terms of balances held on behalf of specific employers. The definition excludes so-called multiplant pension plans established by one employer. Also excluded from this definition of a multiemployer plan are those joint plans established by a parent corporation and one or more of its subsidiaries. Nor does the definition include situations in which employers pool pension contributions solely for purposes of greater investment diversification. A common trust fund operated by a corporate trustee for pension and profit-sharing plans is not considered to be a multiemployer plan. Lastly, the discussion in this section is limited to negotiated multiemployer plans, since the bulk of these plans have been established as a result of collective bargaining.

Arguments Favoring a Multiemployer Arrangement

FROM STANDPOINT OF EMPLOYER

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. An important function of the union in some industries is the maintenance of uniform labor costs. For example, in the garment and hosiery industries the wage differentials of the nonunion shops create significant competitive problems for the unionized segment of the industry. Employers have on occasion supported, with financial assistance, union organizing activities to help equalize labor costs in these trades. In the negotiation of a pension benefits the same emphasis on a uniform contribution commitment can be expected to prevail.

Differentials in employer contribution rates may be justified under various circumstances, although such differentials are the exception rather than the rule. For example, the admission of a new employer to the group may result in a disproportionately high increase in plan liabilities. Also, where the initial participating employers have borne the full impact of the organizational costs, adjustments in the contribution commitments of new employers may be in order to minimize the possibility of adverse selection. Contribution differentials may be necessary where the union cannot obtain a uniform rate because of differences in the economic position of various employers, or where bargaining occurs at differing time intervals. Of course, the financial obligation should vary if differences in benefit levels or eligibility requirements exist between employers.

It should be emphasized that the term "contribution rate" is not the same as "cost" in its broadest sense. The cost of the plan may be borne disproportionally by employers depending on differences in the cost characteristics of each employee group, delinquency or default in contribution payments, business failures of some employers, etc. Also,

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the current contribution rate may not be a proper reflection of the ultimate cost of the plan. Changes in contribution levels may be made on occasion, the impact of which may fall unequally on participating employers over time.

Adaptability to 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.

1. Expense Savings.—The rather large legal and actuarial expenses incurred at the inception of a pension plan do not increase proportionally with the size of the fund. A certain portion of these initial expenses would have to be duplicated in establishing individual plans for each employer.

A large plan can also benefit from the use of specialized and mechanized recordkeeping devices and procedures. However, some of the advantages of modern data-processing techniques are available to smaller plans through computer centers now operating in larger cities. The demand for administrative assistance has also given rise to service organizations known as plan administrators.

Potential expense savings in a multiemployer plan can easily be dissipated through poor plan management. Caution must be exercised particularly in regional and national plans. These plans must be careful to avoid duplicating local administrative activities at the regional or national level. If properly administered, the broader regional plan may effect savings in operating costs.

2. Wider Choice of Funding Instruments.—The combining of several employers into one plan results in a larger group of covered employees, and, therefore, a greater variety of funding instruments may be available. If the plan is to be insured, a multiemployer plan may qualify for a group-deferred annuity contract. The larger plans may be eligible for one of the types of deposit administration group annuity contracts.

Under single-employer plans the smaller companies desirous of insuring their pension benefits may be limited to individual policy contracts with their attendant higher expense component, or to group annuity contracts subject to a special administrative charge. In addition to the expense saving, more favorable investment opportunities may be available. The larger insured plans may permit greater investment flexibility of the nonallocated fund. Group pensions are now available that permit the investment of these funds in equities in amounts far greater than permitted for insurance company assets as a whole. Also, an increasing number of insurance companies credit investment income to the experience fund of group annuity contracts based on yields available on new investments at the time pension contributions are made. This is particularly attractive during a period of rising interest rates.

Certain advantages, due to size, are also enjoyed under noninsured plans. The corporate trustee's investment fee normally declines proportionately with the size of the fund. If an investment advisory service is utilized, its fee is relatively less costly in relation to a larger fund. Also, a larger fund permits greater investment diversification and fund liquidity, which might result in a more favorable rate of return. Banks and insurance companies are attempting to make some of the advantages noted above available to smaller plans. Small employers can participate in commingled trust funds operated by banks and trust companies. The funds may include either fixed income securities or common stocks, or both. With reference to insured plans, deposit administration contracts are increasingly being made available to relatively small-size plans.

FROM STANDPOINT OF UNION

Uniform Benefits.—A labor official may view uniform pension benefits for all union members as a desirable objective. Uniform benefits can be negotiated under single-employer plans, but the varying cost characteristics of individual employers lead to different cost commitments. A multiemployer scheme does permit both uniform employer contributions and uniform employee benefits, if that is what management and labor desire.

Not all employees benefit from uniform benefit plans. In some cases, higher benefits would be available to some employees under singleemployer plans. In at least one multiemployer plan, employees were removed from a more favorable company plan to participate in the newer joint plan. One union faced with this problem of having some members already covered in company plans gave the employees (as a group, not individually) of each employer the option to elect either the company plan or the multiemployer plan.

Portability of Pension Credits.—In most plans, employees accumulate pension credits for all employment with participating employers. More liberal service credit definitions may be based on employment in the industry or on years of union membership. 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.

The effectiveness of the above practice is somewhat limited, in that the transferability of pension credits is usually restricted to employment for participating employers. The provision becomes more meaningful in regional and national plans. Some unions have worked out reciprocity agreements which permit transfers of credits between various plans of the same union; a few plans permit transfers between plans of different unions.

The objective of portable pension credits can be achieved in singleemployer plans by providing full and immediate vesting of earned pension benefits. This latter solution does, of course, raise the question of cost to the employer to provide such a benefit. Furthermore, the high rate of turnover in certain industries, such as the longshoring and maritime trades, makes a full and immediate vesting provision administratively burdensome and costly.

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 suitable for the skilled trades. The employees have an investment in the training necessary to acquire the skill, and their income prospects are usually greater in that trade than in alternative employments in which they have no background. The union card then has significance, and these craftsmen are likely to remain in covered employment. This is not to say that multiemployer plans are undesirable in the unskilled trades. In some cases the unions have been successful in gaining favorable wage rates in basically unskilled jobs. The wage differential may be sufficiently attractive to encourage loyalty to the union and the occupation. Also, the absence of alternative employment to unskilled occupations. These factors may accourage attachment to unskilled occupations. These factors may accourt, in part, for the sizable number of long-service employees in the coal industry.

It was stated earlier that a multiemployer plan may be desirable in an industry marked by a high rate of business failures. Since the plan is likely to outlive many of the participating employers, this arrangement is advantageous, in this respect, for employees. This fact has led some persons to conclude that the employee has greater security under a multiemployer plan than he does under a single-employer plan. At best, this conclusion is true only if one assumes all other factors to be equal. But, the multiemployer arrangement may introduce other factors which have an important bearing on the security of pension benefits. Indeed, some pension observers believe that the practical implications of these plans have an unfavorable impact on pension security. Some of these latter views will be presented in the discussions that follow. The point will not be pursued further now. But, it is obvious that a generalization as to the security of pension benefits by type of pension arrangement is rather meaningless. However, the author does not wish to minimize the advantage to employees of a multiemployer plan in an industry marked by a high degree of business failures. The question of pension security, however, is a much broader issue.

Increased Control Over Plan.—Negotiated multiemployer plans are administered by a joint board composed of an equal number of employer and union representatives. 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 these plans, decisions on funding and investment matters are usually made by management alone. In multiemployer plans, joint administration means an equal voice by management and labor in all matters affecting the plan. The employee representatives have access to all cost information and share equally in investment decisions.

The attitude of labor toward joint administration is clearly set forth in the following statement: "Unions should accept nothing less than an equal voice in the administration of the pension plan. * * * Only through responsible participation in its administration can the union gain the insight and experience as to the details of the plan in operation which will be needed to determine where future modifications and improvements are required. * * * ¹¹ In multiemployer plans, there is an additional reason for joint administration. Pension bargaining in these cases is usually limited to the rate of contribution to the plan; the benefit levels are determined at a later date by the plan's board of trustees. It is unlikely that the union would agree to permit the employers to determine unilaterally the benefit levels supportable by the negotiated financial commitment.

Also, some labor leaders desire a voice in the determination of the investment policies of negotiated pension funds. Some union officials feel that pension assets should be invested in socially oriented projects. These projects include such things as low-cost housing, hospitals, outpatient clinics, retirement homes, and employee recreation and cultural centers. Negotiated single-employer funds hold little of this type of investment. However, substantial amounts are invested in projects of this type by multiemployer plans. This may reflect the increased capacity of labor to effect its views through joint administration. In a private conversation, a union official of a local bargaining unit

informed the writer that an equal say in pension matters was his primary objective in his recent negotiation of a multiemployer plan. Most of the union members were already covered under single-employer plans. However, he had no voice in the management of these plans. The union membership is composed largely of unskilled laborers, and there is little mobility of employees among participating employers. There was evidence that the pension benefit amounts of some employees were adverserly affected by compulsory participation in the new plan. One employer, a division of a large national manufacturing firm, resisted joining the plan, and a 13-week strike ensued. The employer did not join the plan, but it was agreed that the company plan would be amended on behalf of those employees who were members of the union to provide benefits identical to those of the multiemployer plan. However, the employer did not agree to grant his employees pension credits for service with participating employers. Essentially, it became a negotiated single-employer plan whose benefit structure resembles the multiemployer plan.

The union leader acknowledged that optimum conditions for a multiemployer plan may not have prevailed. However, he felt that his increased control over pension matters enhanced his bargaining position generally and this advantage would eventually accrue to the direct benefit of the union membership.

The traditional criteria of a good pension program, then, became subservient to the role of a pension plan in the totality of the collective bargaining process. Obviously, there will be strong differences of opinion as to whether this attitude toward pensions is necessary or desirable. There appear to be cogent arguments on both sides.

Identification of Benefits With Union.—The benefits provided by negotiated multiemployer plans are usually financed solely by employers. Whether employees associate this benefit more closely with the union than with employers is a difficult question to answer. The individual employer's identity is lost in an association or industry plan. The administrative activities of the plan are usually performed in

¹⁴ American Federation of Labor. Pension Plans Under Collective Bargaining: A Reference Guide for Trade Unions (Washington, D.C., 1954), pp. 64-66.

the fund office which may be a part of the union offices. Employees often discuss their pension problems with union officials rather than the personnel departments of the various employers. There is a tendency, therefore, to associate the plan with the union. However, a generalization is not justified. With reference to this whole question, one would have to treat each plan separately.

Arguments Against a Multiemployer Arrangement

FROM STANDPOINT OF EMPLOYER

Decreased Control Over Plan.—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.

Even in the best operated plans, then, there may be a certain degree of detachment for many employers from the actual operations of the pension plan. More importantly, there may be many employers who are not interested in the operations of the pension fund. The industry may be characterized by a predominance of small employers. These employers may be motivated solely by the desire to avoid work stoppages. Therefore, they may agree to contribute to the pension program, if that is what the union desires, feeling that their interest and responsibility end with the payment of their contribution commitments. In this case the possibility of domination of the plan by union officials is quite real.

This possibility is probably the greatest concern of those opposed to multiemployer plans. It is believed that labor's preoccupation with benefit levels may lead to financially unsound plans, and, therefore, be detrimental to the interests of the employees. Also, the employee representatives may advocate an investment policy with which some employers may not agree. Lastly, the misappropriation of funds by a few union trustees reported in past investigations of welfare funds has adversely affected the image of multiemployer plans.

It has been suggested that employer interest in these plans may be increased by more frequent rotation of the employer representatives on the board.¹⁵ The assumption is that the employers' interest in the plan continues beyond their period of service as trustees. Also, the size of the pension boards may be increased in some plans to accommodate a larger number of employer representatives. However, the number of trustees should not be so large as to impair the operating effectiveness of the board.

¹⁵ James E. McNulty, Decision and Influence Processes in Private Pension Plans (Homewood, Ill. : Richard D. Irwin, Inc., 1961), p. 56.

It must be emphasized, however, that joint administration has been successful in many plans. In these cases, employers are quite interested in the management of the plan, and they feel that they are being adequately and properly represented by their chosen representatives. Also, a generalization of labor's attitude toward benefit levels or investment policy is not justified. The writer is aware of at least one plan in which the employees' representatives advocated more conservative benefit levels than those desired by management, and many plans where joint declarations of the desire for conservative benefit levels were made. The joint board, then, is not an inherently unsound development in pension administration. However, it does require that both management and labor be constantly aware of their responsibilities. 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 programing. On the other hand, management may gain better insights into labor's view of the role of pensions in the collective bargaining process.

Loss of Employer Identity in Plan.—Employers surrender their individual identities when they participate in a multiemployer plan. There is not the direct association between the employer and the pension plan. Therefore, some employers feel that the full employee relations value of establishing a pension plan is not realized under a multiemployer arrangement.

There is also the argument that the lack of employer identity with the plan encourages employees to view the plan as a "union plan." There are many employers, but only one union, participating in the plan; and therefore, it is easy for employees to identify the pension benefit with the union. Whether this in fact occurs depends largely on the circumstances surrounding the particular plan.

Impairment of Employee Loyalty.—One of the purposes of a pension plan, from a management point of view, is to encourage employees to render long and faithful service to a particular employer. It is hoped that the establishment of a pension plan will reduce employee turnover and thereby increase productivity.

Multiemployer plans do not encourage loyalty to a particular employer. Quite the contrary, the proponents of these plans offer as an important advantage the ability of employees to preserve service credits earned with any covered employer. To some employers, this concept of transferable credits nullifies one of the basic purposes of a pension plan.

Inequity in Employer Costs.—It has already been noted that in most plans, 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. On the other hand, the uniform rate is excessive for the low-cost employers.

The basis for determining past service credits may also give rise to a cost inequity. In some plans, employment in the industry is the basis for past service credits. But, some of the firms for which this service has been rendered are now defunct. These pension costs must be borne by the participating employers. Essentially the same argument applies for those plans which grant past service credits based on union membership. In some plans, individual employers' cost factors are recognized, and a contribution rate differential is charged accordingly. Also, the cost characteristics of new entrants into the plan may directly affect their contribution rates.

Inflexibility of Benefit Structure.—The practice in multiemployer plans of providing a uniform benefit structure may be disadvantageous for some employers. Certain employers may be willing and capable of providing larger and broader benefits. A compulsory retirement age may be very desirable for one employer but of little or no interest to other participating employers. An individual employer may find the early retirement benefit or a disability benefit to be a useful management tool in resolving certain personnel problems. Although these features can be found in multiemployer plans, the board of trustees must administer these provisions impartially. The board cannot liberalize the administration of the disability provision to solve a personnel problem for a particular employer; that is, the liberalization must be applied uniformly for all employers. The emphasis upon uniformity in these plans does introduce a degree of rigidity.

Inflexibility of Financing Arrangement.—In defined benefit plans the benefits are determined in advance by the use of a formula, and contributions to the fund vary with the experience of the plan. The employer can vary his contributions with changes in financial circumstances and changes in his estimates of future costs of the plan.¹⁶ This approach is used in most single employer plans.

Multiemployer plans are usually fixed contribution—fixed benefit plans. This restricts the ability of the individual employer to vary his contributions with economic circumstances. Decisions as to the rate of funding of pension costs is made for the plan as a whole. The plan may permit prepayment of contributions, but this is seldom done.

FROM STANDPOINT OF UNION

Assuming that the circumstances are suitable for the establishment of a multiemployer plan, the disadvantages to the union of an arrangement of this type are few. The major drawback of these plans is that they prevent the union from negotiating more liberal benefits from the more economically favored employers. The negotiated contribution rate is not a true average of the various employers' abilities to pay. Labor must pitch its contribution demands at a level which can be supported by the economically weaker employers in the group, unless differentials in contribution and benefit rates are permitted. The union must, therefore, sacrifice certain economic gains which could be realized from the other employers.

VESTING AND PRIVATE PENSION PLANS

Approximately two out of every three private pension plans covering three out of five workers provide some form of vesting. Practically all plans impose an age and service requirement to qualify for vested benefits. About 75 percent of the plans require 10 or 15 years service. Approximately 70 percent of the plans require a minimum age, with

 $^{^{16}\,{\}rm The}$ deduction of contributions to a qualified pension trust is, of course, subject to the provisions of sec. $404\,(a)$ of the 1954 Internal Revenue Code.

ages 40, 45, 50, and 55 being most common. Since the rate of turnover is quite high among younger and shorter service employees, the private pension benefits of many employees will be based solely on their service with their last employer, rather than for the full period of their working careers.

Since the question of vesting is a principal issue in the current dialog on private pensions, it might be well to include in this paper an evaluation of the issue in terms of management and labor motivations in the establishment of these plans.¹⁷ Once again, the analysis is based on the assumption that private pensions are viewed as a *voluntary* supplement to OASDHI benefits.

OBJECTIVES OF EMPLOYER

Employers may establish a pension plan for any one of a number of reasons. The employer may wish to reward those employees who have served him well for a long period of time. Or an employer may feel a moral responsibility for the economic welfare of his employees. Also, an employer may establish a plan to effect certain personnel objectives, such as a reduction of labor turnover or to attract new employees or to provide a dignified and orderly method of removing older workers from the payroll. Other reasons of business expediency, such as a desire to enhance the public image of the firm or to offer an employee benefit program comparable to that being offered by competitors, may be determining factors. Or the objective of the plan (particularly in the case of small plans) may be to minimize the Federal income tax burdens of one, or a few, of the key employees. Last, but not least, the plan may be established as a result of union demands.

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 benefits, 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 opinions 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 the hiring of older workers and probably increase labor mobility. These advantages are formidable and obvious. It is equally obvious that the immediate advantages of vested benefits 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. Presumably, some advantage accrues from the improvement in the benefit structure in that, hopefully, employee attitudes toward

¹⁷ For a more complete analysis, see Joseph J. Melone, "Implications of Vested Benefits in Private Pension Plans," *Journal of Risk and Insurance*, December 1965, vol. XXXII, No. 4, pp. 559–569.

the employer become more favorable. Also, the firm might profit indirectly from the general improvement in the economic security of the aged and the greater productivity of the economy resulting from the greater mobility of labor. Lastly, one might argue that the costs of vested benefits are offset, at least in part, to the extent that such benefits minimize the future need for more liberal OASDI benefits or assistance payments.

However, employers, like most other individuals, hesitate to make economic concessions in exchange for possible indirect advantages. Industries faced with foreign competition resist the lifting of tariffs on imports in spite of the macroeconomic benefits which economists assure us are to be derived from the principle of comparative advantage. Likewise, one has difficulty convincing unions and their unemployed members of the macroeconomic benefits derived from automation and other technological advances in their occupational areas.

Nor are the employers likely to be easily moved by the threat that their failure to provide vested benefits will lead to liberalizations of OASDI benefits. This argument implies that there is a general consensus among employers that further expansions in OASDI benefits are undesirable. Even if this assumption is true, it is not likely that an employer will feel that he is able or individually responsible for holding the line on OASDI benefit levels. Also, the argument fails to recognize that the basic objective of OASDI is to provide a minimum floor of protection for a substantial proportion of the population. Private plans, being voluntary, cannot be expected ever to achieve universal coverage. At present, approximately one-third of the labor force is covered under private plans.

If inflation or changes in the concept of what constitutes a minimum floor of protection suggest a need for increased OASDI benefits, the decision will have to be made with reference to the needs of the substantial proportion of OASDI recipients not receiving private plan benefits. More importantly, to suggest that vested benefits in private plans are desirable in order to retard the expansion of OASDI is to confuse the objectives of the two programs. If recognition is given to private pension benefits in determining whether OASDI is providing a minimum floor of protection, private plans could no longer be viewed as a supplement to social insurance benefits. Although the principle of a social security benefit offset has some logic in private pension planning, the reverse; that is, a private pension offset to OASDI benefits, is inconsistent with the objectives of the latter program.

The argument would seem to have merit only if private pension coverage approached the level achieved under OASDI. This development seems unlikely in the near future, barring any legislation requiring the extension of private plan coverage.

The above arguments suggest that employers cannot be expected to be enthusiastic about providing liberal vesting provisions in their plans.

On the positive side, recognition must be given to the fact that the trend is toward an increasing prevalence of vested benefits, although eligibility requirements, in general, are still rather stringent. This trend can be expected to continue. Employers are constantly being made aware of the importance of this issue, which tends to break down some of the resistance to providing such benefits. Also, automation or

plant shutdowns sometimes require an employer to lay off a substantial number of employees. In many such situations, serious labor and public relations problems result. Vested benefits under pension plans may reduce some of the pressures to which employers are exposed under those circumstances. The labor problems created by automation may well be one of the more important factors contributing to the future expansion of vested benefits.

Nevertheless, it seems that a rapid expansion and liberalization of vested benefits will result only if employers receive more direct economic offsets to the additional costs of vested benefits. The most obvious offset would be for employees to recognize the added costs 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.18

OBJECTIVES OF UNIONS

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, secondly, unions are in a position, through adjustments of other wage demands, to offer the employer an economic justification for providing vested benefits.

The objective of private pensions from the point of view of labor should be more clear cut as contrasted with the varied goals that management may hope to achieve via these plans. Barring possible personal objectives of some labor leaders or temporary compromises or tactical bargaining moves, the primary goal of private pensions from labor's point of view should be to enhance the economic security of union members. These possible differences in management and labor objectives, and their implications for the vesting issue, are noted in one labor publication as follows: 19

While today vesting is generally accepted, occasionally a pension consultant or insurance company may try to sell the employer on a plan without vesting provision. Plans of this sort serve more of a management purpose than a trade union purpose. They follow the pattern of the typical pre-collective-bargaining unilateral company plan set up as an instrument of, by, and for management—out of "efficiency" and "personal relations" considera-tions. * * *

"Lower employee turnover" may be a good thing for an individual employer, but it is not necessarily of itself good for workers, nor is it something that unions should be interested in promoting.

Vesting, therefore, fits in neatly with organized labor's goal of increasing the economic security of their members. This is particularly true in the case of negotiated single-employer plans, since workers

¹⁴ It has been argued that the author's above analysis fails to recognize "the dynamics of pension plan change. Only a few large employers need adopt a provision for it to be launched toward near-universal adoption. Large employers well might see advantages in large-scale liberal vestting; for example. offsetting severance pay and bringing new employers to them with vested (and funded) credits, thereby relieving them of the sole burden of providing a fairly decent retirement benefit." Merton C. Bernstein, "The Future of Private Pension Plans," Journal of Risk and Insurance, March 1967, vol. XXXIV, No. 1, pp. 19-20, ¹⁰ American Federation of Labor and Congress of Industrial Organizations. "Pension Plans Under Collective Bargaining—A Reference Guide for Trade Unions," Publication No. 132, not dated, pp. 20-21

may change jobs but still remain in employment covered by a bargaining agreement with the same union.

In contrast, union leaders may not place as high a priority on vesting under multiemployer plans. The nature of a multiemployer plan is such that pension credits are already protected as long as the worker is reemployed by a participating employer. If a worker is not reemployed within a specified period by a participating employer, his accumulated pension credits are forfeited. A vesting provision is needed, if protection of pension rights is to be extended to these individuals. However, in many instances, termination of covered employment means that the employee has moved to another geographical area or industry, or, at least, that he is no longer within the bargaining jurisdiction of the labor union involved. Therefore, 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.

Vesting is also consistent with the generally accepted labor view that private pensions are a form of deferred compensation. Thus, it is not surprising that the AFL-CIO argues that vesting provisions should be included in every negotiated plan because an employee's-

pension credits are properly his. He has paid for them through services performed, at a lower level of wages than he should have been able to obtain if the plan had not been established-even where the plan was not deliberately negotiated in lieu of a direct wage increase.²⁰

This conclusion, as it stands, is unsound. Management and labor representatives agreed at the bargaining table to allocate, explicitly or implicitly, a portion of the total wage package to a pension fund. Since an employer's pension contributions are irrevocable, the monetary equivalent of the forgone cash wage 21 is always fully and immediately vested in the employees, as a group. Management and labor then decide on how the deferred wage fund is to be allocated among the various employees. It may well be decided that pension contributions are to be allocated only to employees that have rendered substantial periods of service; i.e., a wage differential paid only to employees meeting a specified service requirement. Thus, it cannot be argued that employees are entitled, as a matter of right, to full and immediate vesting unless such a benefit was assumed in the labor negotiations.

The above analysis applies regardless of whether the pension plan is of the defined benefit or the defined contribution type. However, the point can be made more forcefully when pension negotiations are carried on in terms of a defined contribution rate, such as in the case of multiemployer plans. In these plans, the employer's financial commitment is usually expressed as a percentage of pavroll, or in cents per hour worked. A board of trustees, composed of an equal number of management and labor representatives, then develops a benefit structure that can be supported by the negotiated contribution rate. Thus, it is obvious in these plans that vesting can be provided only by a reduction of some other benefit under the plan.

It is interesting to note that about one out of three negotiated multiemployer plans—as contrasted to over 70 percent of negotiated single-

²⁰ Ibid., p. 21. ²¹ The assumption is made here that the employer's pension contribution is in fact equivalent to the forgone cash wage.

employer plans—provides vested benefits, and it is not likely that the union trustees of multiemployer plans would argue that covered employees are automatically entitled to vested benefits under the plan.

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. There is some evidence that vesting will be a persistent demand of labor unions in future negotiations. If this proves to be the case, then a substantial increase in the number of plans providing more liberal vested benefits can be expected. However, how strongly labor will fight for a liberal vesting provision remains to be seen. 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. Thus, union leaders must constantly evaluate the relative importance of the various benefits.

Although vested benefits may be socially desirable, there may be a more pressing immediate need to get an adequate normal retirement benefit, or a disability benefit or other nonpension benefits. Union leaders are increasingly faced with the problem of designing or modifying a multiple-benefit wage package that will prove satisfactory to a membership that is composed of persons of varying ages and responsibilities and, therefore, varying economic needs. Thus, it becomes increasingly difficult to allocate too large a portion of any future increases in the wage package to any one benefit, with the possible exception of cash wages.

If vesting proves to be very costly, unions will be able to negotiate this benefit only if their membership is willing to sacrifice increases in other benefits. If the cost of vesting is high and union membership support is lacking it would seem that labor would concentrate its efforts in lobbying for an expansion of OASDI benefits as a solution, at least in part, to the problem. This would then permit labor to have a bit more flexibility in the negotiation of other benefits.

OBJECTIVES OF EMPLOYEES

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. Most of the discussion is based on the assumption that if an employer has a pension plan, employees expect to receive the benefits promised under the plan. This appears to be a reasonable assumption even though it probably attributes to employees a good deal more knowledge about the provisions of the plan than they actually possess. If an employee reaches retirement age and has met all the requirements under the plan, he probably expects to receive his retirement benefit for the rest of his life. Thus, the assumption appears to be reasonable if one is appealing for financial soundness in pension planning.

However, one cannot assume that employees intuitively expect a vested benefit under private pensions. Do terminating short service employees actually expect that they have a right to their accrued benefits under the plan? It is indeed unfortunate, and rather surprising, that so little is known about employee attitudes toward, and relative valuation of, various fringe benefits.²² It would seem that information of this type would be valuable to both labor and management in their attempts to maximize their objectives under these programs.

Some evidence of the value placed on vested benefits by employees may be gathered from the experience as to cash withdrawals under plans providing vested benefits. Most contributory plans that provide a vested benefit require that employees leave their contributions in the plan if employer contributions are to vest. Although little is available by way of published data, it is understood that cash withdrawals are heavy in spite of the forfeiture of employer contributions.

The experience reported with reference to cash withdrawals under the Canadian Public Service Superannuation Act is somewhat discouraging. As indicated in the following table, the proportion of male contributors who terminated employment for reasons other than age, disability or death, and who elected cash withdrawals, ranged from 92.8 percent at age 25 to 67.4 percent at age 58. The proportions of females electing cash withdrawals were 97.4 percent at age 25 and 43.5 percent at age 58. The high rates of cash surrenders at the younger ages are understandable, but the experience at the older ages is surprising. Thus it appears that employees all too often act to defeat the objective of the retirement plan.

GOVERNMENT OF CANADA .--- EXPERIENCE UNDER THE PUBLIC SERVICE SUPERANNUATION ACT TO DEC. 31, 1957

Age	Termination rate for reasons other than age, disability, or death			
	Male	Female	Male	Female
	Percent	Percent	Percent	Percent
5	4.5	15.7	92. 8	97.4
6	4.7	14.7	92. 2	96. 9
3	3.6	11.5	91.0	95.7
)	3.1	<u>9. 1</u>	89. 8	94.2
)	2.7	7.2	88.5	92. 3
	2.4	5.8	87.2	90.1
	2.1	4.7	85.9	87.6
	1.9	3.8	84.5	84.8
)	1.7	3.1	83.0	81.7
	1.5	2.6	81.5	78.2
	1.4	2.2	80.0	74.6
	1.2	1.9	78.3	70.6
}	1.1	1.6	76.6	66. 5
)	1.0	1.5	74.8	62.1
	.9	1.3	73.0	57.6
	. 8	1.3	71.2	53.0
5	.8 .7	1.2	69.3	48. 3
8	.7	1, 1	67.4	43. 5

[Persons with 5 or more years of pensionable service]

Source: "Report on Actuarial Examination," by E. E. Clarke, Chief Actuary, Department of Insurance, Aug. 21, 1959. App. 12. Odd years of age omitted. In, "The 2d Report of the Ontario Committee on Portable Pensions," p. 35.

The evidence suggests that management and labor might profitably devote some time to educational programs directed at improving employee understanding and appreciation of the nature and value of fringe benefit programs. Furthermore, the rather substantial costs of liberal vesting provisions will require a greater employee appreciation

²² An interesting, though rather limited, study in this area was recently completed as a doctoral dissertation at Indiana University. See Arben O. Clark, "Employee Perception and Attitude Toward the Pension Plans of Employing Organizations" (Bloomington, Ind.: Indiana University, unpublished doctoral dissertation, 1963).

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.

SOCIAL WELFARE AND PRIVATE PENSIONS

In all of the above discussion, there is a notable absence of analysis and evaluation of the various philosophies and motivations for private pensions in terms of their effectiveness in advancing social welfare goals. This omission is intentional in that the objective of this paper is to isolate the forces at work at the level of the firm that have influenced the growth of voluntary, private pension plans; and social welfare goals are not, and should not be, the *primary* objective of *voluntary*, private pension plans.

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, shortsighted solutions.

Given that we should strive to improve the economic condition of the aged, the basic question is the role to be played by Government, business, and the individual in attempting to achieve this goal. It is logical to assume that the obligations and roles of each sector are different. This point has been ably stated as follows: "In allocating our obligations we must, of course, consider appropriateness of role. Each institution should do what it is best qualified or equipped to do. Everybody shouldn't get into every act. So, where does business belong? I think it belongs in a variety of places, but it is uniquely concerned with employment and unemployment. Poverty results from lack of income and, in our current structure, incomes are associated with jobs. We look rightly to business and industry for job opportunities."²³ The job opportunities provided by business and industry depend, in turn, on the extent to which they achieve their main objectives, that is, "to produce efficiently for society's needs and wants, to be profitable, to survive, and to grow."²⁴

The establishment and design of employee benefit programs, therefore, must be consistent with the role and objectives of the business firm, if the latter are to make their maximum long-run contribution toward the welfare of society. Business firms have established and will continue to establish, employee benefit plans, because they recognize that the well-being of their employees and of society as a whole are

²⁸ Robert N. Hilkert, "The Responsibility of Business and Industry for Social Welfare in Today's World," Business Review, Federal Reserve Bank of Philadelphia, July 1966, p. 9. *Hild.*, p. 4.

prerequisites to the achievement of the firms' goals. However, these decisions must be made in the light of the labor needs, and market and competitive conditions facing the particular firm.

The role of Government in providing economic security for the aged is, and of necessity must be, quite different from that of business firms. The basic philosophy of OASDHI is to provide a minimum floor of protection against the covered perils for as much of the population as possible. The system is supported by joint employer-employee contributions, and benefits are earnings—related on weighted basis; and the benefits have a large measure of social adequacy as contrasted with individual equity. Inclusion under OASDHI is compulsory (with limited exceptions) and the program covers practically all workers. Furthermore, accumulated benefit credits are not forfeited as a result of job terminations. The principles of compulsory coverage and portability of benefit credits are consistent with the objective of providing a minimum floor of protection for a substantial proportion of the population.

Since the objectives of public and private programs are different, it is not proper to evaluate the performance of either system in terms of the objectives of the other. Critics of OASDHI are often guilty of the error of evaluating this program in terms of certain characteristics (eg., actuarial equities) of private insurance schemes. Likewise, most critics of private pension plans use certain OASDHI features (e.g., portability of pension credits) as guideposts in evaluating private plans. 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 all 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 larger 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.*

FOREWORD

This statement by the American Telephone & Telegraph Co. on behalf of the Bell System companies is in response to the letter of James W. Knowles to the Honorable Martha W. Griffiths, dated October 1, 1966, and Mrs. Griffiths' letter of November 2, 1966, to the Honorable Wright Patman, transmitting the staff document entitled "Old Age Income Assurance: An Outline of Issues and Alternatives."

The statement is intended as a contribution toward the proper solution of some of the important issues raised in the staff document. It does not attempt to deal with all of the issues. The purpose is to evaluate the issues discussed from a broad national viewpoint even though emphasizing considerations of employers because these may not be given due weight by many commentators.

The American Telephone & Telegraph Co. and other Bell System companies have had pension plans covering all employees since 1913, and since 1927 advance provision has been made for the payment of service pensions.

These plans thus predated any legal requirement that they be bargained with unions, although improvements in them have since been bargained. They also predate any sizable individual or corporate income taxes. The plans have been subject to investigation of their purpose and financing by Federal and State regulatory bodies having jurisdiction over communications companies.

In view of this background, the company is in a position to discuss the business purposes of pension plans on the basis of experience with long-range and fundamental considerations.

BACKGROUND FACTS WITH RESPECT TO THE BELL SYSTEM PLANS

The Bell System consists principally of the American Telephone & Telegraph Co., 21 regional Bell operating companies, Western Electric Co., and Bell Telephone Laboratories.

Each company has a separate pension plan and separate funds separately administered. These plans cover 840,000 active employees and about 95,000 employees retired on service pensions. There are some 30 banks as trustees of these funds.

The plans, although separate, are virtually identical. They are noncontributory, and cover all employees from the first day of employment. They have been in existence since 1913.

The pension formula is 1 percent for each year of service of the average annual rate of pay—not including overtime—for the highest

^{*}Comments on certain of the issues discussed in the staff document entitled "Old Age Income Assurance: An Outline of Issues and Alternatives."

5 consecutive years, with an offset at age 62 or later time of retirement for one-quarter of the primary social security benefit under the laws in effect at the time of retirement. Thus, an increase in social security benefits enacted after an employee retires does not reduce his pension.

The mandatory retirement age is 65 and that age has been effective since 1930.

Employees retiring at age 65 are entitled to a pension if they have 15 or more years of continuous service.

Men may retire at their own requests as early as age 60 with 20 or more years' service, women at age 55. There are also provisions for still earlier retirement because of incapacity or to avoid real hardship due to compelling personal reasons for retirement. These earlier retirements require the approval of the employees' benefit committee.

There is no actuarial reduction for any of these pensions.

Copies of the plan summary and texts as amended are given to all employees and have been since the inception of the plans.

In addition, income statements and balance sheets of the trust fund are published to employees. Summaries of benefits paid are published annually to employees.

The plans contain no vesting provisions for employees who leave the Bell System before attaining entitlement to an immediate pension. However, there are death benefits payable to certain survivors of employees who die while in employment, and after retirement on pension, and termination allowances are paid under separate arrangements to employees who are laid off.

From the viewpoint of retaining coverage for pension, there are two important features which deserve mention. The first of these is that term of employment in any of the Bell companies is completely transferable to any of the other Bell companies. The second is that if there is a break in continuous service after an initial period of 6 months, the break or breaks, no matter how long, will be bridged after a subsequent return and continued employment in a Bell company for 5 years.

PENSION PLANS HAVE A BUSINESS PURPOSE

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. This thought was first expressed in the Bell System as far back as 1906, and was a reason for the adoption of a pension plan by Western Electric Co.

By 1913 it had become apparent to the operating telephone companies of the Bell System that a definite and equitable arrangement for continued financial assistance to employees after retirement was needed. A number of informal arrangements had already been made, but these could not be counted on by employees and were not satisfactory to the companies because they did not, in practice, enable the companies to retire growing numbers of older employees whose usefulness to the business had declined.

This business purpose was rather fully stated in the report of a committee of the American Telephone & Telegraph Co. on the revision of pension arrangements, dated July 15, 1927, as follows: "From the viewpoint of management, a pension plan is primarily a systematic

way of providing for a necessary expense in the operation of the business—an expense which, if there were no pension plan, would inevitably be borne by the business through the carrying of underproductive employees on the payroll with resultant adverse reaction upon efficiency and upon the correctness of the distribution of the cost of superannuation."

This line of reasoning was not orignated in the Bell System, nor is it by any means confined to Bell System companies. Although it appears in much of the pension literature, it is hardly mentioned, if at all, in the staff document under discussion. The compelling reality is succinctly stated in the final report of the Advisory Council on Social Security, December 10, 1938, page 21, as follows: "Only through the payment of reasonable benefits can older workers be retired." Thus, 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 "adequate" 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.

The failure of most current discussion to give any real weight to these considerations explains, we think, the current rather wide differences in viewpoint on several aspects of the pension problem.

The business purpose of private pension plans, however, should be given, and in the past has been accorded, considerable weight in the determination of public policy toward pension plans. There are several ways in which this concept should affect conclusions on various specific problems.

PROMOTING BUSINESS EFFICIENCY IS A VALID PUBLIC POLICY

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. The form a plan should take should be left, except for certain minimum regulatory restrictions, to the judgment of individual employers, unions, or both.

The value of pension plans in enhancing efficiency extends to military and civilian, Federal, State, and municipal pension plans, and, of course, public policy also is concerned in a very direct way with governmental efficiency.

PROMOTION OF BUSINESS EFFICIENCY REQUIRES A SALARY-RELATED PENSION PROGRAM

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. If arbitrary maximums on pensions are imposed, for example, the practical possibilities of retiring higher paid employees will be severely limited. And, inefficient management and technical employees can have a serious impact upon a business and its ability to function efficiently or even to survive. Moreover, since the personnel structure of most businesses can be pictured as having an extremely wide base, tapering sharply in numbers at the top, any saving in pension expense due to limiting pensions for top executives would have little effect if the "saving" could be spread over other pensions, or to charges to customers, or to increasing income to investors. The real point, however, is that all of these others would suffer from a decline in business efficiency, so that any "saving" is illusory.

GOVERNMENT WOULD LOSE RATHER THAN GAIN REVENUE IF PRIVATE PENSION PLANS WERE ELIMINATED

Because well-designed private pension plans contribute to the efficiency of business, and thus to the health and growth of our economy, they do not, in fact, involve a loss of tax revenue which would otherwise be available to the U.S. Treasury. 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. Business efficiency is a necessity for a healthy economy, and a healthy economy will generate and support a higher tax yield for all levels of government.

DO SHORT-SERVICE EMPLOYEES HAVE A MORAL CLAIM TO PENSIONS?

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.

On the contrary, the existence of the pension plan may be the very reason for job openings for some of those employees. But, whether it is or not, the wages of such employees could not be increased by the "savings" from the absence of a pension plan because the continued wages of older persons who would have to be retained on the payroll instead of being retired would eat up the "savings" before they could be realized.

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. There is, therefore, no purely economic reason for the employer to depress their wages in order to provide pensions. Indeed, there is no reason to depress the scale of wages of any employees when the cost of pensions is equalled or exceeded by efficiencies of operation which the existence of a pension plan makes possible.

There are other considerations which indicate that the wage scales of younger and short-service employees are not adversely affected by \mathbf{a} pension plan which is soundly based on business economics.

One of these is that 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 and are unlikely to accept, for long, lower and noncompetitive wages to help support a pension plan, whether this is an employer's idea alone or whether it represents an agreement between a union and an employer.

It is true, of course, that national stabilization policies during and after World War II, and possibly to a lesser extent up to the present, have permitted improvements in benefits and pensions when wage increases thought to be of equivalent cost would have been barred. Although this fact no doubt has been partly responsible for spreading the idea that pensions are a substitute for wages, it does not alter the basic economics of pensions unless the resulting scale of pensions has become too high. In any event, the individuals concerned who have not been accorded a valid claim to a pension are not justified in claiming that wage increases were withheld from them to provide for pensions, because employers and unions did not in fact have the alternative of increasing wages.

A second consideration is that 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 rights in addition would unduly increase the total remuneration of such employees.

A third consideration having a bearing on the matter of early pension vesting, from an economic viewpoint, is that in most industries the preponderance of employees who work for short periods and then leave are young women who marry and leave to raise families. Business, while it usually does not provide them with a claim on a pension based on their past earnings (and neither does social security), does provide for their support through pensions and death benefits attributable to their husband's wages.

FIDUCIARY RESPONSIBILITIES

There can be little debate with the concept that those charged with the administration of pension and benefit plans and associated funds should observe high standards of fiduciary responsibility. That there have been a few exceptions is deplorable, and it may be that a Federal law on the subject will be helpful in deterring future departures from proper conduct, especially among individual trustees. However, if such legislation is considered necessary, it should be framed so as not to impose substantial unnecessary burdens on the great majority of plans which will operate satisfactorily in any event, on the mcre chance that such laws may present an additional obstacle to the very few who will choose to be lax or dishonest.

GREATER DISCLOSURE TO EMPLOYEES

It may be that some plans have not acquainted employees with the qualifications which may limit their rights to pensions or other future benefits. A requirement that this be done might be helpful in preventing unwarranted expectations.

GENERAL CONSIDERATIONS RELATING TO FUNDING, REINSURANCE AND PORTABILITY

Funding, reinsurance and portability, together with vesting which has been discussed, are closely related. Any need for reinsurance arises from lack of funding, and portability presupposes adequate funding for individuals going from one employment to another.

Pension plans typically involve conditional promises. The first condition is that a pension will be paid only if the employee lives to receive it after completing a specified term of employment and attaining a certain age. A second condition is the possibility that the plan will be discontinued. Frequently a third condition is that payment of the pension, if the plan is discontinued, will depend on sufficient money in a trust fund to provide the pension. It is this last condition which causes the concern with a minimum funding requirement, reinsurance and portability.

One basic problem in the funding of pension plans arises from the necessity for providing adequate pensions for employees at or close to retirement when a plan is established. The same problem usually recurs whenever the plan is amended to provide additional benefits. As the period of time is short before payment of the pensions to employees at or close to retirement, a very large proportion of the contribution in the early years must ordinarily be devoted to building financial protection for these pensions. Consequently, only a small portion of the early contributions are available to build any financial protection for the younger employees.

Since the money required to secure financially the increase in employees' future pension expectations at the time a plan is established, or improved, is usually far too great to be met by any immediate payment into a fund, financial security can be attained only by payments spread over a number of years. Moreover, if plan improvements are too frequent and too liberal, it may not be possible to achieve financial security. Even if a business is financially able to meet the cost of immediate funding, current Internal Revenue Code limitations as to the maximum payment deductible as a business expense for tax purposes make it more difficult to provide early financial security for employees' pension expectations.

This problem and the gradual funding method have important implications as to the equities of individuals if a plan is terminated during the first two or three decades after its inception or after a substantial increase in its scale of benefits. A pension plan is a *conditional* promise to pay benefits. It is not necessarily inequitable, therefore, if the intent cannot be fully realized with respect to employees who have worked only a few years under the new or improved plan.

[^] Money to defray pensions under most private pension plans is not set aside year by year in the name and for the benefit of individual workers. Neither is it so apportioned under social security or under plans for governmental employees.

The plan will provide an order of application of the funds if the plan is terminated. Those with the first claim to full payment will be individuals already retired on pension or eligible to retire at their own request. This is socially desirable because such individuals are unable to make alternative arrangements. Other employees, however, may be left with unfulfilled pension expectations.

There is currently no legal requirement for advance funding of pensions. Most companies with plans do, however, practice a degree of advance funding.

The enactment of additional legal requirements which are designed to make it more certain that the hopes of employees to receive a pension will be realized would change the nature of the promises made and by thus enlarging the financial obligations undertaken, could encourage a compensating reduction in the scale of pension benefits to be provided.

Additional funding requirements, depending on their nature, might so increase immediate financial requirements as to preclude the adoption of new plans providing adequate benefits to employees then having long service. They similarly might inhibit otherwise desirable liberalizations of existing plans.

In brief, the Bell System companies favor adequate funding, when at all practical, but rigid legal requirements to fund may, in some circumstances, have undesirable results in inhibiting the establishment or improvement of plans to a level of adequacy when, if there were no new legal requirements, the plan could be established or improved and ultimately be sound. In other words, taking the initial risk would prove beneficial, and not having taken it would, in retrospect, be recognized as harmful.

The American Institute of Certified Public Accountants has recently adopted revised standards for accounting for the costs of pension plans. These standards apply whether or not the plan is qualified under the Internal Revenue Code. They apply even if the plan is merely an informal company policy.

In essence, the new standards require that companies account for pension plan costs on an accrual basis without regard to whether or not contributions are actually made on behalf of the plan. Under these new accounting rules failure to fund adequately will result in balance sheet liabilities that may greatly disturb the stockholders. Failure to make proper charges in the income statements will result in exceptions by the public accountants that undoubtedly would adversely influence the attitude of investors toward the company and its management. There are, however, no penalty clauses that would act to the detriment of the employees.

In contrast to this, all of the proposed legislation appears to eliminate the tax-exempt status of the trust in event of noncompliance. This would have the effect of reducing the security of employee pension expectations even further as a penalty for the employer's not having provided adequate security for employee pension expectations.

One of the factors which has led to the widespread adoption of private pension plans and their improvement from time to time has been the considerable flexibility of the funding methods which now are permissible. This flexibility has permitted adoption of funding and plan provisions to the very wide differences in circumstances existing from time to time among companies and industries.

If, in addition to further statutory requirements for minimum funding, there are assessments for the purchase of insurance to fill in remaining gaps in funding, it seems inevitable that the law would have to define the risks to be insured with great precision and prescribe methods of limiting those risks.

CONCLUSIONS AS TO FUNDING

The Bell System companies 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.

CONCLUSIONS AS TO REINSURANCE

While recognizing the appeal of spreading the risk of pension plan failure, the Bell System companies 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.

The results of the joint Bureau of Labor Statistics-Internal Revenue Service study of terminal pension plans, published in the Monthly Labor Review for June 1967, indicate that the need for this type of protection is minimal. One important factor is the short existence of a large proportion of the terminated plans. It is, on the one hand, difficult to see that employees have established much of a moral equity by working where there was a plan for only a few years. On the other hand, it is easy to conceive that an employer with a declining business, or one which he desired to terminate, might adopt a plan for a short time as a way of providing something for a few long-service employees, and if there were insurance to assure payment of full benefits to them, the temptation to do so would be much greater. Other factors noted in the study are that some of the terminated plans were no doubt fully funded and still others involved no loss to employees when their companies were merged into others having equivalent or better plans.

The humanitarian desire to assure that under no circumstances should employee expectations for pensions be unfulfilled would be more compelling if there were no social security system and if private pension coverage were virtually universal. 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, as pointed out in explaining the business purpose of private plans, their existence does not impose an economic burden on the large segment of the population who do not receive pensions.

As to the probable effects of a reinsurance arrangement, insurance necessarily requires definition and limitation of the risks involved, which, in turn, requires rather precise funding standards, thereby decreasing desirable flexibility. It also would involve extra costs of unknown but possibly substantial proportions, depending on its adequacy, thus inhibiting potential benefits.

It would be a mistake, under these circumstances, to impair the usefulness of the private pension plans by burdening them with requirements intended to assist a fractional percentage of those covered, especially when there is no compelling reason in equity to secure such individuals against this particular risk of plan discontinuance when funds prove to be inadequate.

CONCLUSIONS AS TO PORTABILITY

Portability also is a concept which may have some appeal in certain circumstances, although it is perhaps not of major usefulness if there is vesting. 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. The Bell System companies believe that much more study is required before legislation of this type is enacted.

SUMMARY AND CONCLUSIONS

On the basis of their 54 years of operation of their own pension and benefit plans, during 40 years of which they have been funding pensions, the Bell System companies conclude that:

1. Private pension plans have a valid business purpose, which it is also in the interests of employees and the public to protect.

2. The circumstances surrounding private pension plans are so varied and complex that great freedom and latitude to adapt to and change with those circumstances should continue to be permitted.

3. Occasional abuses should not lead to legislation which would impair the usefulness of pension plans in general.

4. The potentialities for basic harm to the private pension system of various current proposals for rigid funding requirements, unlimited vesting, reinsurance and portability make it the path of wisdom to refrain from prematurely enacting new legislation along those lines. Much more study, factual analysis, and examination of probable consequences, as well as further evaluation of the premises behind the proposals, is needed. The Bell System companies believe that the likely ultimate conclusion will be that no such legislation would be desirable. But, in any event, further study should serve to clarify the issues involved. They are not clear now, many complexities are not recognized, and valid priorities of values seemingly have not been established even by proponents of change. Important and far-reaching legislation should not be enacted in such circumstances.

DEFERRED PROFIT SHARING AND OLD AGE INCOME ASSURANCE

BY J. J. JEHRING*

WHAT IS PROFIT SHARING?

Profit sharing, as it is being practiced in the United States today, can best be understood if it is viewed as a complex of economic, political, sociological, psychological, and moral concepts which have evolved from the experience of almost a century of various kinds of applications by businessmen.

In the field of economics it has been looked upon as a method of wage payments, a method of providing security, a method of increasing productivity, and a method of improving labor relations. (John Bates Clark, J. H. von Thunen, Bernard Dempsey.)

In the field of sociology it has been discussed as a superior method of organizing industrial groups to achieve high standards of performance through cooperation. (Georges Friedmann, Jean Fourastie.)

In psychology it has been described as a method through which high levels of ego involvement of individuals can be obtained. (Douglas McGregor, Abraham Maslow.)

In the field of religion and morals, it has been referred to as the application of Christian principles to business and the just wage. (Catholic encyclicals, N. P. Gilman, a Protestant clergyman.)

In the field of political science, it has been discussed as the alternate of socialism and communism. (Vandenberg-Herring Senate committee.)

The use of profit sharing as an idea to raise productivity is an old one. It can be traced to ancient civilizations where it has been employed in agricultural and fishing economies as well as in trading societies.1

The term "profit sharing" as it is currently being used in the American business economy originated with a definition developed by the International Congress on Profit Sharing held in Paris, France, in 1889. This Congress, which was composed of persons from a number of emerging industrial countries who were interested in profit sharing, passed the following resolution which became the basis on which most recent profit-sharing definitions were built:

The International Congress is of the opinion that the agreement, freely entered into, by which the employee receives a share, fixed in advance, of the profits is in harmony with equity and the essential principles of positive law.²

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¹E. R. Hardy submits early Babylonian letter to show profits were shared in brickyard at Larsa New York Times, Oct. 9, 1919. ² The International Congress on Profit Sharing, Compete Rendu in Extenso des Seances, Paris: Chiax, 1890, p. 267.

The first part of this statement is often quoted in the literature as the definition of profit sharing formulated by the Paris Congress. The group expanded on various aspects of the basic definition and during the course of its discussions came up with the following comments:

By a share of the profits was meant a sum paid to the employee, in addition to his wages, out of profits, the amount of which was dependent on the amount of these profits.

Profits were understood as the actual net balance of gain realized by the financial operations of the undertaking in relation to which the scheme exists.

It was observed that the money to be received by the employee under profit sharing was to be received by him strictly as an employee; that is, in consideration of the work done by him, not as a gift.

The committee pointed out that the share must be fixed in advance; however, they indicated it was not necessary that the employee know all the details of the basis on which their share is fixed. However, if the share is indeterminate; that is, the employer decides at the end of the year how much he will give, at his absolute discretion, this is not profit sharing.

The committee also indicated that the shares should be distributed among the employees according to some fixed fashion, but that under some cases the employer may be able to distribute according to his idea of the employee's merit. The committee indicated that no part of the employees' share can revert to the employer; all must be distributed among the employees.

The committee indicated that all employees should share, and plans for managers, foremen, or salesmen alone are not to be considered profit sharing. However, the committee laid down some limits that would have to be met as far as coverage was concerned. Only adults need to be included. As a minimum coverage, the committee suggested that 75 percent of the total number of adult employees who have been in the service of the employer for at least 1 year must participate in the plan.³

The following are some concepts inherent in the definition of profit sharing given by this International Congress:

1. Consideration was being given to profit sharing as a moral concept as can be noted by the terms "equity" and "essential principles of positive law."

2. The idea of incentive was inherent in the manner in which the term was defined. It is to be received by the employee "not as a gift" but "in consideration of work done by him."

3. The concept of total group motivation was in the minds of the conferees, because they indicated that "all" employees should share and then proceeded to define "all employees."

THE DEFINITION OF PROFIT SHARING IN THE UNITED STATES

The first organization to encourage profit sharing in the United States was formed in 1890 and was called "The Association for the

⁸ David F. Schloss, Methods of Industrial Remuneration, 3d ed., London, Williams & Norgate, 1898, pp. 239-253.

Promotion of Profit Sharing." It was made up largely of Protestant clergymen, college presidents, professors, and public officials concerned with the labor question. Because it was founded as a result of the Paris Congress of 1889, it naturally adopted the definition of that group as "its" definition.4

The second profit-sharing movement, formed in 1910, was spear-headed by the Profit-Sharing Committee of the "National Civic Federation." This movement, which was supported by a number of leading industrialists, tended to broaden the definition of profit sharing and used the term to cover almost any system of payment of wages over and above the basic going cash wage of the labor market. Although it had no formalized definition of profit sharing, the following were referred to as profit-sharing plans:

Henry Ford's Five-Dollar-a-Day Wage.

Individual piece rate incentives.

Employee stock ownership plans.

Christmas bonuses.

Welfare and pension schemes of all types.

This group, in its book,⁵ quoted as a definition of profit sharing, the one given in the 11th edition of the Encyclopedia Britannica which follows:

Profit sharing (that is, between employer and employee). A method of remunerating labor under which the employees receive in addition to ordinary wages a share of the profit which the business realizes. The term is not infrequently used loosely to include many forms of addition to ordinary wages, such as bonus on output or quality, gain sharing, and product sharing. Yet strictly where an employee or group works for a share of the products, or is paid so much in addition to ordinary wages in proportion as the product exceeds a certain standard, in neither of these cases have we profit sharing, for the net result of the business may be a large profit or a small one or a loss and the employee is unaffected. In the same way, if a workman is employed on the basis that if in doing a particular job he saves something out of a stipulated time or labor, or a stipulated amount of material, he shall receive in addition to ordinary wages a proportion of the value so saved, that is technically gain sharing, not profit sharing. Even where the bonus depends strictly on profit, it is not reckoned as profit sharing if it is confined to the leading employees.

An agreement is the essence of the matter. It is not profit sharing where an employer takes something from his profits at his own will and pleasure and gives it to his employees.

This group obviously used the following sentence from this definition to define its sphere of influence:

The term is not infrequently used loosely to include many forms of addition to ordinary wages such as bonuses on output or quality, gain sharing, and product sharing.

⁴ N. P. Gilman, Profit Sharing Between Employer and Employee, Boston and New York, Houghton Mifflin & Co., 1889. ⁶ The National Civic Federation, Profit Sharing by American Employers, New York, E. P. Dutton & Co., 1916, p. 23.

THE SENATE COMMITTEE TO INVESTIGATE PROFIT SHARING

In 1939 the Vandenberg-Herring committee conducted extensive research on profit sharing in U.S. business. The committee was charged with making a complete study of existing profit-sharing systems between employers and employees in the United States to consider what favorable contribution, if any, may be made in the encouragement of profit sharing by the Federal Government, including the grant of compensatory tax exemptions and tax rewards when profit sharing is voluntarily established; and to consider any other recommendations which may prove desirable in pursuit of the objectives. The committee had the following to state about profit sharing:

Prior to this time the term "profit sharing" had been given a varied and extremely limited definition. In fact no two writers or students of the subject seem to agree on the subject matter to be included in a definition of profit sharing. Practically all the literature on the subject is limited by the definition set forth by the International Cooperative Congress. * * *

In the discussion of this Congress, profits were further defined as being the actual net balance or gain realized by the total operations of the undertaking in relation to which the scheme exists, and the sums paid to employees out of profits were to be directly dependent upon the profits.⁶

For the purpose of classification of plans, this definition may be practical. However, for the purposes of this survey such limitations are not desirable since our objective is not the analysis of certain plans which might fall within a definition set forth 50 years ago, but rather an analysis of the existing employer-employee relationship.

In order to give implementation to the recommendations of the Vandenberg-Herring committee, more favorable tax legislation was passed which covered profit-sharing programs of the deferred type. This resulted in the following definition of deferred profit sharing which appears in connection with the Internal Revenue Code:

A profit-sharing plan is a plan established and maintained by an employer to provide for participation in his profits by his employees or their beneficiaries. The plan must provide a definite predetermined formula for allocating the contributions made to the plan amongst the participants and for distributing the funds accumulated under the plan after a fixed number of years, the attainment of a stated age, or upon prior occurrence of some event such as illness, disability, retirement, death, or severance of employment. (Commissioner of Internal Revenue in regulations interpreting sec. 401a of the 1954 Code.)

In 1947 the Council of Profit-Sharing Industries was established and it also defined profit sharing in the more restricted rather than the broader manner. This definition reads as follows:

Profit sharing is any procedure under which an employer pays or makes available to all regular employees subject to reasonable

⁶ "Senate Hearings Pursuant to S. 215," Washington, D.C., U.S. Government Printing Office, 1939, pp. 2-3.

eligibility rules, in addition to prevailing rates of pay, special, current, or deferred sums based on the profits of the business.⁷

How Deferred Profit Sharing Should Be Viewed

The furnishing of retirement benefits for employees is only one function of deferred profit-sharing programs in the United States. Another, and a much more important role for these plans, is to furnish incentives to all the factors of production; i.e., labor, management, and capital, to reach high levels of productivity.

The introduction of the computer and automation into our business world calls for new organizational techniques with new approaches to motivation. To use new technology most efficiently, a systems approach is required. Deferred profit-sharing plans can be classed as total systems incentives, because, unlike individual incentives, they not only motivate labor but also management and capital at the same time. Sharing approaches are very likely to become necessary if we are to effectively utilize computers and new technology to achieve high levels of productivity.

Russia, under the new economic approaches being put into operation (Liebermanism), is making use of the profit-sharing approach to increase their productivity. We must encourage, by whatever means possible, the spread of various kinds of sharing systems in the United States to simulate a continuing growth of our productivity.

Research indicates that management thinks of deferred profit sharing as a means to increase productivity as well as to provide retirement benefits. However, research also indicates that both management and labor often lack the understanding which is necessary if maximum results are to be obtained from sharing programs. As a positive step, the Government could well consider encouraging educational programs for labor and management regarding the planning and operation of successful sharing programs.

TAX BENEFITS FOR DEFERRED PROFIT SHARING

Special tax advantages were not given to deferred profit-sharing plans primarily because they were a means of furnishing retirement benefits for employees. Isadore Goodman, of the Internal Revenue Service, pointed out in a speech on the origin and development of the "Basic Tax Requisites Applicable to Pension and Profit-Sharing Trusts" that:

An interest in the employers' business and a sharing of profits through stock bonus and profit-sharing plans are important production spurs which help foster the general economy. Hence, exemption from income tax was granted as early as 1921 to an employees' trust which is part of a stock bonus or a profit-sharing plan of an employer for the exclusive benefit of his employees. Similar treatment was extended in 1926 to pension trusts.⁸

It is interesting to note that no mention was made of retirement benefits in this first law which gave tax advantages to deferred profitsharing plans. The rationale was to encourage the use of such programs

⁷ Council, of Profit-Sharing Industries, Joseph Meler (ed.), Profit-Sharing Manual, Chicago, 1957. ⁸ Speech, Oct. 18, 1962, to Western Pension Conference at San Francisco.

through favorable tax treatment because it was decided that profitsharing plans would not only provide incentives but would also spread capitalism and, as a result, could benefit the economy if they were to become widely 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 sole purpose of the plan is to offer employees or their beneficiaries either (a) a share of the profits of the business or (b) an income after retirement.

It is still possible to establish a deferred profit-sharing plan which is qualified for tax benefits without having the funds going exclusively for retirement benefits, although many trusts now call for retirement funds as their ultimate aim. In the Vandenberg-Herring subcommittee report it is interesting to note recommendations stated that profitsharing trusts should be established for two main reasons. One was to furnish a source for unemployment benefit funds and the other was as a basis for retirement funds.

The main contribution profit sharing can make to old-age income assurance comes from whatever incentive it can provide to increase productivity. A fact often overlooked is that, unless overall productivity is increased at a pace comparable to that with which benefits are expanded, retirement payments are robbed of their real meaning for the retirees. This is evident from the fact that whereas a pension of \$150 per month in the 1930's was looked upon as adequate, today it is viewed as insufficient to support retired persons.

A good principle to adopt is the larger the welfare benefits, the greater will be the need for the Government to encourage incentive plans to increase productivity.

CONTRASTING PENSIONS AND DEFERRED PROFIT-SHARING PROGRAMS

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 costs 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.

Deferred profit sharing in addition to its possible use as the basis for a retirement fund can and is also being used to fill many other needs of the workers such as:

Funds to start a new business. Funds for death benefits. Emergency funds. Educational funds. Collateral for loans. Funds for housing. Unemployment or severance funds.

Under the pension plans, because of the basic philosophy involved, the young workers must contribute a disproportionately large amount when contrasted with the older employee. This does not happen with deferred profit sharing because each individual shares directly, usually according to his wage or sometimes in addition to his length of service.

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 benefits from the plan in which they are currently participating. However, members who have less than 100 percent vesting will forfeit some of their funds to the remaining participants when they separate from the company.

THE IMPORTANCE OF PRODUCTIVITY FOR RETIREMENT PROGRAMS

Deferred profit-sharing plans tend to raise productivity at the same time they are building funds for providing benefits to employees. This is the most important advantage of deferred profit sharing as a means of furnishing retirement funds, and is one that is most often overlooked because of an improper understanding of and appreciation for the importance of productivity in guaranteeing the value of the retirement payments to older employees.

It is only the production of more goods and services at lower costs as more people become eligible for retirement that can give real substance to retirement benefits. Unless we can constantly raise our efficiency and our production, we will only be playing a number's game with the dollar amounts of retirement benefits. We may be raising the dollar amounts of benefits older people receive and at the same time reducing the real values they can purchase.

PROFIT SHARING AND OLD AGE INCOME ASSURANCE

BY WILLIAM J. HOWELL*

Since we specialize in incentive compensation: Both cash types and profit sharing, thrift, and stock purchase plans, and are not actuaries, I shall concentrate on deferred profit sharing and not on private pension plans nor on the social security system.

The Joint Economic Committee report on "Old Age Income Assurance—An Outline of Issue and Alternatives," confined itself to the "public interest in provision of old-age income assurance for consumption." Since "consumption" was not defined, I surmise that it was meant not only to distinguish from savings and investments by older people, but to connote a scale of material living albeit related to the older person's compensation when active yet somewhat more modest.

My contention is that deferred profit sharing to a very substantial degree does not fall into the purview of this report. In many deferred profit-sharing plans the shares result from and are a deferred reward for a level of productivity and harmony of labor relations in excess of the quality of efficiency and labor harmony which would result from payment of the prevailing rate of pay without any profit sharing. Incidentally, few profit-sharing firms, because of profit sharing, are desirous of or able to attract and hold satisfactory employees while paying below competitive rates of pay.

On the other hand, in many deferred profit-sharing plans such a productivity incentive is either not actively sought or is not realized, and either the prime motivation for these plans is close ownership's magnanimity or, far more often, the prime objective is the provision of retirement and other benefits.

As to how the total of deferred profit-sharing plans divides between plans which provide deferred incentive compensation and those which provide deferred benefits, it is necessary to conjecture because of the uncertainty of statistics which deal with management motivations and with company estimates of the incentive power of their plans (which amount to estimating how much less their profits would have been if they did not have a profit-sharing plan). My guess is that retirement (and termination) benefits constitute the prime result in something over half of all the deferred profit-sharing plans, and that incentive compensation is the predominant result in something less than half of all such plans. Even in the incentive category, of course, there is usually strong concern for the potentialities of deferral: not only for retirement benefits but for the full versatility of benefits which occur in deferred profit-sharing plans.

Now many plans with incentive realization, and likewise many without, embody a versatility of benefits beyond the pension objectives of old-age income assurance alone. Though these benefits were provided

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for essentially in the Code and regulations since 1942, they were not for a long time commonly exploited, but in the past few years many new plans and, by amendment, many old plans have adopted such provisions for coping with family financial emergencies, purchase, and enlargement of homes, support of children in college, and advanced occupational training of participants through loans or pre-severance withdrawals or both. In addition, the wide choice of lump-sum terminal withdrawals is due to the preference for an estate at retirement instead of mere income assurance for such uses as helping children get started in life, taking travels never possible during working careers, and set-ting up part-time "retirement" businesses. Finally, job mobility is accelerated by the availability of substantial rapidly vesting equities on termination without which a great many employees would hesitate to pull up stakes and move to a new part of the country for work they prefer. The aggregate impact of such deferred plan versatility is that working class Americans by the tens of thousands yearly are graduated into the middle class, increasing the stability of society in many ways, notably in helping provide sharply improved education and training opportunities for their offspring so that they can move into the brainier jobs that will predominate in the future.

Now, in our opinion, those deferred profit-sharing plans which lack incentive realization and whose predominant result is to provide oldage income assurance 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-the plans which we call "dynamic" deferred plans-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-with more favored tax treatment being one of the best ways Government can provide effective encouragement. 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 mainly 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. In the first law granting tax exemption to employee profit-sharing trusts in 1921, no justification was made because of any retirement security objective, but because of the public concern in increasing employees' interest in their employer's business. Indeed it was not until 5 years later that similar tax treatment was extended to employee pension funds.

Now, although it might be practical to distinguish between those deferred profit-sharing plans which provide great versatility of benefits promoting self-reliance and preretirement financial flexibility, and those plans which provide retirement and severance benefits only, it would certainly not be at all practical for any public regulatory agency to have to distinguish fairly between deferred profit-sharing plans with realized productivity motivation and those without. Incidentally, the nature of a deferred profit-sharing plan is such that sometimes even if better productivity and labor relations were never promoted under the plan and were never management objectives in its adoption and management was not at all incentive-minded, considerably better labor harmony and efficiency would sometimes nevertheless result, and in addition, the operation of a plan without incentive objectives sometimes encourages management to become incentive-minded and adopt an incentive attitude toward the plan.

As compared to pensions, deferred profit-sharing plans would seem to warrant more encouragement by tax policy, since they are inherently less discriminatory than pensions, with the double crediting in pensions of high pay when high pay correlates with long past service, and with their frequent basing of benefits on final rather than on career pay.

In the interests of legislative simplicity we would "settle" for the same tax treatment of all deferred profit-sharing plans as of pension plans *provided* it is substantially equivalent to the present treatment which we consider equitable for pension plans along with those profitsharing plans which possess little or no incentive realization.

We could not understand the allegation in the committee report that deferred profit-sharing plans now receive more favorable tax treatment than pension plans. If the capital gains treatment of lump-sum distributions is what is referred to, such treatment of lump-sum payouts may be an optional provision in pension plans.

Apropos of the capital gains treatment of lump-sum distributions on termination of service whether in profit-sharing or pension plans, we do not justify it on the grounds of a desired parity between saved labor income and property income. Our strong endorsement of the capital gains method of taxing lump-sum distributions is based on a sense of the universally accepted inequity of applying graduated income tax to an accumulation, on the inherent uncertainty whether the profit shares are true earned compensation or a gift of part of the "economic rent" component of accounting profit, and on the simplicity and practicality of this taxing method demonstrated over a long period of time.

The tax treatment of capital gain of stock of the employer is in our view the only practical way in which legislation can favor the incentive type of deferred profit-sharing plan over the type which is interested predominantly in retirement. The double interest of employees in improving productivity and labor relations, inherent in both receiving current profit shares and through the medium of the dividends and growth in the employer's stock, vastly increases the likelihood of plans which provide for investment in the employer's stock being strong incentive type plans. Possibly, even though IRS advance approval is required for all trust purchases of employer stock, this provision could be limited to stocks traded on major exchanges, as it in practice certainly largely is. We believe that many defererd profit-sharing plans are failing to avail themselves of this incentive to better employee productivity and labor-management relations where the use would be suitable and where IRS approval would be granted.

Now, as for specific qualifiable plan features, we see a great loss if deferred profit-sharing plans open to salaried or clerical workers only were prohibited per se (although we have in our consulting career

put in only one plan in 7 years which did not open membership to all categories of regular employees). 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. Since requests for approval of salaried only plans are coming from smaller and smaller companies on the average each year, the IRS has quantitatively changed its attitude in effect from the position that a salaried plan is not per se qualifiable to the present position that it is not per se nonqualifiable. The confusion as to qualification requirements and variance in attitudes of different district offices has been very vexing to firms and consultants involved, for its guidelines both for salaried only plans standing on their own and for satisfactory comparability of benefits of hourly plans with such salaried plans are very confusing, but I feel that a pure and simple exclusion of salaried and clerical only plans would be much worse. The IRS is capable of some better administrative guidelines for use in this critical area. I was glad to note that the interagency task force had, on better understanding of the diversity and complexity of situations, decided not to recommend a ban on salaried or clerical plan coverages per se. Small firms which install deferred profit sharing for salaried and clerical only find the going without any retirement program for hourly and plant people harder and harder as time goes on, and tend to settle for a pension program for the plant and hourly. yielding a combination which is usually less discriminating in favor of high pay (as well as less stimulating) than the reverse combination of a pension plan for salaried and a deferred profit-sharing plan for the hourly.

More than anything else in the committee report, its interest in requiring that forfeitures under deferred profit-sharing plans not be reallocated to other participants but saved to reduce future company contributions, is based on a failure to discern one very major difference between deferred profit-sharing and pension plans. In a pension the company contributions are determined actuarially as sufficient for accumulation of funds needed to pay each specific predetermined benefit. In a deferred profit-sharing plan, the company contributions are first contributed in toto to the plan members as a whole, before allocations are made to individual members, and it would cause considerable employee ill will if the company were required to "take back" amounts forfeited. Naturally, tests of discrimination may have to consider the effect of forfeitures as well as current company contributions. But, changing the rule on forfeitures in deferred profit-sharing plans would not prevent any sustained discrimination which cannot be prevented in the IRS qualification and reviews procedures. Of course, a company could declare a discretionary booster contribution under a deferred profit-sharing plan to restore the expropriation of forfeitures belonging to plan members, but this seems a needlessly sophistical way of achieving equity.

Vesting in deferred profit-sharing plans is usually quite rapid because it is found that too slow vesting dims the commonly sought productivity incentive. The vesting provisions which are specified in Senator Javits' bill, S. 1103 : 100 percent after 15 years' service and reaching age 45, and 50 percent after 10 years' service and reaching age 45, seem practical in our experience. We would not favor a regulatory bill, however, which gave any commission discretion to require immediate vesting, because the productivity of American industry on which our high living standard depends would be severely diminished by encouraging the shortest possible periods of employment. But, profit-sharing vesting should not be too slow, either. I think very few deferred profit-sharing firms would be displeased with Senator Javits' vesting schedules, but I know that the rate of plan adoption would be greatly curtailed if immediate vesting of deferred profit-sharing plans was required. Whatever the situation in pensions, I feel sure that there is, because of turnover patterns, quantitatively very little discrimination in existing deferred profit-sharing plans against women versus men, young versus old, salaried versus hourly, wage earners, low paid versus high paid, Negro versus non-Negro, and union member versus nonunion member.

The committee report seems to conclude that oversaving is promoted by qualified plans. It seems downright ludicrous to me that deferred profit sharing can result in such an excess in the supply of savings compared to the demand for investments that consumption patterns would suffer and investment returns go down badly. The trend in the capital investment standing behind each job is sure to increase substantially, and without an increase of savings, adequate numbers of the newer kinds of jobs cannot be created and not only consumption, but employment would drop. The multiplier effect is constantly at work converting increased investment into increased purchasing power except at the times the economy is overheated.

The issue is raised in the committee report that collective saving under qualified "group" deferred profit-sharing plans may not be as socially and individually desirable as individual saving. Without question, workers generally have undersaved before their allocations began to be saved in deferred sharing plans. In addition, most nonsupervisory employees do not know how to invest, without untenable risks, for a substantially better return than bank savings provide. The investment management available under deferred profit sharing is usually several cuts at least above the financial savvy of the average plan participant. The committee report worried that plan investment policies might be overly cautious, but we have seldom observed thisand only where company executives function as trustees instead of having corporate trustees or utilizing insurance companies. In many plans, selected or elected nonsupervisory employees have a limited role in establishing investments policies and guidelines, and in many larger plans, more than one type of investments is within the choice of participants. I can see no danger as was voiced in the report that the investment pattern of the free enterprise system would not be maintained as deferred profit sharing expands. Indeed, I was pleased to hear Assistant Secretary of the Treasury, Stanley Surrey, say that the Interagency Task Force had decided to recommend leaving investment discretion to individual plan administrators and trustees.

Now. I might comment, most briefly, on several issues in the report that do not appear to me to have appreciable bearing on deferred profit-sharing plans:

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. Obviously, there is no issue of reinsurance, nor of Federal liability. There is, of course, a most vital issue of fiduciary responsibility, but it seems to be admirably handled by State regulations. I have extremely rarely heard of, and never once in my own experience observed, a case of appreciable fiduciary irresponsibility in administering deferred profit-sharing trusts. The "abuses" along this line alleged against qualified plans as a whole are very few, and of those very few essentially none, involve deferred profit-sharing plans. Incidentally, we find a great majority of our clients preferring for their employees funds a corporate fiduciary (or recently in some cases an insurance company group contract) who can buffer the employer from the participant's natural reaction at inevitable fund valuation fluctuations when equity investments are involved.

The availability of portability would not, in my opinion, 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. If a portability mechanism were established as in Senator Javits' bill, S. 1103, I would strongly recommend that before any distributable interest from a private plan could be transferred to a public fund operated by the pension and benefit plans commissioner, not only the approval of the plan administrator be obtained but, without question, the approval of the terminating employee as well.

The suggestion of the report that plans ought to be consolidated or combined into one vast master plan is, of course, not only impractical, but an utter contradiction of terms as far as deferred profit-sharing plans go. Even in the few association-sponsored multiemployer deferred profit-sharing plans, every situation is unique and each participating company not only has a legally separate plan but operates a separate set of plan features in its own way.

Finally, I question the provision in Senator Javits' bill in regard to giving the Commissioner of the regulatory agency the responsibility to improve, in any way, the operation of private plans. As in many contexts in the committee report, it is assumed that the social; that is, public interest should not be delegated to the private sector. On the contrary, a vast amount of the social interest in many areas is successfully delegated to the private sector. Specifically, I don't think that any government agency can become as expert in making private profitsharing plans work as can the private companies operating the plans together with their various types of advisers.

While I have dwelt largely on the issues affecting deferred profitsharing plans, it is impossible to ignore public pension fundamentals because of their great impact on private plans.

First, the issue of coordinating deferred profit-sharing plans with social security. Since probably at least half of deferred profit-sharing plans have retirement benefits as a very prime objective and/or may generate no extra profits as a result, and since it is impractical to determine arbitrarily which deferred sharing plans are of this type and which are not, as a government regulatory agency would have to do, I believe, therefore, that all deferred profit-sharing plans have to be treated like private pensions in respect to the fundamental tenet of integration and the integration formula worked out to be comparable with what ensues for pensions.

Of course, this issue would vanish if the enthusiasm I detect in the report prevailed for a public pension system (whether in two steps or one), which was so adequate in terms of benefits and low in administrative cost that private retirement plans would have no reason for being.

But, in my opinion, this would be a calamitous denouement of pension "reform." While under such a state of affairs, there could be undiminished interest in encouraging deferred profit-sharing plans for purposes other than that of providing retirement benefits by the use of the same effective tax treatment as now. I choose not to discuss this eventuality.

We should not look to government directly for much of our opportunity, and we should not look to government for such a fully adequate degree of old-age income assurance, whether work related or otherwise, as to make private pension plans unnecessary.

I might add that it is well for economic entrepreneurs to have considerable say in the formulation of public and private pension reform, because while advocates of an extreme welfare state will, in my opinion, tend to make light of private objectives, the enthusiasts for private freedom will move much more than correspondingly in the direction of tempering their freedom with the social interest in their approach to retirement planning.

It will be economically healthful when over half of the firms that are larger than mama-papa shops adopt profit sharing, as we predict will occur within 5 years. The type of governmental encouragement that has led one out of eight or so, so far, to act in this direction will have to be continued if this healthful growth is to continue to the point where half of all sizable firms have profit sharing. 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 de-ferred profit-sharing program. Later it could add a private pension plan when it became confident that it had the stability to assume the long-term fixed financial commitment inherent therein. Actuaries generally, and unions generally, tend to feel that this order of plan adoption should be in the reverse-the pension first and later the profit sharing. 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, which will be a prime objective of a larger and larger percentage of deferred profit-sharing plans if public policy encourages continued increase in the total number of plans.

On the other hand, if public policy discourages growth and encourages terminations of deferred profit-sharing plans, this productivity motivation which works on about 5 million employees in over 60,000 companies will diminish and economic activity would perceptibly decline. It is all a matter of not so much *who* as *what* the Government should encourage: A high productivity and percentage of ever-improving performance, or satisfaction with the status quo. Without question, today is a time for excellence, which amounts, as John Gardner has said, to continued improvement and renewal strongly motivated by careful plans. This is true of nearly half of deferred profit sharing today—and it needs continually to be true of a greater percentage of all deferred profit sharing, not less. Why not retain the tax treatment which in just 25 years has brought us this far?

THE ROLE OF JOINTLY TRUSTEED PENSION PLANS*

INTRODUCTION

The National Foundation of Health, Welfare, and Pension Plans, Inc., is pleased to respond to the invitation of the Joint Economic Committee to provide a statement concerning the issues and alternatives raised in the report "Old Age Assurance, An Outline of Issues and Alternatives."

The National Foundation is a nonprofit educational organization which has as its major objectives the following, quoted from its articles of incorporation:

(1) Through education to improve and develop the capabilities of individual union trustees, management trustees, and administrators of jointly trusteed health, welfare, and pension benefits plans;

(2) To provide educational workshops from time to time for the trustees, administrators, and advisers of such plans; the information derived from said workshops to be utilized by the said trustees, administrators, and advisers in the better performance of their duties and thereby directly benefit beneficiaries of said plans and indirectly benefit the national citizenry;

(3) To promote the training and education of trustees and administrators in the management of health, welfare, and pension plans;

plans; (4) To improve public understanding and acceptance of the functions of these plans.

The benefit plan jointly managed by union and employer representatives is the central concern of the organization. This type of plan, which may be a pension arrangement or a welfare, holiday, vacation, or apprenticeship program, is operated generally under the same laws which apply to benefit programs directed by a single employer. In addition, the provisions of section 302(c) of the Labor Management Relations Act apply. This section, which generally covers restrictions on payments to employee representatives, allows for employer payments to funds which union representatives help manage if—

The payments are held in trust.

The detailed basis on which the payments are made is specified in a written agreement.

Employees and employers are equally represented in the administration of the fund.

Arbitration procedures are set forth in the agreement.

An annual audit is performed.

These generally are multiemployer plans and cover employees working in a defined area, which may be a single city, county, State, or even

^{*}National Foundation of Health, Welfare, and Pension Plans, Inc.

the entire Nation. Normally the covered employee can move from one contributing employer to another without any loss of benefit credits. Employees within each plan usually do work covered by a labor contract between a group of employers and a single union, although in a few cases a number of unions in a particular field of endeavor are joined together in one plan.

Membership in the Foundation is in the name of funds, organizations servicing jointly trusteed funds, and individuals interested in the field of jointly trusteed plans.

This statement is provided by the board of the Foundation. Voting directors on the board are trustees or administrators of jointly trusteed funds. Certain other individuals or representatives sit as advisory directors with no vote.

The board of the Foundation cannot comment on all the issues raised in the staff document prepared for the Subcommittee on Fiscal Policy of the Joint Economic Committee. Some of the issues raised concerning the private pension system do not relate to jointly trusteed plans. Some would require research of a type that the Foundation is not capable of sponsoring. Some no doubt will be commented upon by others with greater competence in specific disciplines, particularly economics. It was the intention of the board of the Foundation to provide comments on those topics of the staff document that fall within the competence and experience of the majority of the board of the Foundation.

Finally, some of the issues do not involve the private pension system, at least directly. It is the private pension system, and particularly the jointly trusteed variety, that is the focus of this statement.

Congressman Patman, in his letter of transmittal, states:

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

And Congresswoman Martha W. Griffiths, in her letter of transmittal, states:

As the executive director's letter indicates it is not a statement of conclusions or recommendations by the staff, but an outline drawn from the literature, intended to provoke debate of the issues and alternatives in this field.

It is in the spirit of reasoned discussion rather than hard conclusion that this statement is provided.

OBJECTIVES FOR THE PRIVATE PENSION SYSTEM

THE OBJECTIVE OF THE "OLD AGE INCOME ASSURANCE SYSTEM"

The staff document reviews all sources of income that may support consumption of older persons. These various sources are viewed as one system. Although pensions—public, governmental, and private—are the major concern of the staff document, attention is also given to individual earnings, prior savings, personal gifts, charity, public assistance, and tax benefits.

The document maintains that, because certain tax incentives exist for the establishment and maintenance of private pension plans, the Federal Government should require that private plans meet very specific standards and structural requirements.

What is the objective of the old-age income assurance system? The staff document states: "The public objective of old-age income assurance is adequacy of old-age consumption."

THE OBJECTIVES OF THE SPONSORS OF THE PRIVATE PENSION SYSTEM

Public policy has for some time encouraged the growth of private pension plans. This is demonstrated by the favorable tax treatment afforded such programs: Employer contributions are tax deductible, fund earnings are exempt from tax, and personal tax liability does not arise until benefits are received. The purpose for such encouragement appears to be a simple one: to have covered persons protected from the economic hazard of old age.

Why have private groups, labor unions, employers, Government units, and not-for-profit organizations, established pension plans? Certainly one reason is to protect those covered from economic hardship. But, there are others. Some of the widely stated objectives of private plans are to—

Reduce turnover.

Attract qualified employees.

Encourage loyalty to firm, industry or union.

Remove from the work force those who are too old to give effective performance.

Take advantage of favorable tax treatment.

THE OBJECTIVE OF GROWTH

Most within the national community would seem to desire the growth of the private system. This appears to also represent the view of those within Government. The report, public policy and private pension programs, authored by a Cabinet committee and published in January 1965, stated :

In view of these social purposes, 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.

The staff document, in a less enthusiastic way, states :

If, as seems likely, we are to depend largely upon private business and governmental unit plans to supplement benefits under a basic OASI plan, we should require that these plans satisfy public interest criteria for old-age assurance as a condition for tax support.

The latter statement briefly summarizes what 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?

The legislation providing some tax incentives for the establishment of plans for the self-employed and their employees may provide an answer. Few plans have been established in this area apparently because private incentives are not sufficient; recent legislation has improved the incentives for establishing such plans.

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. Thus, for example, there is a requirement that plans not discriminate in favor of the highly compensated employees. 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. More will be said later about vesting being required of all tax qualified plans.

The idea that tax incentives provide the Government with all the rationale necessary for any conceivable requirement may be less palatable than it appears at first examination. The possibility that new requirements will slow the growth of the private pension system has been noted. But, there is another issue involved that goes to the heart of Government involvement in private activities.

Private pensions are not the only organizations that receive certain tax preferences. So also do schools, churches, hospitals, charitable organizations, and research organizations, as examples. The last paragraph of the staff document states:

Categorical taxation, like categorical public assistance, is faulty in principle. Just as we would do well to abandon the category of aged for tax purposes we would gain from an elimination of the category of nonprofit organizations, among which are pension plans. The receipt of income is an economic activity. Applying a general rule that all income received by any person or organization is subject to taxation, outlays by any person or organization in the support of activities of a genuinely public character would be recognized as deductions in computation of tax.

Does this mean that the threat of withdrawal of tax incentives will, in this new world, be used to assure that churches or educational institutions as well as private pension systems carry on "activities of a genuinely public nature ?" Who indeed will define these ?

Misconceptions Concerning the Operation of the Private Pension System

Certain misconceptions in the area of the jointly trusted portion of the private pension system seem to be revealed by the staff document. Two of these are discussed here.

UNION ADMINISTRATION OF PENSION PLANS

The staff document states that "some jointly managed plans are in effect administered by the union and this practice raises again the possible conflict of interest between the union as plan administrator and as representatives of the members." It further states that "it must require great force of character on the part of union officials to not load the pension plan payroll with helping hands for general union tasks." These statements do not fairly describe joint labor-management fund administration. The Federal labor law, as noted in the introduction of this statement requires that funds be jointly trusteed. 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. One of the major functions of the national foundation is to impress upon trustees this ultimate responsibility and liability.

Many jointly trusteed 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.

The staff document states that there is no competition concerning plan administration that might provide a control mechanism against abuse. It is not clear whether this is intended to include the administration of joint funds, in which there is a very lively competition among approaches to administration. This competition continues after a plan is operating. From time to time plan trustees change their approach as the needs of the particular fund warrant. Through its seminars and written materials, the national foundation puts before the trustees of these funds the considerations, advantages, and disadvantages of each approach.

UNION REPRESENTATIVES AS TRUSTEES

The staff document appears to favor taking away from those who bargain contracts the right to establish a jointly trusteed approach to fund operation. Particularly, it deplores the involvement of union trustees in the operation of the plan. The involvement of employers is also criticized, although less vehemently. Presumably, its contentions is that the Federal Government should operate all plans or one master plan.

Some of the positive advantages of union participation in the operation of plans are ignored. The typical jointly trusteed 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 on-going organizational structure. The only effective way of establishing and operating plans in many situations is through direct union involvement.

In multiemployer situations it is impractical to negotiate a program under which employers pay whatever is required to provide a specified level of benefits. Where many employees move regularly from employer to employer, a fixed contribution of so many cents per hour or a percentage of pay is generally negotiated. The trustees establish the benefits that can be provided. Effective representation of employee interests requires some union involvement in the way pension liabilities are determined.

The staff document sees a conflict of interest between the union official as a joint manager and the union official as a representative of the workers' interest in pensions. It offers no substantial evidence that employees have been harmed through this type of structure. Moreover, the staff document appears to take the view that it might not be of great interest to employees, as a group, that a plan is soundly operated. This might be true where an employer promises to provide a benefit. Where the promise is only a fixed contribution, the employees would seem to have a very real interest in sound plan operation, including assurances that only those actually eligible for benefits receive them.

SUGGESTED ALTERNATIVES

The staff document proposes many changes in the private pension system. That neither unions nor employers be involved in the administration of private plans is one of the major changes. This suggestion appears to the board to be based on certain misconceptions discussed above.

What should be the criterion for evaluating other alternatives to the present private pension structure? The board 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.

Some of the suggestions in the staff document would seem likely to significantly increase plan costs. For example, requiring employee contributions would necessitate detailed individual accounting. Maintaining a legal staff to represent beneficiaries would clearly increase administrative costs significantly. (The staff document suggests a public agency as an alternative.)

The staff document suggests that competition be introduced into the financial operation of plans by having insurance companies sell individual annuity plans directly to employees. This idea would greatly reduce the advantages of the group approach to pensions. The private pension system has struggled for years to achieve the cost savings inherent in group approaches as compared to the individual insurance policy approach. This suggestion appears to be a substantial step backward.

None of these alternatives, the board suggests, is conducive to the growth of the private pension system. The profound consequences of suggestions like those noted could disrupt the private pension system for years. One can only imagine the difficulties that might be caused if every imagined wrong would be investigated by a legal staff paid for by each fund or by a public agency. Of the complaints received by the Labor Department under the Welfare and Pension Disclosure Act, most involve misunderstanding rather than wrongdoing. 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.

Two suggested alternatives are receiving serious consideration among legislators and require separate treatment:

(a) Mandatory vesting.

(b) Funding and reinsurance.

MANDATORY VESTING

The staff document and many other sources suggest that a vesting provision be required of all pension plans qualified by the Internal Revenue Service. The argument for this type of proposal is often based on equity. The staff document states that the mobile worker may well give equal value to society yet never receive pension benefits.

The National Foundation cannot take a position on specific suggested legislation. The attitudes of particular members of the Foundation would, in all probability, vary substantially on this proposal as well as on others, such as funding and reinsurance proposals. Many jointly trusteed 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 arrangements 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. A mandatory vesting provision might be applied without substantially disrupting the private pension system if it were applicable—

Only after a plan has existed for a period of time in order to accommodate the provision of significant benefits to those near retirement.

Only to benefits earned from the date of the applicable statute; this would avoid adding to pension liabilities costs not anticipated in earlier negotiations and applicable to service covered by prior negotiations.

Only to retirement benefits; it is difficult to see the public policy need for granting vesting rights to ancillary benefits such as those paid on death.

These and other reasonable modifications of a mandatory vesting requirement probably would limit the cost increases brought on by such legislation and still allow for significant accomplishment of the public goal of increasing actual coverage under plans.

It appears to the board that benefits should be put on a vested basis only after the covered participant has participated in the plan for a reasonable period in order to avoid many small benefit rights that would be difficult to keep recorded. Also, the vesting of benefits for the younger employees during the period when there is significant movement as work goals are being determined would not seem to be necessary to accomplish broad public policy goals.

FUNDING AND REINSURANCE

It is difficult to respond to the staff document's statement on funding and reinsurance. The suggested approach is contrary to that being widely suggested in governmental circles. Legislators and the executive branch, as represented by the report of the President's Committee, have suggested that pension plans fund accrued liabilities over a stated period of time.

The staff document suggests that funding of accrued liabilities should not be encouraged. The reasons given for this position are:

Funding by raising current contributions costs is an impediment to extension of plan coverage. The accumulation of funds poses a continuing threat to maintenance of full employment.

The management of pension funds presents a challenge to effective supervision of economic power.

Perhaps this position has some merit, but there appears to be substantial economic theory to the contrary.¹ The National Foundation board finds the evaluation of these conflicting views on the relative worth of present consumption versus capital investment outside its scope of activity.

The board notes that many jointly trusteed funds probably are funding accrued liabilities to a lesser extent than similar single employer plans. This is due to a number of factors, among them :

The relative newness of many of jointly trusteed plans.

A recognition that the business failure of one or several employers will not affect the pension promise in many jointly trusteed funds.

The abrupt increase in benefit levels that probably would result at the time a fixed contribution plan were fully funded if the funding took place over a short period of time.

A resinsurance premium based upon the life expectancy of a plan is suggested in the staff document as a substitute for funding. It appears to the board that the establishment of life expectancies for various industries would be most difficult. Modern technology could change an expectation in a modest period of time.

On the other hand, funding requirements, if very stringent, could demand significant increases in employer contributions or result in reductions in plan benefits for many jointly trusteed 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 contribution levels.

Much of the past discussion concerning funding has centered on "accrued liabilities." Since various actuarial methods and assumption combinations can vary this amount drastically, it would appear that some measure of funding is needed other than the degree that accrued liability is covered by funds available. Perhaps a more meaningful test is the degree to which vested benefits could be provided at any given time.

FEDERAL FIDUCIARY STANDARDS

The situations of wrongdoing in both jointly managed and single employer pension funds have been rare. Apparently present laws are usually effective in discouraging potential wrongdoers. Legislators are showing renewed interest, however, in the establishment of Federal fiduciary standards and a system by which those who do not meet these standards can be removed or, in cases of serious wrongdoing, prosecuted. Some suggest that this type of legislation may be required because of the often remote legal interest of participants under present State trust statutes and common law.

The National Foundation does not recognize any significant need for this type of legislation. On the other hand, it foresees no significant

¹For example, see the statement of Dr. Roger Murray, professor of banking and finance and associate dean of the School of Business and Finance, Columbia University, before the American Pension Conference, Feb. 9, 1967.

effect on most funds since they are conscientiously administered. It is hoped that any legislation of this type will be consciously structured to avoid extra administrative burden and expense wherever possible.

THE MESSAGE OF THE JOINTLY TRUSTEED PENSION PLANS

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.

The staff document states that the employees of small employers are discriminated against as compared to employees of large employers. The board believes this to be untrue in the case of many employees covered by jointly trusteed pension plans. Not only are the amounts of their benefits often competitive, but also the plans in which they are participating provide significant protection for the mobile worker. Vesting is often a part of these plans, as well.

The message of the jointly trusteed pension plan may indeed be the medium. A structure was created by the Labor Management Relations Act that gives a readily established form to multiemployer negotiated plans. The Internal Revenue Service qualifies these programs on a plan basis rather than on an employer-by-employer basis. Experience for all employers may be combined, thus requiring only one actuarial valuation.

Does all this provide a hint for the way Government might wish to move in the future in encouraging the growth of private pension plans? Should there 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.

The growth of the private pension system demands great creativity on the part of the Government and private groups involved in an effort to encourage the substantial growth of plans among small employers.

Conclusion

The board of directors of the National Foundation believes in the private pension system with its differing emphases in particular situations. The board believes that the private pension system is a wellestablished and desirable supplement to Federal programs that will provide significant benefits to many citizens. It has inherent flexibility, however, to meet the changing objectives of a given organization or group.

THE STRUCTURE AND EVOLUTION OF UNION INTERESTS IN PENSIONS

BY JACK BARBASH*

INTRODUCTION

This paper is divided into five main parts:

1. The prenegotiated pension movement, that is, mutual aid, industrial pensions, and social security.

2. The influential forces at work in the breakout period of negotiated pensions with emphasis on the initial Miners, UAW, and Steel negotiations.

3. The emergence of negotiated multiemployer pensions.

4. The evolution of union pension policies on retirement benefits, vesting, funding, retirement-related benefits other than in pension plan and the development of pension professionalism in the unions.

5. A commentary on current criticisms of negotiated pensions.

The American union like the British union "owe[s] its origins as much to the desire to associate for mutual insurance as to the desire to establish trade rules." Together with industrial pensions and the public old-age programs trade union benefits constitute the well of experience from which the contemporary negotiated pension movement has evolved. Union beneficiary activities first carried on by the locals in the early 19th century "were not continuous nor, in many cases, important."¹ The activities did not become substantial until about the 1880's when the nationals first began to establish programs.

Latimer's classic study has made the facts of early trade union pensions well known but the main line of development may be worth recapitulating to set the stage for what is to follow. Old-age benefits turn out to be the last to be adopted by the national unions, being preceded by benefits for death, sickness, disability, strikes, and unemployment. Pensions became the final forms in the development of old-age protection which started with payments for permanent and total disability as a lump-sum commutation of the death benefit. In the 1890's the railroad brotherhoods initiated the movement for homes for the aged and disabled. The first plan to provide for periodic oldage payments as distinct from lump sum was established by the Pattern Makers in 1900. The Granite Cutters established the first funded plan in 1905. In 1906–07 the Typographical Union became the first *large* union to adopt a pension program. Characteristically the ITU pension plan arose from urgent need, not broad principle. The need in this case

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¹ J. B. Kennedy, *Beneficiary Features of American Trade Unions*, Johns Hopkins University Studies in Historical and Political Science, vol. XXVI (Baltimore: Johns Hopkins University, 1908), p. 9; see also Sidney and Beatrice Webb, *Industrial Democracy*, vol. I (London: Longmans, Green, 1894), pp. 152–172.

was a pool of older members left unemployed by the strikes over the 8-hour day, for whom the ITU Home was not feasible. The first pension plan to offer benefits as a matter of right-the earlier plans were "gratuities"—was established by the Brotherhood of Locomotive Engineers in 1912. The fullest development of a scheme of old-age benefits came in two railroad unions-the Locomotive Firemen & Enginemen (BLFE) and the Trainmen (BRT)-which offered among others a home for the aged and disabled, old-age and total disability pensions, and pensions to widows of members. Among the nonrail-unions the Cigar Makers Union was regarded as the "model beneficiary" union providing a welfare system which included payments for sickness, death, permanent and total disability and unemployment.² By 1928 about 40 percent of the trade union membership belonged to national unions offering one form or another of old-age and permanent and total disability benefits.³

By the onset of the great depression of the 1930's trade union pension funds were judged by the New York State Commission on Old-Age Security to be "in all cases technically bankrupt. * * * The attaining of solvency will necessitate huge increases in contribution and ** * members of the unions are not prepared to stand such in-creased contributions." * "Benefit systems," Mathew Woll, a prominent AFL vice president and a photoengravers officer, said, in 1930, "where they are still in operation are a constant source of trouble. * * * Their assessments must be raised constantly to meet rising ages, and increases of assessments are always resented. All manner of complications result * * *. Few union operations are today productive of as much woe and uncertainty as the benefit systems that remain in operation." ⁵ In short, the pension system of the unions was collapsing under the weight of a major depression, a declining membership, an aging union population, and more urgent prior claims on the dwindling union treasuries. After the adoption of social security only a handful of national unions continued to offer old-age benefits mostly in the form of homes and pensions-notably the Carpenters, Electrical Workers (IBEW), the Pressmen, Railroad Conductors, and the Locomotive Engineers.⁶

The Webbs remarked, in the 1890's, that the more advanced British union welfare programs reflected "the belief of trade union officials in the advantage of developing the friendly society side of trade unionism [and] rests frankly on the adventitious aid it brings to working-class organizations." 7 Trade union welfarism was seen by leaders as serving similar "adventitious" interests in the American situation. "The officials of the great trade-unions," James Lynch, an ITU president, observed in 1914, "* * * recognize the value of benefit features as builders of unions, as conservator of the membership of these unions, entirely aside

² Helen Sumner. "The Benefit System of the Cigar Makers Union," Trade Unionism and Labor Problems, John R. Commons, ed. (Boston: Ginn, 1905). ³ This section based largely on Murray W. Latimer, Trade Union Pension Systems (New York: National Industrial Conference Board, 1932), p. 3. ⁴ Quoted in Abraham Epstein, Insecurity, a Challenge to America (New York: Smith & Hans, 1933), pp. 150-151. ^a Mathew Woll. "Why Trade-Union Group Insurance Rather Than a Benefit Plan." American Photo-Engraver, April 1930, quoted in Monthly Labor Review, February 1947, p. 202. ^a Florence Peterson, American Labor Unions (New York: Harper & Bros., 1945), pp. 128-146.

pp. 128–146. ⁷ Sidney and Beatrice Webb. op. cit., p. 158.

from their assistance to members as safeguards against financial loss during adversity." 8

In the view of the leadership, union beneficiary features in this period served institutional interests by (1) helping to retain old-and perhaps to attract new-members, (2) strengthening the national union's financial resources which could be, and were, tapped in emergencies for strike benefits, and (3) strengthening the national's hand in enforcing discipline against recalcitrant local unions.⁹ A sympathetic academic observer put it in 1905:

Friendly insurance is not only durable in itself, but it attracts the best class of workingmen, the most frugal and farsighted and keeps them in the union once they have joined. Moreover, it encourages conservatism and above all else secures the obedience of individual members and constituent unions, for neither an individual nor a union will secede when secession means the sacrifice of a large interest in insurance funds.¹⁰

The unions with beneficiary activities in this period began to recognize, and in several instances act on newer approaches to their old-age problems by: (1) Augmenting relief "for the risks that might occur at any age" with preparation for meeting longer range needs, (2) transforming old-age benefits from gratuity into right, (3) replacing "indoor relief," that is, old-age homes, successively, with lump-sum payments and pensions, (4) utilizing legislation instead of mutual aid.

II

The major breakthrough developments of the prenegotiation period in employer pensions took place between 1910 and 1920 in railroads, and in declining degrees in public utilities and banking. Only the very large companies in manufacturing, iron and steel for the most part, were covered by pensions. The plans were mainly contributory and voluntary. On the eve of the great depression something on the order of one-seventh of industrial employees were in companies promising pensions if specified age and service requirements were complied with.¹¹

Latimer found the pre-1932 employer pension plans to be generally insecure, inflexible, and discriminatory. Insecurity was traced to weak financing, actuarial unsoundness, inadequate legal safeguards of funds and employee equities and vague administrative procedures. Inflexibility arose out of excessive age and service requirements.¹² The plans were discriminatory because the employees in the upper grades benefited at the expense of those in the rank and file." 13 The coverage of industrial pension systems in the 1930's was just above 10 percent of all wage earners and between 5 and 10 percent of this number were estimated as eventually qualifying.¹⁴

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⁸ James Lynch. "Trade-Union Sickness Insurance," Trade Unionism and Labor Problems, John R. Commons, ed. (Boston: Ginn, 1921), p. 71.
⁹ J. B. Kennedy, op. cit., pp. 11-16.
¹⁰ T. S. Adams and Helen Summer, Labor Problems (New York: Macmillan, 1905), p. 270; see also S. and B. Webb, op. cit., pp. 152-172; J. B. Kennedy, op. cit., p. 17; Charles L. Deering, Industrial Pensions (Washington: Brookings, 1954), pp. 32 ff.; C. L. Daugherty, Labor Problems in American Industry (Boston: Houghton-Mifflin, 1933), pp. 597-613.
¹¹ Murray W. Latimer, Industrial Pension Systems, vol. I (New York: National Industrial Conference Board, 1932), pp. 50-60.
¹² Ibid., vol. II, pp. 902, 922-930.
¹³ Ibid., p. 930.
¹⁴ Epstein, Insecurity: A Challenge to America, op. cit., pp. 147-148.

Another resurgence of employer interest in pensions in the prenegotiation period took place in the war years, as a result, perhaps, of the 1942 Internal Revenue Code, surplus profits taxes, and wage stabilization programs. The newer plans showed, as Latimer said "a marked tendency to safeguard the employees' rights to benefits." ¹⁵ Nevertheless, it was doubtful whether by 1945 there was a net gain in coverage over the predepression years.¹⁶

With varying degrees of emphasis, managements perceived pensions as accomplishing (1) safety improvements resulting from the retirement of superannuated employees, noted especially by railroad management; (2) stability of the work force through reduction of turnover in anticipation of pensions; (3) enhancement of the enterprise's attractiveness to superior workers; (4) improvement of general morale; (5) reduction in strikes and weakening of union appeals. But "wage earners look askance at these company-instituted and companycontrolled funds," a trade union official reported, in 1914, "as they give the impression that they are instituted in order that the worker may be more firmly bound to the industry and less liable to form industrial organizations for the regulation of hours, wages, and working conditions." 17 A pioneering AFL publication on pensions written in 1949 characterized "the 'typical' company plan" before collective bargaining as "strictly an instrument of, by, and for management." It was a cheap means of getting rid of superannuated employees. It was also a sort of invisible chain by which workers were attached to a particular company through the promise of a pension and the threat of its loss if they quit or were fired.¹⁸ Despite this vigorous criticism, the employer pension movement proved sufficiently viable to lay some part of the groundwork for several of the important negotiated single employer plans.19

III

The third great strand entering into the making of negotiated pensions was the union backlash of disillusionment with the promise of old-age benefits under social security. The Advisory Council on Social Security in 1948 found "three major deficiencies in the old-age insurance program: Inadequate coverage, unduly restrictive eligibility requirements, and inadequate benefits." 20 Labor spokesmen branded "the present Federal old-age security program * * * as inadequate and obsolete." 21 According to a UAW specialist :

Old-age assistance, the "means test" public aid program, which was conceived as a stopgap and auxiliary program, is still * * * the basic approach to the problem: and county and State poor . relief is the only universal provision for incapacity. Labor rejects

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 ¹⁵ Murray W. Latimer and Karl Tufel, Trends in Industrial Pensions (as amended) (New York: Industrial Relations Counselors, Inc., 1940), p. 43.
 ¹⁶ See appended letter, Apr. 6, 1945, in ibid.; see also Sumner Slichter et al., The Impact of Collective Barguining on Management (Washington: Brookings, 1960), p. 373.
 ¹⁷ Lynch, "Trade-Union Sickness Insurance," op. cit., pp. 79-80.
 ¹⁸ American Federation of Labor, "Retirement Plans in Collective Bargaining," Research Report, October 1949, p. 3 ft.
 ¹⁹ Vane B. Lucas, Jr., "Private Pension Issues in Collective Bargaining," Journal of Risk and Insurance, December 1965.
 ²⁰ U.S. Senate, Committee on Finance, Recommendations for Social Security Legislation, reports of the Advisory Council on Social Security, S. Doc. 208, 80th Cong., 2d sess., 1949, p. 2.
 ²¹ Solomon Barkin, "What Shall We Have: Retirement Benefit or Superannuation Plans," Proceedings, Industrial Relations Research Association, 1949, p. 140.

these and any other programs based on the "means test" idea. The social stigma and the connotation of "charity," whether it be private or public, is objectionable and cannot be reasonably called security—either emotional or physical security.²²

This, then, is the point to which the old-age pension movement had evolved by the 1940's. The craft union old-age benefit system was moribund. The industrial pension movement was gaining some ground, but only enough to recover from the doldrums of the 1930's. A Federal social security law had been enacted, but within a decade it was under severe criticism from the very groups that had helped enact it.

 \mathbf{IV}

The mix of forces which converged in the 1940's to thrust the welfare and pension question into the foreground of collective bargaining were (1) the Internal Revenue Act of 1942, (2) the evolving wage-stabilization policy of the National War Labor Board, (3) the socalled Krug-Lewis agreement establishing a UMWA welfare and retirement fund, (4) the Inland Steel decision of the National Labor Relations Board, (5) the stage of development of union-management relations in big industry-notably steel and autos, (6) the postwar movement of wages and prices.

Section 165(a) of the Internal Revenue Act, 1942, established tax advantages for pension plans "and contributed significantly to their growth, to their design, and to the relative importance of noncontributory plans." 23 Combined with the sharp increases in corporate and excess profits tax rates of the 1940's, the special tax treatment accorded eligible pension plans undoubtedly enhanced employer receptiveness to union pension demands.²⁴ The National War Labor Board, the labor regulatory agency during

World War II, "was able to hold its main line—the Little Steel formula" at the price of "greater flexibility on secondary lines" specifically on the "fringe" issues of which pensions were one.²⁵ The main effect of the NWLB period on pensions was to popularize the idea of "fringe" benefits-the term was probably coined during this period-and "to create in the minds of labor leaders and workers the notion that they were entitled to such benefits as a matter of right." 26 The direct effect on pensions at the time was inconsequential; the chief influence was on the shortrun fringe benefits like paid vacations, shift differentials, paid holidays, and so forth. Collective-bargaining gains on the pension front in this period were so "negligible" that in 1945 they went unrecorded. By 1948, the first year for which negotiated pension plans are reported, 1.7 million workers were covered, repre-

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 ²² Harry. Becker, "Labor's Approach to the Retirement Problem," Proceedings, Industrial Relations Research Association. 1949, p. 117; see also U.S. Senate. Committee on Finance, Social Sccurity Revision, hearings, S1st Cong., 2d sess., 1950, testimony of N. H. Crutkshank, Walter Reuther, and Emil Rieve.
 ²³ U.S. President's Committee on Corporate Pension Funds, Public Policy and Private Pension Programs (Washington: Government Printing Office, 1965), p. 3.
 ²⁴ U.S. Congress, Joint Economic Committee, Subcommittee on Fiscal Policy, Private Pension Plans, pt. 11, 89th Cong., 2d sess., 1966, testimony of Stanley S. Surrey and Sheldon S. Cohen, pp. 412-437; see also Slichter, The Impact of Collective Bargaining on Management, op. cit., p. 373. especially footnote 6.
 ²⁵ Milton Derber, "The Principles of Dispute Settlement," Problems and Policies of Dispute Settlement and Wage Stabilization During World War II, U.S. Department of Labor Statistics, Bulletin 1009 (Washington: Government Printing Office, 1950), p. 93.
 ²⁶ John T. Dunlop, "Appraisal of Wage Stabilization Policies," in *ibid.*, p. 166.

senting 11 percent of the workers under collective bargaining agreements.2

The Inland Steel decision of the National Labor Relations Board held that pensions was an appropriate subject for collective bargaining. The union's NLRB charge had not begun as a pension demand but as a question of compulsory retirement. Inland Steel had unilaterally established a contributory pension including compulsory retirement in 1936. The company refused to bargain with the steelworkers on a compulsory retirement grievance on the ground that as part of the pension plan the issue was outside the legal scope of collective bargaining. The steelworkers, accordingly, filed a charge with the NLRB alleging an illegal refusal to bargain. The board upheld the union position and by 1948 the Federal courts had for practical purposes affirmed the board's holding. "Wages," the NLRB ruled, "must be construed to include emoluments of value, like pension and insurance benefits, which may accrue to employees out of their employment relationship." 28 The Seventh Circuit Court of Appeals upheld the NLRB in subjecting the pension plan to mandatory bargaining but preferred to base its affirmation on the phrase "other conditions of employment"²⁹ in section S(a) of the Taft-Hartley Act, which defines the subject matter of the collective bargaining obligation. The Supreme Court subsequently refused to grant certiorari.30

Although John L. Lewis "had long been convinced of the need for a welfare and pension program for miners," the demand for a welfare fund was first advanced in the 1945 bituminous coal negotiations.31 But, as Lewis reported, "the plan was rejected by the operators and not pressed by mine workers." ³² In the 1946 negotiations, the demand for a welfare fund was reinstated. The fund as first proposed was to be used for medical care, hospitalization, life and health insurance. rehabilitation, "economic and in distress cases" and "if money is left * * * cultural and educational work among the mine workers." 33 The mineowners refused again and a strike ensued which lasted from April 1 to May 22, 1946. The U.S. Government, acting through J. A. Krug, Secretary of the Interior, seized the mines. Krug and Lewis thereupon entered into an agreement on May 29 which established a welfare and retirement fund from a 5-cents-a-ton contribution. Lewis first demanded that the fund be managed by the union alone, but Krug, balking, would "not take the responsibility of arranging for a health and welfare fund to be administered solely by the union." According to Louis Stark, New York Times reporter, "The Administration fear[ed] the reaction of public opinion to such a decision." 34 A strike broke out again November 20 on Lewis' charge that a Government interpretation relating to the fund was breaching the con-

33 Ibid

³⁷ U.S. Department of Labor, Bureau of Labor Statistics, Health and Insurance and Pension Plan Coverage in Union Contracts, Late 1960, Rept. No. 228, 1962, table I, p. 2; see also U.S. Department of Labor, Bureau of Labor Statistics, Labor Mobility and Pri-rate Prasion Plane, Bulletin 1407, 1964, p. 52, table I, and p. 5, chart I. ³⁷ Inland Steel Co. v. United Steelmorkers of America, CIO (77 NLRB 4) (1948). ³⁸ Certiorari denied, 336 U.S. 960 (1949); see also A. Norman Somers and Louis Schwartz, "Pensions and Welfare Plans: Gratuities or Compensation," Industrial and Labor Relations Review, October 1950, p. 87; Deering. Industrial Pensions, a., oi., n. 43. ³⁸ U.S. Congress, Senate, Committee on Labor and Public Welfare, Subcommittee on Welfare and Pension Funds, Welfare and Pension Plans Investigation, Final Report, 84th Coug., 2d sess. (Washington, D.C.: Government Printing Office, 1956), p. 167. ³⁸ Louis Stark, "Lewis' Statement on Welfare Fund," New York Times, May 14, 1946.

³⁴ Louis Stark, New York Times, May 23, 1946.

tract. Extensive litigation followed. The miners returned to work, but the fund still was not operative because the parties could not agree on the neutral trustee.

With the expiration of the statute authorizing Government seizure the mines were returned to the private operators on June 30, 1947, and soon thereafter the parties negotiated anew and the employer contribution to the fund was raised to 10 cents a ton. But the payment of pension benefits was delayed because this time the fund's trustees could not agree on the terms of the pension program-in specific, whether the program should be funded or pay as you go. After another strike, an injunction, a contempt order against Lewis, a stalemate on the seating of the neutral trustee, suits to prevent the fund from making pension payments, the negotiation of a new contract in 1948, and a Federal court's approval of the pension plan-the first pension check was disbursed in September 1948. The fund did not become firmly established until 1950.³⁵

The UMW pension program has never been actuarially funded and benefits have been disbursed on a pay-as-you-go basis. Nor do miners have a legal equity in the fund. When considered necessary, pensions are reduced, but, also raised. The method of financing by a cents-per-ton contribution or "royalty" Lewis justified on the ground that "productivity per man employed in the industry would constantly rise ** * * and that manpower of the industry per ton produced would decline," and, hence, a contribution based on cents per man-hour or percentage of payroll would produce a declining contribution to the fund.36

Lewis' struggles dramatized and provided the great initial thrust for the union welfare and pension drive. There had been earlier negotiated pensions, pooled funds and royalty types of contribution, but Lewis and the miners quickened the movement for negotiated pensions as nothing else had. Psychologically it is likely that the miners' welfare fund was the single most influential force in the negotiated pension movement.

The late 1940's was almost the first opportunity the industrial union could come to consider pensions on their collective bargaining priority list. The unions in the first stage of development, as the NLRB had observed in the Inland decision, could not have "negotiate[d] effectively for anything more than the establishment of the routine terms of wages, hours, and conditions of employment, because the failure of most employers voluntarily to accept the processes of collective bargaining placed most unions in a weak position." 37 "Unions," Latimer remarked at the time, "had to pass beyond the organization stage. A union cannot be interested in the long-term outlook involved in social insurance unless the organization, as such, had some prospects of permanency." 38 The immediate postwar years was a period of rapidly rising prices and the industrial unions first concentrated their energies

 ³⁵ Account based on Welfare and Pension Plans Investigation, Final Report, op. cit., pp. 166-177 and Welfare and Pension Plans Investigation, Hearings, pt. 3, testimony of Louis Reed, pp. 1015-1044.
 ³⁶ Ibid., p. 1046. R. L. Myers, "Experience of the UMWA Welfare and Retirement Fund," Industrial and Labor Relations Review, October 1956.
 ³⁷ Inland Steel v. United Steelworkers, op. cit., p. 10, note 24.
 ³⁸ Murray Latimer. "Social Security in Bargaining," Conference on Labor, New York University (Albany, N. Y.: Bender, 1948), p. 6.

on making up the ground lost in direct wages. Pensions at this time, a contemporary account reports-

occupied only a secondary role in bargaining strategy as the disappearance of wage controls left unions free to concentrate on direct wage increases postponed during the war years. This deemphasis, however, was reversed by the success of the United Mine Workers in securing a pension plan from mine operators.³⁹

V.

The pension issue in the steel industry negotiations arose in connection with a 1949 wage reopening provision in a contract due to expire in 1950. In support of its pension position, as steelworkers president, Philip Murray, said at the time, "the union presented to the companies a carefully documented legal brief prepared by the union's general counsel and an exhaustive actuarial analysis prepared by Mr. Murray Latimer, an outstanding expert in the pension and social insurance field."⁴⁰ The union demanded:

(1) \$125 monthly pension to "any employee retiring at or after 65."

(2) Retirement "wholly voluntary and free of any element of compulsion."

(3) Disability pension after 10 years of service at \$150 per month, reduced to \$125 after eligibility for social security benefits.

(4) Joint administration.

(5) As part of the insurance program a paidup death benefit policy of \$1,250 at retirement.⁴¹

The union relying on the Inland decision argued that pensions were wages, and, therefore, negotiable.

Except for Inland Steel the companies took the position that pensions were not bargainable under the 1949 reopening clause because pensions were not wage rates within the meaning of the applicable contract provision, and that in any case in 1948 the union had waived the right to bargain on pensions until 1950. On the merits of the pension demand the union pointed to the inadequacy of the old-age social security benefit and the company's obligation to pay all the costs "as a cost of doing business comparable to the cost of maintaining and replacing machinery." The company favored joint contribution "because it preserves the individual right to spend or save as he sees fit" and because it is "in accordance with the sound and traditional American principle of self help." 42

To hold off a nationwide steel strike President Truman appointed a factfinding board to make recommendations. The board found that even though pensions were not negotiable under the contract until its expiration in 1950, there was an immediate obligation under the Taft-Hartley Act, contract or no. The board accepted the union's human

²⁰ William R. Perlik, "Employee Pensions in Collective Bargaining," Yale Law Journal, March 1950, pp. 686-687 and footnote 36. See also Arnold Strasser, "The Changing Structure of Compensation," Monthly Labor Review, U.S. Department of Labor, Bureau of Labor Statistics, September 1966, p. 954; Deering, Industrial Pensions, op. cit., pp. 41-42

 ⁶¹ Labor Statistics, September 1990, p. 501, Beering, Instantial Contemp (1999)
 ⁶² Philip Murray, The Steelworkers Case for Wages, Pensions, and Social Insurance (Pittshurgh: The Union, 1949), p. 5.
 ⁶³ Benjamin Selekman, Sylvia K. Selekman, and Stephen Fuller, Problems in Labor Relations (New York: McGraw-Hill, 1958), p. 480.

depreciation theory and also found that the cost of pension could be met without "unduly narrowing the profit margin of the industry or its ability to hold or even lower its prices." 43 The steel industry was lagging behind railroad and coal mining in respect to pensions and in accord "with the recent trend" recommended complete employer financing of the pension program but contributory financing of the insurance program. The union accepted the finding. The steel industry refused, objecting specifically to the cost and mostly to the noncontributory principle. "Almost overnight the leading steel companies began to cry in unison that the principle of noncontributory social benefits was un-American and contrary to the most cherished ideals of self-reliance and personal initiative." 44 After three postponements a nationwide steel strike went into effect and lasted for 42 days.

Bethlehem Steel broke the solid front of the steel industry resistance on the pension question because as Cyrus Ching, the Government's chief mediator, speculated, contributory pensions were "not nearly so important because the firm had had a noncontributory plan in effect since 1923." 45 The Bethlehem settlement provided for a noncontributory pension plan (but a contributory insurance plan) with a minimum of \$100 a month including OASI after 25 years of service, a prorated pension for 15-25 years of service, \$50 a month up to age 65 for workers totally and permanently disabled; or where higher for the normal pension a monthly payment equal to 1 percent of average monthly earnings during the last 10 years multiplied by years of service.46

Pensions first arose in automobiles in the course of the 1947 Ford negotiations but nothing came of it when Ford workers rejected pensions in favor of a direct wage increase. An element in the rejection was that pensions had become a factional issue in the UAW's highly volatile power struggle of the period. Reviewing the pension demand early in 1949 Walter Reuther said, "Slackening of the rise in the cost of living enables us to turn our attention to other urgent matters, * * * pension plans and social security.47 The opening shot in the negotiations began with a statement by Ford's industrial relations director on March 2, 1947. Exactly 2 months later the union's formal demands were served on the company and a month later, June 2, face-to-face negotiations opened. In addition to pensions, which consumed most of the time, the union was also asking for an insurance program, substantial wage increases and provisions strengthening union rights in the plant. In the course of negotiations the union presented a 133-page statement in support of its pension proposal. In late June the union asked for the strike vote required under Michigan law, and in the vote conducted in early August, 75,320 workers voted out of a possible 86,305: 65,000 voted for a strike, 9,549 voted against striking. Talks continued intermittently until September 29 when the Steel Industry Board made public its recommendations, which had the effect of pro-

 ⁴³ Ibid.
 ⁴³ Ibid., p. 267.
 ⁴⁶ U.S. Department of Labor. Collective Bargaining in the Basic Steel Industry (Washington: Government Printing Office. 1961), p. 268.
 ⁴⁹ U.S. Department of Labor. Bureau of Labor Statistics. Wage Chronology, United States Steel Corp., 1987-64, Rept. No. 186, 1965. pp. 12-13. The account of the negotiations mostly based on Selekman, Selekman, and Fuller, Problems in Labor Relations, op. et Ibid., p. 402.

ducing a settlement in Ford even if for the moment it failed to produce one in steel. A UAW spokesman outlined the "six major issues" that the union considered important in the 1949-50 negotiations:

1. Joint union-management responsibility for administration of retirement and health security programs.

2. Fixed employer commitment for a specified allocation of money stated in terms of cents per hour.

3. Employer-financed, noncontributory programs.

4. Standard of benefits that together with Old-Age and Survivors Insurance, or future Federal programs for benefits not now existing, will constitute a modest, but adequate, budget.

5. Integration with the Federal program in such a manner that private plans are, in real effect, supplementation of the floor of protection assured by Government.

6. Actuarial soundness.48

The settlement included a noncontributory \$100 monthly normal pension (integrated with social security) at 65 or older after 30 years of credited service, automatic retirement at age 68, expiration of pension agreement on March 1, 1955, although other provisions would run until April 1, 1952, prorated benefits for employees 65 years or older with less than 30 years service with reduced benefits and a total and permanent disability benefit for employees between 55-65 with 30. years' service. The company had the authority to appoint the bank trustee for the pension fund and would be solely responsible for determining the funding of past service. A joint board of administration was established to oversee the plan's benefit structure.49

The concluding phase of industrial union breakout into pension bargaining was marked by the UAW's Chrysler strike of 1950 which lasted 104 days. As Reuther said later :

It was not about the size of the pension. It was about whether the pension would be based on pay-as-you-go or whether it would be a funded plan. And, the Chrysler workers, about 90,000 of them, walked the bricks for 104 days on that principle alone, because we felt that we should not start down the road of a pension program except as we funded the pension and backed up the benefits with an actuarially sound fund.50

The climate of informed opinion including commentators normally sympathetic to the unions ranged from open criticism to grudging caution. For the most part only the union leaders had good things to say about negotiated pension programs. Clark Kerr, at the time director of the University of California's Industrial Relations Center, based his vigorous disapproval on the unsuitability of negotiations to deal with the "unusually complicated" subject matter, the "unfortunate social consequences," the potentiality for interunion rivalry and the need for a "more overall approach." The 1949 report of the House Ways and Means Committee "saw the demands for security by segments of the population threaten [ing] to result in unbalanced, over-lapping, and competing programs. The financing of such plans may

⁴⁶ Harry Becker, "Labor's Approach to the Retirement Problem." op. cit., pp. 120-121. ⁴⁰ This account hased largely on Selekman. Selekman, and Fuller, Problems in Labor Relations, on. cit., pp. 402-420. See also U.S. Department of Labor, Bureau of Labor Statistics. Wage Chronology, Ford Motor Co., 1941-64, Rept. No. 99, 1965. ⁴⁰ U.S. Congress, Senate. Committee on Finance, Federal Reinsurance of Private Pension Plans, hearings, 89th Cong., 2d sess., Aug. 15, 1966, p. 48.

become chaotic, their economic effects dangerous." 51 The segment of opinion which acknowledged some legitimate function for negotiated pensions in the total social security system was concerned lest the movement go beyond the "stopgap" role which would cease as the public system approached a standard of adequacy. The major peril which most views of this kind focused on was the prospect that the private system might be "considered as long-range plans designed to do the major part of providing retirement protection." 52 From another critical standpoint the possibility was advanced that responsibility for pensions might convert the union leader into acceptance "of the code of the businessman," without, however, necessarily implying a "moral conclusion." 53

William M. Leiserson was one of the very few outside of the labor community who allowed himself a mildly optimistic outlook:

The soundness of those plans is not of primary importance. Some plans I know say, "When there isn't enough money, we will just reduce it in proportion," or something like that. They are all experiments. Of course, it is wise for the union and the employers and their advisers to work out as sound a plan as they can, as they see it. But there is no use in somebody coming up and saying, "This is the only sound plan and the only way in which we can do it." It has to be handled on a problem basis. What have we here? How do the people feel about it? What do they want in the way of control over it?

After all, the soundness will really have to be left to actuaries and various kinds of experts, who disagree just as employers and unions disagree.54

"Every shortcoming of private [pension] systems was stated by union spokesmen," Walter Reuther said early in 1950, "long before the same points were raised by others who, for 14 years, did little or nothing about bringing the Federal system up to a minimum level of decency." 55 Every union viewpoint in this period stressed the primacy of OASI and the supplementary function of negotiated pension. "Protection must be more stable, continuous and broader in scope than can be achieved in private and isolated plans." 56 As evidence of the prior place accorded OASI in its strategy the UAW noted "that employer support for improvements in the public program is a direct result of the collective bargaining pressure for workers' security programs." 57 Given the limited increment the union option for "maximum retirement security for the greatest number of older workers who will be eligible for retirement within the period for which the plan was originally negotiated" meant that it was "forgoing for the present" such desirable features as permanent and total disability benefits, vesting and "other provisions directed to the special needs of younger work-

⁵¹ Clark Kerr. "Social and Economic Implications of Private Pension Plans," The Com-mercial and Financial Chronicle, Dec. 1, 1949, in reprint No. 16, University of California, Institute of Industrial Relations, Berkeley, 1949, pp. 4, 8. ⁵² Robert M. Ball, "Pension Plans Under Collective Bargaining: An Evaluation of Their Social Utility," IRRA Proceedings, 1949, p. 131. ⁵³ William Goldner, "Trade Union Structure and Private Pension Plans," Industrial and Labor Relations Review, October 1951, p. 67. ⁶⁴ William M. Leiserson, "Introduction," Pensions and Health and Welfare Plans in Collective Bargaining, University of California, Institute of Industrial Relations, Berke-ley, 1950, p. 6

Collective Burganning, Callecting ley, 1950, p. 6 ⁵⁵ U.S. Senate, Social Security Revision, op. cit., pt. 3, p. 1840. ⁶⁶ Becker, "Labor's Approach to the Retirement Problem," op. cit., p. 118.

ers." 58 The union can't wait on pensions until it is in a position to provide a perfect plan: "Good policy and high principles are not now putting money in the hands of retired workers for the purchase of housing, food, clothing, and medical care. Nor do good intentions alone keep the retired worker from falling back on his local relief agencies for his primary source of income a few months after retirement." 59 Barkin, of the Textile Workers, criticized the critics of negotiated pensions on the ground "that they are attempting to endow the plans with purposes which far transcend their current undertakings." 00

This, then, is the period in which the big industrial unions break out to win negotiated pensions. It is a period ranging roughly from 1946, when Lewis makes his first bid for a fund, up to the opening years of the 1950's when the steel and auto unions concluded the first phase of their pension negotiations. The needle trades unions had earlier negotiated retirement plans but without exciting public attention. If the exigencies which first thrust pensions into prominence seemed at the time to lack "careful definition of issues and constructive planning," 61 the long accumulated stock of experience clearly marked out the options which the unions had to choose from.

VT

Pooled multiemployer funds marked the next stage in pension development. Although the movement for negotiated pensions had been triggered by a multiemployer plan, that is-the UMW-the first major advances were made in the single employer heavy industry sector. But the single employer pattern was not suited to industries such as construction, food, apparel, mining, motor, and water transportation--"characterized by seasonal and irregular employment, small establishments, and such frequent job changes that few workers remain with a single employer long enough to qualify for pensions." 62 In addition the pattern was not suited to the typically high mortality rate in these-except for apparel-largely nonfactory industries. Negotiated pensions in these industries had to wait on a mechanism which would compensate for the great hazards to which individual employer plans would otherwise be exposed. The mechanism was found in a readaptation of multiemployer bargaining in the form of a pooled fund which would receive contributions from employers and disburse benefits to employees, in the multiemployer unit represented by the fund.

The "needle trades," specifically the ACWA, and ILGWU, and to a more limited degree the Hat & Cap Workers, had experimented with pooled funds for private unemployment insurance as far back as the 1920's.63 A more modern and perhaps more relevant antecedent was "the revolutionary proposal," in 1938, of the New York Children's Dressmakers' Union that "employers contribute a percentage of their payroll into a pooled fund," to disburse vacation pay. The fund served to meet two critical problems in establishing welfare programs in the

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 ⁵⁵ Leonard Lesser, "Problems in Pension Contributions and Benefits," *IRRA Proceedings*, 1952, p. 89.
 ⁵⁶ Becker, "Labor's Approach to the Retirement Problem," op. cit., pp. 118-119.
 ⁶⁹ Barkin, "What Shall We Have, etc.," op. cit., p. 144.
 ⁶¹ Ibid., p. 138.
 ⁶² U.S. Department of Labor, Bureau of Labor Statistics, Multicmployer Pension Plans Under Collective Bargaining, Spring, 1960, Bulletin No. 1326, June 1962, p. 1.
 ⁶³ Joel Seidman, The Needle Trades (New York: Farrar & Rinehart, 1942), pp. 267-269.

industry: "loss of vacation money because of change of job and failure to pay when an employer was out of business." 64 Very rapidly welfare funds became an established demand in the needle trades. The first explicitly earmarked retirement fund was negotiated by the ILG Cloak Joint Board in 1944.

These early developments were for the most part localized in the "needle trades." John L. Lewis was the first to *dramatize* the industrywide multiemployer pooled fund. The sources of Lewis' ideas on the union welfare interest are not certain but the experience of the needle trades unions was well known to him and he used it to justify his demand for the unilateral administration of the fund by the union. But this demand, as we know, had to be compromised because of Krug's insistence on joint administration as a condition of agreement. The issue was subsequently resolved by section 302 of the Taft-Hartley Act, spurred largely as a reaction to Lewis' demand for sole control. Section 302 prohibits sole union administration of a welfare fund to which an employer contributes, requires the establishment of a trust for these contributions and prescribes the benefits for which contributions to, and disbursements from, the fund can be made; pensions is one of the approved benefits.65

Nineteen hundred and fifty-four is perhaps as good a date as any to mark the main spurt of multiemployer pensions. Nineteen hundred and fifty-four is the year for example when benefits were apparently important enough in the building trades to warrant collection of information by the Bureau of Labor Statistics.⁶⁶ Hoffa negotiated his first pension plan for the Teamsters in 1955. In 1950, when 3.4 million workers were covered by pension plans under collective agreements in manufacturing, in construction, coverage was so small that it was reported categorically as under 50,000 employees.

The lag in pension bargaining was most marked for but not limited to the craft unions who had at first favored the incorporation of the wage equivalent in direct wages. The Wage Adjustment Board, the special wartime agency for settling disputes in the construction industry, had only one collective bargaining case involving pensions come before it which it decided on the principle "that wage rates established for various classifications of laborers and mechanics engaged in building and construction should provide full compensation for all work performed by such workmen." 67

The craft unions had always had a stronger tradition of mutual aid and at first branded company involvement in welfare as antiunion and paternalistic. The ITU viewpoint was that "our members feel that we are the ones who can best take care of our own." 68 The Machinists were concerned lest "the possible loss of accumulated pension benefits soften the stamina of employees covered by such plans when they should stand firm during the efforts of their union to secure justifiable

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⁴⁴ Adolph Held. "Health and Welfare Funds in the Needle Trades," Industrial and Labor Relations Review, January 1948, p. 3. ⁴⁵ U.S. Congress. House of Representatives, Committee on Education and Labor, Employee Benefit Plans, background material, S5th Cong., 1st sess., April 1957, p. 6 ff.; see also footnote to legislative history, p. 119. ⁴⁰ U.S. Department of Labor, Bureau of Labor Statistics. Union Wages and Hours: Building Trades, July 1, 1961, and Trend, 1907-61, Bulletin No. 1316, 1962, p. 5. ⁴⁷ John T. Dunlop and Arthur D. Hill, The Wage Adjustment Board (Cambridge: Har-vard University Press, 1950), p. 80. ⁴⁸ Deering, Industrial Pensions, op. cit., pp. 54, 113ff. See also Donna Allen, Fringe Bene-fits, New York State School of Industrial Relations, 1964, p. 67 ff.

wage increases and general improvements in everyday working conditions." 69 In service, and wholesale and retail employment the retarded development of pensions was probably due to a combination of (a) a low level of unionization which made union pressures less forceful and (b) low wages which tend to channel union effort where it exists, toward direct wage increases.

VII

"In the earlier period of the [pension] plans," a UAW spokesman recalled, "the major concern was to get the best benefits for those who were immediately ready to retire."⁷⁰ The later 1950's represent the period in which the unions move to go beyond immediate benefits for the greatest number of older workers about to retire, along five general paths: (1) to increase the amount of retirement benefits from a standard of subsistence toward more nearly a standard of minimum adequacy, (2) to vest or otherwise guarantee a variety of pension plan rights prior to or other than normal retirement, (3) to strengthen the security of pensions for workers in whose behalf contributions are being made, (4) to increase and broaden auxiliary benefits, (5) to develop specialized personnel and institutions to improve the union's pension performance. The pooled plans, however, tended to lag behind the single employer plans in the pace at which they moved ahead in these directions.

The essential condition which constrains change is cost rather than imperfect knowledge of pension principles. The cost constraint is mainly reflected in the employer's limited ability to pay and for practical purposes in the unlimited number of contending claims for the increment within the union.

"To the union the [pension] benefits are alternate forms of workers' wages or income ****. Unions and managements in their negotiations keep clearly in mind the money value of the collective-bargaining settlements." 11 Or stated in another way, pensions "represent a deliberate allocation of an earned economic increment which would otherwise have been allocated in the form of cash wages, or for other purpose, through collective bargaining." 72

The first negotiated pension benefits were admittedly minimal, "at best * * * an emergency provision to take care of the immediately pressing problem."⁷³ Union spokesmen stressed the point that the amounts were meant only to supplement OASI benefits. A Social Security Administration study estimated in 1948 that it would take \$120 a month to support an elderly couple at a very low standard of living.74 The steel/auto normal retirement plans called for \$100 a month including social security at age 65 and 30 years of credited service.

Early goals for making pension benefits more adequate as formulated by the UAW consisted of (1) the maintenance of a "decent and healthful standard of living." This standard requires benefits "substantially higher than relief standards" and in any case is not operative

⁶⁰ Jack Barbost, Practice of Unionism (New York: Harper Bros., 1956), p. 133. ⁷⁰ Testimony, of Willard E. Solenberger in U.S. Congress, Joint Economic Committee. Private Pension Plans, pt. I, S9th Cong., 2d sess., 1966, p. 124. ⁷¹ Solomon Barkin. "Labor's View on Actuarial Requirements for Pension Plans," in What Is Actuariat Soundness in a Pension Plan, IRRA Proceedings, 1952, p. 28. ⁷² Lesser, "Problems in Pension Contributions and Benefits," op. cit., p. 87. ⁷³ Barkin, "What Shall We Have, etc.," op. cit., p. 144. ⁷⁴ "Budget for Elderly Couple," Social Security Bulletin, U.S. Social Security Board, February 1958.

if supplementation by public assistance or private charity is neces-sary.⁷⁵ (2) Since health is a critical problem for older people provision must be made for "continued coverage * * * under prepaid health programs." (3) "The benefits of increased productivity" in the form of expanding living standards "must accrue to the industrial worker after he retires as they now accrue to him while he remains a member of the work force." (4) Benefits need to be adjusted to offset increases in the cost of living and to reestablish the real value of pension benefits.⁷⁶

The machinists set a target in 1960 for retirement income, including social security, of 50 percent of final earnings which measured in terms of spendable income accruable after retirement would actually be closer to 80 percent than 50 percent in the case of a couple.⁷⁷ In 1958, the steelworkers set a pension goal "of 50 percent of the employee's full-time earnings level in the years just preceeding retirement.⁷⁸ In 1966, a UAW pension spokesman discounted as "academic" a prediction that "the real goal of organized labor is to have retirement at full pay." But he added quickly that "there should not be a cliff, a drastic alteration of living standards," and 75 percent was, therefore, "a sound enough aim for lower and medium paid workers." Moreover, most discussion of adequacy centers about the longer service worker but "how adequate and how possible is retirement for the worker with 10 or 12 years." 79 An IUE expert projected the maintenance of the preretirement standard of living as the goal for retirement benefits, which he estimated could be attained by a 30-yearservice employee "with a formula of \$8 or \$9 per month per year" of service plus social security. "This is not too high. Several IUE contracts are already in the neighborhood and the union's demand from GM in 1964 was \$12 per month per year of service." 80

The earlier concentration at the low end of the benefit distribution is changing. The Bankers Trust 1965 survey reported that "there is a greater range than formerly in the rate of benefits provided" in the negotiated plans.⁸¹ A BLS study of 1959 negotiated plans "show[s] that the clustering of plans at the lower end of the benefit scale that characterized the 1952 distribution has changed to a more symmetrical distribution. The principal reason for this change is the revisions negotiated by the parties." 82 Normal retirement benefits in the first Ford-UAW agreement were set at \$1.75 per month for each year of service exclusive of social security. In the 1964 agreement these benefits were set at \$4.25 per month for each year of service. UAW is typical only of the magniture of change, not of the level of benefits.⁸³

The unions aim at maintaining benefit levels with advances in the cost of living and the standard of living. For Solenberger of the

 ⁷⁵ See for example the UAW's detailed family budget for retired workers in U.S. Senate, Social Security Revision, op. cit., pp. 1843-1903.
 ⁷⁶ Lesser, "Problems in Pension Contributions and Benefits," op. cit., p. 91.
 ⁷⁷ International Association of Machinists, A Guide to Pension Planning (Washington:

 ⁷⁹ International Association of Machinists, A Guide to Pension Planning (Washington: IAM, 1960), p. 7.
 ⁷⁶ United Steelworkers of America, Insurance, Pensions and Supplemental Unemployment Benefits (Washington: USA, 1958), p. 33.
 ⁷⁶ Willard E. Solenberger, "New Challenges to Labor and Management in Providing Retirement Security." Third Annual Corporate Pension Conference, 1966 (mimeo), p. 50.
 ⁸⁰ Statement by Joe Swire, Aug. 30, 1965 (mimeo), p. 3.
 ⁸¹ Bankers Trust Co., Study of Industrial Retirement Plans (New York: Bankers Trust, 1965), p. 23. [Emphasis added.]
 ⁸² U.S. Department of Labor, Bureau of Labor Statistics, Private Pensions Under Collective Bargaining, Normal Retirement, Fall 1959 (Washington: Government Printing Office, 1961), p. 13.
 ⁸³ Statistics from U.S. Department of Labor, Wage Chronology, Ford, op. cit., pp. 23-25.

UAW "the perfect formula would be one where at the point the individual retires the benefit is first adequately related to his final pay and then after retirement continues to rise with each rise in pay of the job he left." 84 Accordingly, the union seeks direct and indirect escalators. Directly the union seeks periodic liberalization to adjust to the rising cost of living including its extension to past retirees, or more formally, but less frequently, through variable annuities and explicit cost-of-living escalation. More commonly the effect of upward movement is achieved through benefit formulas which favor final earnings or percentage of earnings. Unions have been additionally effective in liberalization by (1) eliminating or sharply reducing the social security offset, (2) increasing the minimum pension and (3) reducing or eliminating limitations on the accumulation of credited vears of service.

The relatively low-wage worker continues to be favored "largely because of the greater coverage of plans that relate benefits to service alone and because of the flat benefit plans." Minimum pensions and the virtually universal acceptance of the noncontributory principle in negotiated plans also favor the lower paid worker. This position constitutes one of the great changes worked by collective bargaining and contrasts significantly with his less favorable situation in the earlier unilateral plans with their typical contributory requirements and benefit formulas tied to career earnings.85

Multiemployer plans utilize simpler benefit formulas, commonly flat benefits or benefits varying by years of service alone. Benefits related to earnings are relatively uncommon due to the pressure for uniformity to simplify administration, and the narrower distribution of skill and earnings in pooled fund industries.86

VIII

The union pension bargainers considered vesting from the very start as a policy choice for the future.⁸⁷ "In the formative years of negotiated plans * * * vesting was largely set aside in favor of benefit levels, reasonable funding, benefits for workers near retirement and financing solely by employers," and was slow in getting accepted.⁸⁸ A current example of union priorities with respect to vesting is seen in the CWA which, as a spokesman put it, does "not mention vesting * * * [not] because we don't believe in vesting * * * [but because] we have so far to go on some of the other basic problems * * * that we plan on attacking that one in the future." ⁸⁹ In 1952 only 25

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 ⁴⁴ Solenberger, "New Challenges, etc.," op. cit., p. 52.
 ⁴⁵ Solenberger, "New Challenges, etc.," op. cit., p. 52.
 ⁴⁵ This section based on the following: Robert Tilove, "Pension Planning and Administration." Conference on Labor, New York University, 1961. pp. 364-372: Bankers Trust, Study of Industrial Retirement Plans, 1965. op. cit., pp. 24-28; Alfred Skolnick. "Ten Years of Employce Benefit Plans," Social Security Bulletin, U.S. Department of Health, Education, and Welfare, vol. 29, No. 4, 1966. p. 16; U.S. Department of Labor, Bureau of Labor Statistics, Private Pension Plans Benefits, Bulletin 1485, 1966. p. 12; Silchter, The Impact of Collective Bargaining on Management, op. cit., pp. 378-379.
 ⁴⁰ BLS, Private Pension Plans Benefits, op. cit., pp. 15-16; BLS, Multiemployer Pension Plans Under Collective Bargaining, op. cit., pp. 12-24; J. J. Melone, Collectively Bargained Multiemployer Pension Plans (Homewood, III: Irwin, 1963), pp. 20-23.
 ⁴⁷ International Association of Machinists, Pension and Welfare Manual (Washington: IAM, 1950), p. 3; AFL, "Retirement Plans in Collective Bargaining." op. cit., pp. 378, 1952, pp. 66ff: Becker, "Labor's Approach to the Retirement Problem." op. cit., pp. 120-121, 126; Lesser, "Problems in Pension Contributions and Benefits." op. cit., p. 89.
 ⁴⁸ TLS, Labor Mobility and Private Pension Plans, op. cit., p. 11.
 ⁴⁹ Testimony of Louis Knecht in Joint Economic Committee, Private Pension Plans, op. cit., p. 250.

percent of the negotiated plans contained a vesting provision and three-fourths of these were in contributory plans; only 10 percent of the noncontributory plans had vesting. By 1958, 60 percent of the negotiated plans were vested. In its 1962-63 survey, BLS found 67.2 percent of the plans representing almost 60 percent of the workers were vested. The Bankers Trust 1965 study showed 94 percent of the negotiated plans providing some form of vesting "compared with 82 percent in the 1960 study and 41 percent in the 1953-55 study.90

The upsurge of vesting came about as a result of vesting improvements in the UAW-Ford agreement negotiated in 1955 and the Steelworkers' agreements in 1956. The Ford agreement conferred vested rights on "employees separated from active employment at or after age 40 with at least 10 years credited service." In United States Steel vesting became applicable "to employees laid off for more than 2 years or terminated as a result of a permanent shutdown" at age 40 and 15 years of continuous service.⁹²

"The concept of pensions as deferred wages is fundamental to the logic of vesting," an AFL report observed in 1949, and this logic has been the dominant tendency in union pension strategy.⁹³ But as a current AFL-CIO pension manual counsels, "If * * * there is strong resistance to the inclusion of a vesting provision in a newly established plan, the program should not be jeopardized for this reason. In the vast majority of cases a vesting provision is relatively easy to secure after the plan has been in operation for a few years." 94

Unless there is vesting the pension plan serves only a management purpose providing "the employer a cheap means of getting rid of superannuated workers with a specious show of generosity," the union viewpoint asserts. The freedom of the worker to change jobs in his own interest is impaired in fear of losing his pension. A worker discharged from a job before normal retirement is in effect assessed a double penalty: He loses his job and also his retroactive pension credits. Only as the pension plan firmly confers rights on all workers is it equitable as a deferred wage increase for the younger worker who in the majority of cases will not stay until normal retirement to collect on his pension. Vesting is essential if a balance of interests is to be maintained between younger and older workers and between longer and shorter service employees. In the recent period vesting makes more viable the early retirement or other forms of separations of employees redundant due to technological change and other forms of displacement.95

Unions have pursued many roads to vesting if it is defined broadly as a guarante to the employee of rights in a pension plan in addition

 ⁹⁰ Bankers Trust, Study of Industrial Retirement Plans, 1965, op. cit., pp. 19-20; BLS, Labor Mobility and Private Pension Plans, op. cit.; U.S. Department of Labor, Bareau of Labor Statistics, Private Pension Plans and Manpover Policy, Bulletin 1359, 1963.
 ⁹¹ U.S. Department of Labor, Wage Chronology, Ford, op. cit., p. 24.
 ⁹² I.S. Department of Labor, Wage Chronology, United States Steel, op. cit., p. 21; see also Bureau of National Affairs, Pensions and Profit Sharing (Washington: BNA, 1953), p. 236: Rankers Trust Co., Study of Industrial Retirement Plans (New York: Bankers Trust, 1960).
 ⁹³ AFL, "Retirement Plans in Collective Bargaining," op. cit., p. 3.
 ⁹⁴ American Federation of Labor and Congress of Industrial Organizations, Pension Plans Under Collective Bargaining (Washington: AFL-CIO, 1964), pp. 21-22.
 ⁹⁵ This is a composite argument based on the following: Kirkland, Pension Plans Under Collective Bargaining, op. cit., p. 66-69; International Brotherhood of Pulp. Sulphite, and Paper Mill Workers, Pension Plan Principles for Collective Bargaining, Department of Research and Education (Washington: The Union, n.d.), pp. 4.10-4.11; Richard Shoe-maker, Pension Plans Under Collective Bargaining (Washington: AFL-CIO, 1965), pp. 19-22; IAM, Pension and Welfare Manual, op. cit.; AFL, "Retirement Plans in Col-lective Bargaining." op. cit., p. 3: United Steelworkers of America, Better Insurance, Better Pensions, Better SUB (Washington: The Union, 1960(7), p. 10.

to or other than the rights created by meeting the eligibility standards for normal retirement.³⁶ There is first the direct vesting route which entitles the worker "to a future retirement benefit when he reaches retirement age regardless of where he may be at the time." Immediate full vesting would be inordinately costly in terms of feasible allocation of the wage increment. The unions consequently are agreeable to conditions for vesting such as the almost universal age and service requirement or "further increasing the percentage of accrued benefits * * * as additional requirements are fulfilled, until workers become fully vested." ⁹⁷ The thrust of union strategy is to whittle away at the qualifying conditions in vesting by reducing the age or service requirement. The Bankers Trust survey comparison of 1960-65 and 1956-59 negotiated plans notes "a pronounced trend toward more liberal vesting requirements: The employee who has attained age 40 with 15 years of credited service vests fully in 75 percent of the pattern plans * * * but an employee with the same qualifications would have had a vested right in only 42 percent of the pattern plans in one previous study." 98

Other union routes to vesting provide for rights in the pension plans before normal retirement; that is, early retirement. The most common form of early retirement which was incorporated at the very start of pension bargaining in the single employer plans is retirement for permanent and total disability at a prorated, actuarially reduced benefit. This is almost costless to the plan because the disabled worker bears the full burden by taking a proportionately reduced benefit.

The union objectives for the improvement of disability provisions are the reduction of age and service requirement, the liberalization of disability definitions, and the integration of disability benefits with the public programs in social security, workmen's compensation and rehabilitation.95

Early retirement in general on an actuarially reduced basis was possible under the first Ford plan but not in steel-which was not accomplished until the 1956 agreement. Prevailingly negotiated plans permit early retirement at employee's option at age 60 after meeting a service requirement. The significant tendency is the increasing proportion of plans which permit such early retirement having risen in the Bankers Trust survey from 56 percent in 1956-59 plans to 69 percent in the 1960-65 plans. The early retirement provision is to be found in almost every negotiated plan, "rising from 70 percent in 1953-55 and 88 percent in 1956-59." 100

In the very recent period provisions for early retirement at a greater benefit than the actuarial equivalent, known as "special" early retirement have been negotiated as an inducement to employment attrition

¹⁰ This is an adaptation of a definition in BLS, Labor Mobility and Private Pansion Plans, op. cit., p. 11. ¹⁰ Ibid., p. 12. ¹⁰ Bankers Trust, Study of Industrial Retirement Plans, 1965, op. cit., p. 19. ¹⁰ AFL-CIO, Pension Plans Under Collective Bargaining, op. cit., pp. 22-24; Skolnick, ¹⁰ Ten Years of Employee Benefit Plans," op cit., p. 15; IAM, A Guide to Pension Planning, ¹⁰ or cit., p. 53; U.S. Department of Labor, "Changes in Negotlated Pension Plans, 1961-64," "Monthly Labor Review, October 1965, p. 4; United Steelworkers of America, Insur-ance, Pensions, and Supplemental Unemployment Benefits (Washington: The Union, 1958), pp. 30-32; Joseph Krislov, Age and Service Requirements for Total and Permanent Dis-ability Benefits in Private Pension Plans, analytic note No. 108, U.S. Department of Health, Education, and Welfare, Social Security Administration, 1960. ¹⁰⁰ Bankers Trust, Study of Industrial Retirement Plans, 1965, op. cit., p. 13.

to ease the displacement effects of technological change or relocation. The payment of above-normal benefits to early retirees has been associated with provisions for mandatory retirement at the employer's request or under mutually acceptable conditions. Mandatory retirement which historically has been an employer demand has now been reinstated in response to the pressure of younger employees in situations of contracting employment. The recent special early retirement provisions negotiated by the Steelworkers, Auto, Rubber, and Packinghouse Workers are illustrative of this tendency.¹⁰¹ The rank-and-file pressure in the UAW took the form of a "60 Now" club to press for compulsory retirement of older workers and as Charles Odell, the UAW's social security director said, "The 1964 gains were a result of genuine rank-and-file organization and pressure for even earlier retirement than was already possible. The leadership of the union skillfully turned this pressure into a major breakthrough." 102

The increasingly complex structure of options represents in effect a vesting equivalent inasmuch as the options are alternatives to the normal retirement benefit. The death benefit option in the form of a lump sum or a period certain guarantee "takes some of the 'sting' out of a pension that terminates shortly after it has begun because of death." 103 In the survivor options the employee chooses a reduction in normal retirement benefits for which he gets insurance protection for his surviving beneficiary.104 The union pressure is on bringing the election of option closer to the "time of application for retirement * * *. An irrevocable election required to be made long in advance results in very few workers exercising the option." 105 Obviously the closer the election is to the date of retirement the greater is the likelihood of adverse selection and the more costly the option is.108

Vesting provisions are in general much less frequent in multiemployer plans. "Slightly more than a fourth of multiemployer plans, covering two-fifths of the workers, provided a normal benefit only. Another fourth * * * added a disability retirement benefit." 107 Vesting is less frequent also because the multiemployer plans are younger and hence many are still in the stage of development where they are still giving priority to improvements in retirement benefits, with disability provisions probably next in line. The effect of vesting is achieved to the extent that employees carry their pension credits from firm to firm within the multiemployer unit including units with which the plan may have reciprocity. Since the attachment is to a multiemployer unit the employee's pension credits are not necessarily tied to the survival of a particular employer. However, this is limited vesting since the rights do not go beyond the pooled or reciprocal unit.

The scope of transferability-and portability in the event of re-

 ¹⁰³ Max Kossoris, "Early Retirement: An Overvlew," Industrial Relations, May 1965,
 ¹⁰³ Max Kossoris, "Early Retirement: An Overvlew," Industrial Relations, May 1965,
 ¹⁰⁴ Charles Odell, "The Case for Early Retirement," Industrial Relations, May 1965, p. 19.
 ¹⁰⁵ Jack M. Elkin, "Standard and Optimal Forms of Retirement Forms of Retirement Benefits," Newsletter from Martin E. Segal Co., January 1966, p. 3.
 ¹⁰⁴ See Harry L. Levin and Stanley S. Sacks, "Survivors Benefits in Collectively Bargained Pension Plans," Monthly Labor Review, July 1962, pp. 751-757; AFL-CIO, Pension Plans Under Collective Bargaining, op. cit., pp. 24-29.
 ¹⁰⁵ Ibid., p. 27, ¹⁰⁶ See Solenberger, "New Challenges, etc.," op. cit., p. 56; Bankers Trust, Study of Industrial Retirement Plans, 1965, op. cit., p. 21; Skolnick, "Ten Years of Employee Benefit Flans," on. cit., p. 4.
 ¹⁰⁶ BLS, Multiemployer Pension Plans, etc., op. cit., p. 30. See also Vane B. Lucas, Jr., "Private Pension Issues in Collective Bargaining," op. cit., p. 556.

ciprocal arrangements—in multiemployer plans depends on the size of the territory represented by the associated employers. "Nearly half the workers in multiemployer plans belonged to plans that were limited to a single craft, occupational group, or industry in a locality. Of the remainder, worker coverage was about equally divided between regional plans and industrywide national programs." 108 The Martin E. Segal Co. which services many multiemployer plans estimates these plans "probably provide continuity of pension accrual for most of the job changes that are likely to occur." ¹⁰⁹ Reciprocity agreements among pooled plans further extends the vesting effect. By 1960 reciprocity arrangements were operative for 61 plans representing 8.3 percent of the plans, covering 764,000 workers representing 23.6 percent of workers covered by multiemployer plans. An additional 26 plans (3.5 percent) covering 95,900 workers (3 percent) were authorized to make reciprocity arrangements. The other side of the coin is that more than half of the multiemployer plans cover fewer than 1,000 workers-almost 35 percent cover fewer than 500 workers-and one-third of the workers were covered in six of the largest plans out of the total almost 800. Only a relatively small proportion of the workers have a substantial area of mobility within which their credits can be transferred.¹¹⁰

IX

Union interests in funding raise two categories of problems: (1) the standards for funding and (2) the conservatism or liberality with which the standards are applied. Funding standards are to an important degree predetermined by whether the fund unit is a single employer or multiemployer. If single employer, especially in largescale, mass production, the financial commitment exacted from the employer is to provide a fixed level of pension benefits; the employer is free within legal constraints to determine the funding and other actuarial measures necessary to fulfill his contractual benefit commitment, as in United States Steel, for example. A more specific funding obligation is undertaken in the contract provision which requires the employer simply to contribute to a trust fund "on a sound actuarial basis" sufficient to pay the pensions agreed to, as in Continental Can, for example.¹¹¹ Steel industry employers have characteristically funded their pension obligations beyond contractual requirements but this has never fully satisfied the union. In recent years experience has led the steelworkers "to a wider understanding of the need * * * for sounder financial provisions to improve the pension security of terminated employees." 112 Specifically the union experts warn against incorporating [sic] "(a) [the] United States Steel funding provision or its equivalent, giving company the right to determine manner of financing pension costs, (b) vague provisions regarding 'meeting

 ¹⁰⁹ BLS, Labor Mobility, etc., op. cit., p. 38; see also BLS, Multiemployer Pension Plans, etc., pp. 9-11.
 ¹⁰⁰ Martin E. Segal Co., Pension Plans and Public Policy in California, report to the Assembly Interim Committee on Industrial Relations, State of California, December 1966,

Assembly Interim Committee on Industrial Learning, p. 60, p. 60, ¹¹⁰ BLS, Multiemployer Pension Plans, etc., op. cit., pp. 5, 10, 98: President's Commis-sion on Corporate Pension Funds, Public Policy and Private Pension Programs, op. cit., p. 43, ¹¹¹ United Steelworkers of America. Pension and Insurance Agreement Between Conti-nental Can and United Steelworkers of America, October 1964, p. 15. ¹¹² United Steelworkers of America, Report of Officers, 12th Constitutional Convention, ¹²⁶⁴ p. S1

^{1964,} p. 81.

Treasury requirements,' (c) retention of right by company to skip contributions, (d) failure to fund for disability pensions, [and] (e)failure to fund for vested pensions." 113

The UAW has gone farthest among the unions in insisting contractually on an explicit funding standard, specifically "an annual, actuarially determined contribution computed as sufficient to fully fund the cost of benefits based on current service, and in addition to fund, over a stated number of years, the cost of benefits based on past service." In a smaller number of cases the UAW has settled for a cents-perhour contribution actuarially determined to support the level of pension benefits agreed to.¹¹⁴

As to funding medium the union preference has traditionally been for the self-administered trusteed plan over the insurance company fund on the grounds of "flexibility and the most effective application of allocated funds." 115 "Philosophical considerations" in the case of the AFL-CIO favor the self-administered plans:

The insurance industry has generally been opposed to improve-ments in the Social Security Act * * *. It becomes somewhat anomalous if labor, after suffering setbacks in Congress due to insurance industry opposition, turns to collective bargaining and obtains improvements in benefits for retirees and then underwrites these benefits with an insurance carrier.¹¹⁶

But the characteristic union preference for the self-insured trust is "rapidly changing" according to the AFL-CIO's pension specialist as a result of the stronger competitive cost position of the insurance companies, reflecting the "vigorous campaign" of the insurance industry to capture an increased proportion of the pension market.

The unions have brought ambivalent moods to the funding question. On the one hand the unions support liberal funding assumptions to maximize that portion of the wage increase increment available for increasing retirement benefits and minimize the amount needed for funding pension credits. In contrast to "the actuary operating on conservative principles of loading his cost figures against all eventualities, and assuming the ultimate termination of plans and insisting on accelerated funding," 117 the unions take a more relaxed view relying "on the collective bargaining process which allows for periodic reviews and frequent changes in the light of later developments." It is not unknown for unions to shop around for an actuary who will be inclined to favor their more liberal assumptions.¹¹⁸

¹¹³ Steelworkers, Insurance, Pensions, and SUB, op. cit., p. 38. See also testimony of Filiot J. Bredhoff in Senate Committee on Labor and Public Welfare, Welfare and Pension Plans Investigation. op. cit., hearings, pt. 3. p. 1174; Steelworkers. Officers Report. op. cit., p. 33; see to the same effect United Steelworkers of America. Special Report on Insurance, Pensions, and Supplementary Unemployment Benefits, 1960, pp. 43-45; Steelworkers. Better Pensions, Retter Insurance, Better SUB, 1959, pp. 10-11. ¹¹⁴ Willard E. Solenberger, "Pension Programing From a Labor Viewnoint." Society of Chartered Life Underoriters, spring 1954, vol. VIII, No. 2, pp. 131-132. See also testi-mony of Walter P. Reuther in Senate Committee on Finance, Federal Reinsurance, etc., op. cit., p. 58. ¹¹⁵ Testimonv of Solenberger in Joint Economic Committee, Private Pension Plans, op. cit., pp. 108-122.

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[&]quot;Developments in Fension and Wenare Logismu, 1962, p. 4. ¹¹⁷ Barkin, "Labor's View, etc.," op. cit., p. 28. ¹¹⁸ J. P. Stanley, The Function of an Actuary in a Pension Program, Industrial Union Department (AFL-CIO), pension conference, Sept. 12, 1957 (mimeo), p. 4; Ray M. Peter-son, "Actuarial Soundness in Pension Plans With Insurance Companies," What Is Actu-arial Soundness in a Pension Plant Industrial Relations Research Association, 1952, p. 36; James E. McNulty, Jr., Decision and Influence Processes in Private Pension Plans (Home-wood, Ill.: Irwin, 1961), pp. 98-101.

Union liberality comes to the fore most insistently in a period of economic expansion when an employer committed only to fixed benefits is able to capture the so-called actuarial gains arising out of earlier conservative assumptions on investment earnings. Swire, the pension expert for the IUE, argues that "the results of economic expansion and prosperity should not be kept by the company * * * for its * * * own benefit alone. * * * The union calls upon the company to share the pension fund gains from an expanding economy of which we are all a part with its employees." 119 This appreciation of pension funds which in effect "cuts company contributions down substantially," Swire says in another place, "makes mincemeat of union negotiators who, through negotiation after negotiation thought they were buying nice bundles of pension costs." 120

Inclining the union toward conservative funding is the security of pension expectations. The UAW set actuarially sound funding as a major goal from the very beginning of its bargaining history on pensions:

Even though it means lower immediate benefits, UAW-CIO believes that pension plans established by collective bargaining must be constructed on sound actuarial assumptions. Workers want retirement income security * * *. Past service liability under private pension plans must be amortized over a reasonable length of time and future service must be funded by payments into the pension trust fund as such credits are accumulated.¹²¹

The UAW waged a 104-day strike against Chrysler in 1950 on the funding issue.

The structural characteristics of the multiemployer pension mechanism predetermine some of the issues in funding. First, the likelihood that the fund for an entire industry will be terminated is very slim. Second, inherent in the commitment of the multiemployer plan is the fulfillment of benefit rights of participating employers who go out of business. Third, unlike the single-employer plans there can be no question as to the cost of the pension "package" since the parties negotiate a uniform fixed level of contributions (that is, commonly cents per hour, percent of payroll) in the formal collective bargaining. Fourth, neither can there be a dispute in negotiations as to the level of benefits which the contribution can buy since this determination is made jointly by the parties through the pooled fund's bilateral board of trusteess.122

The vulnerable feature of the pooled fund is in a formula of financing—cents per hour or percentage of payroll—which, in effect, ties contributions to the aggregate level of employment in industries marked by instabilities in employment. The result is a large element of uncertainty in projecting the benefit levels which a pooled fund can support. The pooled plans, therefore, "ordinarily take a cautious view of what future employment may be like * * *. They may discount present levels of employment by 5, 10, or even 20 percent, knowing that

 ¹¹⁹ Joe Swire in Pension and Insurance Proposals, presented to the General Electric Co.
 by JUE negotiating committee, International Union of Electrical Workers, Aug. 23, 1966 (mimeo), pp. 14-16 passim.
 ¹²⁰ Swire, statement, Aug. 30, 1965, p. 16.
 ¹²¹ Becker, "Labor's Approach, etc.," op. cit., p. 125. See also Lesser, "Problems in Pension Contributions, etc.," op. ist., Pp. 82-89.
 ¹²² Segal, Pension Plans and Public Policy in California, op. cit., pp. 48-55.

the pension plan has to be adequately financed even if employment drops in the future." 123

The craft base of many pooled funds makes for an adverse imbalance in the age distribution of the employee population at the same time that the small scale and marginal profitability of many of the participating employers imposes severe limits on their capacity to contribute. A period of declining employment accelerates retirement and accentuates financing difficulties even further. The other side of the "au-tomatic vesting" effect of the pooled fund is what one commentator has styled "the floating liability * * *. Employees after establishing some equity in a plan, may drift out of the area of coverage, leaving open the question of their return." 124 These instabilities of the pooled plans are a significant factor in their characteristically less developed benefit structure, compared to the single employer schemes. Disability, early retirement and other major supplemental benefits are both lower and less prevalent in the pooled plans.125

The ILG is not the only union participating in a pooled fund which has had difficulties with its retirement program but is the union we know most about due to the detail of its public reporting. "Adequate funding of retirement benefits is no simple matter" in the ILG's industries, "with [the] multiplicity of branches" and the heavy concentration of workers employed "in small or medium size establishments." 126 It was becoming apparent in the coat and suit industry branch in 1953 "that the annual income to the fund was insufficient to meet new needs." 127 The imbalances were basically caused by an over-aged labor force, sharp fluctuations in employment, excessive "liberality" in eligibility requirements and low contributions rates.

The union responded by reducing expenditures and improving efficiency. Eligibility standards were tightened by increasing the required period of attachment to the industry, raising the retirement age and restricting the right of the pension recipient to work in the industry. At various times benefits were reduced and subordinate bodies mandated to negotiate higher employer contribution rates. "Only a 1-percent contribution of payroll" had been obtained in the first pension agreement of the dress industry in 1947. "The union realized from the outset that this was not sufficient to retire all the dressmakers eligible. It was only accepted as a start, to get the fund in operation." ¹²⁸ For greater efficiency and security 41 separate funds were merged into one national fund. A decade earlier a more limited consolidation had been accomplished in the establishment of an eastern region retirement fund. The return of economic expansion also helped. With rising employment contributions increased particularly for employees in the younger age groups, thus redressing some of the age imbalance.

By 1965, the union could report that the New York Coat and Suit Industry Fund, one of the hardest hit funds, is now in a position to pay "full benefits to every qualified applicant." 129 The union plans, as this is written, to increase retirement benefits, to raise employer con-

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 ¹²³ "Congressional Proposal To Regulate Pension Plans," Martin Segal Newsletter, April 1967, p. 3. See also Barkin. "What Is Actuarial Soundness, etc.," op. cit., p. 29.
 ¹²⁴ Donald F. Farwell, "Pension Bargaining," Pension and Welfare News, September 1965, 500

tributions in funds with insufficient reserves "even where it is necessary to do so during the life of the agreement." 130

Other pooled funds have had analogous problems. UMW pension beneficiaries have been subject to fluctuating eligibility requirements, size of benefits and retirement age. In May 1967 the fund announced an increase from \$100 to \$115 per month for past and current retirees. "Hoffa was determined to produce an impressive-sounding benefit schedule from the start 'even though the employer's contribution rate was low." "131 The IBEW, as a result of a union-authorized actuarial study, in the early 1950's raised its employer and class A membership contributions sharply, increased the service requirement and intensified its investment program.132

That the cause of funding instability lies in the structure of enterprises typically covered by the pooled fund rather than in the pooled fund advice as such is supported by the termination experience of the large industrial unions who have had to bargain with small companies. There, too, a union like the Steelworkers has had to tailor its standards to the "small employer's" ability to pay and acquiesce in plans "with limits on the amount of the company's regular contribution and with limited liability in the event of termination of the plan." If the plan should actually terminate as some have "the number and amount of pension benefits which can be paid out * * * will be limited by the amount of pension reserves accumulated since the inception of the plan." 133

There has been a renewal of union interest in the funding question caused undoubtedly by the Studebaker termination, the maturing of the union pension experience which makes termination more immediately relevant and a resurgence of public interest in the security of pension funds. Some unions are apparently concluding that collective bargaining is not equipped to deal with every contingency in which pension rights are imperiled by terminations. The UAW is an important force behind a proposed program of Federal reinsurance of pensions.¹³⁴ At the same time there seems to be a union consensus against mandatory public standards for funding especially marked in the multiemployer plan circles. The Martin E. Segal Co., which probably takes a view representative of the pooled funds interest, entertains doubts as to whether the complex of risks are insurable.

Х.

Not all contract terms affecting retirement are contained in the pension plan. Life insurance for retired employees is commonly part of the health insurance program. Hospital and surgical care less commonly but nevertheless significantly is continued at a reduced scale after re-

 ¹³⁰ Ibid. Discussion additionally based on U.S. Senate Committee on Labor and Public Welfare, Welfare and Pension Plans Investigation, op. cit., final report, pp. 113-114, 119-120, 124-126, 175-177; Melone Collectively Bargained Multiemplayer Pension Plans, op. cit., pp. 111-117; Deering, Industrial Pensions, op. cit., pp. S9-100; Merton Bernstein, Future of Private Pensions (Glencoe, N.Y.: Free Press, 1964), pp. 260-262; BNA, Pensions and Profit Sharing, op. cit., p. 215.
 ¹³¹ Ralph and Estelle James, "Hoffa's Manipulation of Pension Benefits," Industrial Relations, May 1965, p. 47.
 ¹³³ Pension Plan of the AFL Electrical Workers, 1954," Monthly Labor Review, November 1954, pp. 124-1236.
 ¹³⁴ Steelworkers, Report of Officers, op. cit., p. 82.
 ¹³⁵ Steelworkers, Report of Officers, op. cit., p. 82.
 ¹³⁶ Get testimony of Reuther and Lesser in Senate Committee on Finance, Federal Reinsurance, etc., op. cit., pp. 46-62; Segal, Private Pensions and Public Policy in California, op. cit., pp. 75-78.

tirement on a contributory basis. Retired workers also become eligible under the main agreement for various benefits associated with involuntary separation generally, including severance pay, with the relatively shorter service workers—10 years or less—predominating among the recipients; prorated vacation pay and contributory individual savings funds, composed of employee and employer contributions can be drawn on in the event of involuntary layoffs. 135

For a relatively small number of unions the quality of the pensioner's life after retirement is of active concern. The UAW created an older and retirement workers department in 1957:

Today (1965) the UAW is directly involved in the direction, operation, and/or financing of 70 senior citizen centers throughout the United States and Canada * * * which serve not only as a place where retired people can spend their time in useful and enjoyable activity, but also as a bridge between the retiree and the communitv.136

Grants from public funds have been used by the ILGWU to establish a "friendly visiting service" with the goal of "drawing the homebound retiree back into community life and helping him meet the problems that arise in retirement." Fifty pensioners will be trained to serve as "friendly visitors" in the New York area.¹⁸⁷ By way of example of other union activities in this field there are the art shows and preretirement classes of the ACA, the retired teachers' residences sponsored by the Teachers' Union and the retirees' clubs sponsored by hosts of local unions.¹³⁸ Most unions, nevertheless, probably accept Kirkland's formulation of this point :

The primary need [of retired workers] is not clubhouses, arts and crafts, counseling services, handrails in the hall * * * but simply money. Given a decent steady income the great majority of aged persons are quite capable of, and would undoubtedly prefer, working out their own adjustment with their environment and their declining powers.139

XI.

The enlargement of union interests to include insurance and pensions has brought with it the development of institutions, skills, professions, and functions far from the traditional union mold. The most innovative and far reaching of these has been the self-administered or self-insured trusteed plan directed jointly by union and management trustees. The fund mainly provides a mechanism for the collection, crediting and transfer of contributions within the specified multiemployer unit, invests the fund's reserves, and disburses benefits to eligible employees.

 ¹²⁵ This section based on Bureau of National Affairs, Basic Patterns in Union Contracts, ¹²⁵ This section based on Bureau of National Affairs, Basic Patterns in Union Contracts, ⁴⁴: 6, 1961; BNA, Collective Bargaining, etc., op. cit., pp. 452-460; National Industrial Con-ference Board, Employce Savings Plans in the United States (Washington: NICB, 1962); U.S. Department of Labor, Bureau of Labor Statistics, The Operation of Severance Pay Plans and Their Implications for Labor Mobility, Bulletin No. 1462, 1966, p. 1; Bernstein, Future of Private Pensions, op. cit., p. 168.
 ¹³⁶ Odell, "The Case for Early Retirement." op. cit., pp. 17-18.
 ¹³⁷ International Ladies' Garment Workers Union, Justice, Jan. 15, 1967, p. 9.
 ¹³⁸ Selected from University of Michigan, Bureau of Industrial Relations, Index to Labor Union Periodicals.
 ¹³⁹ Lane Kirkland. "Pensions and the Pensioner," IUD Pension Conference, 1956, in BNA, Daily Labor Report, June 7, 1956, p. D-1.

To be sure, the union and the unit of employers had in almost every case been earlier associated in collective bargaining but the collective bargaining relationship is organizationally a periodic meeting only; the welfare and pension fund mechanisms have become separate, substantial and going enterprises in their own right. More specifically "the administration of a pension plan involves day-to-day functions such as processing applications, determining eligibility, awarding benefits and interpreting the plan, as well as financial administration, in-cluding the selection of medium of funding, adoption of funding methods, receiving contributions, investments, payment of benefits, and so forth," while some or all of these administrative functions may be contracted out to an insurance company, bank, service organization, union, employer, or salaried administrative staff. In the largest number of cases the fund performs virtually all of these functions.140

Some unions involved in pooled plans complement the fund organization with their own internal organization. The ILG's welfare and health benefits department "coordinates the many health and welfare programs of the ILGWU" and "administers the ILGWU national retirement fund." 141 The welfare funds control department conducts "audits of firms which make contributions" to the funds. This is the policing function which the union must be mainly responsible for to see that employers contribute the full amount of their contractual obligation. An investment department implements the ILGWU policy "to invest the reserves of its funds under terms that insure maximum safety, highest return and most desirable social effects." 142

Few unions have as elaborate an infrastructure to carry on their pension interests. But the sizable "pension industry" consisting of independent consultants, actuaries and administrators serves as the virtual equivalent of a pension staff for many unions exercising, because of their independent status, a larger influence perhaps on union policy than an internal staff might otherwise.143

The admission of the employer to the governing of the pooled fund was probably forced on the unions and possibly on many employers as well by the Taft-Hartley law which, reacting to the mineworkers' original proposal for sole union control, requires equal representation of employers on any fund to which an employer contributes. But equal representation is not the same as equal power. The union is clearly the dominant partner in the pooled fund enterprise. This is not because the employer representatives are necessarily inactive. The situation is that "many employers who are not also employer representatives do not identify themselves with pension affairs beyond making the contributions required of them." 144 More importantly only the union has the marketwide power, interest and capabilities to oversee and maintain the fund as a going concern. In short, it is extremely unlikely that the employees in the pooled fund industries would be covered by pensions without the intervention of the unions.

The employee composition of the pension unit is most commonly a craft or industry, in a specific city or metropolitan area; a construction industry craft is an example of the former and retail trades or

¹⁴⁰ BLS. Multicmplower Pension Plans, op. cit., pp. 16, 123.
¹¹¹ H.GWU, Proceedings, 1965, p. 177.
¹¹² Ibid., p. 28.
¹¹³ McNulty, Decision and Influence Processes, etc., op. cit., chs. VI, VII, and VIII.
¹¹⁴ Ibid., p. 55.

apparel manufacturing is an example of the latter. Geographic coverage extends less commonly to a multistate region (Western Conference of Teamsters) or to a nationwide unit (IBEW, UMW).145

Reciprocity arrangements among funds enlarge the area of pension credit transferability. Most frequently the zone of portability under reciprocity does not go beyond the national union. Beyond reciprocity is one actual merger of separate funds as in the case of the ILGWU.146 The Amalgamated Clothing Workers is unique in union institutionalism establishing an insurance company to underwrite pension plans to which the union is a party.

Industrial unions whose main strength lies in single-employer bargaining units have adapted the pooled, multiemployer method to provide pension programs for employees in small establishments for whom coverage might otherwise not be practical. These types of pooled arrangements may differ from the typical pooled plan in not requiring uniform contributions or uniform benefits for all participating employers. In effect an employer buys into the pooled plan on an actuarily determined basis. The pension program of the Industrial Union De-partment for example "operates nationally" and offers individualized contribution and benefits levels for small- and medium-sized employment groups "under contract with IUD affiliated unions. A principal feature is the "simplicity of negotiation. Either the parties" may agree on contribution rate (cents per hour or dollars per week) and the administrator will determine the benefit level or parties may agree on desired benefit level and the administrator will determine required contribution rate." 147

The unions which are parties to single-employer pension plans have worked out an institutional response which is somewhat more restricted and fundamentally different from the response of the union in the pooled pension situation. Where the latter functions as a kind of joint venturer with its employers, the former functions essentially in an adversary relationship to the remployer. The day-to-day administration of the single-employer pension program is integrated into the personnel administration function of the enterprise which is commonly large enough to provide the base for economical coverage and the professional expertness to administer the plan.¹⁴⁸

The union involvement comes first through the collective bargaining negotiations and later in the processing of disputes over employee eligibility either through the general grievance machinery or through a joint board established expressly for handling pension benefit problems. Occasionally the union is able to go beyond an adversary relationship to a joint committee as in steel. Established in 1953 to review the welfare program, the committee has continued on and at times aided materially in the peaceful negotiation of complex pension provisions.149 Neither involves the union in the management of the trust fund.¹⁵⁰ Unlike the multiemployer fund where the union and employer work out the details administratively after bargaining the level of

 ¹⁴⁵ BLS, Labor Mobility, etc., op. cit., p. 38.
 ¹⁴⁵ ILS, Labor Mobility, etc., op. cit., p. 38.
 ¹⁴⁶ Ibid., pp. 38-39.
 ¹⁴⁷ National Industrial Group Pension Plan, Newark, N.J., 1966.
 ¹⁴⁸ Lucas, "Private Pension Issues, etc.," op. cit., p. 537.
 ¹⁴⁰ U.S. Department of Labor, Collective Bargaining in the Basic Steel Industry, op. cit., pp. 98-99.
 ¹⁵⁰ BNA, "Retirement Plans Pension Administration," Collective Bargaining Negotiations and Contracts, 1963, 44:251-256.

contributions, the single-employer plan sets out the details of the plan in the collective bargaining agreement in the form of a schedule of benefits.

The main responsibility for implementing the union interest in pensions in the large mass-production industrial unions rests on the union's infrastructure. Union specialists on the staff are notably important in the UAW, USW, IAM, URW, and IUE. The Social Security Department of the UAW describes itself as-

the professional and technical consultants of the international union in the development of pension programs [etc.] * * * The staff undertakes research studies, makes out estimates, works with international servicing departments, regional directors, and international representatives in the preparation and negotiation of collective bargaining proposals and in the interpretation and review of operating programs. * * * ¹⁵¹ The Steelworkers' Insurance, Pension, and Unemployment Bene-

fits Department was established because the subject matter areas of its responsibilities "represented new fields basically different from those which the union's staff has been accustomed to handle." The department guides the leaders of the union "in setting objectives and developing policy" and a large part of its work consists of "assisting in negotiating the detailed benefits to be included * * * after agreement has been reached in contract negotiations on the amount of money to be al-located for that purpose."¹⁵² The union specialists are also very influential in formulating and interpreting union pension viewpoints outside of the union to the pension and welfare industry and to the students of the field.

In the beginning of pension and welfare bargaining joint administration was widely demanded by unions. It was put in the top priority position by a UAW spokesman in 1949 and conceived as "a policymaking * * * rather than as a full-time administrative body."¹⁵³ The Ford agreement of 1949 included a provision for a board of administration with an impartial chairman having jurisdiction over "ad-ministrative policy and procedure" in respect to service credits, payment of benefits, employee pension rights and appeals, administrative statistics, and authorization of trustee to make proper payments. But the right to select, contract with the pension trustee belongs to the company and investment is the function of the trustee.¹⁵⁴

By 1954 a UAW spokesman in an enumeration of pension principles lists joint administration in third place and incorporates a more restricted view of the joint committee's purposes to "pension admin-istrative functions which directly affect *individual employees* [emphasis in original]" and current information on "the financial status of the program and experience under it * * * resort to the impartial chairman to resolve any issue has been so rare as to constitute a notable exception." 155

The steelworkers never made joint administration an important demand and have in fact specifically disclaimed any interest in ad-

 ¹⁵¹ Walter P. Reuther, Report to United Auto Workers Convention, pt. 3, 1966, p. 140.
 ¹⁵² United Steelworkers of America, Insurance, Pensions, and Unemployment Benefits (Pittshurgh, Pa.: The Union, 1956), p. 4.
 ¹⁵³ Becker, "Labor's Approach, etc.," op. cit., p. 122.
 ¹⁵⁴ U.S. Department of Labor, Bureau of Labor Statistics, "Ford-UAW Pension Agreement. 1941," Collective Bargaining Provisions, Health, Insurance, and Pensions, Bulletin 908-917, 1949, pp. 177, 179.
 ¹⁵⁶ Solenberger, "Pension Programing, etc.," op. cit., p. 132.

ministration except for "the right of appeal in all disputes" over individual pension rights and amounts and "medical arbitration of disputes concerning whether an employee is or continues to be permanently and totally disabled." 156 The union has instead adhered to the principle of "employer responsibility for administration" for two reasons: "First, much of the administration of the plan involves personnel mat-ters * * * between the company and the employees * * * Obviously all of these matters for administrative efficiency have to be handled in the plant." A second and probably more important reason is that the union "ought not to be responsible for the making of that initial personnel decision" in order "to preserve the right to protest and to handle it as a grievance in order to protect the employee's rights. This does not preclude the union from taking an interest in administration. Each of the steelworkers' insurance and pension agreements establishes a joint * * * committee to receive reports on and to review the progress periodically." 157

The union interest in pension administration was summed up realistically in an early report by the Bureau of National Affairs, the private labor relations information service : "The administration of negotiated pension plans is probably not so serious an issue as represented. There is considerable evidence to indicate that unions, especially after some experience with administration problems, are quite content to let management do the dirty work." 158 The depth of union participation is governed more by the scope of the employee unit than by philosophy of union leadership. The multiemployer plans cannot operate without the presence of the union to hold it together. In the single-employer plan the union functions essentially as a check on management but the primary responsibility for administration belongs to management and the unions seem to prefer it this way whether they say so explicitly or not.

The investment policies of pension funds in the view of several unions can properly be directed to social purposes if there is no impairment of security. ILG and ACWA funds have been invested in low- and middle-income housing mortgages, but "we have never permitted the sentiment or the social goal to interfere with our investment standards," according to an employee trustee of an ILGWU fund. "While the housing that we have promoted has been eminently desirable, the security is the same as if it were a factory." ¹⁵⁹ From time to time Reuther has raised the question in negotiations of a union voice in pension investment to promote low- and middle-income housing.¹⁶⁰ The AFL-CIO has established a mortgage investment trust to channel investment of reserves subject to union participation including pension fund reserves into the construction "of socially desirable housing projects; that is, projects which provide adequate living accommodations" for low- and middle-income groups, retirees.¹⁶¹

 ¹⁵⁴ Steelworkers. Insurance, Pensions, and SUB, op. cit., 1958, pp. 28, 38. See also Steelworkers. Special Officers Report, etc., 1954, op. cit., p. 22; BNA, "Retirement Plans Pension Administration," op. cit.
 ¹⁵⁵ Steate Committee on Labor and Public Welfare, Welfare and Pension Plans Investigation, op. cit., pp. 118-122 passim.
 ¹⁵⁶ BNA, Pensions and Profit Sharing, op. cit., p. 212.
 ¹⁵⁶ Testimony. of Harold Korzenik in Joint Economic Committee, Private Pension Plans, op. cit., p. 141, pt. I.
 ¹⁶⁶ Pensions (1990) Harold Korzenik in Joint Economic Committee, Private Pension Funds," 14th Annual Conference on Labor, New York University, 1961, pp. 385-392. See also Robert Tilove, "Pensions, Health, and Welfare Plans." Challenges to Collective Bargaining, L. Ulman. editor (Englewood Cliffs. N.J.: Preutice-Hall, 1967), pp. 56-58.
 ¹⁶¹ AFL-CIO, Prospectus, Mortgage Investment Trust, 1966, p. 2.

Union leaders have sought control over pension investment policy for internal union and collective bargaining power. The James study of the Teamsters includes an extraordinary report on Hoffa's utilization of pension funds, the major points of which seem to be these: (1) Hoffa controlled the administrative and investment policy of the Central States Pension Fund for the most part without effective opposition from the other trustees whether employer or union. (2)The employment of professional investment counsel was conspicuous by its absence and distrusted by Hoffa. (3) Hoffa's investment and bank account policy was guided by the need for "friends" and included such unorthodox borrowers as Teamster local unions, country clubs, gambling casinos, trucking and warehouse concerns, hotels and motels, newspapers and news commentators. (4) In one instance at least the CSPF invested in Montgomery Ward "for organizing purposes." 162

To put the involvement of unions in pension plans in a more general perspective it should be noted that the unilaterally employer-managed pension plans which are not subject to the same degree of public exposure as are the bilateral plans are not altogether free of problems. One "problem area" is the---

very definite tendency toward the financial integration, or weaving in, of pension affairs with the total financial affairs of many employers [which] * * * take a number of forms involving such things as choice of funding agency, annual contribution rates, management of the investment of pension fund assets, and changes in actuarial and investment fund valuations to go along with the general financial position of the client firms.¹⁶³

XII

The effects of the union interest in pensions may be summarized from the evidence here 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 wagethe union presence has made the difference between pensions and no pensions.164

 ¹⁶² Based on Ralph and Estelle James, Hoffa and the Teamsters (Princeton, N.J.: D. Van Nostrand, 1965), pp. 213-229, 358-373. See also Tilove, "Pensions, Health, and Welfare Plans," op. cit., pp. 56-58: Duncan M. MacIntyre. "Regulation of Employee Benefit Programs," Industrial and Labor Relations Review, July 1957, pp. 562-564; Senate Committee on Labor and Public Welfare, Welfare and Pension Plans Investigation, op. cit., final report; "Conflict of Interest Problems Arising From Union Pension Fund Loons," Columbia Lavo Review, January 1967; Segal, Pension Plans and Public Policy in California, op. cit., pp. 79-83.
 ¹⁶⁴ McNulty, Decision and Influence Processes, etc., op. cit., p. 114.
 ¹⁶⁴ McNulty, Press, 1962), ch. 2; Lucas, "Private Pension Issues, etc.," op. cit.; Strasser, "The Changing Structure of Compensation," op. 37-45; Slichter, The Impact of Collective Bargaining, etc., op. cit., pp. 372-380.

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.¹⁶⁵ The sectional interests which constrain the union decision on pensions are the need for immediate benefits 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, because there is no ideal standard of efficiency with operational significance. There is to be sure actuarial science but it is now commonplace to say that the science is no better than the long-range assumptions on future employment levels, turnover, mortality, investment return, and so forth, which have

¹⁶⁵ Kerr, "Social and Economic Implications, etc.," op. cit., p. 4.

to be made with respect to the given population for whom the pensions are intended. Actuarial soundness is, therefore, as a leading actuary has said, "an extremely inchoate field." 166 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. "The great majority of articles on the Federal old-age benefit plan are very critical of its provisions," Witte reported in 1937.167 It took a shattering depression to bring about enactment of a minimum public program. After enactment "the consequences of the failure of Congress to change the old-age and survivors' insurance system as required by changed conditions," Witte said in 1949, were "well nigh tragic." 168

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 shortrun time horizon of collective bargaining makes possible experimentation at relatively little incremental risk.¹⁶⁹ 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.¹⁷⁰ 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 old-age system.¹⁷¹

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 ¹⁰⁰ Dorrance C. Bronson, Concepts of Actuarial Soundness in Pension Plans (Homewood, Ill.: Irwin, 1957). p. xl.
 ¹⁰⁷ Edwin E. Witte, "Old Age Security in the Social Security Act," Social Security Perspectives (Madison: University of Wisconsin Press, 1962), p. 46.
 ¹⁹⁸ Witte, "The Bug-a-Boo of the Welfare State," in *ibid.* ¹⁰⁶ This discussion of incrementalism owes much to Robert A. Dahl and Charles E. Lindblom, Politics, Economics, and Welfare (New York: Harper & Bros., 1953), pp. 82–855.
 ¹²⁰ Arthur Butler, "The Relationship Between Public and Private Economic Security Plans," IRRA Proceedings, 1957, p. 142; Kerr, "Social and Economic Implications, etc.," op. cit., p. 7.

op. cit., p. 7. ¹⁷¹ Kathleen Meyers, First Adjustments of Employee-Benefit Health Plans to Medicare, U.S. Social Security Administration, Research and Statistics, note No. 7, 1966.

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." 172

This way of formulating the criticism presents many difficulties. First: the criticisms 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 finding 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 men and women workers who are most affected by a lack of vesting will not be reemployed in an establishment covered by a pension plan where they will vest? "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." 173

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" which workers put on benefits Lester finds most marked in unionized, high-wage industry and high-wage areas, "appear to be largely separate from the tax advantages from employee

¹⁷² Nelson McClung in U.S. Joint Economic Committee. Subcommittee on Fiscal Policy, Old Age Income Assurance: An Outline of Issues and Alternatives, committee print, 1966, p. 23. ¹⁷³ Robert Tilove, "The Adequacy of Private Plans—Another View." Annual Conference on Labor, New York University, 1966, p. 43. See also Segal, Pension Plans and Public Policy in California, op. cit., p. 65.

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." 174

There are only a few instances where the 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 few general attitude surveys which ask specific questions on pensions rank this benefit high on workers' priorities.¹⁷⁵ One survey conducted in the course of Cagan's study of the effect of pensions on saving showed an "apparent confusion over the amounts of * * * benefits attributable to the employer's contribution." 176 This confusion has apparently been used to question whether members really look upon employer contributions as deferred compensation or whether they know how much the employer contributes.¹⁷⁷ The survey population constituted a predominantly white-collar group drawn from a consumers union membership list. But perhaps one reason that members were confused over the amount of deferred compensation attributable to pensions is that as Cagan says, "in most plans * * * employer contributions are not specified : even if there were, no particular part could be allocated to specific employees." 178 There is also a likelihood that the Cagan study has only very limited application to negotiated plans because of the predominantly upper white collar-and hence likely nonunion-composition of the survey group.¹⁷⁹

Beyond polls, there is evidence on pensions as an historical movement. 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

 ¹⁷⁴ Richard A. Lester. "Benefits as a Preferred Form of Compensation," The Southern Economic Journal, April 1967, p. 490, passim.
 ¹⁷⁵ Ludwig A. Wagner and Theodore Bakerman. "Wage Earners' Opinions of Insurance Fringe Benefits," Journal of Insurance, June 1960, p. 27; Stanley M. Nealey, "Pay and Benefit Preference," Industrial Relations, October 1963.
 ¹⁷⁶ Phillip Cagan, The Effect of Pensions on Aggregate Sasings, National Bureau of Economic Research. New York, 1965, p. 71.
 ¹⁷⁷ McClung in Joint Economic Committee, Old Age Income Assurance, etc., op. cit., p. 21.
 ¹⁷⁸ Cagan, The Effect of Pensions, etc., op. cit., p. 73.
 ¹⁷⁹ Ibid., table E, p. 94.

of the individual worker under the plan; or obversely, whether the union can use the pension plan "to control the behavior of members." 180 Union pension and the beneficiary system 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.¹⁸¹

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 problem." ¹⁸² "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." 183 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." 184 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.¹⁸⁵ Hoffa's investments for the Central States Teamsters Fund "became the basis for criminal

 ¹⁸⁰ McClung in Joint Economic Committee. Old Age Income Assurance, etc., op. cit., p. 25.
 ¹⁸¹ Slichter, The Impact of Collective Bargaining, etc., op. cit., p. 399.
 ¹⁸² Bankers Trust. Study of Industrial Retirement Plans, 1965. op. cit., p. 10.
 ¹⁸³ Fred Slavick, Compulsory and Flexible Retirement in the Economy. New York State School of Industrial and Labor Relations. Cornell University, 1966, p. 37. See also McIvin Bers, "Equity and Strategy in Union Retirement," op. cit.; BLS, Private Pension Plans and Manpower Policy, or cit., p. 29-30.
 ¹⁸⁴ McClung, in Joint Economic Committee. Old Age Income Assurance, etc., op. cit., p. 23.
 ¹⁸⁵ MacIntyre, "Regulation of Employee Benefit Programs," op. cit., p. 562.

charges against him" but there has been no evidence of serious malfeasance or incompetence in pension administration generally.¹⁸⁶

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" ¹⁸⁷ 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." 188 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." 159 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 contributes to the pluralism which ranks so high in our political and democratic values.

Many public interest questions are capable of concrete definition and yielding 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." 190 Special contern 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

¹⁸⁰ Tilove, "Pensions, Health, and Welfare Plans," op. cit., pp. 56-58.
¹⁸⁷ McClung, in Joint Economic Committee, Old Age Income Assurance, etc., op. cit., p. 23.
¹⁸⁰ Ibid., p. 13.
¹⁸⁰ Ibid., p. 22.

shortrun economies from competition proved to be illusory and contributed to the corruption of union and health fund officials.¹⁹¹ 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 Munts 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." ¹⁹² 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." 193 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 con-tributes. 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.

The President's Committee on Corporate Pension Funds has recommended vesting and funding requirements as conditions for preferential tax treatment. Senator Javits has introduced legislation to require minimum standards of vesting, funding and portability. Senator Hartke has introduced a bill which would establish a Federal program of pension plan reinsurance.

Major stress on defects in protection of employee rights in pension

¹⁰¹ Jack Barbash, "Negotiated Health and Welfare Plans." New Dimensions in Collective Rargaining, Harold Davey, ed. (New York: Harper & Bros., 1958), pp. 108-110, ¹⁰² Raymond Munts, Bargaining for Health (Madison: University of Wisconsin Press, 1027).

^{1967),} n. 215. ¹⁰⁶ Testimony of Stanley S. Surrey in Joint Economic Committee, *Private Pensian Plans*, pt. 2, op. cit., pp. 412-413.

plans has been put on weakness in the law of fiduciary obligation and most insistently on the inadequacy of funding and vesting practices.¹⁹⁴

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.

¹⁰⁴ See Benjamin Aaron, Legal Status of Employee Benefit Rights Under Private Pension Plans (Homewood, III.: Irwin, 1961); President's Committee on Corporate Pension Funds, Public Policy and Private Pension Programs, op. cit.; Senate Committee on Finance, Federal Reinsurance of Private Pension Plans, op. cit.; Joint Economic Committee, Private Pension Plans, hearings, op. cit.; Bernstein, The Future of Private Pensions, op. cit.

FEDERAL LEGISLATION AND PRIVATE PENSION PLANS

BY WALTER P. REUTHER*

INTRODUCTION

Private pension plans constitute a major institution in our social structure. The statistics alone give some indication of their importance—as of the end of 1966, \$93.4 billion in assets were being held for the future benefit of more than 27 million employees; about 10 percent of these, or 2.7 million, were already retired and drawing benefits at a rate in excess of \$3 billion yearly. Programs which have been negotiated by the UAW are backed up by more than \$2.9 billion in assets being held for the benefit of about 1.5 million workers and retirees; approximately 200,000 retirees are currently receiving benefits at a yearly rate of approximately \$350 million.

Large as these figures are, they must be put in perspective to be properly evaluated. The 27 million covered persons, including some presently retired, amounted to fewer than 45 percent of the labor force, excluding Government employees. Furthermore, a recent study has shown a serious imblance 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, particularly since the January 1965 report on "Public Policy and Private Pension Programs" by the President's Committee. I had the privilege of commenting upon that report as a member of the President's Labor-Management Advisory Committee, and have on other occasions expressed my views on the need for legislation; e.g., during the hearings in the last session of Congress on the Federal pension reinsurance proposal (S. 1575, 89th Cong.) by Senator Hartke.

The paper "Old-Age Income Assurance," prepared by your own

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staff, has raised many interesting questions which stimulated even greater public discussion.

In this session of Congress we have seen the introduction of a greater than usual number of proposals with respect to private pension plans.

It would appear, therefore, 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.

Furthermore, there is some tendency to overemphasize the longrange nature of pension programs, and thus to advocate legislation affecting only future benefit accruals. In fact, the greatest need is with respect to situations which are occurring or which may occur in the near future, and we should concern ourselves with these problems as well as with the longer range situation. It is not equitable to assure that programs will operate extremely well for those who will retire many years in the future, but to do little or nothing for those who are now or soon will be facing the problems of retirement.

The fact that this examination of the status of private pension plans is occurring simultaneously with a review of the social security system emphasizes the dual nature of our retirement arrangements. In my testimony on H.R. 5710 earlier this year, I emphasized the pressing need for a substantial improvement in the social security system. At the same time I pointed out the UAW's support for the principle of a combined public and private approach to the provision of adequate retirement income. Even though the complimentary roles of the public and private program have been generally accepted we have not yet expanded the public program to the scope it should achieve, nor has there been adequate recognition of the function which Government has with respect to the private programs.

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.

In particular, Federal legislation can greatly strengthen the private programs, and thus encourage them to fulfill their potential. Such legislation can be classified into at least three major categories: (a)Establishment of pooling and guarantee arrangements which cannot be independently developed by the private plans; (b) determination of ground rules concerning the design of private plans in order to assure equity to individual participants; and (c) supervision of the handling and administration of the assets of private plans.

The constructive effects of such legislation can and must be achieved without reducing the opportunity for experimentation and flexibility in the establishment of programs, since that is one of the great strengths of the private system. Furthermore, if legislation were to impose requirements that are unnecessarily onerous, the establishers of private programs would seek out ways to provide comparable benefits through unregulated programs. Thus, any legislative proposals must realistically evaluate alternative procedures available in the development of private programs, and must create a better framework for such programs without stifling them.

(A) THE ESTABLISHMENT OF POOLING AND GUARANTEE ARRANGEMENTS WHICH CANNOT BE INDEPENDENTLY DEVELOPED BY THE PRIVATE PLANS

My recommendations cover three items: a Federal reinsurance program, the issuance of purchasing power bonds, and the recording of vested benefits by the Social Security Administration.

(1) FEDERAL REINSURANCE PROGRAM

As previously mentioned, I presented testimony in the last session of Congress on S. 1575 introduced by Senator Hartke. At that time I pointed out that most plans covering UAW members—in fact most plans in the country—will probably never need to turn to the proposed reinsurance program in order to pay benefits. However, our concern is with that minority of situations where, as a result of business failure, plant closing or removal, discontinuance of manufacturing operations, or other factors, the pension plan terminates at a time when currently accrued assets are insufficient to provide promised benefits. It is exactly because there are so few of these situations that it would be possible, at a very low premium, to protect all plans against this risk.

In this connection, it is interesting to note that the extent of private pension plan coverage (approximately 27 million employees) is not much different from the extent of private homeownership (approximately 28 million homes in 1960). We are all aware of the great merit of various Federal programs, such as FHA and VA mortgage guarantees, designed to encourage and assure the spread of such ownership. In those programs, as in the proposed pension reinsurance program, by eliminating those few situations in which default of promised payments would actually have occurred, all mortgage arrangements have been strengthened.

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. In our interdependent society such an event may even result from causes beyond the control of the management involved. 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. Thus, the business decisions of a single firm, aimed at maximizing its own productivity and profits, may result in the destruction elsewhere of jobs of hundreds of workers: For example, discovery of a new process could enable one company to gain such a large competitive advantage that others are forced to layoff or dismiss workers, or a producer who decides to manufacture some parts previously purchased could wipe out business and jobs at a supplier firm. 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.

This uncertainty that affects practically every employment group is one of the factors that will make it quite difficult for the program to be manipulated—as its critics anticipate—for the benefit of some plans. Senator Hartke's proposal included a minimum period which would have to elapse before the protection became effective; no employer can be certain his business situation will continue for at least that long without substantial change. Furthermore, to the extent that an employer does deliberately terminate a pension plan, it is his employees' benefits that are protected. 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 the major issues involved.

For example, fears have been expressed that a reinsurance program would reduce the incentive to fund private plans, and that this in turn might result in an ever increasing cost for the program. Our studies indicate that the effect upon incentives to fund are unpredictable. A firm which continued in business for a long period of time would actually find it less expensive to fund for its liabilities, thus reducing its reinsurance premium, than to continually pay that premium.

It has even been suggested that new funding requirements beyond those now imposed by the Internal Revenue Code would be a satisfactory alternative to the reinsurance program. I shall discuss later on the desirability of funding private plans; however, it clearly would not provide the protection needed. Even if every private program undertook to fund at the maximum rate permitted for tax deduction purposes (and no one has supported even that fast a rate of funding as a required standard), there would still exist the very real risk to plan participants that their benefit expectations might be defeated as the result of premature plan termination. As a practical matter, it is highly unlikely that many plans ever will have sufficient assets to meet their benefit commitments because of the need to periodically up-date the plans. In the automobile industry, for example, new or additional benefits have been negotiated approximately every 3 years. Therefore, even though these plans include a negotiated contractual funding schedule which has been in effect for almost 17 years, they are far from being completely funded.

There have been other forecasts that the reinsurance program would have undesirable "side effects," such as influencing whether or not plans are established or improved, or encouraging employer decisions to close facilities. This is the kind of speculation that is produced every time a new Government program is considered. For example, when the social security system was introduced we were told it would destroy individual initiative to save, but the latest studies show that the reverse is true.

The same kind of arguments are advanced at the collective bargaining table whenever we propose a new or expanded program; we're always told we'll "kill the golden goose," but every year the goose gets bigger and fatter.

As is true of all new legislation, the financial impact and other effects of a pension reinsurance program will be another consideration to be taken account of in making future decisions. But it is only one of a host of such considerations. Pension plan decisions are not made independently of other business and social considerations, neither are they generally the most significant factor in evaluating alternative activities. For example, the inducement of businesses to move from one State to another (or even from one county or city to another) through special zoning, tax concessions, etc., probably has much more significance for the plant closing problem than would result from the reinsurance program.

Therefore, the Studebaker closedown, with its accompanying problems, was merely an outstanding illustration of an on-going problem. In addition, it must be emphasized that the Studebaker-UAW plan was soundly conceived and administered. It was in the process of being funded in accordance with a procedure that would be considered acceptable under practically every standard that has been suggested as a reasonable requirement. The funds which had been contributed were honestly and carefully invested by one of the major banks in the country. The important point is that there is no reasonable mechanism available to cover the risk involved; only a Federal program can do the job.

Undoubtedly technical improvements could be made in S. 1575; in fact, Senator Hartke has reintroduced the proposal in this session, as S. 1635, in somewhat modified form. The actuaries and other insurance experts may be able to develop more improvements; it would be better for them to do that than to ignore the widespread need for this protection. Further modifications may be desirable, but the basic principle is sound. 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. Any long-range financial program faces the risk that its purposes will be defeated through increases in the cost of living and the consequent deterioration of value of the money anticipated. Furthermore, since a pension program is intended to help retirees maintain a decent standard of living, benefits which are designed in terms of current income levels will in the future be inadequate simply as a result of our rising standards of living.

The UAW has consistently negotiated increases in benefits for those already retired as the pension programs for our members have improved. For example, in 1964 the contracts we negotiated with major automobile and agricultural implement manufacturers included approximately a 55-percent increase in pensions to those already retired, and improved health insurance coverages which are provided without any current contribution by the retiree (previously the retiree had to pay 50 percent of the monthly premium). We will continue to bargain for improved benefits to retirees so that they will be protected against price increases and share in our improved standard of living.

In other situations, pensions have been geared to the investment performance of assets invested in stocks or other equities. While this may occasionally produce spectacular results, it still leaves the retiree open to great uncertainty with respect to the adequacy of his income. The stock market goes down as well as up. Most retirees do not have the resources which will permit them to "wait-out" a short term drop in stock values. The fact that the long-term trend of stock prices is an increasing one offers little comfort when a retiree's current income remains constant, or even decreases, while the cost-of-living is going up.

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 plans. 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 central recording arrangement so that those benefits which are vested for individuals are not forfeited through inaction. It is, after all, unrealistic to assume that every individual will keep adequate records of benefits which he may have accrued many years before he retires. Furthermore, during the years after his employment terminates, the individual and his former employer may each have moved several times thus making it quite difficult for them to locate each other. The situation is similar to those in which banks and insurance companies hold amounts which are never claimed. But, 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. Most plans negotiated by the UAW include a requirement that

Most plans negotiated by the UAW include a requirement that former employees who have a vested benefit, but do not apply for it, shall be notified of their entitlement. However, it is wasteful for individual plans to search for beneficiaries when an efficient recording arrangement could be maintained at practically no cost.

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.

There have also been proposals that a central fund be established into which moneys would be transferred on account of vested liabilities or that such transfers be made between plans when an individual changes employment. I do not believe such transfer arrangements to be very desirable, mainly because most plans are continuously less than fully funded; a transfer of funds equal to the value of a terminating employee's benefits would weaken the funded status with respect to other employees covered by the plan. Certainly, in the absence of a satisfactory reinsurance program, such a reduction in the security afforded nonterminated employees would be inequitable.

(B) DETERMINATION OF GROUND RULES CONCERNING THE DESIGN OF PRIVATE PLANS IN ORDER TO ASSURE EQUITY TO INDIVIDUAL PAR-TICIPANTS

My recommendations cover two items: better assurance that tax concessions will not be granted to programs which discriminate against the lower paid employees, and minimum vesting requirements.

(1) NONDISCRIMINATION REQUIREMENTS

While it is quite clear under the present tax laws that pension benefits may not be discriminatory in favor of higher paid employees as compared with lower paid employees covered by the same plan, it is still common for separate programs 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.

There are also many instances in which employees working at different facilities of a corporation will have widely differing pension benefits. This may be based upon the internal structure of the corporation (e.g., separate plans for one or more divisions or subsidiaries), upon differences in the kind of work (e.g., employees involved in the manufacture of one product may have different benefits than those involved in manufacturing other products), or simply upon the fact that the employees are at different physical locations. As far as the executives or stockholders are concerned, all income and profits are combined to determine their compensation; other employees, however, are subject to differential benefits based upon some accounting concept of allocating costs.

There are circumstances when a variation in pension benefits would be justified. Some such circumstances are: (1) Where the employees involved have basically different compensation arrangements, thus it may be reasonable to provide different benefits for commission salesmen than for salaried office employees; (2) where the particular work involved places significantly different demands upon the employees, thus it may be reasonable to make retirement available earlier to employees doing strenous or hazardous work; or (3) where employees covered by a collective bargaining agreement negotiate a pension plan different from that covering other employees. Similarly, when one corporation purchases, merges, or otherwise combines with another which has a different pension program some reasonable period would have to be permitted for transition arrangements to be made; thereafter the employees should have comparable coverage.

Congress should identify the general circumstances which would justify the establishment of more or less favorable plans for particular groups of employees of an employer. In particular, where a collective bargaining unit is covered by a less favorable plan than is applicable to other employees, the employer should be required to show that an offer was made to extend the more favorable plan to the unit, but that the employees through their bargaining agent chose the other plan. Reasonable transition arrangements should also be established for present plans to conform to any new requirements; thereafter where separate plans are maintained for classes of employees, the employer should be required to show that they conform to the nondiscrimination requirements. As a general principle, pension benefits, including social security, should not be discriminatory in favor of higher paid employees, even if such benefits are provided by plans separate from those covering other employees, unless such differences are due to the 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 attain retirement age. The National Commission on Technology, and so forth—among others—pointed out that one of the byproducts of our technological progress is the need for vesting benefits after some reasonable period of service so that employees will in fact be able to accumulate benefits over their entire working lifetime.

This is not to be carried to the extreme of requiring that there be immediate earmarking and vesting of all contributions for individual employees. A group pension plan should not be merely a forced savings arrangement. That is the reason that various proposals to improve vesting through greater use of employee contributions do not really meet the basic issue. When an employee contributes to a pension plan, he is merely saving his own money and could accomplish the same thing by authorizing a payroll deduction for U.S. saving bonds or to his credit union. Using the pension plan as a vehicle for forced savings may afford him some tax advantages, but it also reduces the flexibility which he has with respect to his savings.

Actually, a pension plan represents wages which are earned by a group of employees and used for the benefit of that group as a whole. No portion of those earnings belongs to any individual employee, but if an employee has participated in the group for a reasonable period of time he should be entitled to retain some equity in that plan even if he terminates employment before retirement age. Furthermore, if purchasing power bonds were available, these vested benefits could be given the same type of protection as the benefits of those who continue to be covered as active employees under a plan until their actual retirement.

A vesting requirement necessarily involves a careful definition of the types of benefits subject to that requirement. Simply because a particular benefit is, or is not, included in what is formally labeled a pension plan is not an adequate basis for deciding whether or not it should be vested. Only plans qualified for special tax treatment and only those benefits which are intended to be paid during the whole of an employee's lifetime or that of a designated survivor, even if their commencement date is sometime in the future-for example, the employee's attainment of age 65—should be affected. Furthermore, since the funds available to finance some pension plans provide very low benefits even if they are restricted to those who remain as active employees until they retire, plans which provide benefits that are less than some specified minimum level-which might be defined as a percentage of pay per year of service-should be exempt from the vesting requirement. In order to encourage the development of new benefits to meet problems as they emerge, the agency administering the vesting requirement should have authority to exempt benefits which are clearly "experimental." 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

My recommendations cover three items: Minimum funding requirements, regulation of investments, and a procedure to assure that plan administration will correctly reflect plan provisions.

(1) MINIMUM FUNDING REQUIREMENTS

As you know, the UAW was a pioneer in negotiating funded pension plans, and has consistently entered into collective bargaining agreements which require the employer to pay the full current costs of pensions accrued and to provide for the amortization of past service liabilities over periods of approximately 30 years. 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, and would be a valuable adjunct to a Federal reinsurance program even though it does not appear to be a necessary prerequisite for the successful operation of such a program. For example, it is clear that mandatory funding would reduce the absolute size of the potential drain on the reinsurance fund, and may be desirable for that purpose alone. Furthermore, the requirement of making substantial annual contributions whenever a pension plan is established or improved could serve as an additional deterrent against any attempt to abuse the reinsurance program.

There is, in addition, another important reason for the establishment of minimum funding standards. That is the need for a generally acceptable estimate of the longrun cost of a pension plan. Both management and labor need such an estimate since it would be equally

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undesirable to establish a plan which initially appears to involve fairly low costs only to discover after some years that such costs were seriously underestimated, as it would be to avoid establishing any plan at all because of unfounded fears concerning the possible costs.

Since most pension plans only cover those who retire after the plan is established, the total initial benefit payout is generally very low. By making contributions larger than the benefit payout, a fund can be accumulated to help meet the increasing total of such payments as the number of retirees increases. On the other hand, we in the UAW have met many situations in which management cited the total potential future benefit payout for all employees as an objection to establishing a pension plan, implying that this would be an immediate lump-sum obligation; when we point out that this obligation can be met by annual contributions at a reasonable level over a 30-year period, this objection is eliminated.

There is, of course, no magic in the specific figure of 30 years, and it may be that some more flexible requirement is appropriate. It is my understanding that the accounting profession has adopted for their purposes the use of a 40-year period for such amortization.

The major point is that funding is not an end, but a means to an end. We adopted 30 years as an amortization period with security of benefit expectations as our major goal. The accountants seem primarily concerned with assessing the cost impact. In special situations, for example, a multiemployer plan covering a highly diversified group or a large segment of a healthy industry, some other requirement may be acceptable.

In any event it would appear that the implementation of a funding requirement will involve the judgment of competent actuaries, since they must determine the assumptions concerning future experience appropriate for the particular program. It, therefore, appears necessary for standards to be established in order to determine the qualifications of individuals offering to act as actuaries.

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

I generally support the bills introduced by Senator Yarborough (S. 1024) and Congressman Perkins (H.R. 5741) which would make explicit the fiduciary responsibilities of persons handling pension funds.

Clearly these funds should be managed for the exclusive benefit of the plan participants, and any manipulation by a fund manager to enhance his own self-interest is reprehensible.

In addition, 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 in the hope of obtaining a large return, since any losses which may result from poor judgment can be ignored for many years by continuing to value the investment at its original purchase price. If those investments are held until the plan terminates, it is generally the employees who suffer the loss involved. The clarifying of fiduciary responsibility should eliminate this type of occurrence. Any additional disclosure requirements which will eliminate these occurrences should also be promptly adopted. There is no reason to keep secret any aspects of the administration, funding, or investment of a pension plan.

However, there are other questions to which Congress should address itself.

Under most plans, the earnings of the fund serve to reduce the need for employer contribution. To what extent has the pursuit of high investment earnings become an overriding goal without adequate regard to the social utility of the particular investments involved? 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. It might be required that, to retain its tax-exempt status, a pension fund would have to invest at least some specified portion (e.g., 10 percent) of its assets in situations which have been certified as having high community priority. This certification might be made by one of several Government agencies (e.g., one responsible for stimulating area redevelopment) given such authority. Such a certified loan would be subject to a maximum interest rate and, through the payment of a specified premium (such as is used for FHA), would be guaranteed by a self-supporting backup fund.

Another important matter is that of voting rights with respect to stocks owned by pension funds. At the present time, even though these investments are made on behalf of plan participants, any voting rights are exercised by the plan managers with no assurance that they are acting in accordance with the best interests of plan beneficiaries. 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 voting rights. For example, it might be feasible for the plan manager to send each participant an instruction inquiry and be guided by the majority opinion of those who return the inquiry.

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

The document prepared by your staff has correctly noted that pension programs are often of such complexity that it is difficult for individual participants to understand the benefits to which they are entitled. It is, of course, not always easy to describe a program which must operate for many years into the future. However, participants do require the assurance that they are fairly treated.

I do not agree with the contention in your staff's document that "unions ought to stay out of the business" of pension administration. On the contrary, employees' interests are most satisfactorily protected when any determination as to their rights to benefits is participated in by the union which represents them. For example, in plans negotiated by the UAW there is invariably a board of administration with equal representation for the employer and union, and we have over the years found many instances in which employees would have been deprived of benefits to which they were entitled if those determinations had not been subject to the union's approval. In any event it is a proper function of the Government to review administrative decisions, whether on the basis of spot checks or upon appeals from individuals, in order to see that the benefits which a plan purports to provide are in fact paid.

* * *

None of the legislation proposed here would inhibit the development of sound and imaginative private pension plans. On the contrary, by providing better assurance to all participants that they will be fairly treated and that their benefit expectations will be met, the Federal Government will be substantially improving the ability of private pension plans to fulfill their purpose. Deficiencies in the present arrangements, as well as inadequacies in the social security program, prevent retirees from receiving benefits which we could easily afford.

The first priority, of course, is to make substantial improvements in social security, and I have made detailed proposals to accomplish this in my testimony on H.R. 5710. We must utilize the social security program to assure everyone an adequate retirement income; the voluntary and diversified nature of the private plans precludes dependence upon them for other than supplementary benefits.

Those 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. The varied conditions and needs of individuals require the flexibility available to private plans in order to enable all retirees, their families and survivors to maintain standards of living comparable to those enjoyed prior to retirement. In some cases, for example, retirement earlier than permitted under social security is a high priority goal; in others, there is 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.

VESTING PROVISIONS IN PRIVATE PENSION PLANS

BY HARRY DAVIS*

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. Comprehensive current data are needed because public discussion usually involves matters such as the prevalence of vesting, the rate at which vesting provisions are being added to plans, the requirements for vesting, and the rate at which they are being liberalized. To meet this need, 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.1

Until the mid-1950's, vesting provisions were limited largely to contributory plans not under collective bargaining. In 1950 a Brookings Institution study disclosed that three-fourths of the members of plans with vesting contributed to the financial support of their plan. The study also revealed that nearly two-thirds of the members of plans with vesting belonged to plans installed before the 1940-50 union drive to secure pensions.²

The prevalence of vesting jumped sharply in 1955 when the United Automobile Workers Union succeeded in adding a vesting provision to the plans it had negotiated in the automobile, farm equipment, and other industries. Another boost occurred in late 1957 when vesting was added to plans negotiated by the United Steelworkers. As a result, BLS studies of large pension plans under collective bargaining showed that the incidence of vesting provisions had increased from 25 percent of the 300 plans analyzed in 1952 to 60 percent of a similar group studied in 1958.3

The Bureau's two most recent studies are based on much larger samples-around 1,200 plans-and show that the prevalence of vesting in negotiated plans rose to 67 percent in the winter of 1962-63 and to 74 percent in mid-1967.4 However, chiefly because of the absence of vesting in many large multiemployer plans, only 56 percent of the members of negotiated plans had the protection of a vesting provision in 1962–63 and 61 percent in 1967.

^{*} Bureau of Labor Statistics, U.S. Department of Labor.

¹ See Labor Mobility and Private Pension Plans, BLS Bulletin 1407 (1964). ² Charles, L. Dearing, Industrial Pensions (Washington: The Brookings Institution,

² Charles L. Dearing, Industrial Fensions (Washington: The Brookings Institution, 1954), p. 75. ³ Pension Plans Under Collective Bargaining, BLS Bulletin 1147 (1953), and Pension Plans Under Collective Bargaining, pt. I. Vesting Provisions and Requirements for Early Retirement; pt. II. Involuntary Retirement Provisions, Late 1958, BLS Bulletin 1259

^{(1959).} 4 Includes some plans mentioned in collective bargaining agreements that were not nego-tiated; e.g., plans initiated unilaterally by employers and which the union has not bar-gained often are mentioned in agreements as among the conditions of employment that will be continued without change. See technical note which follows.

The recent studies also show that while in both 1962–63 and 1967 about two out of three plans not under collective bargaining had vesting, the proportion of members in such plans rose from two out of three to almost three out of four. For all plans combined, vesting coverage rose from 59 percent of all plan members in 1962–63 to 63 percent in 1967.

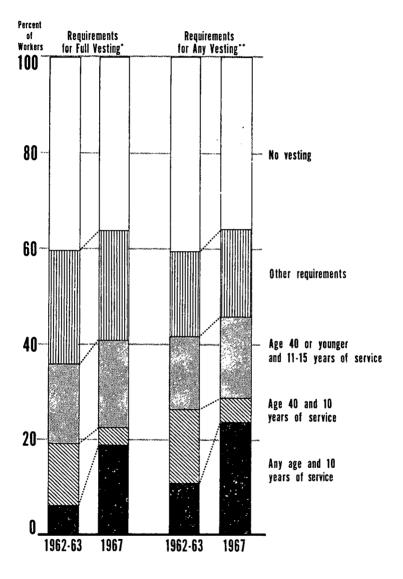
Vesting increased in single employer and multiemployer plans, in negotiated and nonnegotiated plans, and in noncontributory plans. (See table 1.) By far the strongest gains were made by multiemployer plans; the number with vesting nearly doubled and the number of covered workers rose by more than a third. 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 participants in multiemployer plans has 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.

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	Percent with vesting				
	Plans		Workers		
	1962-63	1967	1962-63	1967	
All plans	67	70	59	63	
Stilkle enibligver	69	72	71	77	
INEXO(13(60	73	79	72	78	
	68	68	źī	74	
Aultiemployer	32	45	23	26	
VEXUNATED	67	74	54	59	
NOT REGOLIATED	67	67	67	73	
Contributory	76	75	78	8 0	
Voncontributory	64	69	51	57	

During this period the requirements for vesting were liberalized by plans covering several million workers, including many large plans. For example, almost one out of five plan members in 1967 can qualify for full vesting after 10 years of service, regardless of age, compared to only one out of 17 a few years ago. (See chart 1.)

Chart 1. Age and Service Requirements for Vesting, 1961-62 and 1967

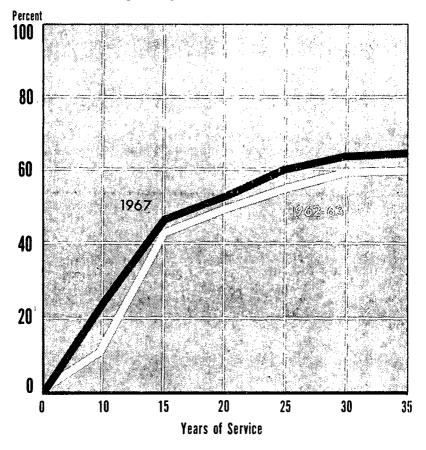


* Plans with graded vesting provisions classified by their age and service requirements for full vesting.

** Plans with graded vesting provisions classified by their age and service requirements for initial vesting.

The effect of all of the liberalizations of age and service requirements is illustrated in chart 2 which depicts the probability of all workers acquiring vested rights if they begin working at age 25 in jobs covered by pension plans. It shows, for example, that after 10 years' service i.e., at age 35—about 22 out of 100 such workers would have vested rights under current plan provisions compared to about 15 out of 100 almost 5 years ago. The contrast is not as great for older workers with more service because the most important liberalization was dropping the age requirements from plans negotiated by the automobile workers.

Chart 2. Chance of Acquiring Vested Rights After Stated Service for Private Pension Plan Participants Beginning Work at Age 25



PREVALENCE OF VESTING IN 1967

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.

	Total		With	vesting	Without vesting	
	Plans	Workers (thousands)	Plans	Workers (thousands)	Plans	Workers (thousands)
All plans	16, 852 15, 595 1, 257 12, 439 4, 413 6, 176 10, 676	17, 326 12, 521 4, 806 13, 198 4, 127 12, 423 4, 903	11, 782 11, 221 561 8, 482 3, 300 4, 591 7, 191	10, 842 9, 606 1, 236 7, 548 3, 294 7, 279 3, 563	5,070 4,374 696 3,957 1,113 1,585 3,485	6, 484 2, 915 3, 570 5, 650 833 5, 144 1, 340

TABLE 2

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 vested 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.

Vesting was prevalent in manufacturing industries, especially in the durable goods sector, where almost seven out of 10 workers participated in plans with vesting. Since large proportions of the employees in the transportation, retail trade, mining, construction, and service industries were covered by multiemployer plans which did not include vesting, fewer than half of the workers in those industries were under plans with vesting. In finance, where nonbargained whitecollar plans predominate, three out of four workers were in plans with vesting. Reflecting the influence of the Bell Telephone System plans, fewer than one-third of the workers in the communications and public utilities industries had vesting. These plans have liberal early retirement provisions, however, which protect accrued benefits for older workers in much the same way that vesting provisions do.

	Ali	plans	With vesting		Withou	Without vesting	
Industry	Number	Workers (thou- sands)	Plans	Workers (thou- sands)	Plans	Workers (thou- sands)	
All plans	16, 852	17, 326	11, 782	10, 842	5, 070	6, 484	
Agriculture, forestry, and fisheries	96	44	95	27	1	17	
Mining	318	334	162	98	156	235	
Contract construction.	521	1, 583	301	464	220	1,119	
Manufacturing	9, 875	10, 610	7, 391	8, 050	2, 484	2,560	
Nondurable	4, 196	4, 196	2.894	2, 405	1, 302	1, 791	
Durable	5, 679	6, 414	4,497	5, 645	1, 182	769	
Transportation	625	1, 273	222	540	403	733	
Communications and public utilities	846	1, 285	487	380	359	904	
Wholesale retail trade	1, 770	976	1, 159	540	611	437	
Wholesale trade	1, 075	521	836	340	239	182	
Retail trade	695	455	323	200	372	255	
Finance, insurance, and real estate	1, 975	773	1, 579	562	396	21`	
Services	826	448	386	181	440	267	

TABLE 3

Types of Vesting Provisions

Three types of vesting provisions are found in private pension plans: Immediate full vesting, deferred full vesting, 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 of an employee's accrued benefits are vested.

Although, occasionally plans having any of these three provisions pay benefits as soon as the employee is separated, particularly where the benefits are small, benefit payments usually are deferred until normal or early retirement age.

Deferred full vesting was the predominant type of vesting in all industries except transportation, where one large multiemployer plan (the Western Conference of Teamsters Pension Trust) had deferred graded vesting. That plan also largely accounts for the fact that about half the workers in multiemployer plans with vesting had deferred graded vesting; the remaining had deferred full vesting.

	Plan	s	Work	ers
Type of vesting	Number	Percent	Number (thousands)	Percent
All plans with vesting	11, 782	100. 0	10, 842	100. (
Deferred full Deferred graded Immediate full	8,400 3,368 14	71.3 28.6 .1	8, 943 1, 859 40	82. 5 17. 1

TABLE 4

REQUIREMENTS FOR VESTING

As mentioned above, virtually all vesting provisions require the participants to meet certain age and/or service requirements. The possibility that an employee will receive a retirement benefit depends, of course, on the liberality of these requirements. In addition, vesting may be determined by the type of termination; i.e., whether the employee was laid off (an involuntary termination) or quit (a voluntary termination).

Minimum service requirements 1	Percent distribution		
	Plans	Workers	
All plans with deferred full vesting	100. 0	100.0	
o service requirement	. 1	. 2	
ess than 10 years	14.8	7.2	
) years	31.5	40.2	
to 14 years	2.5	1.8	
years	33.7	37.9	
to 19 years	1.0	. 8	
J years	11.9	7.0	
l to 24 years	. 2	.5	
o vears	3.4	3.6	
to 29 years	. 4	. 3	
0 years	. 4	.5	

¹ For those plans which require that a period of emoloyment be served before participation in the plan begins, the minimum service requirement includes both the preparticipation service and the required plan membership service.

In addition to service requirements, minimum age requirements usually 40 years—were specified by about three out of five plans. However, plans covering about half of the workers had no age requirements; they vested the benefits of all workers meeting their service requirement, which was usually 10 years. The number of workers covered by such plans has increased markedly in the last 3½ years, primarily because, as previously noted, the age requirement was abolished in the major plans negotiated by the Automobile Workers.

TABL	Ë	6
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Minimum age requirement ¹	Percent distribution		
winning age reduitement.	Plans	Workers	
All plans with deferred full vesting	100, 0	100.0	
age requirement	41.8	50.8	
ge 40 and under ge 45	21.3 9.7	27.3 7.4	
ge 50	9.2	7.9	
ge 55	15. 2	5.7	
ge 60 and over	2.7	. 8	

¹ Where plans specified alternative age requirements, depending on length of service, the youngest age was tabulated.

On the whole, service requirements for deferred full vesting were about the same in plans covering only salaried workers and in those covering only production workers; age requirements, however, were more prevalent in salary worker plans. Plans covering two out of three salary workers had age requirements. By contrast, only about half the members of plans covering production workers and half those in plans covering both salary and production workers were subject to age requirements. Deferred Graded Vesting.—Employees under plans with deferred graded vesting generally qualified 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.

Service of 10 or 15 years was most frequently required to vest the first step of the worker's equity in deferred graded plans.

The amount initially vested typically 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.

TYPE OF SEPARATION

A worker that met the specified age and service requirements usually would be vested regardless of the reason for terminating 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 in order to qualify for his accrued benefits.

		Workers		
Number	Percent	Number (thousands)	Percent	
11, 782	100. 0	10, 842	100.0	
11, 101 681	91. 2 5. 8	9, 410 1, 432	86.8 13.2	
	11, 782	<u>11, 782</u> 100. 0 <u>11, 101</u> 94. 2	(thousands)	

TABLE 7

BENEFITS PAYABLE UNDER VESTING PROVISIONS

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 terminates. However, if the plan has a minimum normal retirement benefit, it is usually not used in computing vested benefits.

In about two out of three plans, the benefit was payable only at normal retirement age, usually 65 years.

TA	BLE 8				
Time of booofit poursest	Plan	IS	Workers		
Time of benefit payment	Number	Percent	Number (thousands) ¹	Percent	
All plans with vesting	111,747	100. 0	10, 824	100. 0	
At normal retirement age only	8, 081	68.8	6, 257	57.8	
At normal retirement age or In prior 5-year period In prior 10-year period In prior 15-year period	559 2, 024 83	4.8 25.7 .7	2,060 2,357 149	19.0 21.8 1.4	

* Excludes 35 plans covering 18,220 workers for which complete information was not available.

Employees could elect to receive the actuarial equivalent of vested benefits before normal retirement age in one out of three plans covering four out of nine workers. An actuarial reduction was specified in slightly more than three out of four plans, covering about 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. A few plans made no reduction because of the early receipt of the benefit. The vesting provision in these plans provided a type of early retirement benefit—often at an earlier age than under the early retirement provision. Conversely, early retirement provisions also protect accrued benefits—usually under stricter age requirements than the vesting provision.⁵

	Plans		Workers		
Reduction factor	Number	Percent	Number (thousands)	Percent	
All plans commencing payment of vested benefits before normal retirement age	3, 718	100. 0	4, 636	100.0	
reduction for early retirement	141	3.8	44	1.0	
tuarial reduction	2, 843	76.5	2, 278	49.1	
of 1 percent for each month	13	.3	28	.6	
of 1 percent for each month	44	1.2	303	6.5	
2 of 1 percent for each month	43	1.2	75	1.6	
of 1 percent for each month	253	6.8	387	8.3	
of 1 percent for each month	241	6.5	573	12.4	
of 1 percent for each month	25	7	170	3.7	
bercent for each month	20	.5	508	11.0	
ble of reduction factors not uniform	95	2.6	270	5.8	

TABI	.E 9
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NOTE ON SCOPE AND METHOD

A private pension plan is defined for this study as a plan established by an employer, union, or both that provides a cash income for life to qualified employees upon retirement. Profit sharing, stock bonus, and savings plans are excluded because the amount of benefits they provide are not computable in advance. Plans of Government and nonprofit organizations, other than unions, are also excluded from the scope of this article. Plans with less than 26 participants, active or retired, are excluded because they are not required to file reports under the Welfare and Pension Plans Disclosure Act, the chief source of the data. This exclusion does not seriously effect the data, since small plans account for only a minute part of the total coverage of all pension plans. Because of these exclusions and certain other adjustments, the number of plans and workers are not comparable to data published by the Office of Labor-Management and Welfare-Pension Reports.

This article was based, as noted above, on the reports and documents filed with the U.S. Department of Labor's Office of Labor-Management and Welfare-Pension Reports, pursuant to the Disclosure Act, by private pension plans covering more than 25 participants. Two probability samples of these plans were drawn. One sample, stratified by industry division and size, was drawn from a complete

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⁵ See BLS Bulletin 1407, p. 25.

list of all retirement plans that had filed financial reports (form D-2) in 1960.⁶

A second sample—a 5-percent random sample—was drawn from the retirement plans which had filed plan descriptions (form D-1) by September 1966, but had not filed a financial report in 1960. Data for each sample plan were appropriately weighted in accordance with its probability of selection so that the tables based on the first sample show estimates for all private pension plans with 1960 financial reports on file. They are designated "1962–63" because the descriptions were analyzed in the winter of 1962–63. The estimates designated "1967" are based on the combined samples and cover all plans with descriptions (D-1 reports) on file in September 1966.⁷ Since the estimates are, of course, subject to sampling variability, small differences may not be significant; i.e., if the same data were available for the entire universe, it might not show the difference estimated from the sample.

The vesting provisions of all sample plans were analyzed from the plan descriptions on file in July 1967, and were considered current at that time. Coverage data, however, were obtained from the reports for 1964 or 1965. The vesting provisions of the plans in the first sample were also analyzed and reported in BLS Bulletin 1407, "Labor Mobility and Private Pension Plans." The differences between the 1962– 63 data and those for 1967 obviously reflect reports of both plan amendments and the "new" plans, including plans with descriptions on file in 1962–63 that did not file financial reports for 1960.

And finally, it should be noted that each plan's collective bargaining status was determined by the response to the question on Form D-1: "Is the plan mentioned in a collective bargaining agreement?" A "Yes" was assumed to mean that the plan was negotiated, although in some cases, the agreement says that the pension plan is outside its scope or that the plan will not be changed without the consent of the union.

^oThis sample is described in more detail in the appendix of BLS Bulletin 1407. ⁷ Because complete plan descriptions were not available for 239 plans with 158,000 workers, the 1967 tables on vesting differ by those amounts from the data for all plans. Similarly, the vesting tables for 1962-63 exclude 213 plans with 66,000 workers, for which vesting information was not available.

THE EXTENT AND CONSEQUENCES OF PENSION PLAN TERMINATIONS

BY JOSEPH KRISLOV*

INTRODUCTION

Some loss of benefits is likely when a pension plan is terminated because few plans are fully funded; i.e., have sufficient funds to meet all obligations. The likelihood that members will lose benefits when a plan is terminated has resulted in proposals to prevent or insure the loss. Senator Hartke, for example, has authored a bill to establish a Federal reinsurance program for private pension plans. It was apparent throughout the hearing on Senator Hartke's bill 1 that there was little data available on the extent and consequences of pension plan terminations. This paper summarizes and analyzes the available information. It focuses on two questions: (1) Will many persons be deprived of their expected retirement benefits as a result of pension plan terminations? and (2) What proportion of their expected benefits will terminated plan members actually lose?

EXTENT

It is surprising how few plans have actually been terminated. Murray Latimer's pension plan study in the 1930's includes data on plan terminations during our country's severest depression. Of the 419 pension plans known to have been in existence before 1929, only 27 (6.4 percent) were known to have been discontinued by July 1929. The companies that terminated plans were small, and Latimer concluded that "it is probable that less than 1 percent of the employees enjoying the protection of a pension plan at one time or another were in companies whose schemes were discontinued." A followup inquiry, covering the period July 1929 through April 1932, indicated that an additional 10 percent of the plans were "discontinued, closed to new employees, or suspended; these plans covered, however, less than 3 percent of employees." The benefits of plans covering an additional 30 percent of the employees were "scaled down in one way or another."² No inquiries were reported by Latimer after 1932. Additional plans were undoubtedly discontinued or suspended during the remaining depression years.

The Internal Revenue Service (IRS) releases data on a quarterly basis showing the number of pension and deferred profit-sharing plans qualifying for tax deductions as well as the number that are

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¹ S9th Congress, U.S. Senate, Committee on Finance, Hearings, Federal Reinsurance of Private Pension Plans, 1966, pp. 19-20 and 54. ² Murray Webb Latimer, Industrial Pension Systems, 1932, pp. 634, 639, 846, and 940.

terminated.³ While there are undoubtedly some plans that have not qualified, the difference between the number of plans in existence and those qualifying is probably small. Consequently, the IRS data may be used to indicate the percentage of plans actually terminated. Relating the number of terminations of pension plans as well as deferred profit-sharing plans to active plans from 1948 through 1965 yields an annual termination rate of about 1 to 2 percent. Since 1955, separate data for pension and profit-sharing terminations have been released. The termination rate for pension plans is about 1 percent; the rate for profit-sharing plans is about 1.3 percent. The IRS quarterly release does not include data on the terminated plans' membership.

In addition to Latimer's study, data from three studies show that terminated plans are likely to cover few employees. The first is a joint Labor and Treasury Department study of all terminated pension plans reported to IRS from 1954 through 1965. Preliminary figures indicate a total of 4,243 terminations with only 183,699 members-an average membership of only 45.4 The second, by the New York State Banking Department, included information on 97 pension and profit-sharing plans terminated in that State from 1936 through 1954. $\overline{\mathbf{A}}$ total of 3,448 active employees and 88 retired employees were covered by the terminated plans.⁵ The average number of employees covered by each terminated plan was 350, compared with an average of 2,000 for all active plans. The third, by the Social Security Administration (SSA) of terminations reported to the Office of Welfare and Pension Plans (OWPP) in 1961-62, analyzed data on the partici-pants (retired and nonretired) of 137 terminated plans. These plans had a total of 77,266 participants—an average of almost 600 per plan.⁶ Active plans reporting to OWPP reported an average membership of almost 800. (The average membership of the terminated plans in the last study was high because 11 plans, with 46,000 members, were merged. Also, plans with fewer than 26 members are not required to file reports with the OWPP.)

Consequences

Retirement protection for members of some terminated plans continued. The SSA's study concluded that approximately 70,000 members of the terminated plans had their protection continued, and that 6,700 had their protection discontinued.⁷ Two studies of a limited number of companies that merged also concluded that members of some plans continued to have retirement protection. In addition, the two studies concluded that the members of the absorbed company did not always receive full credit for service covered by the discontinued plan.⁸

³ U.S. Treasury, Internal Revenue Service, Determination Letters Issued on Employee Benefit Plans. Quarterly. ⁴ Senate Committee on Finance, op. cit., p. 19. ⁵ New York State Banking Department, Pension and Other Employee Welfare Plans, New York, 1954. p. 6. ⁶ Joseph Krislov, "Private Pension Plan Terminations," Social Security Bulletin, Decem-ber 1963, table 7, p. 19. ⁷ Ibid. ⁸ Jomes Hammond "The Effort of Margare on Private Pensione" (unpublished destare)

³ James Hammond, "The Effect of Mergers on Private Pensions" (unpublished doctoral dissertation, University of Pennsylvania, 1960), pp. 3-4 and 96; and Charles P. Spencer & Associates, Inc., Employee Benefit Plan Review Research Reports (162-13), Chicago, Decomber 1958 Associates, Inc December 1958.

What losses are suffered by plan members whose protection is not continued? Detailed information on the disposition of a significant number of terminated plans' assets is, unfortunately, not available. Two studies (both by the author) have attempted to overcome this lack of data by calculating the assets per both retired and active members at termination, and then making a judgment as to whether the assets were sufficient to meet the plan's obligations. Both studies concluded that some terminated plans were unable to meet their accrued obligations.9

An indication of a termination's consequences can be gained from the widely publicized 1964 Studebaker experience. According to a United Automobile Workers spokesman, approximately 7,600 Studebaker employees had retired or were eligible for either a retirement or vested benefit when the plan was terminated. About 3,600 were retired or were eligible for retirement and they received their full pension rights; the remaining 4,000 employees received only 15 percent of their accrued pension benefits. More than half the 7,600 employees were then deprived of most of their accrued rights. If the 2,900 employees on Studebaker seniority rolls are included in arriving at an estimated universe of workers having an equity in the fund, then about two-thirds of all Studebaker employees were deprived of most of their expected benefits.¹⁰

Whether so many prospective beneficiaries lost such a high proportion of expected benefits in other terminations remains open for further research. It is significant, however, that the Studebaker pension plan had been in existence for 14 years.¹¹ Moreover, the automobile workers' union has been extremely aware of the need for funding. Many pension plans are terminated long before 14 years and the members of very few plans would have received the able representation characteristic of the automobile workers' union. It seems likely, therefore, that many of the other terminated plans were not so well-funded as the Studebaker plan.

Conclusions

Despite the lack of detailed information, some conclusions seem warranted. Relatively few plans-covering relatively fewer workershave 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 terminations 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 terminations, it would be premature to generalize. However, if the Studebaker losses are typical of those of other complete terminations, then the members of terminated plans suffer substantial losses.

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

⁹ See Krislov, op. cit., pp. 20-21: and Joseph Krislov, Terminations of Private Pension Plans, analytical note 109, Bureau of Old-Age and Survivors Insurance, Social Security Administration, May 1960, pp. 4-5. ¹⁰ See Senate Committee on Finance, op. cit., p. 59.

¹¹ Ibid.

companies develop pension plans initially. As coverage becomes widespread, 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 credits 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 subsequent pressures will probably develop among organized, but not among unorganized workers.

The unfavorable reception received by the Hartke proposal ¹² strongly suggests that congressional action to insure pension plans will not be easily achieved. It seems likely, therefore, that some plan members (retired and nonretired) will continue to be deprived of benefits. Their exact number and the extent of their losses can be determined by an analysis of reports regularly supplied to both the Internal Revenue Service and the Labor Department. The development of this information would aid the Congress in evaluating the need for legislation to protect the prospective beneficiaries of private pension plans.

¹² See Senate Committee on Finance, op. cit., pp. 73-80, 89-96, 101-102, 104-108, 111-119; Employee Benefit Plan Review, October 1966, pp. 3 and 8, December 1966, p. 32, and March 1967, p. 16.

AN ACTUARIAL ANALYSIS OF THE LOSS OF PENSION BENEFITS THROUGH THE TERMINATION OF PRIVATE PENSION PLANS

BY JOHN M. GROGAN

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 through 1965, 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.

Before undertaking the development of new pension laws the quality of performance under existing laws should be well understood. Thus we hope that the findings reported here will have the careful consideration of every Member of Congress and all in the executive departments who are concerned with the regulation of private pension plans.

It is the responsibility of the Congress and executive department staffs to draw conclusions from this paper and similar studies. This paper attempts to analyze one of the key issues in the many pension topics now being scrutinized, that is, whether a substantial percentage of employees now covered by pension plans are likely to lose a substantial portion of their accrued benefits through plan terminations.

Although the extent of future terminations cannot be forecast, the incidence thus far has been very slight and on any funding basis total accrued benefits will become more fully protected as plans mature.

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.

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A. THE STUDY FINDINGS

The report of the study includes summaries of the plans and participants tabulated according to---

year of termination (table I, pt. A),

age of plan at termination (table I, pt. B),

size of plan (table I, pt. C), and

reasons for termination (table II).

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.

1. Termination trend.—Although the incidence 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. Mr. Beier observed, "Although changes in general economic characteristics of firms with pension plans influence the rate of plan terminations, there is little reason to expect a radical change in the rate in the coming decade.* * * As new plans account for a declining proportion of the total, it is quite possible that the termination rate may decline."

2. Plan age and size.—The study shows that terminated plans tend to be small and relatively shortlived. Two-thirds of the plans covered no more than 25 employees and one-half of them were no more than 6 years old. Ninety percent of the plans had no more than 100 employees, and the median plan had 15 members during the late 1950's, dropping to 10 during the mid-1960's.

3. Termination causes.—Mergers accounted for the greatest number and percentage of terminations and covered employees as a single category, but the combination 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. No other single category accounted for as much as 10 percent; 18.9 percent of all plan terminations (affecting 22.7 percent of all covered employees) were for reasons not directly related to business circumstances.

Some correlation was noted between plan size and termination causes in that financial difficulties were most frequently cited as the reason for termination in small plans. The average number of employees in plans terminated for financial difficulties was only 35, in comparison with 57 for mergers, 56 for business dissolution and 63 for all other reasons. Mr. Beier noted: "Mergers and sales tended to increase with plan size, accounting for a fourth of the terminations involving fewer than 10 workers and about a third among larger plans; business dissolution followed a similar pattern."

4. Benefit losses.—"Aside from such well-publicized cases (the Studebaker case)," the report observes, "only the most fragmentary data are available on the extent of participant losses of expected benefits through plan terminations. IRS termination records do not contain the information needed to determine the frequency and magnitude of accrued benefit losses."

In order to obtain an indication of the extent to which funds in terminated plans are insufficient to cover benefits, a sampling of terminated plans was drawn from Department of Labor files on plans registered under the Welfare and Pension Plans Disclosure Act. Of 100 plans examined, data adequate to determine coverage was available in only 26 plans. Benefits were fully covered or almost fully covered in 10 plans covering 2,300 employees. Six plans with 2,400 members were less than fully funded but incurred no losses because members were transferred to other plans. Of the remaining 10 plans (with 10,000 members—8,500 of them from Studebaker), losses were a little less than 50 percent.

B. ANALYSES POSSIBLE WITH TERMINATION DATA

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. Since any such estimate would relate to possible benefit losses throughout the total private pension system, the exact point at which true losses fall within this range is not significant in attempting to measure such range. The loss range can be used to—

estimate the amount of benefit losses at representative benefit levels,

project the loss rate for future years, and

estimate the approximate cost of insuring expected losses.

C. ESTIMATES OF MAXIMUM LOSS UNDER INTERNAL REVENUE SERVICE Rules

1. Maximum loss range.—The minimum rate at which employers must contribute to maintain a qualified pension plan is one which will keep the unfunded past service cost from exceeding its initial level. The annual payment on this basis is—

Normal cost: the annual cost assigned, under the actuarial cost method used, to years subsequent to the inception of a pension plan.

Plus

Interest on *past service cost* (at the valuation rate) the pension cost assigned to the years prior to the inception of the plan.

By applying these minimum requirements to a representative plan and distribution of employees as reported by Mr. C. L. Trowbridge in volume IV of the transactions published by the Society of Actuaries, it is possible to estimate the minimum benefit funding that would result at the end of each year of plan life. Funding percentages for different plan years are shown in table III, expressed as the benefit value for total employees and for active employees if retired lives are granted full benefits under the minimum contribution rate and under a 20-year-funding rate. Funding is illustrated under both the "Entry age normal cost method" and the "Unit credit cost method." The two cost methods illustrated are those most commonly in use. It can be seen from table III that contributions at the minimum rate under the "Entry age normal method" provide for 9.4 percent of a terminated plan's total liability for accrued benefits at the end of the first year, 17.5 percent at the end of the second year, 24.3 percent at the end of the third year—up to 59.5 percent after the 15th year. Benefits for retired employees are 100 percent funded from the beginning and the deficiencies apply to employees still in active service at the termination date, at the levels shown.

It will be noted that even under 20-year funding the benefit loss from termination in the very early years remains substantial. However, the 20-year-funding rate under these methods is not the most rapid which will occur in terminated plans. For example, under the plan conditions assumed for table III, other widely used cost methods would afford benefits in full for retired lives and the following percentage of accrued benefits for active lives:

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Year	Individual level premium method	Aggregate method
1	27.6	20, 9
2	47.6	36.5
3	63. 2	49.1
4	75.9	59.6
5	86.1	68.4
10	116.7	97.1
15	129.9	119.4

Also under a fifth method currently used, the "Attained age normal method," slightly greater funding would occur in years 1 through 10 under 20-year funding than with the "Entry age normal method" as illustrated in table III.

Application of the funded percentages on a minimum funding basis on the "Entry age normal method" to the termination conditions of the plan studied permits the determination of approximate maximum benefit loss that would have occurred. Table IV shows the results of such a determination for—

All employees for whom coverage was conclusively reported as discontinued, plus

A percentage of the coverage-unknown employees at the same ratio as prevailed in the known population.

The age of plans at termination date for the 138,000 employees was assumed to be the same as for the total population.

2. Circumstances under which loss would have been greater.—A. greater loss than indicated in table IV would have resulted under three circumstances:

(a) If coverage-continuance was lower for plans for which the continuity of coverage was unknown than for the total population,

(b) If plans covering the 138,000 employees terminated at shorter plan durations than in the total population, or

(c) If an overly liberal valuation basis was used or if the age distribution of employees covered under terminated plans was higher than the averages assumed in this report.

3. Circumstances under which loss would have been smaller.—The total loss of benefits actually incurred is likely to have been smaller than shown in table IV for these reasons:

(a) Employers do not all fund plans at the minimum rate allowed by the law,

(b) Fund earnings customarily exceed the interest assumptions used in actuarial valuations, and

(c) The age distribution of employees covered under terminated plans is probably lower than that assumed in this report since many of these are relatively new companies.

There is no satisfactory basis for concluding how much smaller the actual loss may have been under the actual funding conditions, but the effect is probably not a significant one in estimating the benefit losses that may result from terminating plans.

4. Summary.—Employees who suffered some loss of accrued pension benefits during the period totaled less than six-tenths of 1 percent of the covered working force. For approximately 40,000 employees (less than 3,700 per year), the percentage of loss could have been significant because their plans had been in effect for not more than 5 years. However, in another sense we could speak in terms of a significant gain in benefits due to these plans even though their duration was very short.

Of the remaining 93,000 employees, full benefits are likely to have been funded for a substantial number.

TABLE 1 .- SELECTED CHARACTERISTICS OF TERMINATED QUALIFIED PENSION PLANS, 1955-65

	Pla	ans	Partic	ipants
	Number	Percent	Number	Percent
A. Year of termination:				
1955	220	5.2	8,000	3.6
1956	231	5.4	10,000	4.4
1957	276	6.5	16,000	7.1
1958	329	7.7	27,000	12.0
1959	372	8.7	20,000	8.9
1960	351	8.2	18,000	8.0
1961	524	12.3	32,000	14. 2
1962	484	11.4	21,000	9.3
1963	548	12.9	24,000	10.7
1964	492	11.6	31,000	13.8
1965	432	10.1	18,000	8.0
B. Age of plan at termination:				
1 year or less	284	6.7	13,000	5.8
2 years	468	11.0	12,000	5.3
3 years	495	11.6	19,000	8.4
4 years	380	8.9	8,000	3.6
5 years	339	8.0	13,000	5.8
6 years	286	6.7	14,000	6. 2
7 years	278	6.5	16,000	7.1
8 years	211	5.0	17,000	7.6
9 years	168	3.9	16,000	7.1
10 years	193	4, 5	12,000	5.3
11 years	164	3.9	12,000	5, 3
12 years	152	3.6	12,000	5. 3
13 years	126	3, 0	10,000	4.4
14 years	108	2, 5	8,000	3.6
15 years and over	478	11.2	36,000	16.0
Unknown	129	3.0	7,000	3. 2
_				
C. Number of participants:				
Under 10	1,891	44.4	9,000	4.0
10 to 24	1,093	25.7	17,000	7.6
25 to 49	499	11.7	18,000	8.0
50 to 99	367	8.6	26,000	11.5
100 to 249	253	5.9	40,000	17.8
250 to 499	90	2.1	31,000	13.8
500 to 999	42	1.0	29,000	12.9
1,000 and over	24	. 6	55, 000	24.4
Total plans and participants	4, 259		225,000	

TABLE II.—REASON FOR TERMINATION AND EMPLOYEE COVERAGE FOLLOWING TERMINATIONS

	Plans	Employees	Percent of all employees
Coverage discontinued—Business circum- stances:			
1. In merger 2. Financial difficulties 3. Business dissolved	406 1,087 771	19,000 38,000 43,000	8.4 16.9 19.1
Total Average per plan	2, 264	100, 000 44	44. 4
Coverage discontinued—Employee circum- stances:			
4. By union agreement 5. Employee lack of interest 6. Few employees eligible	180 125 111	11,000 8,000 7,000	4.9 3.6 3.1
Total Average per plan	416	26, 000 63	11.6
ontinuity of coverage unknown: 7. In merger	359	20,000	8.9
8. Other	320	20, 000	8.9
Total Average per plan	679	40, 000 59	17.8
Coverage continued: 9. In merger	511	34,000	15.1
10. Change to profit sharing 11. Transfer to other plan	214 175	14,000 11,000	6. 2 4. 9
Total Average per plan	900	59, 000 66	26. 2

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TABLE IIIFUNDING OF ACCRUED BENEFITS IN A REPRESENTATIVE PENSION PLAN UPON TERMINATION DURING IST 15 YEARS [Under 2 common cost methods; rapid and minimum funding methods]
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Accrued Value of lettied Minimum funding 20-year funding<							Entry age normal	e normal							Unit credit	edit			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2027	Accrued	Value of		Minimum fr	Inding			20-year fu	nding			Minimum 1	unding			20-year fui	nding	
1 <th>Ical</th> <th>וומטוווץ</th> <th>retired</th> <th>Total</th> <th>Remaining</th> <th>Percent</th> <th>funded</th> <th>Total</th> <th>Remaining</th> <th></th> <th>funded</th> <th>Total</th> <th>Remaining</th> <th>Percent</th> <th>Iunded</th> <th>Total</th> <th>Remaining</th> <th>Percent</th> <th>funded</th>	Ical	וומטוווץ	retired	Total	Remaining	Percent	funded	Total	Remaining		funded	Total	Remaining	Percent	Iunded	Total	Remaining	Percent	funded
$ \begin{array}{c cccc} \begin{array}{cccccccccccccccccccccccccccccccc$				assels	assels	Total	Active	assers	assets	Total	Active	assets	assets	Total	Active	assets	assets	Total	Active
1 346, 72 0 844, 311 94 87, 200 57, 200 537, 829 537, 829 537, 829 537, 829 54, 737 11, 002 101, 459 21, 3 226, 013 33, 259 116, 255 236, 657 38, 35 56, 73 38, 55 56, 73 38, 55 56, 73 38, 56 56, 73 38, 56 56, 73 38, 56 56, 73 38, 56 56, 73 38, 56 56, 73	Ξ	(2)	(3)	(4)	(2)	(9)	6	(8)	(6)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(11)	(18)	(61)
⁵ 548, 193 23, 235 133, 293 110, 013 24, 3 21, 0 212, 875 133, 165 034 116, 931 25, 2 11, 7 111, 931 256, 301 187, 204 385 55 8 55, 8 55, 8 55, 8 55, 9 55, 017 137, 137, 131 256, 301 187, 204 385 55 8 55, 8 55, 8 55, 8 55, 8 55, 9 55, 017 137, 137, 137 137, 137 137, 201 187, 204 385 55 166, 731 55, 010 286, 938 156, 931 165, 010 116, 911 25, 010 286, 956 330, 125, 000 334, 055 331 164, 259, 939 664 2 59, 55, 8 55, 8 55, 9 5, 017 155, 707 355 256, 384 55, 307 187, 206 385 55 8 55, 8 55, 9 5, 017 155, 707 355 256, 384 55, 307 187, 206 385 55 8 55, 8 55, 9 5, 017 137, 137, 137, 137 137, 137 256, 384 55, 301 187, 206 385 56 8 55, 8 55, 9 5, 017 155, 707 355 256, 387 155 266, 715 566 738 751 758 217, 8 201 250, 000 343, 000 288, 905 464 2 53, 339, 138, 138 7 339, 138 441, 173 76 8 55, 9 725, 882 175 887 175 857 173 852 119 871 185, 111 41, 8 30, 049 300, 483 332, 856 61, 7 78 221 77, 8 306, 547 332 346, 511 77 335 256, 334 753 325, 448 66 11 185, 101 343, 133 239, 158 7 713 320, 310, 323 239, 158 7 239, 683 973 768 177 366 713 866, 11 185, 101 345, 130 239, 138 7 133 239, 158 7 774 881 571 168 171 385, 203 106, 125, 000 343, 223 445 561, 77 348 571 173 871 330, 552 248, 455 514 771 332 524 456 61, 77 348 571 185, 101 185, 111 41, 8 30, 443 511 667 726 669 974 761 721 774 731 756 731 774 881 571 188, 101 200, 000 288, 992 570, 884 95, 773 858 61, 77 348 571 188, 101 200, 000 288, 992 570, 864 971 271 271 271 774 881 571 188 71 380, 532 735, 669 971 271 271 771 334 773 356 533 735, 669 971 271 271 771 336 773 560 931, 200 231, 200 234 58, 900 541, 100 211 1001 1001 1001 1001 1001 1001			10 EA2			9.4	9.4 4				14.9		\$37, 829	8.1	8			11.7	11.7
4 528,019 38,107 177,29 138,156 301 25,2 288,653 25,8 24,1 137,50 138,155 301 137,504 38,5 666,631 780,715 167,71 137,50 138,155 364,715 566,715 56,61 38,45,3 38,45,3 38,45,3 38,45,3 38,45,3 56,83 24,417,3 756,713 35,2 56,61,37 35,5,5 36,57,33 38,55 56,83 32,41,173 756,713 35,5 26,61,75 56,715 56,715 56,715 56,715 56,715 56,715 56,715 56,715 56,715 56,715 56,175 56,715 56,176 56,126 56,146	4 M ·		23, 236			24.3	21.0				36.1		93, 033	21.2	13. 3			30.7	21.6
6 666 (51) 78 000 282 576 184 576 314 427 949 349 949 64 2 5 24 707 156 707 35 7 56 347 715 56 715 51 4 7 772 782 787 175 75 75 75 75 75 75 75 75 75 75 75 75 7	4 0		39, 103 58, 267			30. I 35. I	25.2 28.5				44.8 52.4		116, 991	26.5 31.2	21.3			38.5 45.3	34.1
8 742, 031 132, 100 343, 002 213, 002 345, 231 359, 173 347, 173 75, 7 21, 111 118, 111 310 440, 531 344, 173 75, 7 21, 111 118, 111 310 440, 531 344, 173 75, 7 21, 111 118, 113 310 440, 531 344, 173 75, 7 316, 111 118, 113 310 440, 551 344 551 371 771 382 561, 7 351 346, 232 319 445 311, 9 560 544 561, 7 354 773 351 773 351 773 351 773 351 773 351 773 351 773 351 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 354 773 <td>œ۲</td> <td></td> <td>78,000</td> <td></td> <td></td> <td>39.4</td> <td>31.4</td> <td></td> <td></td> <td></td> <td>59.5</td> <td></td> <td>156, 707</td> <td>35.2</td> <td>26.6</td> <td></td> <td></td> <td>51.4</td> <td>52 10 10</td>	œ۲		78,000			39.4	31.4				59.5		156, 707	35.2	26.6			51.4	52 10 10
9 778 150 152, 100 381 164 229, 064 49.0 36, 6 638 778 82.1 77.8 82.1 77.8 36, 228 194, 128 44.5 31.0 514, 544 56.1 1845, 002 200 451, 952 251, 437.7 773, 252, 158 771 380, 413, 169 700, 129 752, 247 731, 247 731, 257 152, 250 752 754, 552 754 755, 164 751, 1845, 001 451, 952 248, 455 51, 437.7 774, 581 577, 681 91.7 89, 04 131, 169 201, 169 48, 9 22.7 624, 247 224, 733 477, 334 773, 356 752 248, 455 51, 435 55, 438 757, 544, 561 75, 551 754, 552 754 757, 551 754, 552 756, 552 756, 552 756, 552 738, 753 551 100, 100, 1 001, 1 73, 567 55, 571 552, 573 753 753, 573 556 773, 534 777, 334 773, 335 557, 552 556 560 453, 756 552 758, 552 738 753 555 100 453, 756 753 753 753 753 451, 577 734 773, 354 777, 354 777, 354 777, 356 552 756 560 758, 40.5 558 70, 555 100 548, 922 570, 564 277, 756 752 740, 558 100, 100, 1 001, 1 73, 567 55, 574 52, 344 773, 356 777, 354 777, 356 753 555 100 543, 716 558 24, 15 507 556 700 758, 922 570, 564 281, 872 555 74 40, 556 70, 758 753 756 750 755 756 750 755 756 750 750 756 750 750 750 750 750 750 750 750 750 750	~ ∞		125,000			46.2	35.3				72.0		112, 832	38. / 41. 8	90.0 30.0			20.8 19	53.9
11 845 00 100 451, 930 233, 445 53, 4 38, 7 747, 861 571, 661 91.7 83, 4 300, 364 204, 403 84, 8 31, 9 304, 397 451, 547 73, 9 212, 567 55, 2 39, 7 38, 702, 516 10, 1 301, 1 301, 1 218, 101 50.7 33, 6 577, 364 451, 364 77, 3 1 3 9 365, 397 56, 600 565, 700 546, 200 546, 291, 872 59.5 42, 201 1,001 100, 1 100, 1 100, 1 232, 758 53, 753 53, 753 542, 291 56, 651 566 560 560	<u>م</u>		152, 100			49.0	36.6				77.8		194, 128	44.5	31.0			66.1	57.9
12 876 022 226, 000 433, 826 257, 836 55.2 39.7 840, 981 614, 981 96.0 94.6 444, 101 218, 101 50.7 33.6 677, 354 451, 364 77. 3 13 905, 559 248, 000 543, 160 266, 607 55.8 40.5 906, 381 654, 581 100.1 100.1 473, 674 225, 674 53.7 33, 6 772 431, 677 80.6 14 933, 659 284, 000 543, 116 274, 716 58.2 41.3 911, 379 104, 0 105, 7 501, 568 53, 7 33, 10 312, 080 83.7 15 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 960, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35.6 831, 283 542, 291 86.6 16 961 (19) for an init credit cost method. (9), (9), (13), and (17) assets remaining percentage of total liabilities. (7), (11), (15), and (19) remaining assets expressed as a percentage of total vibal in the interventing assets expressed as a percentage of total vibal in the interventing assets expressed as a percentage of total vibal in the interventing assets expressed as a percentage of total vibal in the interventing assets expressed as a percentage of total vibal in the interventing assets expressed as a percentage of total vibal in the interventing astets expressed as a percentage interventing	23		203, 000			53.4	38.7				89. 0		210, 169	40.9 48.9	32.7			73.9	61.8 65.6
14 303, 539 264, 000 343, 107 208, 2097 58, 2 41, 3 909, 399 103, 309 104, 1 107, 1 47, 548 232, 548 53, 7 35, 67 431, 607 431, 607 831, 6 15 966, 000 288, 992 570, 864 281, 872 59. 5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 966, 000 288, 992 570, 864 281, 872 59. 5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 966, 000 288, 992 570, 864 281, 872 59. 5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 966, 000 288, 992 570, 864 281, 872 59. 542, 0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 966, 000 288, 992 570, 864 281, 872 59. 542, 0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 966, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 966, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 966, 000 288, 992 570, 864 281, 872 59.5 42.0 1, 035, 108 746, 116 107.8 111.2 528, 079 239, 087 55.0 35, 6 831, 283 542, 291 86, 6 16 967 97 97 97 97 97 97 97 97 97 97 97 97 97	22		226,000			22.2	39.7				94.6		218, 101	20.7	33.6			77.3	69.4
15 960,000 288,992 570,864 281,872 59.5 42.0 1,035,108 746,116 107.8 111.2 528,079 239,087 55.0 35.6 831,283 542,291 86.6	24		269,000			8 28 29 29	41, 3			_	100.1		225, 6/4	27.3 23.7	35.0			80.6 83.7	2.5
ote: (2) accrued liability on unit credit cost method. (5), (9), (13), and (17) assets remaining percentage of total liabilities.	15		288, 992			59.5	42.0			-	111.2		239, 087	55.0	35, 6			86.6	80.8
	Note	(2) accrue	d liability on	unit credit	cost method	(6), (9),	(13), and	(17) asset:	s remaining	percen	1 -	otal liabiliti		, (15), and	(19) rem:	aining asse	ts expressed	as a per	centage

130

TABLE IV .-- ESTIMATED MAXIMUM LOSS OF BENEFITS ACCRUED IN PENSION PLANS TERMINATED WITHOUT NEGOTIATION

	T -1-1	Retired e	mployees	Number of	Maximum loss for active em-	Maximum loss for all employees
Age of plan at termination	Total affected employees ¹	Percent	Number	active employees	ployees if retired have first priority (percent)	if no priority (percent)
1 2 3 4 5	8,004 7,314 11,592 4,968 8,004	0. 200 . 498 . 837 1. 252	15 58 42 100	8,004 7,299 11,534 4,926 7,904	90. 6 84. 1 79. 0 74. 8 71. 5	90. 6 82. 5 75. 7 69. 9 64. 9
Subtotal	39, 882					
6 7 8 9 10	8, 556 9, 798 10, 488 9, 798 7, 314	1. 777 2. 280 2. 778 3. 307 3. 950	152 223 291 324 289	8, 404 9, 575 10, 197 9, 474 7, 025	68. 66. 4 64. 7 63. 4 62. 3	6 60.6 57.0 53.8 51.0 48.6
Subtotal	45, 954			<u></u>		
11 12 13 14 15 and over	7, 314 7, 314 6, 072 4, 968 22, 080	4, 556 5, 128 5, 618 6, 120 6, 668	333 375 341 304 1, 472	6, 981 6, 939 5, 731 4, 664 20, 608	61. 3 60. 3 59. 5 58. 7 58. 0	46.6 44.8 43.2 41.8 40.5
Subtotal	47, 748					
Total Age unknown	133, 584 4, 416		4, 319	129, 265		
Grand total	138, 000		••••••			.

¹ Assumes same distribution as plan ages in total population-see table 1, part B.

Source: From table II: All employees from lines 1, 2, 3, 5 and 6 plus 45 percent of line 7 and 70 percent of line 8 (the approximate ratio for known plans).

PRIVATE PENSIONS AND LABOR MOBILITY

BY HUGH FOLK *

I. INTRODUCTION

The term "labor mobility" describes both propensity to change jobs and actual job changing.¹ 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.

Section I of this paper introduces the problems. Section II examines the theory of worker and employer behavior with respect to pensions. Section III summarizes the direct evidence of association between pension plans and mobility. Section IV examines trends in mobility and in job-tenure. Section V considers pension trends that might have affected mobility and the number of retiring persons who can expect pen-sions. Section VI is a general summary of the findings of the paper.

EFFECT OF PENSIONS ON MOBILITY

President Kennedy in the memorandum establishing the Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs asked the committee to consider, among other things, how pensions "* * * may contribute more effectively to efficient manpower utilization and mobility."²

This concern was stimulated by the belief of many authorities that pensions reduce mobility. For instance, Clark Kerr writes:

Private pension plans, except where they provide full and immediate vesting of both the employee's and firm's contribution, retard * * * movement. They tend to tie the worker to the com-

^{*} Associate professor of economics and of labor and industrial relations, University of Illinois. I acknowledge research support from the Institute of Labor and Industrial Relations and facilities furnished by the Department of Computer Science of the University of Illinois. Mr. L. Heyen and Mrs. L. Folk performed the computations. Prof. V. Stoikov pointed out several errors and made many helpful suggestions. None of these are responsible for the remaining errors which are mine.

¹ For reviews of studies on labor mobility, see H. Folk, Private Pensions and Man-power Policy, BLS Bulletin 1359, Washington, May 1963 (parts of which are included in this paper): and H.S. Parnes, Research on Labor Mobility, Social Science Research Council Bulletin 65, New York, 1954, and "The Labor Force and Lahor Markets," in H. G. Heneman, Jr., and others (editors), Employment Relations Research, Industrial Rela-tions Research Association Publication 23, New York, Harper, 1960. ² President's Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs, Public Policy and Private Pension Programs: A Report to the President on Private Employee Retirement Plans, Washington, U.S. Government Printing Office, January 1965, app. C, memorandum to the Sceretary of Labor and others, Mar. 28, 1962.

pany while employed; and hold him in a company-attached labor pool when unemployed.³

Robert Tilove writes:

* * * the conclusion seems inescapable that most private pension plans, in the form in which they commonly exist today, exercise a retraining influence on labor mobility. They often involve forfeiting accrued pension benefits upon any shift in employment; and they inhibit hiring in the upper ages, either because pension costs are thought to be greater or because the older worker may be reluctant to take a job on which he may not have a sufficient prospect of accruing pension rights.4

There are also dissenting opinions. Michael Puchek suggests that experience denies "* * * a widely held opinion that private pension plans restrict labor mobility." 5 Arthur M. Ross denies that pensions, seniority systems, and welfare plans have reduced quit rates.⁶ Herbert S. Parnes, in a study of two closely comparable firms found no significant relation between pensions and mobility. In an earlier paper, the present author concluded that "* * the immobilizing effects of pensions which might be significant for manpower policy are likely to be important principally for older workers who stand to lose large unvested benefits, are close to retirement, and face special difficulties in finding new jobs." 7

After examining the evidence, the President's Committee concluded :

Private pensions, along with seniority and other benefits based on length of service, tend to reduce labor mobility by tying workers to a particular employer. While the effect of private pensions on mobility is significant, it is limited and selective. However, there is cause for concern in the selective impediments to mobility now erected by private pension plans and in the possibility that such plans in the future will not permit a rate of mobility among mature workers sufficient to accommodate a rapid rate of technological change.⁸

EFFECTS OF MOBILITY ON PENSIONS

When a worker leaves his job he forfeits any unvested pension rights. If the job change is voluntary, the worker presumably prefers the new job. If involuntary, there is no such presumption, and the worker may have been deprived of part of his compensation. Whether the move is voluntary or involuntary, it will ordinarily reduce the amount of retirement benefits the worker eventually receives.º Thus, unvested pensions do not fully serve the objective that is used to justify special tax treatment for pension plans. A worker who changes jobs

³ "Social and Economic Consequences of the Pension Drive," Handbook on Pensions (National Industrial Conference Board, Inc., Studies in Personnel Policy No. 103, 1950),

p. 85. 4 Robert Tilove, Pension Funds and Economic Freedom (Fund for the Republic, New

⁴ Robert Tilove, Pension Funds and Economic Freedom (Fund for the Republic, New York 1959), p. 23. ⁵ Pension Plan Policies and Practices, Ithaca: New York State School of Industrial and Labor Relations, Bulletin 21, July 1952, p. 49. ⁶ "Do We Have a New Industrial Feudalism?" American Economic Review, December 1958, pp. 903-920. ⁷ "Effects of Private Pension Plans on Labor Mobility," Monthly Labor Review, March 1963, p. 287. ⁸ Op. cit., pp. vili-ix. ⁹ This is because the new firm is unlikely to provide a pension benefit offsetting the rights forfeited, even though the new firm may pay higher wages.

several times during his worklife could have long service with several employers, never quit voluntarily, and yet receive no pension at retirement.

Pension plans often have a minimum entrance age or a length-ofservice requirement before pension credits start accruing. Some pension plans place a maximum on the number of years on which retirement benefits may be based. These measures deemphasize earnings during the early years of worklife when mobility is highest. Actual movement declines sharply with age, so that most long-service, older workers in firms with pensions have enough tenure to receive vested pension rights if they were separated. Even so, a much smaller proportion of retired workers receive private pensions than would be expected from the proportion of workers employed in jobs covered by private pension plans. This is true even though newly adopted pension plans commonly grant full or partial past-service credit to retiring workers, even though their service under the plan is not long enough to earn a pension on future service. Of those workers who do receive pensions, many fail to receive pension credits for substantial parts of their work lives.

The immediate interests of unions and employers lie in providing pensions for those workers who are still employed immediately before retirement, and not in vested benefits. Money spent on vested benefits for workers leaving employment and union membership goes to workers who have no future interest in the firm or union, and these funds could be used for workers whose work careers are in the firm or union. The public interest in providing retirement income for all and the interest of mobile workers is in vested pensions, but few workers have the legal right or the effective ability to bargain for themselves. The Government, however, can exercise control over the form of pensions.

HOW MUCH MOBILITY IS DESIRABLE?

Some critics of private pensions write as if mobility was desirable for itself, rather than as a means for achieving economic efficiency and other social goals, such as personal liberty. A voluntary job change does not necessarily mean the worker wants to move. On the contrary, in many instances the worker would prefer improvement of conditions in his job. 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. If employed workers were completely tied to their jobs, such changes would be limited by the availability of new entrants to the labor force and displaced workers. Another important function is promoting movement out of declining industries, firms, and regions. If employees were tied to their jobs, the work forces of declining firms would age rapidly and pools of unemployed and underemployed workers would cluster around such firms. Mobility is also socially desirable in a free country because workers need practical alternatives to sticking with the present employer. Otherwise, either the employer will have too much control of the private lives and political behavior of his workers, or the dependence of workers on the company and absence of alternatives may lead to restrictive work rules imposed by militant unions in order to protect the workers' jobs.

The foregoing reasons are arguments for some labor mobility, but they do not tell 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 benefits, 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. It is not necessary that a pension be paid for by lower-than-competitive wages (as shown in section II). 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.¹⁰ A worker who wants and needs a pension may freely choose a job that pays lower than competitive wages but offers a generous but unvested pension. The employer in most instances retains the right to modify or eliminate the pension at any time before benefit receipt begins. If he does so, he may have deprived the worker of part of his compensation. It is on these grounds of equity that the President's Committee urged the adoption of minimum standards of vesting in pension plans as a condition for qualification under the tax laws.ⁱⁱ

A low level of voluntary mobility may be highly desirable. It may be economically more efficient and may accurately represent worker choices. There is no presumption or convincing evidence that high mobility is more conducive to economic growth and individual liberty than is low mobility within rather broad limits.

II. THEORY OF WORKER AND EMPLOYER BEHAVIOR

The theory of employer and worker behavior with respect to pensions presented in this section is quite simple, but it predicts or explains seemingly inconsistent patterns of behavior. For instance, employees appear to value pension rights only slightly, but employers count on pensions to reduce turnover. Employers prefer unvested pensions for most of the worker's worklife, but commonly grant generous vesting on early retirement in the later years of the worker's worklife. Moreover, the theory permits us to answer some of the questions about pensions in economic terms that have previously been answered only by commonsense or in legal (i.e., conventional) terms. For instance, do workers pay all or part of the cost of the pension?

PRESENT VALUES

Throughout this analysis costs, wages, and benefits are usually expressed in present values. The worker is assumed to take into account the balance of his worklife. The worker's present value of a stream

¹⁰ Inequity is a personal judgment, but there are many who hold the same view, for instance, see the comments of Clark Kerr included in President's Committee, op. cit., app. D, p. 15. ¹¹ Op. cit., pp. ix-x.

of expected benefits $E_1, E_2, * * * E_{\infty}$ discounted at at rate (1+r), when the individual has a probability of survival through the period of p_i , is

$$W = \sum_{t=0}^{\infty} \left(\frac{E_t p_t}{(1+r)^t} \right)$$

The E_t are the net expected money values of the various advantages of a given year.¹² Those advantages that cannot be converted into money values are not included in the present value, but the worker can evaluate medical plans, holidays, and pension plans. Here we consider only two kinds of advantages; namely, wages (W) and pension costs (P).

The probability of surviving through the period (p_t) depends both on mortality rates and retirements rates. The relevant interest or discount rate is the rate at which the worker actually discounts the future in making decisions, but this rate may not be unique. For most workers the interest rate for borrowing exceeds the rate for lending, but in fact most workers both borrow and save (or lend). The desired rate is neither his borrowing or lending rate, but the discount rate at which the worker would sacrifice expected income next year for cash today. This rate should depend on his present nonhuman wealth (wealth that is independent of work), opportunity rate of earnings on assets, and the risk that the worker views as inherent in his expected income. If he thinks there is a large variance in the amount E_t in year t he might use a higher rate of discount than if the variance of E_t were low, because of the diminishing marginal utility of income. Thus two E_t 's of the same amount in the same year may have different subjective values.

The worker may also have different rates of discount for near and distant outcomes. When we use a single rate we must take account of this possibility by considering that the worker may prefer one of two equal present values because it has larger benefits in the near future. In figure 1, for instance, a worker should prefer the lifetime earnings shown by the lower of the two curves. At every date in the future stream 2 has the lower present value, but at time 0 (now) it has the same present value as stream 1. This means that the payoff completed by time 1 is larger for stream 2 than for stream 1.

During the early years of most careers, the worker invests in his earning abilities and the present value of his earnings increases. While investment continues for many years in some occupations, the aggregate amount is less than gross earnings (including the forgone earnings caused by the investment activities). so that the worker receives a cash income. The longer the period of net investment, the longer maximum lifetime present value is delayed.¹³ The maximum present

¹² By expected value is meant the sum of the k possible outcomes, e_{i} , each weighted by its probability of occurrence (q_{i}) . Thus the expected value is

i=1¹³ For a discussion of human capital as a function of age, see Burton A. Weisbrod, "The Valuation of Human Capital," Journal of Political Economy, October 1961, pp. 425–436.

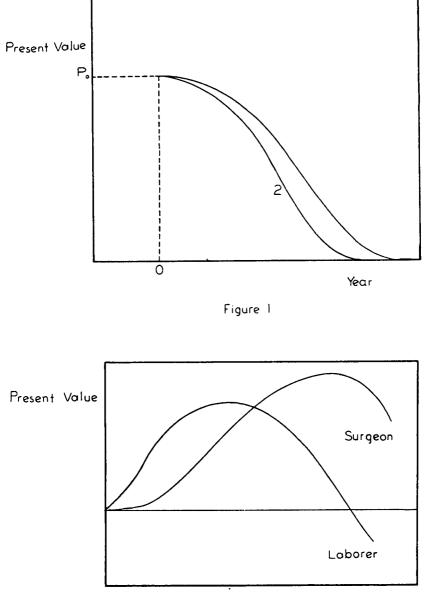




Figure 2

WORKER VALUATION OF PENSIONS

Assume that the worker has a utility function that depends only on present values of wages and pension costs of employers.¹⁴ Assume also that the pension contributions on behalf of the worker are held by the pension fund. In the event that the worker leaves employment, the funds are forefeited to the fund and reduce the employer's contributions on behalf of other workers.¹⁵

The worker's utility function is

$$U = U(W, P) \tag{2}$$

This function assumes that the worker does not evaluate pension benefits in terms of present values, but knows how much the employer will contribute for his pension. Assume $\partial U/\partial W > 0$ and $\partial U/\partial P > 0$. If the worker attaches no value at all to pensions $(\partial U/\partial P=0)$ the situation is that of indifference curve 1 in figure 3. If $dW/dP=(\partial U/\partial P)$ ∂P /($\partial U/\partial W$)>-1, the situation is that of indifference curve 2. This implies that the worker attaches some value to pensions, but he would prefer a dollar of wages to a dollar of pension costs.¹⁶

The third possibility, dW/dP < -1, implies that the worker prefers a dollar in pension costs to a dollar in wages.17 This is shown in indiffer-

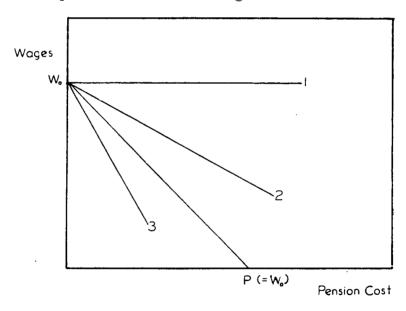


Figure 3

¹⁴ For simplicity, pension costs are used instead of the pension plans available to the orker. This assumes the worker or employer must choose what kind of pension is to be ¹⁴ For simplicity, particular worker or employer must choose many be used to reduce adopted.
 ¹⁵ Federal regulations provide that forfeited pension credits can only be used to reduce employer contributions. This is in most instances identical in effect with this assumption made in the text.
 ¹⁶ Curves 2 and 3 are not necessarily linear.
 ¹⁷ This is essentially the assumption made by G. Rimlinger, "A Theoretical Integration to the text for the second se

¹⁷ This is essentially the assumption made by G. Rimlinger, "A Theoretical Integration of Wages and Social Insurance," *Quarterly Journal of Economics*, August 1963, pp. 470– 484. Rimlinger unrealistically assumes that the worker prefers pensions to wages but cannot defer earnings except through collective action, thus assuming away all annulties and reserve life insurance.

ence curve 3 in figure 3. Without special tax treatment for pension costs, few workers would fall in this category. The exceptions would be: (1) workers concerned about retirement who were convinced that the employer could earn more or higher return on pension contributions than the worker could; and (2) those workers who would not make payments into their own retirement fund but think that they ought to be made to do so. With special tax treatment, however, there will be many more workers in this class. One dollar in pension costs in a qualified pension fund accumulates interest on the whole dollar, while the dollar paid in wages is taxable before the worker can invest it. Thus even if marginal tax rates were the same during work and retirement years, there is a possible advantage in a pension for the worker.¹⁸ As it is, of course, a retired worker receives tax-free OASDHI benefits and gains the advantage of double personal exemption when 65 years and over. Moreover, by definition of retirement, his earnings will usually be much lower than during his prime working years. Most workers, and especially high-wage workers, expect that marginal tax rates will be lower in retirement than during the prime working years.

WORKER ATTITUDE TOWARD JOB-CHANGING

Define the worker's mobility during period $t(M_t)$ as the probability of his leaving the job during the period. For a given set of alternative jobs available to him, his mobility will be a function of the utility of the presently held job

$$(M_t = \mathcal{M}(U_t) \tag{3}$$

Assume that an increase in the utility of the present job, *ceteris* paribus, decreases his mobility $(\partial M_t/\partial U_t < 0)$. Any change that increases his utility decreases his mobility $(\partial M/\partial W < 0 \text{ and } \partial M/\partial P < 0$ [in the usual cases in which $\partial U/\partial P < 0$]). For given wages and pensions in the job presently held, the worker's mobility depends directly on wages and pensions in alternative jobs. These depend on the other employers' perceptions of the worker's productivity.

What effect does an unvested pension have on the worker's mobility? The worker with completed service under the pension plan can expect a larger pension if he stays with the firm than if he moves to another firm with identical wages and pension plan, so his mobility is reduced. When benefits are a large part of the worker's human wealth, as with workers close to retirement and executives, mobility should be substantially reduced. A fully vested pension should have no effect even though it is expected income rather than nonhuman wealth because receipt of the vested pension does not depend on continued employment in the firm. An unvested pension is in no essential respect different from

¹⁵ If W_p is the present value of earnings when a pension is paid, W_w is the present value of earnings when no pension is paid, I_p is the present value of taxes when the pension is paid, and I_w is the present value of taxes when only wares are paid, then the worker will prefer a pension if $U(W_p,P) > U(W_w,O)$. Usually, $U(W_p-I_p) > U(W_w-I_w)$ if $W_p-I_p > W_w-I_w$. In this case, it is possible for $W_p < W_w$ if I_p is sufficiently smaller than I_w . This means that if the tax saving is sufficiently great, then the W_p+P can be less than W_w even though the utility of W_p and P is greater than the utility of W_w . This is likely to be so if the worker attaches a great deal of importance to pensions or has a high marginal tax rate. Given the tax advantages, the employer may spend less on pensions and wages together than he would have to spend on wages alone if he could not grant pensions.

other expected income, and if another firm wishes to bid enough, it can make its offer greater than the present value of the unvested pension and wages in the original job.

The effect of pensions depends on the present value of the pension costs (P) compared to the total present values of the worker's total wealth (A) and of the wages associated with the job (W). Total wealth is important because a worker with large wealth can better afford to forfeit pension rights. In a pension plan integrated with OASDHI under Internal Revenue Service regulations, the higher the worker's wages the larger are the proportions of his pension rights to his human wealth and to his total wealth. Hence, P/W and P/A are both increasing functions of W. Thus we would expect the immobilizing effects of pensions to be greater for higher earners, ceteris paribus. In fact, wealth is highly correlated with earnings so the immobilizing effects resulting from the high ratios may be mitigated by a high level of wealth.

As the worker ages, W declines although A may increase. Usually P/A will be an increasing function of age; hence, the immobilizing effects of unvested pensions should increase with age.

The likelihood of a potential employer making an offer of a more valuable job to the worker decreases with age because of the shortening of remaining worklife that occurs with increasing age and the increasing ratio of P/(+P) that results from accumulating pension rights. The present value of the productivity differential between any two jobs normally decreases with age, while the premium necessary to move the worker increases.¹⁹ There are few instances in which potential employers will pay a premium for an older worker. In most instances invested pensions restrain mobility of workers close to retirement age far more than is necessary to prevent movement because the older worker has no alternatives.

EMPLOYER'S WAGE POLICIES

The magnitude of the worker's wages depends on his employer's perception of his productivity. The revenue attributable to the worker's productivity is

$$R = \sum_{t=0}^{\infty} \left(\frac{(MRP)_t d_t}{(1+i)^t} \right) \tag{4}$$

where $(MRP)_t$ is the marginal revenue productivity of the worker at time period t, d_t is the probability of the worker continuing in the job through period t, and (1+i) is the rate of discount relevant to the firm, which is the firm's marginal profit rate, since employers are usually assumed to borrow up to the point that the profit rate equals their interest rate (marginal interest rate in the case of a monopsonistic borrower).

The marginal revenue product depends in part on the worker's marginal physical productivity, which depends on his native ability and his training. If the labor market is in equilibrium for different

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¹⁹ A given wage difference has a lower present value for an older worker than for a younger worker.

kinds of workers, a dollar buys the same marginal revenue product for each grade of worker. If the employer provides general (or mar-ketable) training at firm expense, then he will have to pay the worker his increased market value. If the worker is trained in skills that are useful only to the particular firm ("specific training" in Becker's term 20) his market value to other firms does not increase and the firm will not have to pay the worker a higher wage than before the training. Nevertheless the worker can cause a loss to the firm by moving. This loss of specific training is one of the major turnover costs of the employer.21

Once a firm has invested in specific training for the worker, it has an incentive to protect the investment while it is being amortized. It can do this by paying the worker a larger wage than his opportunity wage that might be paid by other employers who could not benefit from his specific training.22

The probability of survival, d_t , depends not only on mortality and probability of disablement to the worker but also on his mobility, since if the worker leaves employment with the firm he is economically dead to the employer. The probability of survival depends in part on actions of the employer through his compensation policy.

The employer's compensation policy is also influenced by the presence of a union or the threat of unionization. Unions usually seek job security. They tend to demand and to enforce strict seniority rules for layoffs and promotions. The worker's seniority provides security worth a great deal of money.23 Few executives or salaried workers are covered by formal seniority systems, but the custom that older workers shall not be discharged, demoted, or suffer wage cuts simply because their productivity has dropped is a powerful constraint. The employer lacks complete control over the wages and tenure of many of his employees for each period of time. Hiring decisions are increasingly long-term decisions, and this trend has led to a gradual decasualization of labor markets and the growth of continuing employment relationships.

The effect of these practices, together with the eventual decline of productivity in old age leads to a situation in which productivity and salaries are to a degree independent (fig. 4). The present value of the worker to the firm is at first close to zero (for the marginal worker), becomes large, as mobility decreases with length of service and as the employer invests in specific training for the worker, reaches a peak, then declines and becomes negative as the worker's expected worklife shortens and as wages exceed productivity (fig. 5).

²⁹ See Gary S. Becker, "Investment in Human Capital: A Theoretical Analysis," Journal of Political Economy, supplement: October 1962, pp. 9-49. ²⁰ Others include recruitment costs, severance pay, and the costs of any chargeable

^a Others include recruitment costs, severance pay, and the costs of any chargeable unemployment insurance. ³² In some circumstances, the specific training of a worker may become valuable as a result of commercial rivary, and the rival may be willing to pay a substantial premium to learn about the internal affairs of the original employer. "Trade secrets" in the sense of unpatented inventions and techniques are other examples of marketable human capital, the knowledge of which may not increase the physical productivity of the worker but may make him especially valuable nonetheless. ³³ The worker's accumulating seniority increases his expected stream of earnings by increasing the probability of his being promoted to the level of his ability and decreases the variance of the expected earnings since the probability of layoff is decreased. A senior ity system may decrease the present value of the job to the new worker who would expect rapid promotion if promotion were based on ability and who does not value distant income very highly.

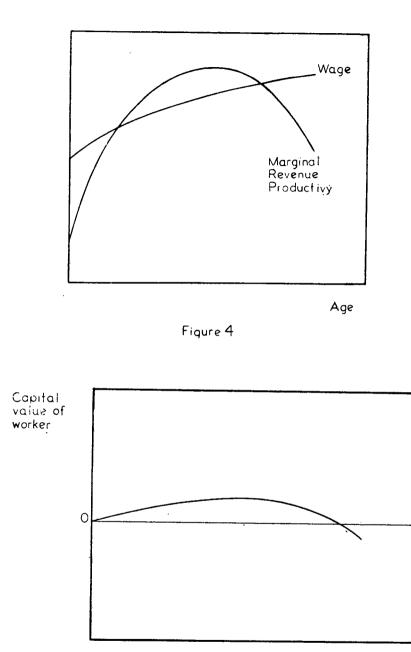




Figure 5

EMPLOYER ATTITUDES TOWARD PENSIONS

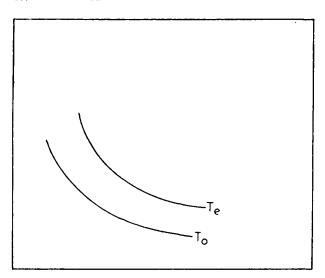
Assume employers wish to maximize profits and that they hire any worker for whom revenue R (as defined in equation 4) is greater than cost C, where

$$C = W + P + T \tag{5}$$

in which W is the present value of wages, P is the present value of pension costs, and T is the present value of turnover costs. The firm must minimize cost for each worker subject to the worker's utility of his opportunity wage, which we have assumed is a function of W and P. It was assumed above that the worker knows P and now assume, for simplicity, that his expectations and his employer's expectations of W are the same. Since W and P enter the worker's utility function and T does not, the employer may pay more to the worker than is minimally necessary to keep him, that is, T is an increasing function of the worker's mobility which is a decreasing function of P and W, hence

$$C = W + P + T(W,P) \tag{6}$$

in which $\frac{\partial T}{\partial W} < 0$ and $\frac{\partial T}{\partial P} < 0$.



Pension Cost

Figure 6

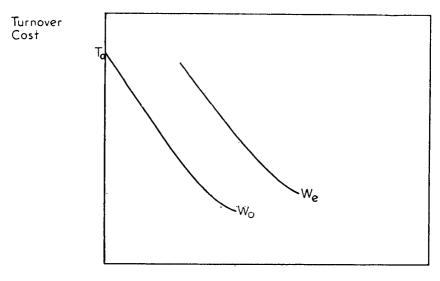




Figure 7

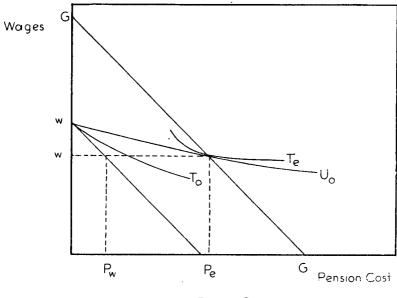


Figure 8

For a given level of turnover cost (as T_0 in fig. 6) we assume a diminishing marginal rate of substitution of P for W. Similarly, for a given level of wage cost (say W_0 in fig. 7) we assume a diminishing marginal rate of substitution of P for T. The employer minimizes Csubject to the worker's opportunity utility by choosing the lowest (or outermost) isoturnover cost curve (T_e in fig. 8). The assumed curvatures permit a stable, but not necessarily unique, equilibrium if curvature of the cost function is greater than the curvature of the utility function at the equilibrium point.24

This equilibrium is reached paying the worker a stream of wages W_e and pension costs P_e with total cost $G+T_e$ to the firm. The worker would accept a wage W_0 with no pension giving a total cost W_0+T_0 to the firm. This implies that T_0-T_e (turnover savings) is greater than $P_e - W_0 + W_e$ (net pension cost).

As a result of this cost minimization the employer now has an optimal compensation package for each employee and pension contributions accumulate for each worker but belong to the worker only when he gains a vested right.25 This is true even though the worker may have given up some of his current wages (as he will have if $\partial U/\partial P > 0$) in exchange for pension rights. Only if the worker attaches no value whatever to pensions does the employer pay the entire costs. We can now consider the question, Why should one employer value

the worker at more than another employer? When firms and the labor market are in equilibrium, resources should be employed in the firms so that the marginal revenue productivities are equal to prices. A particular worker should be worth the same to two firms with identical technologies unless the worker has firm-specific training. Hence, in equilibrium, the worker's capital value to the firm is the present value of his specific training. If the accumulated unvested pension rights exceed the value of specific training, the employer is exploiting the worker, having established larger pension rights than necessary to compensate the firm for losses in company-financed specific training.26 If the accumulated pension rights are less than the capital value of the worker, the firm is out of equilibrium and it should hire more workers of the same sort as the given worker.

These conclusions follow because, in a firm with unvested pensions, the worker continues to accumulate pension rights (D) as he ages. In contrast, his capital value to the firm (K), or the value of his firm specific training (L, which in equilibrium is equal to K), peaks well before retirement age and then declines. There is, therefore, a tendency for value of accumulated pensions to the firm to exceed the value of unamortized specific training. Whenever pension rights exceed value

²⁴ The mathematical solution of a problem of minimizing a nonlinear function subject to a nonlinear constraint is slightly more complex than the familiar linear-nonlinear problem treated in microeconomic theory. In particular, the stability (or second order) properties become more complicated. This problem is treated (in its maximizing guise) in H. Folk and J. N. Wolfe. "The Ambiguity of the Substitution Term." *Economica*, August 1964. The first-order conditions in the present problem imply that in equilibrium the last dollar in wages provides the same utility to worker as the last dollar in pensions for the firm may differ from the marginal rate of substitution of wages for pensions for the worker. ²⁵ There need not be any funds placed in a pension fund, the employer only need recog-nize the liability.

nize the liability. ²⁰ If the worker values pension rights then part of the pension rights represent a reduc-

tion in wages.

of specific training, the present value of future earnings that the firm pays the worker (E_F) can be less than the worker's market value (E_M) , since

$$D + E_F = L + E_M \tag{7}$$

represents the compensation just sufficient to place the firm in equilibrium. If D > L, then $E_F < E_M$ and this implies that future compensation is less than the presnt value of the worker's marginal revenue product, which is the conventional definition of exploitation.²⁷

SUMMARY

In this section 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 (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.

(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.

III. EVIDENCE OF THE EFFECT OF PENSIONS ON LABOR MOBILITY

The analysis in the preceding section suggests that unvested pensions will reduce mobility if workers value pensions and that profitmaximizing employers will adopt pensions unilaterally only if they believe that mobility will be reduced. Direct evidence of the association of pensions with low mobility is scanty, but there are three studies worth examining:

(1) Parnes' study of two plants in Columbus, Ohio.

(2) The Bureau of Employment Security's seven-city study.

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 $^{^{27}}$ We ignore the sense of exploitation in which any employee of a firm in imperfect competition is exploited. See Allan Cartter, *Theory of Wages and Employment*, Irwin, Homewood, 1958, pp. 65-70.

(3) Interindustry comparisons based on Bureau of Labor Statistics data on pension coverage by industry.

PARNES' STUDY

Herbert S. Parnes studied male production workers between the ages of 35 and 50 employed in two Columbus, Ohio, firms, one with a pension plan (company P), and the other without (company N).²⁸ Both firms were metal-fabricating establishments located less than a mile apart. Until shortly before the study they had been owned by the same family and had similar wages and personnel policies. Company P was organized by a CIO union and company N by an independent union. Company N had slightly higher wages. Company P had a pension plan with normal retirement at age 65 for workers with 15 years of service. At the time of the study the monthly benefit formula was \$1 for each year of service up to age 40 plus \$2 for each year of service between 40 and 65 years, and \$1 for each year to 68. A worker hired at 25 would receive a monthly pension of \$65. Company N had a deferred profit-sharing plan paying a lump sum on severance to workers with 5 years of service or more.

The two firms had work forces similar in personal, family and migrant status, job composition, tenure, mobility characteristics, and job satisfaction.

Retirement plans were mentioned as "things liked best about working for the company" by only 2 percent of the workers in each of the companies, but were disliked by 6 percent in Company N and 4 percent in company P. Retirement plans were mentioned as favored improvements in terms or conditions by 15 percent of the workers in Company N and 11 percent of those in company P.

N and 11 percent of those in company P. Workers in these two firms and in firm C, a "control" firm with a long established pension plan, were asked if they would or would not accept a hypothetical job paying 30 cents an hour more and otherwise identical to their present job. Only 16 percent of the workers in firm P and 17 percent in firms N and C would make the change without qualification.

The reason for refusing to accept the job or perceived disadvantages of accepting the hypothetical job was:

	N	Р	C
Percent mentioning security.	76	84	78
Percent mentioning loss of fringe benefits	2	14	8

In company P only 5 of the 13 workers mentioned fringe benefits specifically mentioned pension rights while seven mentioned vacation time. In company C, three of four workers mentioning fringe benefits mentioned vacation time while only one mentioned pension rights.

²⁵ "Workers' Attitudes to Job Changing: The Effect of Private Pension Plans." in Gladys L. Palmer et al., The Reluctant Job Changer, University of Pennsylvania, Philadelphia, 1962, pp. 45-80.

Parnes concludes (p. 58) that there is "* * no evidence that provisions for retirement occupy a prominent position in the respondents' minds when they evaluate their jobs, even though substantial numbers believe that their retirement programs leave something to be desired."

Only one-fifth of company N workers and one-seventh of company P workers have looked for other work except during layoffs since being hired. An additional fourth of each company had thought of looking for another job.

Respondents were also asked the hypothetical question: "Suppose you were laid off at the (company) and found exactly the same kind of work at the same pay with another company in Columbus. If you were called back to the (company) after 6 months, do you think you would go back?" Responses were similar among the three groups of workers, but workers in company C in which the pension effect should have been greatest showed the greatest reluctance to return. Again job security is the most important reason for returning. Fringe benefits were mentioned by relatively few respondents as reasons for returning, and vacations were mentioned more often than pensions.

Parnes concluded (p. 68) "* * * however immobile workers may be, the explanation is not related in any substantial degree to the existence or characteristics of a pension plan." He also found that relatively few workers in any of the three companies had a very clear idea of benefits of either social security or company retirement plans.

BES SEVEN-CITY STUDY

The most comprehensive data dealing in the turnover rates for firms with and without pensions comes from the seven-city study conducted in 1965 by the Bureau of Employment Security.²⁹ Annual turnover data for 1955 were collected for establishments of 50 or more employees classified by pension plan coverage.

Quit rates are usually higher in pension firms than in nonpension firms classified by industry division (table 1). The quit rates are actually higher in pension firms for workers 25 to 44 years old in construction and for workers under 25 years old in service industries and in transportation. On the whole, however, pension firms have lower quit rates than nonpension firms.

Quit rates by age for pension firms classified by size of firm also are lower than the quit rates of similarly classified nonpension firms (table 2). The quit rates are inversely related to size of firm.

These data do not prove that pensions reduce mobility, but they clearly demonstrate that firms with pensions have lower quit rates, independently of industry or of size of firm, although the lower mobility of workers in pension firms cannot be laid to pensions alone. There are three major reasons that pensions may not be the principal immobilizing influence in firms with pensions.

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²⁶ Bureau of Employment Security. Older Worker Adjustment to Labor Market Practices. BES Bulletin R151, 1956. Previously unpublished data from the same study are included in H. Folk, Private Pensions and Manpower Policy, BLS Bulletin 1359, 1963.

TABLE 1 .- ANNUAL QUIT RATES BY INDUSTRY, AGE, AND PENSION COVERAGE, 1955,1 6 AREAS?

			Quits	per 100 em	ployees		
Industry division and pension class	Under 25 yrs.	25 to 34 yrs.	35 to 44 yrs.	45 to 54 yrs.	55 to 64 yrs.	65 yrs. and older	All ages 2
All industries: 1							
Pension	41	22	14	6	3	9	17
No pension	47	34	22	16	12	11	24
Construction :							
Pension.	38	36	23	11	5	11	27
No pension	21	24	21	21	18	9	20
Nanufacturing:						• .	
Pension	38	21	12	5	2	8	14
No pension	43	21 34	19	5 11	2	8 10	23
ransportation, communication, and public utilities:					-		
Pension	31	15	15	2	8	6	13
No pension.	7	24	12	2	8	Ū	19
Vholesale and retail trade:	•	~ ·		•	-		•
Pension	51	30	20	10	4	6	25
No pension	60	47	30	21	17	12	35
inance, insurance, and real estate:	00	77	50		17	14	00
Pension	37	24	16	4	3	22	21
No pension	90	59	48	22	19	16	49
ervice:	20	55	-10		15	10	45
Pension	70	19	15	6	6	18	18
No pension	46	29	22	28	13	16	26
	40	23	~~	20	15	10	20

¹ In establishments with 50 workers or more covered by State unemployment insurance laws or by the Railroad Retirement Act. Years ending June 1955, except Los Angeles (March 1955) and Seattle (December 1955). ² Detroit, Los Angeles, Minneapolis-St. Paul, Philadelphia, Seattle, and Worcester.

Source: BES data published in H. Folk, "Private Pension Plans and Manpower Policy," Bulletin 1359, Bureau of Labor Statistics, 1963.

TABLE 2.--ANNUAL QUIT RATES, BY SIZE OF ESTABLISHMENT, AGE, AND PENSION COVERAGE, 1955,1 6 AREAS 2

	Quits per 100 employees Number of employees in establishments								
Pension class and age									
	Total	50 to 99	100 to 499	500 to 999	1,000 to 4,999	5,000 and over			
Vorkers under 45 yrs.: Pension No pension	23 33	29 39	27 33	21 39	20 22	23			
Vorkers, 45 to 64 yrs.: Pension No pension	5 15	6 21	7 14	3 12	4 7	4			

1 See footnote 1, table 1. 2 See footnote 2, table 1. Source: See table 1.

First, characteristics other than industry or size of firm which affect mobility may differ between pension and nonpension firms. Pensions are more common in high-wage firms; hence, pension firms probably have higher wages than nonpension firms. Pensions are also much more common in unionized firms, and such firms are likely to have strict seniority rules and effective grievance procedures which minimize the necessity of workers changing jobs in order to obtain satisfactory work situations. Firms in seasonal industries are less likely to have pension plans than firms with fairly steady year-round employment; hence, the nonpension firms probably include most of the seasonal firms which characteristically have high labor turnover. In other words, pension firms are likely to offer better compensation, working conditions, and job security than nonpension firms, and might be expected to have lower turnover regardless of the effect of pensions in holding workers.

Second, pension firms have lower accession rates than nonpension firms. About 70 percent of workers separated in 1955 had less than 1 year of service. If the patterns of separation of pension firms and of nonpension firms are similar to those of all firms, then the lower accession rates of pension firms would mean that fewer short-service workers who are prone to quit or are frequently discharged are employed. The lower accession rates of pension firms may be a result of lower separation rates induced by pensions, but they are also related to the lower rate of growth of employment in firms with pensions.

Third, pension firms have lower quit rates in most age groups in all industry and size-of-firm classes although the differences are largest for older age groups. Since the effect of pensions on the mobility of young workers is probably quite small, this finding suggests that it is factors other than pensions which account for much of the lower mobility of workers in firms with pensions.

The pattern of firm maturity and large size associated with the presence of pensions is also associated with the presence of unions and formal seniority systems with the consequence that other factors associated with low mobility may be more important than pensions which were in this instance chosen as the dichotomizing variable. It is, unfortunately, not possible to control this survey for these factors, but it is unjustifiable to ignore their existence and potentially great impact.

BLS STUDY

It is possible to estimate the percentage of workers in several industries that work in firms with pension plans (table 3). These estimates of pension coverage can then be compared with voluntary mobility rates of workers in these industries for the same year. The voluntary mobility rate ranges from 9.7 jobs left for improvement of status per 100 workers in retail trade down to 3.6 jobs left per 100 workers in transportation, communications, and public utilities. The rank correlation between percentage of workers in firms without pensions and voluntary mobility rates is not statistically significant.³⁰

Industry	Wage and salary					Voluntary mobility	
	workers on payroll 1	Number			ra	te ³	
	(annual average in thousands)	(thousands) -	Percent	Rank	- Percent	Rank	
Mining Construction	673 2, 816	327 1.072	48.7 38.1	6	8.3 8.3	23	
Manufacturing Transportation and public utilities	16, 326 3, 903	9,678 2,556	59. 3 65. 5	8 7	5. 0 3. 6	7 8	
Wholesale trade Retail trade	2, 993 8, 344	479 440	16.0 5.3	3 2	6.8 9.7	5 1	
Finance, insurance, and real estate	2,731 7,610	733 308	26.8 4.0	4 1	7.8 5.4	4 6	

TABLE 3.—PENSION COVERAGE AND VOLUNTARY JOB CHANGING, BY INDUSTRY, 1961

¹ Bureau of Labor Statistics, "Employment and Earnings," 1961.
² Bureau of Labor Statistics, "Labor Mobility and Private Pension Plans," BLS Bulletin 1407, June 1964, table 27, p. 68.
³ Derived from data in Bureau of Labor Statistics, Special Labor Force Report, No. 35, table 6, p. A-10, and No. 25, table C-2, p. A-17. The number of jobs left in each industry was multiplied by the percent of workers who left jobs for reason of "improvement of status" and the product was divided by the total number of wage and salary workers during the year in during. the year in the same industry.

³⁰ The Spearman r_s is 0.381, while for N=8, the 0.05 significance point is 0.643.

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Much of the variation in voluntary mobility between industries is attributable to factors other than pensions, of course, but the insignificant gross correlation between pension coverage and voluntary mobility suggests that pensions cannot be a major factor relative to the other causes of differential mobility.

SUMMARY

The direct evidence available is quite limited and does not provide unequivocal support for the effect of pensions on mobility. Both the Parnes and BLS studies contradict the proposition. Considering the palpable inadequacies of these studies, however, this would not be very important if the BES study uniformly supported the proposition. Only a naive interpretation of the data lends support to the proposition. All that can be said is that there is a strong simple correlation between low quit rates and the presence of pensions, but that we recognize that the partial correlation might be small if other variables were included in the analysis.

IV. TRENDS IN LABOR MOBILITY AND JOB TENURE

Recent changes in mobility have been influenced by changes in economic conditions. Occupational mobility during the depression decade of the 1930's was markedly lower than during the prosperous decade of the 1940's. Manufacturing quit rates were low during the 1930's but high in the prosperous 1920's and 1940's. Judging by these rates, there has been a long-term downtrend in mobility, but the trend has been reversed during periods of marked prosperity.³¹

MANUFACTURING QUIT RATE

Most of the discussion of trends in labor mobility has centered on trends in manufacturing quit rates, which have, heretofore, been the only long statistical series of comparable observations. Evaluation of trends in manufacturing quit rates must include consideration of the level of unemployment. Even when this factor is taken into account, however, it appears that quit rates during the relatively prosperous years of 1951–53, 1955–57, and 1963-65 did not approximate the very high quit rates of the World War II period.

The downtrend in the quit rate has been explained in terms of the following influences:

- 1. Growth of unions
- 2. Development of seniority provisions
- 3. Development of fringe benefits (especially pensions)
- 4. Government and supplementary unemployment benefits
- 5. Growth of large corporations
- 6. Aging of the labor force
- 7. Stability of manufacturing employment.

^{a1} Some of the principal articles discussing the downtrend in mobility are Ewan Clague, "Long-Term Trends in Quit Rates," *Employment and Earnings*, December 1956; Arthur M. Ross, "Do We Have a New Industrial Feudalism" *American Economic Review*, December 1958; Joseph Shister, "Labor Mobility: Some Institutional Aspects," Industrial Relations Research Association, *Proceedings*, 1950; Paul F. Brissenden, "Labor Mobility and Employee Benefits," *Labor Law Journal*, November 1955.

Each of these factors undoubtedly has played a role in the decline, but no one of the factors explains the downtrend over the entire period for which turnover data is available. During the postwar period, with which this analysis is primarly concerned, it is likely that only the development of fringe benefits, aging of the labor force, and stability of manufacturing employment could have had much influence. Unions, seniority practices, unemployment benefits, and large corporations were prevalent during both the war and immediate prewar period. During the postwar period it can scarcely be said that there has been enough of an increase in prevalence of these factors to have had much influence on the quit rate.

The relative stability of employment in manufacturing over the period 1946-50, and over the period 1953-63, probably played the major role in the downtrend of the quit rate over this period. When accession rates are low, relatively few highly mobile younger workers and short-service workers enter manufacturing, so that quits of younger workers fall off also, and consequently total quits decrease.

These relationships are shown in turnover data for the period 1947– 65 (table 4). In years of high unemployment, such as 1949, 1954, 1958, and 1961, both quit rates and new hire rates are relatively low; while in prosperous years, such as 1951, 1955, and 1965, both quit rates and new hire rates are relatively high. Even so, the quit rate in 1949 (a recession year) is as high as in any year since 1953. Apparently there is a downtrend in quit rates that is not fully accounted for by the higher unemployment rates of the late 1950's and early 1960's. There has also been a sharp downtrend in the new hire rate. New hires and quits are highly interrelated because workers quitting are replaced by new hires and many newly hired workers quit soon after beginning work. The general decline in separation rates over the period is attributable largely to the decline in the quit rate. Before 1954, quits were more than one-half of separations in each year except 1949. Since 1954, quits have been less than one-half of separations in every year.

,	Quits per 100 workers	Manufacturing unemployment rate (percent of experi- enced wage and salary workers)	Layoffs per hundred workers	Employment growth rate (net acces- sions per 100 workers)	New hires per 100 workers
1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1965 1965	4, 1 3, 4 2, 9 2, 8 2, 8 1, 9 1, 6 1, 1 1, 3 1, 2 1, 4 1, 5 1, 9	3.52 5.63 3.38 2.55 6.51 4.2 4.2 4.2 9.2 6.0 6.2 7.58 7.9 4.0	1.1 1.6 2.9 1.3 1.4 1.6 2.3 1.5 1.7 2.6 2.0 2.4 2.0 1.8 1.7 1.4	$\begin{array}{c} 0.5 \\ 0.7 \\7 \\ 1.2 \\ 0.5 \\35 \\6 \\ 0.5 \\5 \\5 \\ 0.1 \\5 \\ 0.1 \\3 \end{array}$	

TABLE 4. OVER RATES IN MANUFACTURING, ANNUAL AVERAGES, 1947-65

¹ Preliminary.

Source: Bureau of Labor Statistics data in "1966 Manpower Report of the President," table A-15, p. 169, and table C-8, p. 205.

In section II we analyzed the possible effects of pensions on mobility and concluded that an unvested pension would probably reduce the worker's mobility. Here we must attempt to measure the possible aggregate effect. Coverage by pensions has grown rapidly. This means that the number of workers exposed to the demobilizing effects of pensions has increased (table 10, below), but at the same time vesting provisions and substitutes have been introduced into plans as they matured, so the immobilizing effects of many existing plans have been reduced during the period. All this has occurred during a period when the quit rate (Q_t) has declined, but, at the same time, there has been a downtrend in the new hire rate (H_t) and in net accession rate (G_t) or employment growth, and an uptrend in the unemployment rate (U_t) and the layoff rate (L_t) . We would expect voluntary mobility to be a function of all these variables. Thus,

$$(Q_t - F(H_t, L_t, G_t, U_t))$$

The new hire rate is related because the greater the number of new hires, the greater the number of short-service employees, and because the mobility of short-service employees is high, this means quits will be high, hence $\frac{\partial Q_t}{\partial H_t} > 0$. Of course, it works the other way, too; a high quit rate means vacancies and these are filled by new hires.

The growth factor (G_t) is important because, for given levels of the other variables, the greater the rate of growth the greater are job opportunities in manufacturing. Hence, $\frac{\partial Q_t}{\partial G_t} > 0$.

The effect of layoffs on quits are obvious enough. Most laid-off workers have low seniority, and these have the highest quit rates, and many who are laid off would have quit anyway. Also, the worker seeing others laid off is also less likely to quit. Hence, $\frac{\partial Q_t}{\partial L_t} < 0$.

The effect of unemployment on the quit rate is the same as that of layoffs, since it is simply a moving average of lagged layoffs, less recalls, new hires, and labor force withdrawals. The unemployment rate is a proxy for the length of the hiring queue and should make $\frac{\partial Q_t}{\partial U_t} < 0$.

It is not possible to get precise estimates because of the multicollinearity of the data and the simultaneous interdependence inherent in quits and new hires, but, it does seem clear that, after variations in the four independent variables are taken into account, there has been a significant downtrend in the manufacturing quit rate (table 7). In each regression of the quit rate on a single variable and trend, the regression coefficients have the theoretically predicted signs and are significant at the 0.05 level (except for employment growth which is not significant). In each case, the inclusion of the trend variable results in a considerable improvement in the adjusted multiple correlation coefficient (\overline{R}^2) which measures the percentage of total variance in the quit rate that is associated with variations in the independent variables. When all four independent variables and trend are included in the regression only the new hire rate and trend have highly significant regression coefficients. The adjusted correlation coefficient in this case OLD AGE INCOME ASSURANCE-PART IV

is very little larger than the coefficient for the regression that includes new hires and trend only.

Independent variable	Regression coefficient (standard error)	Trend coefficient (standard error)	Intercept (t=0 in 1951)	\widetilde{R}^2	Degrees of freedom
Unemployment rate 4	▶-0.2961		3. 4446	0. 58	16
Unemployment rate and trend	(.0604) »2393	»-0.0678	3. 5213	. 85	15
Layoff rate	(.0372) *-1.1599	(. 0123)	4, 1525	. 43	17
Layoff rate and trend	(. 3066) » 9253	» 0940	4, 1903	. 84	16
Employment growth rate	(.1707) .5769	(. 0146)	1. 9 733	. 06	17
Employment growth rate and trend	(. 4069) . 4208	۵—. 1067	2. 5181	. 57	16
New hire rate •	(. 2730) ^b . 7804	(. 0226)	- . 3597	. 90	13
New hire rate < and trend	(.0682) .6738	» 0351	. 1777	. 95	12
Unemployment rate «	(. 0534) ^d 1364	(. 0087)	9327	. 94	10
Layoff rate	(.0542) 4.6582 (.2650)				
Employment growth rate	(. 2030) . 0077 (. 0908)		•••••	·····	
New hire rate	(, 1347)		•••••	•••••	
Unemployment rate	0931 (, 0443)		. 4993	. 96	9
Layoff rate	4.6582 (.0443)	•••••			
Employment growth rate	.0077		••••••		••
New hire rate	(. 0500) ¹ . 7973 (. 1347)	••••		•••••	
Trend		۵—, 0299 (, 0106)	·····		

TABLE 5.—REGRESSIONS OF THE MANUFACTURING QUIT RATE ON TURNOVER AND UNEMPLOYMENT VARIABLES, 1947–65

The regressions support the contention that the manufacturing quit rate has declined and that not all of this decline is attributable to the decline in the new hire rate, the growth of employment, unemployment, or the layoff rate.

It is tempting, but insupportable, to attribute the downtrend in the quit rate to the increase in pension coverage. We cannot estimate the pension coverage in manufacturing employment for all years, but even if we could, an uptrend matching the decline in the quit rate would only be suggestive.

CHANGE IN MOBILITY FROM 1955 TO 1961

Comparison of data on labor mobility in 1961 with data relating to 1955 provides some evidence of the nature of changes in mobility patterns in periods of differing economic conditions. The year 1955 was a year of relatively high prosperity (unemployment rate—4.4 percent) compared with 1961 (unemployment rate—6.7 percent).

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<sup>Period included is 1948-65.
Significant at the p=0.01 level.</sup>

[•] Period included is 1951-65. • Significant at the p=0.05 level.

As expected, sharp differences are clearly evident in the mobility patterns of the 2 years.³² In general, voluntary job changing was sharply reduced in the latter year while job shifts for economic reasons were substantially higher. The net effect of these two forces was a drop in overall mobility rates except for women workers 18–34 (table 6).

TABLE 6.- NUMBER OF VOLUNTARY AND INVOLUNTARY JOB SHIFTS PER 100 PERSONS WHO WORKED, 1955 AND 1961

	Reason for leaving job						
Age and sex	Improveme	nt in status	Economic				
	1961	1955	1961	1955			
Male, 14 yrs. and over	6.1	7.8	6.8	5.3			
14 to 17 yrs 18 to 24 yrs	3.0 14.0	5.7 18.6	2.8 13.0	2.7			
25 to 44 yrs	7,9	9.1	7.6	5.6			
45 to 64 yrs	2.1	4.1	4.6	4.0			
65 yrs. and over	. 9	7	2.8	1.5			
emale, 14 yrs. and over	4.1	4.8	2.8	2.3 2.3			
14 to 17 yrs	1.4 9.4	5.7 10.5	1.4	2.3			
18 to 24 yrs 25 to 44 yrs	4.2	4.3	2.8	2.3			
45 to 64 yrs	2.3	2.6	2.1	2. 1			
65 yrs. and over	.1	.8	.7	. 3			

Source: Bureau of the Census, "Current Population Reports, Labor Force Series P-50," No. 70, February 1957, and Gertrude Bancroft and Stuart Garfinkle, "Job Mobility in 1961," Special Labor Force Report, No. 35, Bureau of Labor Statistics, 1963, and unpublished data on 1955 survey furnished by BLS.

In the older age groups, the 1961 data show sharper changes for men than for women. The number of voluntary job shifts in 1961 for "improvement in status" of men 45 to 64 was only about half the rate of 1955. The decline for women in these age groups was relatively slight.

Changes in the level of economic activity between 1955 and 1961 increased the proportion of job changes due to economic reasons. About 20 percent of craftsmen, foremen, and kindred workers who changed jobs, did so for economic reasons during 1955 compared with 56 percent in 1961. An increase also occurred in the operative group—from 31 percent in 1955 to 38 percent in 1961 (table 7). The proportion of job changes for economic reasons among nonfarm laborers also increased from 33 to 47 percent during this period.

The lower level of economic activity in 1961 compared to 1955 prevents any conclusion regarding a trend in recent years from being more than suggestive. The decline in job changing for reasons of improvement of status and the increase in job changing for economic reasons between 1955 and 1961 is largely attributable to the relatively high level of unemployment in 1961. While the sharp drop in voluntary job changing for men 45 to 64 points up the difficulties which older workers experience in shifting to better jobs, it is impossible to indicate to what extent the increasing prevalence of pensions may have been responsible, but the reversal of the downard movement

³² Merton C. Bernstein denied the significance of the differences in the 2 years as originally published in BLS Bulletin 1359 (*The Future of Pension Plans* [Free press of Glencoe, London: 1964], note 10 to p. 58), but this is attributable to his failure to read the rest of the paragraph. He proceeds to write: "Significantly, involuntary job separation accounted for a larger portion of the changes in the 1955 sample" (p. 58).

in the manufacturing quit rate since 1961 suggests that economic conditions are probably the dominating factor.

TABLE 7.—REASON FOR LEAVING JOB, BY OCCUPATION: DISTRIBUTION OF JOBS LEFT IN 1961 AND 1955, BY MAJOR OCCUPATION GROUP

	Reason for leaving job									
		19	61							
Major occupation group of job left	Eco- nomic	Improve- ment in status	Termina- tion of tempo- rary job	Other	Eco- nomic	Improve- ment in status	Termina- tion of tempo- rary job	Other		
Total	32. 1	32. 6	12. 9	22. 5	23. 5	37.6	17. 9	20. 9		
Professional, technical, and kindred workers Farmers and farm managers	21.7 (¹)	34, 8 (¹)	16. 1 (¹)	27.4 (¹)	15. 9 18. 5	33. 3 38. 5	18. 8 30. 2	32. C 12, 7		
Managers, officials, and proprietors, except farm Clerical and kindred workers Sales workers	36. 0 16. 9 18. 4	37.3 36.2 47.3	6.9 14.9 14.0	19.8 31.9 20.3	35.8 15.4 12.7	41.6 38.3 51.8	12. 1 15. 1 12. 0	10. 4 31. 1 23. 4		
Craftsmen, foremen, and kindred workers Private household workers Private household workers	56. 2 38. 5 27. 0	28.7 34.7 31.0	3.9 7.4 11.5	11. 2 19. 4 30. 5	29. 2 31. 4 10. 1	37.9 40.0 43.8	17.6 9.9 18.6	15.2 18.7 27.6		
Service workers, except private house- hold Farm laborers and foremen Laborers, except farm and mine	19. 2 13. 2 46. 9	33.6 18.4 23.6	10.8 53.5 9.2	36.4 15.0 20.3	17.2 10.0 33.4	40. 0 21. 0 33. 9	13.3 52.8 17.3	28.8 16.1 15.4		

¹ Percent not shown where base is less than 100,000.

Source: Bureau of the Census, "Current Population Reports, Labor Force Series P-50," No. 70, February 1957, and Gertrude Bancroft and Stuart Garfinkle, "Job Mobility in 1961," Special Labor Force Report, No. 35, Bureau of Labor Statistics, 1963, and unpublished data on 1955 survey furnished by BLS.

TRENDS IN JOB TENURE

Since the Korean war there has been an increase in length of job tenure among workers (table 8). The proportions of employed workers in each group with more than 10 years tenure in January 1963 was larger than the corresponding proportions in January 1951, but there was little change from 1963 to 1966. This is symptomatic of a general decline in labor mobility. The increase in tenure is especially significant for analysis of the number of persons who will receive pensions. Despite the decline in movement, there is evidence of substantial mobility of older workers.

More than two of five male workers 45 years old and older in 1962 had changed jobs at least once in the preceding 10 years, suggesting an annual mobility ratio of at least 4 percent (table 9). Surprisingly, salaried managers and professionals 45 and over seem to be no more stable than average men or craftsmen and operatives. The most stable groups are self-employed professionals and farmers (who, of course, are tied by no pension plan), while the very unstable groups are service workers and farm and nonfarm laborers, relatively few of whom are covered by pensions.

TABLE 8PROPORTIONS	6 OF	WORKERS	WITH	10	YEARS	OR	MORE	TENURE,	JANUARY	1951,	1963,	AND	1966
								1951	1	1963		19	

	1951 1	1963	1966
	100. 0	100.0	100.0
5 yrs. or less	63. 6 16. 0 20. 4 {	52.6 16.8 211.6 9.0 10.0	54.6 15.6 10.7 8,2 10.9

¹ Estimated by allocating ²527 of those with current jobs starting from September 1945 to December 1947, to the 5 yrs and less! oup and the remainder to the 6 to 10 yrs. group, and ¹523 of those with jobs starting in the January 1940 November 1941, to the 6 to 10 yrs. group and the remainder to the 11 yrs. and more group. ² Estimated by allocating ¹52 of those with jobs starting October 1945 to June 1950, to the 11 to 15 yrs. group and the to remainder to the 16 to 21 yrs. group.

Source: Derived from "Experience of Workers at Their Current Jobs, January 1951," "Current Population Reports---Labor Force," series P-50, No. 36, p. 1. Harvey R. Hamel, "Job Tenure of American Workers, January 1963," "Special Labor Force Report," No. 36, Bureau of Labor Statistics, 1963, table A, p. A-5. Harvey R. Hamel, "Job Tenure of Workers, January 1966," "Monthly Labor Review," January 1967, table 1, p. 32.

TABLE 9.—PROPORTION OF MALE WORKERS WITH MORE THAN 10 YEARS OF SERVICE IN THEIR CURRENT JOB, BY OCCUPATION, JANUARY 1963

	Percent with more than 10 yrs. service		Median yea	ars of service
	Age 25 to 44	Age 45 and over	Age 25 to 44	Age 45 and over
Total male	26. 3	56.4	5. 1	12.8
Professional, technical, and kindred	19.8	60.1	4.4	14. 2
Wage and salary	18.2	53.3	4.0	11.5
Self-employed	33.8	80.5	7.3	21.0
Farmers and farm managers	56.2	82.1	11.7	21.0
Managers, officials, and proprietors:				
Except farm	29.2	59.5	6.0	13.8
Wage and salary	30.4	61.6	6.2	15, 0
Self-employed	27.4	57.7	5.4	12.9
Clerical and kindred	28.5	61.7	5.6	14.7
Sales workers	17.3	43.3	3.4	8.3
Craftsmen, foremen, and kindred	31.1	56, 8	6.0	12.7
Operatives and kindred	25.8	57.5	5.2	12.7
Service workers, including private household	21.3	35.3	4, 1	6.0
Farm laborers and foremen	14.6	26. 3	. 9	3.0
Laborers, except farm and mine	18.1	43.8	3.2	7.8

Source: Derived from Harvey R. Hamel, "Job Tenure of American Workers, January 1963," Special Labor Force Reports, No. 36, "Bureau of Labor Statistics," 1963, table G, p. A-12.

On this evidence, at least, there is no reason to believe that the proportion of mature managers or professionals who are mobile is especially low. Indeed, because layoffs of professionals and managers are relatively infrequent, the tenure pattern suggests that the proportion of workers in these occupations who voluntarily change jobs in a period of years is probably higher than for most other major occupation groups. This is inconsistent with what is known of gross annual job changing behavior of these occupation groups. In all occupations in 1961, 4.5 job shifts per 100 persons with work experience were to improve status, while the rates were 3 per 100 for professionals and 2 per 100 managers. The tenure information suggests relatively fewer job shifts per job changer during periods longer than a year, and, therefore, less gross mobility. In part, of course, the pattern reflects the relatively high job status of upper white-collar workers, the infrequency of layoffs, and the year-round, full-time, salaried jobs they typically hold. These characteristics, in turn, are related to the specific investments which employers have in these workers which make employers unwilling to lay them off because of their large potential turnover costs.

For purposes of pensions, however, multiple-job changes in a single year are less relevant than tenure data. Workers with short tenure seldom have pension rights and are not likely to be immobilized by pensions while a very large proportion of workers with tenure longer than 20 years are vested so pensions are unlikely to immobilize them.

JOB TENURE AND PENSION COVERAGE

The proportion of workers with nominal coverage by private pension plans has increased steadily since 1940 (table 10), and is projected to increase even more in the future. At any time, a much smaller proportion of persons 65 years and older is receiving benefits, in part because there are some workers this old working, but primarily because coverage is nominal; that is, it does not mean that the covered worker has a vested right in his pension plan and will eventually receive a pension. As pension plans mature, of course, the ratio of beneficiaries to covered workers will increase. The limited impact of private pensions on retirement is shown by the estimate that in 1980 only 28 percent of persons 65 and over will be pensioners and their wives, even though a very large proportion of these persons will have spent at least part of their working lives in companies with pension plans. It is mobility, rather than the relatively recent adoption of many plans that is responsible for this difference in coverage and benefit receipt. Many plans provide for full or partial coverage of past service when the plan is adopted, so that the worker who retires with long service a few years after his employer adopts a pension plan often receives at least a small pension.

Year	Covered workers ¹	Beneficiaries 1	Covered workers as parcent of employees in private nonfarm establishments ²	Persons 65 yrs. and over and their de- pendent wives receiv- ing private pensions as percent of all persons 65 yrs. and older ³
1940	4.1	0.16	13.8	
1945	6.4	. 31	17.7	
1950	9.8	. 45	23.0	4
1955	15.4	. 99	33.8	7
1960	21.2	1.78	45.0	12
1962	23. 1	2.09	48.4	13
1963	24.0	2.24	49.3	14
1964	25.0	2.40	50.3	14
1970	34.0	3.90	59.8	21
1975	38.7	5.20	62.4	25
1980	42.7	6.60	63. 5	28

TABLE 10.-ESTIMATED AND PROJECTED PENSION COVERAGE AND PENSION BENEFICIARIES, 1940-80

¹ At end of year, app. A, table 1 of President's Committee on Corporate Pension Funds and Other Private Retirement Welfare Programs, "Public Policy and Private Pension Programs," January 1965. ³ Based on average annual employment and coverage. President's Committee, po. cit., table 2, app. A. ³ Based on estimates by the Social Security Administration and the President's Committee, in table 4, app. A, Presi-

dent's Committee, op. cit.

FREQUENCY OF VESTING

It is possible to estimate the frequency of vesting for 1963. In that year, the Bureau of Labor Statistics studied job tenure and also independently studied pension plans for vesting and early retirement characteristics.³³ It is possible to combine these estimates to obtain an imperfect, but usable measure of the frequency of vesting.

The first step is to obtain a distribution of the work force by age and tenure (table 11). This is computed directly from the 1963 BLS iob tenure study.

Assume that the age and tenure distribution of covered workers is identical with the age and tenure distribution of the work force as a whole (table 12). This is an unrealistic assumption, for it is known that pension firms as a group have lower turnover at all ages than nonpension firms but that pension firms as a group have only insignificantly larger proportions of older workers than nonpension firms.³⁴ It is reasonable to believe that the average length of service of workers in pension firms is likely to be longer in pension firms as a group than in nonpension firms. Inevitably, then, the use of the total age and tenure distribution instead of the unavailable age and tenure distribution for pension firms will underestimate the frequency of vesting.

TABLE IL-DISTRIBUTION OF WORK FORCE BY AGE AND TENURE, JANUARY 1963

A	7.4.11	Tenure in years					
Age in years	Total 1	5 or less	6 to 10	11 to 15 2	16 to 21 2	Over 2	
Total	100.0	52, 57	16. 77	11.63	8.95	10.08	
Jnder 45	60.11	39. 57	10.30	5.88	3. 41	. 96	
45 to 49 50 to 54	11.39 10.38	4.30 3.51	1. 97	1.89 1.58	1.66 1.55	2.04	
55 to 59	8, 36	2.58	1.33	1.12	1.18	2.14	
60 to 64	5, 69	1.47	. 89	. 75	. 71	1.86	
65 and over	4.08	1.14	. 58	. 41	. 46	1, 51	

¹ Based on persons for whom age and tenure were reported. ² Estimated by allocating one-half of those with jobs, starting October 1945 to June 1950, to the 11 to 15 years group and the remainder to the 16 to 21 years group.

Source: Derived from Harvey R. Hamel, "Job Tenure of American Workers, January 1963," "Special Labor Force Report," No. 36, Bureau of Labor Statistics, 1963, table A, p. A-5.

TABLE 12PROPORTIONS OF ALL COVERED WORKERS IN FIRMS WITH GIVEN AGE AND TENURE REQUIREMENT	
FOR VESTING, EARLY RETIREMENT OR REGULAR RETIREMENT	

A X	Number							
Age in years	(thou- sands) ²	Total	5 and less	5 to 10	11 to 15	16 to 21	Over 21	
Number (thousands) 2		15, 621	8, 214	2, 620	1,816	1,398	1, 575	
Total	15, 621	100.00	2.10	26. 34	34. 29	20.73	16. 54	
Under 45 ³	9, 392 1, 780 1, 622 1, 306 889 637	49.65 5.19 5.10 12.62 9.82 17.60	. 39 . 03 . 74 . 28 . 67	18. 83 2. 05 . 66 1. 85 1. 49 1. 46	16. 82 2. 45 1. 97 6. 27 2. 18 4. 61	4.67 .52 1.41 2.65 3.60 7.87	8.94 .17 1.04 1.11 2.27 3.00	

¹ Age grouping in the source differ slightly from those used here: less than 5 instead of 5 and less; 5 to 10 instead of 6 to 10; 16 to 20 instead of 16 to 21, and over 20 instead of over 21. The age groupings used here are those of the 1963 BLS tenure study. See table 11.

² Number of workers is 1961 active workers.

³ Includes workers in plans in which no age requirement is specified.

Source: Derived from Bureau of Labor Statistics, "Private Pensions and Labor Mobility," BLS bulletin.

 ³³ Employment data is for 1961, plan data for the 1962–63 winter.
 ³⁴ See Bureau of Employment Security, Older Worker Adjustment to Labor Market Practices, BES Bulletin R151, 1956, table XXII, p. 255.

The "likelihood of vesting" (table 13) is the probability that a worker employed by a pension firm with given age and tenure will have a vested pension. Assume that a worker with, say, age in the range 60 to 64, and 16 to 20 years of experience in the firm will have a vested pension if his pension firm requires age 64 or less and 20 years' tenure or less. There is a small error involved here since the worker might, for example, be 60 years old and have 16 years' tenure while the firm might require age 62 and 20 years' tenure.

The row and column totals of likelihood of vesting provide estimates of proportions of the various age and tenure groups that have vested pensions. Only 10 percent of covered workers under 45 have vested pensions, while almost three-fifths of covered workers 65 years and older have vested pensions.

There were an estimated 65,935,000 workers employed in January 1963, and 15,621,000 (24 percent) were covered by private pensions. If this proportion of workers, 60 to 64 years old, were working in covered firms, about 11 percent would have a vested pension or be currently eligible for retirement. This is close to the 14 percent of all persons 65 years and older (and their dependent wives) receiving private pensions in 1963 (table 10, above). No doubt the 11 percent figure underestimates the proportion of all workers 60 to 64 years old who will eventually become eligible, but the figure suggests these estimates are of the correct order of magnitude.

A	Tenure in years					
Age —	Total I	Less than 5	5 to 10	11 to 15	16 to 20	Over 20
All ages 1	20. 3	0.5	20.9	41.6	50.4	71.0
Under 45 45 to 49 50 to 54 55 to 59	10.2 24.8 29.5 38.5	.4 .4 .4 1.2	19.2 21.3 22.0 24.5	36. 0 40. 6 43. 2 52. 0	40. 8 45. 8 49. 8 61. 3	49.7 54.9 60.0 72.6
60 to 64 65 and over	47.5 57.1	1.4 2.1	26. 3 28. 5	56.0 62.7	68.9 83.5	82.4 100.0

TABLE 13.--LIKELIHOOD OF VESTING FOR WORKERS IN FIRMS WITH PENSIONS, 1963

¹ Based on estimated distribution of covered workers by age and tenure from 1963 BLS survey and likelihood of vesting in the age-tenure cells of this table. It is assumed that the likelihood of vesting for each age and tenure group here is the same as the likelihood of vesting of the similar age and tenure groups of table 11. See table 12, footnote 1.

Source: Derived from Bureau of Labor Statistics, "Labor Mobility and Private Pension Plans," BLS Bulletin 1407, table 29, pp. 69-70.

The estimate of the proportion of workers with vested pension rights suggests that about one-fifth of the workers in firms with pension plans have vested pension rights in 1963. The proportion are quite small among workers with short service who have small likelihood of vesting, but age is also important, and only one-half of those with more than 20 years' tenure who are under 45 years old have vested pensions. Mobility of workers is closely related to age and tenure, so that separated workers are predominantly young and have short tenure. As a result, a very large fraction of separated workers have no vested pension rights. Even relatively liberal vesting requirements provide no protection in this event. The Boeing Co., like other firms in the airframe industry, has a vesting requirement of 10 years' service, but when the Dyna-Soar contract was canceled, Boeing laid off 5,000 workers as a direct result of the cancellation. Of 3,758 respondents to a survey, only 248 respondents had over 10 years of continuous service at Boeing suggesting that perhaps 7 percent of the displaced workers had vested pensions on separation.³⁵ The Boeing example may be extreme in that the airframe industry is notoriously unstable, but the vesting requirement reflects this instability by being especially generous.

Although our results on the likelihood of vesting are not fully comparable with respect to age and tenure categories with those of Holland, previously published (table 14), it seems clear that our estimate of the likelihood of vesting is markedly higher in similar age and tenure groups. In the 1956–59 study, for instance, Holland found a likelihood of vesting for workers 55 to 59 years old with 20 or more years of experience to be 55 percent, while for workers of the same age with more than 20 years tenure our likelihood is 73 percent, and differences similar in direction, if not in magnitude, may be found in other age and tenure groups. Despite the crudeness of our estimates, it seems likely that vesting has become more widespread in the 1960's, but vesting is still concentrated among workers with long tenure, especially among older workers with long tenure.

VI. SUMMARY AND CONCLUSIONS

This paper presents theoretical arguments suggesting that, in many instances (1) pensions are paid for, in part, by wages that are lower than they would otherwise be; (2) pensions reduce mobility; and (3) employers exploit workers who leave employment before gaining a vested right to a pension.

Empirical evidence of direct association between pensions and low mobility is not convincing, but 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: and (3) average length of job tenure increased from 1951 to 1966. There is no direct evidence of association between the spread of pensions and the decline of mobility, but the change in prevalence of pensions has been larger than changes in other factors that might have influenced mobility.

³³ Leo Neuschwander and Ray Williams, A Case Study of the Effects of the Dyna-Soar Contract Cancellation Upon Employees of the Boeing Co., in Seattle, Wash., U.S. Arms Control and Disarmament Agency, July 1965, table B-3, p. 46.

Age	Length of service (in years)	1947–49	1950-52	1953-55	1956-59
Under 30	Less than 5	0.2	0.1	0.02	0. 02
30 to 39	5 to 9 Less than 5 5 to 9	.8 .2 1.3	2.2 .1 2.6	1.8 .02 2.3	1.9 .02 2.3
40 to 44	10 to 14	4.0 .2 1.3	6.7 .1 2.6	5.7 0 2.3	6.3 0 2.3
45 to 40	10 to 14 15 to 19	5. 4 7. 5	7.4 9.8	25. 5 26. 9	30.6 38.4
45 to 49	5 to 9 10 to 14	1.3 6.9	.1 2.6 8.5	.02 2.3 31.0	. 02 2. 3 35. 6
50 to 54		9.3 13.1 .2	11.1 18.4 .1	32.6 34.9 .02	43.9 47.4 .02
	5 to 9 10 to 14 15 to 19	1.4 7.2 9.8	2.7 8.8 12.0	2.5 31.7 34.6	2.6 37.2 46.7
55 to 59	20 or more	18.3 1.0 2.2	20. 2 1. 1 3. 7	37.8 .1 2.6	50. 8 2. 9
	10 to 14 15 to 19	9.5 12.5	12.0 15.5	34. 2 38. 2	40. 0 49. 9
60 and over	5 to 9	21.3 10.8 12.0	25.0 1.5 4.1	42,7 2,0 4,5	55.0 1.9 4.5
	10 to 14 15 to 19 20 or more	20. 1 25. 0 36. 1	23.1 29.5 41.5	37.7 43.4 51.2	42.0 59.6 82.3

TABLE 14.—LIKELIHOOD OF WORKERS OF GIVEN AGE AND LENGTH OF SERVICE HAVING VESTED PENSION RIGHTS, 124 LARGE COMPANY PLANS

Source: Daniel M. Holland, "The Pension Structure," in "A Respect for Facts," 40th annual report of the National Bureau of Economic Research, Inc. (New York, 1960), p. 45.

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.

IMPLICATIONS FOR PUBLIC POLICY

Policy considerations have not been emphasized in this study, but there are several obvious policy conclusions that will be drawn from these results, and it seems desirable that appropriate qualifications should accompany these conclusions.

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 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 a 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 costs 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 pen-sions 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 assumptions of little or no turnover among employees with long tenure made by many firms, the projected additional cost 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 payments of wages in cash, conceiving that the enhancement of the liberty of the many more than outweighed the 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.

EARLY RETIREMENT AND INCOME MAXIMIZATION

BY ALLEN J. LENZ, CDR., SC., USN*

Some Effects of the Economic Incentives in the Military Retirement System and Other Systems Offering Early Retirement

The U.S. military retirement system is designed to serve an established need of the military organization: It functions to permit withdrawal of career personnel from the Military Establishment at relatively young ages, in order to prevent the organization from being dominated by men too old for the rigors of military life and to insure that maintenance of "youth and vitality" will provide a combat effective organization.

The removal of superannuated personnel is a commonplace objective of retirement systems. However, the military system is virtually unique with respect to the early age at which the withdrawal of career members is mandatory or encouraged.

The military retirement system does fulfill its objective of maintaining "youth and vitality" in the military personnel structure. But, in achieving its goals the system establishes a pattern of economic incentives and resultant individual behavior responses which may imperfectly serve the best interests of the military organization. The purpose of this paper is to describe some effects of the military retirement system on labor mobility and to demonstrate that these effects can stem from any retirement system which offers an "early retirement" option to employees who are capable of continued, highly productive employment.¹

Part I briefly describes the military retirement system. The unique "income maximization" problem thrust upon members of the military profession by the necessity of a second career is examined in part II. Part III summarizes the results of a study of the effects of the length of a military career on lifetime incomes. Part IV examines the career length behavior patterns which may be expected in some nonmilitary organizations offering an early retirement option and part V offers comments concerning the effect of early retirement programs on efficient resource allocation. Conclusions are summarized in the final portion of the paper.

^{*} The author is an active duty naval officer. However, the views and conclusions expressed in this paper do not necessarily represent the position of the Department of Defense, the Department of the Navy, or any agency or staff thereof.

¹ In this paper "early retirement" refers to retirement without actuarial reduction of benefits prior to the "normal" retirement age in our society. The normal retirement age is popularly considered to be about age 65—the age at which unreduced social security benefits become available.

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I. MILITARY RETIREMENT AND SECOND CAREERS

Every career military officer and enlisted man faces ultimate involuntary retirement from military service. In itself, mandatory retirement is not an unusual practice. Most organizations specify some age at which the employee is involuntarily removed. However, few, if any, remove their members at such early ages and in accordance with such a specific, well-defined plan as does the military.

For the vast majority of its "employees" the military organization requires retirement at a relatively young age.² The basis for this requirement is an emphasis on the maintenance of a young and vigorous military force capable of performing vital defense and combat missions. As a result of prior experiences wherein promotion stagnation and superannuation of personnel lead to military forces with less than the desired efficiency and capabilities, the need for such an emphasis is well established and generally recognized.3 This is not to say that youth and vigor is a panacea for the military organization or that the organization is optimally structured. In the present day world many military skills closely parallel those of the civilian economy. Not all of these skills require the same degree of physical vigor. New concepts, more complex weapons systems, the continuing cold war, and the worldwide deployment of military forces may carry need for a recurring change in the mix of requirements for physical endurance, technical skill, and practical experience which would provide the "ideal" military personnel structure. There can be no assurance that the present system of personnel utilization is optimum.

Nevertheless, given the present assumptions concerning manpower requirements and resultant methods of personnel management, termination of all but a tiny minority of military careers at an age much lower than the normal civilian employment retirement age fills a need of the organization-not a need of the individual. The termination may be desirable from the standpoint of the organization, but it imposes problems on the individual terminated. His financial needs normally greatly exceed the income from his military retirement annuity. And, even though middle-aged commencement of a new profession may be difficult or even somewhat traumatic, withdrawal from the

² For the most part, mandatory retirement provisions for military officers are not field directly to age, but rather to grade and length of service. For officers, the retirement system is closely integrated with an up-or-out selective promotion system. Each officer is periodi-cally considered for promotion and those not selected for advancement are eliminated from the active duty force. Those who have 20 years or more of service are forced to retire upon completion of a specified career length (30 years or less, dependent upon the grade attained before promotion failure). Those with less than 20 years' service are discharged with a separation payment. Generally speaking, only officers selected for flag rank (admiral/ general) can expect to be able to serve more than 30 years. Enlisted personnel are not subject to the up-or-out selection principle, but few (less than 4 percent of the total enlisted population) serve beyond 20 years, most availing themselves of the voluntary retirement option soon after completing a minimum-length career. If large portions of the enlisted force were motivated to extended-length careers, involuntary removal rates would be high in order to maintain the degree of youth considered essential. Thus, while maximum-age limitations are not predominant in mandatory retirement to generate relatively young retirees and to maintain the desiree of youth in the active duty force. A typical officer is 43 at completion of 20 years service—a typical enlisted man is 30—but the completion of 20 years of active service can occur as early as age 37.

as age 37.

as age 54. For further details on the provisions of military retirement, see "Federal Staff Retirement Systems," appendix to the report to the President by the Cabinet Committee on Federal Staff Retirement Systems, Apr. 6, 1967, U.S. Government Printing Office, p. 127. ⁹ See Ibid., p. 365.

labor market is usually neither physically necessary, financially practical, nor emotionally desirable for the typical military retiree. As a result, the great majority of career military personnel seek civilian employment in a "second career" after retiring from the military.4

Military retirees generally earn less in their second careers than is earned by other civilians of similar age and education. One may argue that, in part, the differential results from availability of the military annuity and thus a reduced civilian earnings aspiration level for the military retiree. This probably causes some of the differential, but there is good evidence that this is not the major cause.⁵ Rather, the higher incomes accruing to the civilians appear to be primarily a natural result of seniority and experience advantages.

If this is the case, then a late, middle-aged transfer from military to civilian employment carries an economic penalty, and one can say that pursuing a military career involves an "opportunity cost" that follows the individual into subsequent civilian employment. Thus, despite governmental provision of a military retirement annuity which is a significant percentage of active duty income,⁶ from the viewpoint of the individual, middle-aged military retirement is neither an unmitigated economic nor social benefit. A portion of the military retirement annuty, in effect, serves to compensate the retiree for the economic disadvantages typically encountered in a middle-aged transfer from a military to a civilian occupation. The military retirement annuity is thus an unusual form of income maintenance program, compensating recipients in part for the "opportunity cost" of pursuing a military career which does not offer a working lifetime of employment. However, the problems and economic penalties of a transition to civilian employment vary with respect to the individual's retirement age, education, military occupation, and so forth. Further, there is no assurance that the annuities provided for each of the possible military career lengths are equally advantageous. The effect is to create a unique income maximization problem for those eligible for military retirement.

II. MILITARY RETIREMENT AND INCOME MAXIMIZATION

Since the military cannot provide a lifetime career for most of its personnel, it seems logical to assume that each individual achieving eligibility for military retirement will attempt to determine the optimum time, within the range of choices available, to make the transition from military to civilian employment. Selecting the most favorable point at which to terminate a military career and begin civilian employment will inevitably involve consideration of a variety of factors, both economic and noneconomic. The interest of this paper is in the economic elements of the decision process.

⁴ For military retiree employment participation rates, see "The Economics of Military Retirement." Mahoney and Fechter, in "Old Age Income Assurance," Joint Economic Committee. 90th Cong., 1st sess.
⁵ See "A Study of the Military Retired Pay System and Certain Related Subjects," a report to the Committee on Armed Services of the U.S. Senate by the Study Committee of University of Michigan, 1961, p. 38, and pt. III of this paper.
⁶ Monthly military nondisability retirement pay is determined by multiplying 2½ percent times the number of years service times the monthly base pay for the individual's retirement grade and longevity pay step. The minimum payment is 50 percent of base pay (for 20 years' service) and the maximum is 75 percent of base pay (for 30 or more years of service). Nondisability annuities are not paid for less than 20 years of service. Basic pay is, on the average for those eligible for retirement, only about 76 percent of tax equivalent gross cash income.

For a military careerist who is eligible to retire from military active duty service, it is contended that the logical and typical approach in deciding "when to retire" would be one of selecting the military career length which maximizes expected future total lifetime income; that is, maximizing the expected income for that portion of the individual's lifetime subsequent to his earliest opportunity to retire from the military organization (after completion of 20 years of active service). We define this period as the "post-retirement-opportunity period" and identify the income received during this period as the "post-retirement-opportunity lifetime income."

After achieving eligibility for military retirement, a military careerist can receive various combinations of four types of income: Military active duty pay; military retired pay; civilian second career pay; civilian second career retired pay.

A careerist who could retire from military service but does not do so continues to receive military active duty pay, but forgoes military retired pay and the opportunity to earn a civilian second career income. Conversely, a careerist who retires forgoes military active duty pay in exchange for military retired pay and the opportunity to earn a civilian second career income.

As the length of an active duty military career is extended beyond the minimum required for military retirement, the tenure of receipt of military retired pay and the potential period during which second career income may be received are obviously shortened. The individual's economic maximization problem thus becomes one of selecting the optimum "mix" of military and second career lengths.

Some of the considerations which may affect the determination of an optimum include:

1. Military retirement pay increases as the length of a military career increases.

2. Continued military service may bring an increase in active duty compensation as a result of promotion and/or reaching longevity pay increase points. Either type of active duty pay increase also serves to increase subsequent retirement pay.

3. It is generally assumed that job opportunities and incomes in second careers decline as military retirement age advances.

4. Second careers also offer potential pension benefits. However, the value of these benefits will decline as the starting age advances and the potential years of civilian second career employment decrease.

5. In large measure, the individual's capabilities, skills, and education determine his civilian employment opportunities. Thus, those with low civilian employment potential will find delayed military retirement more financially rewarding (or less of a financial sacrifice) than will those with a higher employment potential.

III. THE IMPACT OF MILITARY CAREER LENGTHS ON INCOME MAXIMIZATION

The very small number of enlisted personnel who serve beyond the minimum military career length and the growing numbers of officers who retire soon after completion of 20 years service offer strong evidence that military personnel are, in the main, convinced that short military careers are in the best interest of the individual.⁷ In this section I offer evidence concerning the effect of military career lengths on post-retirement-opportunity lifetime incomes.

In an investigation of the effects of economic incentives on the career lengths of officers of the naval service, I utilized a simple mathematical model which considered post-retirement-opportunity income from each of the four potential sources previously noted.⁸ The data used are incomes from active duty military employment, military retirement, second career employment and second career retirement. Second career income information was obtained from some 5,300 responses to a questionnaire mailed to Navy and Marine Corps officers who retired during the years 1955-64 in the pay grades O-5 through O-8.º Through use of various discount rates, the model collapses post-retirement-opportunity lifetime income streams from each of the four potential sources into a single-valued estimate of the present worth of post-retirementopportunity income.

The optimum retirement length of service was determined by comparing the values resulting from the various possible combinations of military and civilian career lengths. The combination which yielded the largest estimated value was considered the optimum military career length for income maximization purposes.

The results appeared to indicate lack of a significant positive financial incentive for officers to remain on active duty for a maximum length military career. For each individual, the solution depends, of course, on the relative opportunities offered by military and second careers. However, in terms of groups and averages, second career opportunities tended to be substantially better for those who hold advanced degrees than for those who did not. As a result, for advanced degree holders, early retirement appears to show a strong financial advantage over extended military service.

For those who did not hold advanced degrees, the solution generated by the model was less clear-cut and the indicated economic advantages of early retirement were relatively small. However, inclusion in the analysis of factors outside the purview of the model (nonemployment and unemployment rates) strengthens the case for early retirement.

In large measure, the optimum retirement time for those who did not hold advanced degrees appeared to be dependent upon their atti-

⁷ See Fechter and Mahoney, op. cit., for military personnel continuation rates by years of service. ⁸ A detailed description of methods is contained in : Allen J. Lenz. "Military Retirement and Income Maximization : An Examination of the Economic Incentives to Extended Mili-tary Service." unpublished Ph. D. dissertation, Graduate School of Business, Stanford University, 1967. ⁹ The military services differ somewhat in the titles used to identify a particular level in the organizational hierarchy. For purposes of clarity and brevity, ranks are subse-quently identified by using the Department of Defense pay grade which is identical for all of the individual military services. Pay grades and applicable rank title equivalents for the group in which this paper is interested are:

Pay grade	Navy rank title	Army, Air Force, and Marine Corps rank title
0-5	Commander	Lieutenant colonel.
0-6	Captain	Colonel.
0-7	Rear admiral (lower half)	Brigadier general.
0 -8	Rear admiral (upper half)	Major general.

⁷ See Fechter and Mahoney, op. cit., for military personnel continuation rates by years

tude toward "risk." For example, a Navy captain or Marine Corps colonel (O-6) who completed 23 years of service could look forward to a guarantee of 7 additional years of military employment at an income level which is, at worst, not likely to decline sharply. Conversely, the vagaries of business conditions might make it difficult to secure civilian employment or, if he is employed, might cause him to lose his job. Thus, a transfer to civilian employment during this period could represent, in a real sense, a loss of "security."

However, continued military service until retirement is mandatory increases "risk" in the sense that it increases the odds that, when termination of military employment does finally occur, the retirees will be unable to find civilan second career employment that is both financially rewarding and personally satisfying. Thus, it is difficult to say which course of action, early or later termination of a military career, is the more risky. To a large extent, the solution is dependent on the economic aspiration level of the individual. If his income aspiration levels are relatively low, extended military service provides a high degree of assurance of attaining his goal. If his income aspirations are low enough such that the combination of military active duty income and subsequent military retired pay satisfies his desires, that is, he does not desire a second career, extended military service provides him complete assurance of attaining his goal. Conversely, if he aspires to higher income levels, early retirement offers the greatest opportunity for realizing his ambitions.

In addition to the results yielded by the model, analysis of questionnaire and other income data led to the following conclusions:

1. Except for a "one time surge" occurring during the first 1 or 2 years immediately after entering the civilian work force, military retirees maintain, but do not tend to improve, the *relative* income standing they establish at the time of their military retirement, that is, though their incomes may grow over time, the growth experienced generally parallels that of the Nation's wage level.¹⁰

2. The military retirement age (and hence the age at which the individual enters civilian employment) is a crucial variable in determining the absolute and relative level of income which will be realized from second career employment. As age advances, second career incomes decline. (See table 1.)¹¹

3. There was a strong positive correlation between education and annual income (see table 1). However, the relative advantage of an advanced degree declined sharply as the retirement age advanced.12

4. O-6 retirees almost invariably achieved higher income levels than O-5 retirees in comparable retirement age and education level groups. Thus, if promotion to higher rank is a measure of "success" in military life and annual income is a measure of success in civilian life.

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¹⁰ This result corresponded with published findings from census data for similar age groups in the overall U.S. population. See H. P. Miller, "Lifetime Income and Economic Growth," "American Economic Review," September 1965, p. 834. ¹¹ It should be noted that the annual incomes displayed in table 1 relate only to those individuals who held full-time employment or were self-employed. Lower averages would, of course, result if unemployed and part-time workers were included. However, for the purposes of the analysis undertaken, it was considered that a more valid comparison of the effects of age and other factors would be obtained by focusing on those working full time.

¹² The relatively poor table 1 income showing of those who obtained master's degrees after retirement stems from the fact that most of this group entered the education field, a relatively low-income profession.

one can conclude that the qualities which result in success in the military environment similarly tend to produce success in civilian second careers.

5. The income level achieved in second careers, as well as the labor force participation rate, appears to be very much a function of the opportunities open to the individual and not solely a function of need. Were second career incomes solely a function of need, we would expect O-6 retirees, with their larger retirement annuities, to have lower second career incomes than O-5 retirees. Table 1 illustrates that the reverse is true, when retirement age and education level are held constant. Similarly, tables 2 and 3 indicate that labor force participation is strongly affected by the opportunities available, with participation and opportunities increasing with the education level.

For officers holding advanced degrees there appears to be a strong positive economic incentive to leave the military organization soon after achieving retirement eligibility.¹³ If such an incentive actually exists and if career military officers are responsive to economic incentives, we would expect the more highly educated officers tending to retire at earlier ages than their less educated fellows who do not have comparable second career opportunities.

The empirical evidence available substantiates the theory. Table 4 compares the retirement ages and education levels for O-5 and O-6 officers in the population surveyed. The relationships are very much those which we might expect from the economic data in table 1. Those who earned master's degrees while still on active duty tended to exit from their military careers at earlier ages than their less educated age and grade cohorts. (At some ages those who obtained master's degrees after their military retirement terminated their military service earlier than those who had earned their master's degrees before retiring, but the former group is small in number and statistics concerning it, therefore, more subject to the influences of random variations.)

Most of the O-5 retirees in table 1 are individuals who failed of selection to O-6. For them, retirement would be mandatory upon completion of 26 years of service. Most retire before completing that length of service, but when the group is analyzed by education level, there are some perceptible differences in the rates of exit. Table 4 indicates that graduate trained officers in grade O-5 do not tarry on active duty once they fail of promotion to the next grade. Some 73.3 percent of this group had retired by age 45, while only 58 percent of the B.S. degree holders and 32.3 percent of the nondegree personnel had retired by the same age. It is also interesting to note that 38.8 percent of the graduate trained retirees in grade O-6 had turned to civilian life by age 47. By retiring at this early age, the majority must have forgone the opportunity to be considered for promotion to the next grade (O-7, rear admiral-brigadier general).

Thus, the data of tables 1 through 4 tend to indicate that—

1. There is a positive economic incentive for the more highly educated officers to leave military service soon after becoming eligible for retirement.

2. Officers holding advanced degrees are apparently aware of, and responsive to, this incentive.

¹⁸ Lenz, op. cit., ch. IV.

3. If education level is a valid measure of the "quality" of a military professional, the officer corps can expect a tendency to lose, via voluntary retirement, a larger portion of the higher quality personnel (advanced degree holders) than it will lose of the lower quality personnel (those not holding advanced degrees).

From the viewpoint of the organization, the undesirable aspects of a retirement system which encourages early retirement of its better quality personnel are obvious. But, is education level a reasonable proxy for the "quality" of a professional military officer? Few, including the writer, would assert that attained level of education was an unfailing measure of quality in any profession, be it military or civilian. However, the majority of those Navy officers who hold advanced degrees at the time of their military retirement probably have received their graduate educations under Navy auspices and at Navy expense. The receipt of such training is based on a selection process which utilizes standards similar to those used for determining who will be promoted. Presumably, the result is selection for graduate training of the individuals with the greatest career potential; i.e., those the naval organization, using its own standards, views as being of superior quality. If one accepts this rationale, it is difficult to escape the conclusion that the naval service is suffering a quality loss through early retirements.

There is little reason to expect that analysis of Army and Air Force officer retirement patterns would yield basically different results. In general, we would expect that retirements would correlate closely with civilian opportunities—the greater the civilian opportunities, the higher the rate of early, voluntary military retirement. To the extent that the rewards of civilian employment correlate with education, the military can expect to lose its higher educated people at a more rapid rate through early voluntary retirement. Similarly, to the extent that civilian opportunities stem from specific skill training, it should be expected that those members with skills easily marketable in the civilian economy will tend to voluntarily retire earlier than those members possessing skills not in high demand in the civilian economy.

IV. THE INCENTIVE EFFECTS OF "EARLY RETIREMENT" IN NON-MILITARY SYSTEMS

In the military system the potential for premature loss of valued personnel is heightened by the individual's expectancy of organizationally imposed mandatory retirement before completion of a lifetime employment career. Civilian employers do not, as a practice, mandatorily retire employees with satisfactory employment records before completion of a normal employment lifetime. Thus, they do not force upon their employees an economic evaluation of the merits of early retirement. In fact, most employers do not permit retirement until the member has achieved an age at which full-time employment with another employer is not a practical likelihood. Thus, for most civilian workers, there is little merit in "retirement" from a given employer as an income-maximizing device. Nevertheless, there is a growing tendency toward permitting retirement at earlier years—the Federal Government being more lenient in this respect than most corporate employers. Minimum voluntary retirement qualifications and the man-

	Minimum requi retirement w diate annuity	Mandatory retirement	
	Age	Length of service	at age
Civil service (excluding law enforcement) Civil service (law enforcement) Foreign service	55 50 50	30 20 20	70 70 60

datory retirement ages for various governmental employee groups are shown below.

At age 55, a civil servant with 30 years of service can retire with an annuity of 56.25 percent of his "high 5 average annual salary." The effects of frequent general wage level increases, longevity changes, promotions realized by the individual, etc., reduce the annuity to a somewhat lower percent of the terminal salary. However, by retiring, a civil servant escapes a continued 61/2 percent of salary contribution to the civil service retirement fund. The combined effect of these influences is to give the individual an immediate gain from continued employment of something less than 45 percent of his salary (where immediate gain equals salary less retirement annuity and contribution). Of course, continued employment will bring him a retirement multiplier which increases by 2 percent for each additional year of service and, given a generally rising wage level in the economy, a higher average wage against which that multiplier will ultimately be applied. And, unlike the military careerist, the civil servant can expect to be able to retain his job until mandatory retirement at age 70, if he so desires. Thus, a retirement timing decision is not so crucial to his financial well-being as it is to the military careerist. Further, for most individuals who retire from civil service at age 55 or later, finding another job may not be easy. The basic choice in a typical civil servant's retirement decision may, therefore, generally be one of continued civil service employment versus retirement to a leisure world. Nevertheless, certainly one would expect that there are many civil servants with skills and capabilities such that employment outside the Federal Government at age 55 would still be an attractive alternative. For these individuals, the availability of a retirement annuity which is a high percentage of the civil service wage results in a high opportunity cost on continued civil service employment. The greater the outside alternatives and/or the larger the retirement annuity, the higher the opportunity cost of remaining with civil service. And, if other employers value the same attributes as does the governmental employer, the employees the civil service organization would most like to retain will be those with the greatest outside opportunities, and, thus, those most likely to retire soon after eligibility is established. Conversely, those with the poorer outside alternatives can be expected to generally reject the early retirement option; i.e., it will not be as economically advantageous for them to terminate their civil service employment.

The possibility of premature (from the employer's viewpoint) retirement from the civil service is a relatively recent development. The "age 55, 30 years of service" rule was established in 1966. Until that time, retirement prior to age 60 was not permitted without an actuarial reduction in the annuity. Nevertheless, there are already some indications that the early retirement option may bring losses to the civil service organization similar to those the military is apparently experiencing. According to a recent newspaper article: 14

Throughout the Federal service are 66,400 Federal employees who are 55 or older, who have at least 30 years of service, and who are eligible for immediate retirement under civil service.

Informal surveys reveal at least half of them are planning to retire within the year. Their pending retirements constitute a massive personnel problem to Federal agencies.

Hundreds of the eligibles hold key supervisory, management, scientific and professional positions, and they can't be replaced easily. Agencies that look and plan ahead are setting into motion programs to train others to take over their jobs.

But, there are many other agency problems related to retirement; *example*: An agency has about 50 employees eligible to retire, and its officials, for reasons best known to themselves, would be happy if 10 or 12 of them would retire today. The remainder, they feel, are excellent workers who can contribute much more to the public service.

A check showed that perhaps only one of the 10 or 12 so-called unwanted employees had retirement plans, while about 20 of the wanted will retire within the year. The check also showed that a factor contributing to the pending retirements of several wanted employees is the decision of the unwanted to continue working.

The agency has no authority to force the retirement of any employee before that time * * *.

V. EARLY RETIREMENT AND LABOR MOBILITY

The Federal Government has encouraged employers to provide early vesting of pension plans in order that labor mobility not be reduced. Generally unhindered labor mobility is a desirable objective because it permits the efficient allocation of labor resources via the price system; i.e., labor migrates from lower wage, lower marginal product employment to higher wage, higher marginal product employment. However, early vesting of pension plans usually refers to an ultimate, not an immediate, receipt of a pension. A plan may vest after, say 10 years of employment, regardless of age, but payments do not usually begin until the employee achieves a stated normal retirement age. This type of plan is more or less neutral in its effects on labor mobility. In itself, it neither encourages nor discourages the employee to switch employers. This is the desired effect. In theory, the price (wage) system should function without interference to achieve an efficient allocation of labor resources.

A plan which allows early retirement from an employer's work force and immediate availability of an unreduced annuity is a different matter. When the retiree can switch to other employment, the retirement plan is not likely to be neutral in its impact on labor mobility. Rather, at the point where the employee is eligible, it tends to encourage labor mobility and thereby provide a stimulus which may tend to inefficient allocation of labor resources.

To illustrate how an inefficient allocating may occur, consider a hypothetical example. Let us assume a 55-year-old civil servant with

^{14 &}quot;66,400 Eligible Retirees Pose Personnel Problems," Washington Post, July 11, 1967, p. A18.

30 years of Government service, earning \$10,000 per year. Our example individual is eligible for immediate retirement and by doing so can draw an annuity of \$5,200. In addition, he can take a job with a non-governmental employer at an annual salary of \$8,000. The sum of his civil service retirement annuity and his "second career" wage is, therefore, \$13,200 or \$3,200 more than he can earn by continued employment with civil service. Thus, he can maximize his own personal immediate income by retiring from the civil service work force and switching to the nongovernmental employer. But, if the \$10,000 civil service wage and the \$8,000 nongovernmental employer wage are both accurate valuations of the marginal product of the individual in the alternative employment situations, the change of employment represents an inefficient allocation of labor resources. The individual has maximized his income, but, at the same time, is contributing a smaller product to society. Clearly, a pension plan generated incentive to change employers is undesirable for society as a whole. Plans should not restrict labor mobility. Neither should they encourage it. It would seem that the ideal pension plan would be neutral with respect to its impact on labor mobility, leaving the task of allocation of labor to the price (wage) system.

VI. SUMMARY AND CONCLUSIONS

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 years) military careers may be more economically rewarding than longer careers, providing 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 interests 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

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.

TABLE 1.--AVERAGE 1966 ANNUAL INCOMES OF SURVEY RESPONDENT POPULATION. BY RANK, EDUCATION LEVEL. AND RETIREMENT AGE

0 and a sect	1966 average annual income by retirement age								
Grade and education ¹	Less than 44	44 to 45	46 to 47	48 to 49	50 to 51	52 to 53	54 to 55	Over 55	All ages
0-5:									
LTBS	\$11,110	\$10,910	\$9,600	\$8,650	\$8, 830	\$8, 890	\$10,940	\$8, 390	\$9,810
BS	12, 310	10,630	10, 880	10, 260	10,060	10, 230	(2)	(2)	11,130
MBR	15, 720	14,350	13,630	11, 880	12,080	11,250	11,250	(2) (2) (2)	14, 520
MAR	10,000	8,640	8,750	(2)	(2) (2)	(2)	(2) (2)	2	9,130 15,050
Ph. D	(2)	(2)	(2)	(2)	(2)	(2)	(9)	69	15,050
0-6: LTBS	(1)	14,170	16.530	11,250	12, 190	9,550	10, 140	12,920	12,280
BS	(2) 14, 730	13, 390	12.030	11,220	11, 220	10, 280	11, 280	12, 190	11, 440
MBR	20, 270	17,640	15,670	14, 260	12, 330	12, 490	11,350	13,040	14,660
MAR.	(2)	(2)	11.670	9,350	7.380	8,630	8, 570	(2)	9,070
Ph. D	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	14,110
0-7: All	(2) (2) (2)	(2) (2) (2)	(2) (2)	(2) (2)	(2) (2)	(2) (2)	(2) (2)	(2) (2) (2)	12,920
0-8: All	(²)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	13,630

[Full time and self-employed only]

¹ Education: LTBS—Less than a bachelor's degree; BS—Bachelor's degree or some work toward a master's degree; MBR—Master's degree awarded before military retirement; MAR—Master's degree awarded after military retirement; and Ph. D—Ph. D degree.

² Number of observations too few to provide meaningful data.

Source: Lenz, op. cit., p. 83.

TABLE 2.—PERCENT OF SURVEY RESPONDENTS WHO HELD CIVILIAN EMPLOYMENT FOR 3 OR MORE MONTHS AND WERE CURRENTLY EMPLOYED FULL TIME, BY GRADE, EDUCATION LEVEL, AND RETIREMENT AGE

	Percent holding full-time employment by retirement age								
Grade and education 1	Less than 44	44 to 45	46 to 47	48 to 49	50 to 51	52 to 53	54 to 55	Over 55	All ages
0-5:									
LTBS	93, 4	90.7	86.5	84. 0	79.0	70.4	75.1	50.0	85.3
BS	96, 9	95. 0	94. 0	89.0	91.1	96. 2	90, 9	64.3	93.9 97.4
MBR	98.8	98.2	100.0	100.0	100.0	(2)	(2)	(2)	97.4
MAR	100.0	92.0	100.0	90.0	100.0	(2) (2)	(2) (2)	(2) (2)	96. 8
0-6:						.,	.,	.,	
LTBS	100.0	100.0	70.6	94.1	80.0	84.4	66.7	65.0	81.5
BS	88.9	95.2	94.2	86.4	80.3	79.4	74.6	75.0	83. 5
MBR	98.4	96.5	95.5	90.7	88.7	78.7	79.3	90.0	89.4
MAR	(3)	(3)	92.3	83. 3	97.1	83.6	87.5	(2)	87.6

LEducation: LTBS—Less than a bachelor's degree; BS—Bachelor's degree or some work toward a master's degree; MBR—Master's degree awarded before military retirement; MAR—Master's degree awarded after military retirement. ² Number of observations too few to allow meaningful percentage expressions.

Source: Lenz, op. cit., p. 174.

Grade and	Percent not employed since retirement, by retirement age									
education ¹	Less than 44	44 to 45	46 to 47	48 to 49	50 to 51	52 to 53	54 to 55	Over 55	All ages	
0-5: LTBS BS MBR MAR 0-6:	3.6 2.6 2.2 5.9	4.5 1.5 0 16.0	6.5 1.7 2.3 5.3	13. 3 5. 7 4. 0 9. 1	11.0 10.4 (2) 0	13. 6 12. 9 (²) (²)	20. 0 7. 7 (2) (2)	56. 4 26. 3 (²) (²)	10. 3 4. 1 2. 3 4. 1	
BS MBR MAR	14.3 1.8 0 0	0 4.6 1.2 0	5.3 3.5 1.1 7.1	30. 8 6. 2 0 0	16. 0 10. 2 7. 5 0	19.5 16.5 8.9 5.9	11.8 19.9 14.7 0	42. 5 25. 5 9. 1 (²)	21. 0 11. 7 4. 7 2. 4	

TABLE 3.—PERCENT OF SURVEY RESPONDENTS NOT EMPLOYED SINCE RETIREMENT, BY RANK, EDUCATION LEVEL AND RETIREMENT AGE

¹ Education: LTBS—Less than a bachelor's degree; BS—Bachelor's degree or some work toward a master's degree; MBR—Master's degree awarded before military retirement; MAR—Master's degree awarded after military retirement. ² Number of observations too few to allow meaningful percentage expressions.

Source: Lenz, op. cit., p. 172.

TABLE 4.—RETIREMENT AGES AND RETIREMENT EDUCATION LEVELS OF SURVEY OFFICERS RETIRING FOR NONDISABILITY REASONS DURING YEARS 1955-64

[Cumulative percent of all retirements accomplished by indicated age]

Grade and education ¹	Age 43	Age 45	Age 47	Age 49	Age 51	Age 53	Age 55	Age over 55
0–5:								
LTBS	18.9	32.3	49.5	72.8	89.2	95.0	96.7	100
BS	30, 9	58.0	73.8	85.2	91.6	95.7	97.4	100
MBR	45.1	73, 3	84.4	90.7	95.2	96.7	98.5	100
MAR.	34.7	60.2	79.6	90.8	97.9	98.9	99.9	100
0–6:								
LTBS	3.6	13.8	23.5	36.8	49.6	70.5	79.2	100
BS	4.1	10.5	21.1	37.9	55.4	84.3	86.3	100
MBR.	6.9	22.3	38, 3	52.5	69.3	91.7	98.0	100
MAR	3.7	9.2	17.7	36.0	56.7	87.8	98.6	100

¹ Education: LTBS—Less than a bachelor's degree; BS—Bacherlor's degree or some work toward a master's degree; MBR—Master's degree awarded before military retirement; MAR—Master's degree awarded after military retirement. Source: Lenz, op. cit., p. 150.

THE ECONOMICS OF MILITARY RETIREMENT

BY BETTE S. MAHONEY and ALAN E. FECHTER*

The military retirement system, like most other retirement systems, is a complex structure. The benefit formulas and eligibility requirements are incorporated into numerous laws enacted by Congress, and regulations promulgated by the Department of Defense.¹ This paper addresses two aspects of the military retirement system: (1) the importance of the nonvested retirement program upon job mobility; and, (2) the affect of the retirement income upon labor force behavior during what are usually considered prime working years. The non-vested retirement program provides active duty military personnel with an important incentive to remain in the Armed Forces until becoming eligible for the retirement benefits. The retirement income is substantially higher than the non-wage-and-salary income of the civilian contemporaries of military personnel. As such, it is expected that this higher "independent" income will have an effect upon the subsequent labor force behavior of retired military personnel. The next section examines the job mobility pattern of active duty military personnel. The labor force behavior of military retirees is analyzed in the third section. The final section draws tentative conclusions based upon the evidence of the earlier sections.

JOB MOBILITY OF ACTIVE DUTY MILITARY PERSONNEL

After completing 20 or more years of active service, military personnel may request retirement. Retirement pay after 20 years of service is 50 percent of the monthly basic pay of the retiree at the time of his

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¹A detailed description of the military retirement system may be found in U.S. Senate Committee on Armed Forces, A Study of the Military Retired Pay System and Certain Related Subjects, prepared by the study committee of the University of Michigan, July 6, 1961.

retirement. For each year of service after 20 years the amount of retired pay is increased by 21/2 percentage points, with a maximum of 75 percent of basic pay reached after 29 years and 6 months of active service.² There are no retirement benefits paid if separation from the Service occurs prior to the 20-year point for any reason other than disability.3

The implication of such a retirement program for labor mobility between the military and the civilian sector is that it makes mobility more costly for military personnel with larger numbers of years of active service until the year they become eligible to receive retirement income. There will be an economic incentive to retire at that time if the future retirement income and the salary associated with staying in the military service are not sufficient to offset the pecuniary and nonpecuniary attractions of civilian career opportunities. This type or retirement systems should give rise to a U-shaped profile of turnover rates of personnel classified by years of active service. Loss rates were constructed by dividing the year-group losses for

the fiscal year 1965 by the sum of the inventory in that year group as of June 30, 1965, plus the losses from that year group during fiscal year 1965. Military enlisted loss rates have a dramatic peak at the end of the initial tour of obligated duty and at 20 years (fig. 1). The initial peak is followed by a noticeable, if irregular, decline until the 20th year. It is difficult to attribute this decline entirely to the military retirement program. Mobility studies conducted for civilian labor markets have consistently found that older workers are less mobile and change jobs less frequently.⁴

There is little doubt that the second peak in military loss rates at the 20-year point reflects the retirement program. The decision to retire voluntarily at the 20-year point is associated with two characteristics of the retirement system: (1) the actual amount of retirement income that the serviceman is eligible to receive; and (2) the vesting of that income at the 20-year point. Unfortunately, it is impossible to separate the effects of the two characteristics upon the decision to retire.

It is clear from the examination of the loss patterns that the incentives for staying until the 20-year point after having made an early decision for a military career are far higher than the incentives for staying beyond the 20-year point. Thus, although it is not possible to separate the pure effects of the nonvested retirement, the loss pattern is dramatic enough to suggest the importance of the nonvested retirement in shaping the military career.

² Basic pay is only part of the total pay package of military personnel. In addition to special pays for hazardous duty, proficiency, responsibility, nontaxable cash allow-ances for quarters and subsistence are paid. Basic pay is, on average for the total force, only 70 percent of tax equivalent gross cash income. ³ If the serviceman joins the Reserves upon separation, the years of active duty spent in the Reserves are counted as part of the 20 years of satisfactory Federal service necessary for Reserve retirement. Reservists do not become eligible for retirement pay until age 60. ⁴ See, for example, R. L. Bunting, L. D. Ashby, P. A. Prosper, Jr., "Labor Mobility in Three Southern States." Industrial and Labor Relations Review, vol. 14 (April 1961), No. 3, pp. 432-445; R. L. Bunting, "Labor Mobility: Sex, Race, and Age." Review of Economics and Statistics, XLII (February 1960), No. 1, pp. 229-231; L. E. Gallaway, "Interindustry Labor Mobility Among Men, 1957-60," Social Security Bulletin, vol. 29 (September 1966), No. 9, pp. 10-22.

THE EFFECT OF RETIREMENT INCOME ON THE LABOR FORCE BEHAVIOR OF RETIREES

The military pension given to retirees at a relatively early age should act to reduce their labor force participation. Economic theorists have discussed two possible effects, the "income" and the "subtitution" effects, of changes in market wage rates relative to the returns to nonmarket activity which would operate in opposing directions on labor supply. Where the "income" effect operates, the portion of nonmarket activity known as leisure is considered a superior good which is then demanded in greater quantities as incomes rise. Since market wage rates are an element of income, an increase in these will give rise in an increase in the amount of leisure demanded. This demand is usually considered to be satisfied at the expense of time spent in market activity. The "substitution" effect describes the tendency to sub-

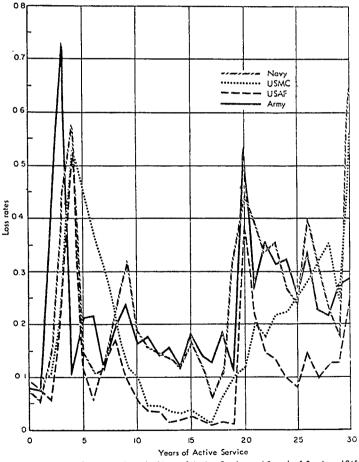


FIGURE 1 Enlisted Loss Rates by Years of Active Service and Branch of Service, 1965

stitute market for nonmarket activity as the return to market activity (wage rates) rises relative to the return on nonmarket activity.

The "income effect" has implications for the labor force behavior of military retirees. They stem from the effect of the relatively large pension received by military retirees after they retire from active service. Other things equal, this pension should decrease their labor force participation below what it would have been had they not had this "independent" source of income.

It is also expected that the labor force participation rates of groups of military retirees will vary with their unemployment rates. Whether the relationship for a particular group is positive or negative will depend upon whether the "added worker" or the "discouraged worker" effect is dominant. The "added worker" effect implies an increase in labor force participation as a result of an increase in unemployment rates as additional family members seek to supplement reduced family income occasioned by unemployment of the primary earner. The "discouraged worker" effect implies a decrease in labor force participation as labor force participants leave the labor force because they do not expect to be able to find jobs. In the case of male retirees, who are generally primary family workers, it is expected that the "discouraged worker" effect will be dominant.

These implications will be explored by examining differences in labor force behavior among military retirees and between retirees and comparable civilians. The differences will then be compared to differences in income patterns to determine whether the effect of the retirement income is consistent with that postulated by the theory. Finally, a statistical examination of the effects of the magnitude and composition of family income and unemployment upon labor force behavior will be made.

Information on labor force, income and unemployment characteristics of officer and enlisted retirees was obtained from a survey of a 25percent random sample which was undertaken by the Department of Defense in June 1966. A followup survey of nonrespondents was made in September 1966. The overall response rate to the original and the followup surveys was 74.5 percent. The analysis was confined to male retirees who were retired for reasons other than disability. In addition, retirees were also excluded who did not report either their labor force status or some element of income and retirees who had retired after January 1, 1965. The sample size was between 60,000 and 70,000, depending on the tabulation.⁶ We stratified the retirees by age and level of school completed for two reasons: (1) age and level of schooling have been found to be important determinants of labor force behavior and income; and (2) comparable labor force and income data are available for civilians classified by these characteristics.

Two measures of labor force behavior were used: one, the ratio of retirees who worked any amount of time in 1965 to total retirees (L_1) ;

⁵ An excellent development of this theory may be found in J. Mincer, "Labor Force Participation of Married Women." in *Aspects of Labor Economics* (National Bureau of Economic Research, Special Conference Series, vol. 14, Princeton, New Jersey: Princeton University Press, 1962), pp. 63–97. See especially, pp. 63–68. ^a There were 95,520 usable returns in the Department of Defense sample of all metinose

retirees.

and a second measure, closer to the standard measure, the number of employed retirees plus the number of unemployed retirees who were looking for work at the time of the survey as a proportion of all re-tirees (L_2) . The former statistic has the advantage of covering the same time period as the income statistics used in this analysis. The broader time period also makes it less sensitive to the transitory fluctuations in labor force behavior than the usual labor force measure, which applies to a particular week.

Table 1 summarizes the labor force behavior of retirees based on work experience in 1965, and participation in June 1966. Labor force behavior rates are presented for retirees classified into six level-ofschool completed groups and four age groups. Because of the relatively small number of nonwhites in the sample, the analysis concentrates on white retirees. When measured by work experience, in 1965, the labor force behavior rates reveal no statistically significant difference at the 5-percent level between the rates for whites and nonwhites." Labor force participation rates in June 1966 show a statistically significantly higher participation rate for nonwhites.

There are significant differences at the 5-percent level in both participation rates between the different age groups. They are generally lower for older retirees. For retirees in each age group with less than 16 years of school completed, participation rates frequently increase with the level of school completed. This relationship is much stronger for older retirees than for younger retirees. The pattern of partici-pation rates for retirees with 16 or more years of school completed differs from that of those with less than 16 years of school completed.⁸ Their participation rates are significantly lower than those with less than 16 years of school completed for the youngest age group and significantly higher in the oldest age group.

	Age								
Level of school completed	35 to 44		45 to 54		55	to 64	65 p	lus	
_	L1 ª	L3 a	L ₁ •	L <u>2</u> ª	Lı a	L2 *	Lı •	Lg ª	
Less than 8 yr 9 to 11 yr	0.966 976 982 982 915 945 945 980 925 976	0. 984 983 989 981 964 965 984 964 984	0. 919 . 944 . 957 . 965 . 943 . 961 . 954 . 952 . 954	0. 950 . 967 . 972 . 971 . 952 . 963 . 968 . 957 . 968	0. 736 . 722 . 810 . 815 . 759 . 841 . 782 . 807 . 787	0. 741 . 780 . 826 . 828 . 763 . 821 . 793 . 797 . 793	0. 307 . 338 . 377 . 386 . 362 . 511 . 343 . 439 . 367	0. 244 . 277 . 348 . 364 . 339 . 452 . 317 . 397 . 317	

TABLE 1.- ESTIMATES OF LABOR FORCE BEHAVIOR OF WHITE MILITARY RETIREES BY AGE AND LEVEL OF SCHOOL COMPLETED

L1 equals the proportion of retirees who worked or looked for work at least 1 week in 1965. L2 equals the proportion of retirees who were employed or seeking employment at the time of the survey, June 1966.

Source: App. A.

⁷ App. A contains detailed tabulations for both of the labor force participation rate measures by level of school completed, age, and race. ⁸ Since most of the population with 16 years or more of school completed are retired officers rather than retired enlisted men, the average age at retirement will be higher and the number of years since retirement will be smaller for this educational group. The importance of this difference would be most significant for the youngest age group.

In comparing the labor force behavior of military retirees to that of civilian in similar age and education groups, L_2 , the proportion of retirees who were employed or seeking employment at the time of the survey was used as the measure of labor force behavior. This measure is consistent with the available civilian measure.⁹ If, within each agelevel-of-school-completed class, all that distinguished retirees from other civilians was the military pension received as income by the retirees, we would expect the labor force participation rates of retirees to be below those of other civilians in the same age-education classifications.

The racial distribution of retirees and civilians is one factor which differs between the two populations. There are proportionately fewer nonwhite military retirees than there are other civilians. However, evidence available on differences in labor force behavior between white and nonwhite males in the age groups under study suggests that such differences are small.10

Table 2 compares the labor force participation rates of the military retirees and all civilians and the actual and expected number of white retirees in the labor force. The expected number of white retirees in the labor force is calculated by applying the civilian labor force participation rate for each age-education group to the total number of white retirees in that group of the sample.11 The total number of white retirees in the labor force is smaller than the number expected based on civilian labor force behavior in 15 of the 24 cells. The differences between the actual and expected number of white retirees in the labor force are statistically significant.¹² This implies that the distribution of retirees in the labor force is different from what it would have been if participation rates were the same for retirees and civilians.

Labor force behavior of retirees is believed to be affected both by the level and composition of their family incomes. It is expected that the higher the level of their family income, other things (including wage and salary income of retirees) being equal, the smaller their labor force participation rate (the income effect), and that, the higher their wage and salary level, other things (including the level of family income) being equal, the higher their labor force participation rate.

⁹ There is one notable difference between the measures. The statistic employed for military retirees is based on their labor force status at the time of the survey. For the bulk of the retirees, this was June 1966 and, for the remainder, some time between June and September. For the civilian labor force, the statistic employed refers to behavior in March 1966. ¹⁰ W. G. Bowen and T. A. Finegan, "Labor Force Participation and Unemployment," in A. M. Ross. editor, *Employment Policy and the Labor Market* (Berkeley, Calif. : University of California Press, 1965), pp. 115-161, employed a race variable in their cross-section analysis of labor force participation of males in the age groups, 25-54 and 65 or more years of age. It had no significant effect on participation rates for the former age group, and was only significant in 1 of 3 cross-section analyses for the former age group. Furthermore, the estimated parameter of the race variable was guite small in the case where if was significantly different from zero. In addition, U.S. Bureau of Labor Statistics, "Educational Attainment of Workers, March 1965," Special Labor Force Report, No. 65, p. 257, found that the 1965 labor force participation rates of white and now bits males were "generally similar within the same age and education categories."

of white and nonwhite males were "generally similar within the same age and education categories." The evidence of the sample of retirees suggests that a larger proportion of nonwhites is associated with slightly higher participation rates. ¹¹ The actual number of white retirees is associated with a fower participation rate than that for all retirees while the participation rate for civilians is expected to be slightly higher than that for whites only. The two errors tend to minimize the calcu-lated differences. ¹² A chi square test performed found a value of chi square=138.124 for 23 degrees

 $^{^{12}}$ A chi square test performed found a value of chi square=138.124 for 23 degrees of freedom between the expected and actual frequencies.

The levels and compositions of family incomes of retirees is examined and compared to those of civilians in their age-education classes to determine whether existing differences in labor force behavior are associated with differences in levels and compositions of family income implied by economic theory.

TABLE 2.--COMPARISON OF LABOR FORCE PARTICIPATION RATES OF MILITARY RETIREES AND ALL CIVILIANS AND ACTUAL AND EXPECTED NUMBER OF WHITE RETIREES IN THE LABOR FORCE

Level of school completed and age	Labor force p rate c		Number of white retirees in the labor force		
-	Retirees	Civilians	Actual	Expected 1	
ss than 8 vr.:					
35 to 44 yr	0. 986	0. 938	1,160	1,106	
45 to 54 ýr	. 953	. 907	1,833	1,750	
55 to 64 yr	. 741	. 802	1,686	1, 844	
65 vr. or more	. 244	. 216	279	267	
to 11 yr.:	. 244		215	207	
35 to 44 yr	. 984	. 970	2.035	2,009	
	. 968	. 959	3, 118	3,094	
45 to 54 yr					
55 to 64 yr	. 783	. 872	1,703	1,093	
65 yr. or more	. 281	. 292	223	23!	
yr.:	. 989	. 986	10, 832	10.78;	
35 to 44 yr	. 972				
45 to 54 yr		. 972	13, 470	13, 46	
55 to 64 yr	. 830	. 892	2, 214	2, 39;	
55 to 64 yr65 yr. or more	. 354	. 347	215	21/	
to 15 yr.:					
35 to 44 yr	. 981	. 979	4, 277	4, 26	
45 to 54 yr	. 971	. 974	7,505	7, 530	
55 to 64 yr	. 831	. 894	1,632	1,76	
65 yr. or more	. 370	. 388	269	28	
yr.:			205	201	
35 to 44 vr	. 963	. 994	643	66;	
	. 950	. 977	1.900	1, 95	
45 to 54 yr		. 892			
55 to 64 yr	. 765		729	85:	
65 yr. or more	. 336	. 383	184	20	
yr, or more:					
35 to 44 yr	. 962	. 991	502	51:	
45 to 54 ýr	. 963	. 984	2, 177	2, 22	
55 to 64 yr	. 823	. 888	1, 118	1, 20	
65 yr. or more	. 453	. 610	266	35	

¹ The expected number of retirees in the labor force is calculated by applying the civilian labor force participation rate for each group to the total number of retirees in that group of the sample.

Source: App. A and U.S. Bureau of Labor Statistics, "Educational Attainment of Workers, March 1965," Special Labor Force Rept. No. 65, table E.

Family income varies systematically with both age and level of school completed of white military retirees. In a given age group total family incomes are higher for retirees with greater amounts of schooling completed. The age-income profiles differ considerably among retirees with differing amounts of schooling completed (figure 2). Incomes decline as age increases for retirees in the two lowest levels of education groups. It peaks in the 45- to 54-year-old group and then declines as age increases for the next two education groups. For retirees with 16 or more years of school completed, income rises with age until the 55- to 64-year-old group, and declines for retirees who are 65 and older.

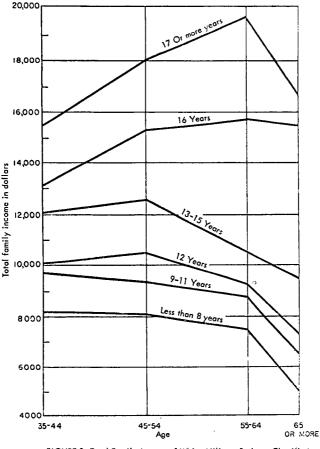


FIGURE 2 Total Family Income of White Military Retirees Classified By Age and Level of School Completed, 1965

Table 3 summarizes the components of family income for white military retirees. Wage and salary income constitutes the largest single component of family income in all but one of the comparisons for age groups under 65. Wage and salary incomes are generally lower for older retirees. Within an age group, they are higher for retirees with more school completed. Much of the variation in the wage and salary component of income is the result of variations in the number of weeks worked by retirees.¹³ Variations in weekly wage and salary incomes of retirees are much smaller than variations in annual wage and salary incomes.

¹³ The average number of weeks worked of white military retirees classified by age and educational levels may be found in app. B.

Level of school completed and age	Wage and salary income 1	Nonwage and salary income of retiree ²	Income of other family members	Military retire- ment income	Income in goods and services ³	Family income other than wage and salary of retiree	Total family income
Less than 8 yr: 35 to 44 yr	\$5, 111 4, 762 3, 606 803	\$116 163 333 1,066	\$937 1,033 971 640	\$1, 934 2, 111 2, 510 2, 481	\$53 45 36 26	\$3, 040 3, 352 3, 850 4, 213	\$8, 151 8, 114 7, 456 5, 016
35 to 54 yr	6, 334 5, 722 4, 268 996	115 168 356 1, 291	1, 136 1, 098 983 920	2, 032 2, 311 3, 117 3, 348	55 48 41 35	3, 338 3, 625 4, 497 5, 594	9,672 9,347 8,765 6,590
35 to 44 yr 45 to 54 yr 55 to 64 yr 65 yr. or more 13 to 15 yr:	6, 310 6, 236 4, 336 1, 348	223 256 378 1, 414	1,182 1,297 1,122 842	2, 248 2, 661 3, 341 3, 694	60 55 46 36	3, 713 4, 269 4, 887 5, 950	10,023 10,505 9,223 7,298
35 to 44 yr	7, 409 7, 143 5, 105 2, 095	194 266 507 2, 227	1, 345 1, 376 1, 214 1, 309	3, 037 3, 680 4, 544 4, 758	66 62 51 36	4,642 5,384 6,316 8,330	12, 051 12, 527 14, 421 10, 425
35 to 44 yr 45 to 54 yr 55 to 64 yr 65 yr. or more 17 yr. or more:	7, 482 8, 091 6, 423 3, 270	354 632 1, 092 3, 307	1,481 1,526 1,571 2,371	3, 767 4, 963 6, 537 6, 536	68 61 47 33	5,670 7,182 9,247 12,214	13, 152 15, 273 15, 670 15, 484
35 to 64 yr	9, 254 10, 515 9, 385 4, 926	361 573 1, 335 3, 626	1,516 1,547 1,553 1,556	4, 257 5, 375 7, 387 6, 415	67 60 46 31	6,201 7,555 10,321 11,628	15, 455 18, 070 19, 706 16, 554

TABLE 3.-INCOME OF WHITE RETIREES BY AGE, LEVEL OF SCHOOL COMPLETED, AND TYPE OF INCOME

1 Includes profits and fees of self-employed, of retirees.

Excludes income from military retirement pension.
 Savings from shopping in commissaries, equals 1 month's expenditure in commissary.

Source: App. B.

Partially offsetting lower wage and salary income of older military retirees is higher military retirement and other nonwage incomes. The positive relationship between military retirement income and age is due to the positive association between age and rank (officer versus enlisted) and, given rank, between age and pay grade.¹⁴ The difference in other incomes between retirees under 65 and those over 65 is probably associated with Social Security payments and pension payments from nonmilitary jobs.

14 The distribution of retirees by age, rank, and pay grade is .

A <i>m</i>	Percent officer	Average pay grade		
Age	Fercent onicer	Enlisted	Officer	
35 to 44	0. 1364	6.8729	4. 2925	
45 to 54	. 3046 . 4118 . 4559	6.9560 6.9408 6.9667	4.6898 5.0969 5.3703	

Military retirement income is consistently higher for retirees with larger amounts of school completed. A positive relationship between level of school completed and rank (officer versus enlisted) and, for a given rank, between level of school completed and pay grade, may explain why retirement income is larger for retirees with more schooling completed.¹⁵

The relation between income of other family members classified by the age and level of school completed of the retiree is roughly similar but less pronounced than the one described for wage and salary income.

The labor force behavior of table 1 and the income components of table 3 indicate that the labor force behavior of retirees is consistent with the economic theory as stated. Lower labor force participation rates for older retirees are generally accompanied by lower weekly wage and salary earnings and higher non-wage-and-salary income. The higher participation rates of retirees who have had more schooling reflects the joint influences of higher weekly wage and salary earnings and higher non-wage-and-salary income.

Further evidence of the effect of military retirement income on labor force participation of retirees may be obtained from a comparison of labor force behavior between military retirees and all civilians. Table 4 contains a comparison between the money incomes of all (white and nonwhite) retirees and males in the experienced civilian labor force. Unfortunately, the only income data available for civilian males classified by age and level of school completed were money incomes of male persons in 1965. This includes both wage and salary income and income from other sources. It does not include income of other family members. The income of military retirees shown in table 4 is all money income of the retiree except his military retirement income.¹⁶ If other incomes were roughly equal between retirees and other civilians then these statistics could be used to provide a rough ranking of wage and salary incomes. Although the correlation between the differences in participation rates of retirees and civilians in table 2 and the differences in money income in 1965 is small, the correlation is in the expected direction.¹⁷ Participation rates of retirees higher than the rates of civilians are associated with higher money incomes of retirees than money incomes of civilians.

¹⁵ Appropriate data are not available for retirees classified by education. The educa-tional standards for officers have traditionally been higher than the standards for enlisted men. ¹⁰ Wage-and-salary income (col. 1 of table 3) and non-wage-and-salary income (col. 2 of table 3) are the two components of money income. ¹¹ The coefficient of determination from the simple correlation is 0.01 and the estimat-ing equation is $Y = -2.54 \times 10^{-2} + (3.68 \times 10^{-9})\chi$ where Y equals the difference in labor force participation rates and χ represents the difference in money income.

the state of the s	Money income	s in 1965 o
Level of school completed and age	Retirees	Civilian
sss than 8 yr.: 35 to 44 yr	\$5, 227 4, 925 3, 939 1, 869	\$4, 542 4, 622 4, 012 1, 854
to 11 yr.: 35 to 44 yr 45 to 54 yr 55 to 64 yr 65 yr. or more	6, 449 5, 890 4, 624 2, 287	6, 118 6, 111 5, 532 2, 426
yr.: 35 to 44 yr	6, 533 6, 492 4, 714 2, 762	7, 040 6, 957 6, 626 2, 882
to 15 yr.: 35 to 44 yr	7, 603 7, 409 5, 612 4, 322	8, 145 8, 724 6, 804 3, 041
yr.: 35 to 44 yr 45 to 54 yr 55 to 64 yr 55 yr. or more	7,836 8,723 7,515 6,577	10, 029 11, 557 8, 949 4, 157
yr, or more: 35 to 44 yr	9,615 11,088 10,720 8,552	11, 048 12, 326 10, 844 7, 346

TABLE 4.-COMPARISON OF MONEY INCOMES (OTHER THAN INCOME FROM MILITARY RETIREMENT PENSION) OF MILITARY RETIREES AND COMPARABLE OTHER CIVILIANS, 1965

Source: App. B and U.S. Bureau of the Census, Current Population Reports, series P-60, Consumer Income, No. 51, table 22, p. 35.

The striking conformity of the labor force behavior of different groups of military retirees to the theoretical model suggested the pos-sibility of deriving estimates of the income and substitution parameters of labor force participation from the retirement survey data. This would enable us to specify more precisely the effects of military retirement income on the labor force behavior of military retirees.

It is possible to separate the income effect from the substitution effect by observing the independent effects of changes in wage and nonwage components on labor force behavior. The nonwage component identifies the pure income effect and the wage component captures the income and the substitution effects jointly. Given an estimate of the income effect based on the nonwage component of income, the pure substitution effect may be derived as a residual from estimates of the joint effects picked up by the wage component.¹⁸

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¹⁸ The technique for isolating these effects is developed in detail in J. Mincer, op. cit., especially on pp. 69-75. Estimates of income and substitution parameters have been derived in several studies. See, Bowen and Finegan, op. cit.; "Educational Attainment and Labor Force Participation." American Economic Review. LVI (May 1966), No. 2, pp. 567-582 : G. G. Cain, Married Women in the Labor Force (Chicago, III.: University of Chicago Press, 1966), p. 159 ; "Unemployment and the Labor-Force Participation of Secondary Workers," Industrial and Labor Relations Review, XX (January 1967), No. 2, pp. 275-297. A review of the recent literature on labor force participation may be found in J. Mincer, "Labor Force Participation and Unemployment: A Review of Recent Literature," in R. A. Gordon and M. S. Gordon, editors, Prosperity and Unemployment (Berkeley, Calif.: University of California Press, 1966), pp. 73-112. A more rigorous analysis of the income and substitution parameters is contained in M. Kosters, "Income and Substitution Parameters in a Family Labor Supply Model," unpublished Ph. D. dis-sertation, University of Chicago, 1966.

The labor supply model for retirees may be summarized as follows:

$$L_r = f(Y_r, W_r, U_r, Z_r)$$

Where L_r = the labor force participation rate of a group of retirees, Y_r = the average family income of the retirees,

 W_r =the average wage and salary income of the retirees, U_r =the unemployment rate, and

 Z_r = other factors affecting L_r .

Since Y_r may be written as:

$$Y_r = W_r + X_r$$

where X_r = average family income other than wages and salaries of the retirees, then the equation can be rewritten so that:

$$L_r = g(X_r, W_r, U_r, Z_r).$$

Two exponential functions, one explaining the labor force participation rate and one explaining a transformation of that rate, were estimated by using least-squares-multiple-regression techniques applied to the logarithms of the variables.¹⁹ It is possible to produce estimated participation rates greater than one from the equation using labor-force participation rates as the dependent variable. Since one is the upper bound of participation rates and many of our observations were close to one, the participation rate was transformed to a ratio of the number in the labor force to the number in the population who are not in the labor force.²⁰ The transformation assumes that the responsiveness of labor force participation rates to a given absolute change in any of the independent variables would increase rapidly when participation within the population is small, taper off in the middle ranges, and diminish as the rate approached one.

Initially, it was assumed that the determinants of labor force behavior have uniform effects on retirees in each of the 24 age-level-ofschool cells. The cells were then independent observations in the analysis and parameters were estimated from weighted regressions.²¹ Both measures of labor force participation-the ratio of retirees who had worked any amount of time in 1965 to total retirees (L_1) , and the ratio of employed retirees and unemployed retirees who were looking for work to total retirees (L_2) —were used as the dependent variables. The independent variables were weekly wage and salary incomes of retirees (W), family income other than the wage and salary income of the retirees (X), and the unemployment rates of military retirees (U).

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¹⁹ Other empirical studies of labor force participation rates have used either linear or exponential functions in which the participation rate was the dependent variable. I_{i} where I_{i} where I_{i}

³⁰ The mathematical transformation to the labor force participation rate is $\frac{L}{1-L}$ where Lis the labor force participation rate. ³¹ Unweighted regressions were also run and produced results quite similar to those obtained from the weighted regressions. Weighted regressions are more appropriate for analyzing the labor force behavior of all military retirees in which each cell represents a different fraction of the population under analysis. Unweighted regressions would be appropriate if we wished to analyze the average behavior of the cells.

The regressions estimated differed from the supply equation. The supply function may be written:

$$L = \alpha_0 (X + W)^{\alpha_1} W^{\alpha_2} U^{\alpha_3} = \alpha_0 X^{\alpha_1} W^{\alpha_2} U^{\alpha_3} + \alpha_0 W^{\alpha_1 + \alpha_2} U^{\alpha_3}$$

where L is either the labor force participation rate or its transformed value. The equation estimated was:

$$L = \alpha_0 X^{\alpha_1} W^{\alpha_2} U^{\alpha_3}.$$

The partial derivative of the participation rate with respect to other family income, $\partial L/\partial X$, is the same for both equations. The partial derivatives for the other two variables differ between the two equations.²² Although the estimates of the coefficients with respect to wages and unemployment are biased, the income coefficient is an unbiased measure of the income effect.

The results of the regression analysis are summarized in table 5. The three economic variables explain between 94 and 97 percent of the between-cell variation in the labor force participation rates. The regression coefficient associated with family income other than the wage and salary income of the retiree has the expected sign in all of the regressions and is an unbiased estimate of the effect of income upon the different measures of labor force supply.

The assumption of homogeneity of the retirees in each of the cells was relaxed by introducing two sets of dummy variables-one set for all but one of the four age groups and one set for all but one of the six level-of-school groups.²³ This allowed us to determine whether, independent of the three economic variables of the "naive" model, there was variation in the labor force behavior of retirees that could be attributed purely to their age and level of school completed.24 The results of this analysis are also summarized in table 5. The first set of coefficients apply to a regression equation in which only those age-levelof-school-completed dummies that contribute significantly to the ex-planatory power of the regression are included. The second set refers to regressions in which all 10 of the dummies are included. The addition of dummy variables that significantly reduce the unexplained variation in the dependent variable (equations 5-8) have little affect on the coefficients of the "economic" variables in equations 6-8 although the coefficients in equation 5 are reduced. However, when all of the dummies are used, the coefficients of the "economic" variables become less important.25

²² The difference between the partial derivatives with respect to wage and salaries is $(\alpha_1 + \alpha_2)\alpha_0 W^{\alpha_1 + \alpha_2 - 1} U^{\alpha_3}$ and between the partial derivatives with respect to unemployment is $\alpha_3 \alpha_0 W^{\alpha_1 + \alpha_2} U^{\alpha_3 - 1}$.

 U_{a_1} and between the partial derivatives with respect to unemployment is $\alpha_{1a}\alpha_{0}W_{a_1}^{*a_2}U_{a_2}^{*a_1}$. ²³ Dummies for the lowest age and level of school completed cells were omitted as independent variables in the analysis. Their exclusion from the analysis prevents the variance-co-variance matrix from becoming singular and, therefore, impossible to invert to obtain estimates of regression coefficients. ²⁴ The equally important question of whether there were significant interactions be-tween the estimated coefficients of the "economic" variables and the dummy variables is not addressed in this paper, although we do explore differences in income elasticities estimated from these coefficients. ²⁵ Only three of the 12 coefficients remain statistically significant. Eight of the coeffi-cients are smaller. High multicollinearity between the "economic" and the dummy of the coeffi-cients of the "economic" variables.

TABLE 5.—ESTIMATES OF REGRESSION COEFFICIENTS DERIVED FROM	M LABOR FORCE AND INCOME STATISTICS
OF MILITARY RETIREES CLASSIFIED BY AGE AND LEVEL OF SCHOOL	L COMPLETED, 1965, L1 AND L2 AS DEPEND-
ENT VARIABLES	

Regression	Dependent		Coefficient of		Dummy variable	s included n	Constant	R2
number	variable ^b	Wь	Хр	Uъ	School	Age		
(1)	Lı	*0.9115	*-0.5876	*0.2334	None	None	*1.008	0. 97
(2)	L2	*Ì.155 ´	*7199	*. 3593 [´]	do	do	(. 298) *1. 272	. 97
(3)	$L_1/1 - L_1$	(.076) †1.031	(.0545) *-1.564	*—Ì. 982 ĺ	do	do	(. 380) *5. 808	. 93
(4)	L2/1L2	(. 477) *1. 479	(. 342) *-2. 239	(. 427) *1. 896	do	do	(2.387) *9.824	. 94
(5)		(. 513) *. 4924 (. 1267)	(. 368) †—. 1982 (. 0866)	(.460) .0629 (.0664	12 years, 16 years, 17 or more years.	55 to 64 years, 65 or more	(2.569) 6497 (.3619)	. 99
(6)	L2	*1.180	* 7106	*. 4040	12 years, 13 to 15	years. None	*1.139	. 98
(7)	L ₁ /1-L ₁	(.059) *1.100 (.400)	(.043) *—2.455 (.738)	(. 0536) *—1. 433 (. 478)	9 to 11 years, 12 years, 13 to 15 years, 16 years,	55 to 64 years.	(. 306) *13. 73 (6. 62)	. 98
(8)	L ₂ /1-L ₂	*3.119 (.656)	*-2.412 (.387)	†—1. 432 (. 695)	17 or more years. 12 years, 13 to 15 years, 17 or more	45 to 54 years, 55 to 64 years.	*7. 962 (2. 505)	. 98
(9)	ել	*. 5150	2671	. 0800	years. All	All	1604	. 99
(10)	L ₂	(. 1565) *. 8492	(. 2601) 3257	(. 1013) . 2315	Ali	All	(1.693) 8566	. 98
(11)	L1/1L1	(.2369) -1.026	(. 3937) 1, 919	(. 1534) *1. 492	All	All	(2.563) 11.24	. 99
(12)	L ² 1/2-L2	(. 858) . 693 (. 824)	(1.389) 1.231 (1.370)	(. 541) 239 (. 534)	All	All	(9.04) 9.922 (8.919)	. 99

 Coefficients of dummy variables and their standard errors appear in app. C.
 The definition of the dependent variables is in table 1, note a. W and X are defined in the text. U represents the un-"In order to be of retirees.
 *Signifies that coefficients are significant at the 0.01 level, using a 2-tail test.

†Signifies that coefficients are significant at the 0.05 level, using a 2-tail test.

Numbers in parentheses are standard errors of the regression coefficients.

The elasticity of supply with respect to X is equal to $\alpha_1 = \frac{X}{X+W}$ when supply is measured by L or by $\frac{L}{1-L}$. When L is the measure of supply, this elasticity is estimated from the regression coefficient of X found in table 5. It is assumed to be the same for each ageeducation group. When supply is measured by $\frac{L}{1-L}$ the income elasticity with respect to L, $\frac{\partial L}{\partial X} \cdot \frac{X}{L}$ is derived by multiplying the regression coefficient of X (table 5) by (1-L). This produces differing elasticities for each age-education cell. Estimates of the elasticities in each of the cells using the income coefficients of equations 2 and 4 are presented in table 6. The estimated elasticities are less than one in all but two cases. The income elasticity is higher for older retirees in each education class for both equations. In each equation age constitutes the major source of variation in the estimated elasticity. Since younger retirees are more likely to be primary workers, it is reasonable to expect to find their labor force behavior to be less sensitive to forms of family income other than their earnings. There is a substantial difference in estimated elasticities for given age-education groups between the equations. Because of the asymptotic properties of the

transformed equation, the estimated elasticities are substantially lower for retirees below the age of 65. They are also considerably higher for retirees 65 and older in all but one case. As one might expect, it is extremely low (less than 0.01) for retirees below the age of 55, who have participation rates exceeding 0.95. Of the two sets of estimates, those based on the transformed participation rates are probably more reasonable for the range of data under consideration.²⁶

TABLE 6.--ELASTICITIES OF LABOR FORCE PARTICIPATION RATES WITH RESPECT TO FAMILY INCOME OTHER THAN WAGE-AND-SALARY INCOME OF RETIREES

	Estimated from equation				
Level of school completed and age	2(L₂ dependent variable)	4($\frac{L_2}{1-L_2}$ dependent variable)			
ess than 8 yr.:					
35 to 44 yr	-0, 720	-0.036			
45 to 54 yr	— . 720	112			
55 to 64 yr	720	— . 579			
65 yr. or more	720	-1.691			
to 11 yr.;					
35 to 44 yr	720	038			
45 to 54 ýr	720	074			
55 to 64 ýr	720	—. 4 93			
65 yr. or more	720	-1.616			
2 yr:					
35 to 44 yr	720	025			
45 to 54 yr	720	063			
55 to 64 yr	720	390			
65 yr. or more	720	-1.456			
3 to 15 yr.:					
35 to 44 yr	720	043			
45 to 54 yr.	720	065			
55 to 64 yr.	720	385			
65 yr. or more	720	-1.420			
6 yr:					
35 to 44 yr	720	081			
45 to 54 yr.	720	108			
55 to 64 yr	720	531			
65 yr. or more	720	-1, 477			
7 yr. or more:					
35 to 44 yr.	720	078			
45 to 54 yr	720	083			
55 to 64 yr	720	404			
65 yr. or more	720	-1, 223			

SUMMARY

This paper examined 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 in 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

 $^{^{23}}$ Because the equation with participation rates as the dependent variable has no asymptote, six observations have estimated participation rates greater than 1, a completely impossible occurrence.

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.

APPENDIX A

TABLE 1.—NUMBER OF RETIREES AND PROPORTION WHO WORKED AT LEAST 1 WEEK IN 1965 BY LEVEL OF SCHOOL COMPLETED, AGE, AND RACE

	Wh	ite	Nonwhite		
Level of school completed and age –	Number	Proportion	Number	Proportion	
Less than 8 vr.:					
35 to 44 yr.	958	0.966	183	0, 940	
45 to 54 yr	1,848	. 919	223	. 910	
55 to 64 yr	2, 271	.736	126	. 722	
65 yr. or more	1, 193	. 307	121	. 438	
9 to 11 yr.:	1,155	. 307	121	. 430	
35 to 44 yr	1,687	. 976	218	. 968	
	3, 068	. 944	234	. 932	
45 to 54 yr.					
55 to 64 yr	2, 152	. 772	93	. 817	
65 yr. or more	780	. 338	33	. 455	
12 yr.:					
35 to 44 yr	8, 210	. 982	397	. 972	
45 to 54 yr	12,675	. 957	416	. 947	
55 to 64 yr	2, 576	. 810	93	. 860	
65 yr. or more	604	. 377	18	. 389	
13 to 15 yr.:					
35 to 44 yr	3, 341	. 982	107	. 972	
45 to 54 ýr	7,004	. 965	190	. 942	
55 to 64 yr	1,910	. 815	52	. 904	
65 yr. or more	715	. 386	15	. 533	
16 yr.:			10		
35 to 44 yr	507	. 915	10	. 700	
45 to 54 yr.	1.741	. 943	37	. 919	
45 to 54 yr	904	. 759	19	. 895	
55 to 64 yr	528				
65 yr. or more	528	. 362	6	. 333	
17 yr. or more:			-		
35 to 44 yr	366	. 945		. 857	
45 to 54 yr	1, 968	. 961	40	. 950	
55 to 64 yr	1, 294	. 841	12	. 750	
65 yr. or more	579	. 511	5	. 800	
Total	59, 192	. 884	2,697	. 890	

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate.

	Wh	ite	Nonwhite		
Level of school completed and age -	Number	Proportion	Number	Proportion	
ess than 8 yr.:					
35 to 44 yr.	1, 179	0. 984	228	1.00	
45 to 54 yr	1, 929	. 950	246	. 97	
55 to 64 yr.	2, 299	. 741	136	, 87	
65 vr. or more	1, 237	. 244	122	. 41	
to 11 vr.:	,				
35 to 44 yr	2,017	. 983	279	. 99	
	3, 226	.967	258	. 97	
45 to 54 yr	2, 182	. 780	- 99	. 83	
55 to 64 yr				. 38	
65 yr or more	805	. 277	34	. 30	
2 yr.:	10 050	000	COF	99	
35 to 44 yr	10, 953	. 989	605		
45 to 54 yr	13, 852	. 972	472	. 97	
55 to 64 yr.	2,682	. 826	105	. 92	
65 yr. or more	617	. 348	21	. 52	
3 to 15 yr.:					
35 to 44 yr	4, 361	. 981	148	. 97	
45 to 54 yr.	7, 731	. 971	201	. 97	
	1,970	. 828	53	. 94	
55 to 64 yr	739	. 364	15	. 66	
65 yr. or more	/35	. 304	15	.00	
6 yr.:	666	. 964	13	. 92	
35 to 44 yr	1.996	. 952	41	. 90	
45 to 54 yr.					
55 to 64 yr	956	. 763	19	. 89	
65 yr. or more	543	. 339	6	. 16	
7 er more yr.:					
35 to 44 yr.	520	. 965	13	. 84	
45 to 54 yr.	2,260	. 963	43	1.00	
55 to 64 yr	1, 361	. 821	13	1.00	
65 yr. or more	588	. 452	5	.60	
Total	67,094	. 898	3, 231	. 93	

TABLE 2.--NUMBER OF RETIREES AND PROPORTION OF RETIREES IN THE LABOR FORCE IN JUNE 1966, BY LEVEL. OF SCHOOL COMPLETED, AGE, AND RACE

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate.

APPENDIX B

TABLE 1.--NUMBER OF RETIREES REPORTING WAGE AND SALARY INCOME, AVERAGE ANNUAL WAGE AND SALARY INCOME AND STANDARD DEVIATION OF AVERAGE BY LEVEL OF SCHOOL COMPLETED, AGE, AND RACE, 1965

	White			• Nonwhite		
Level of school completed and age	Number	Mean	Standard deviation	Number	Mean	Standard deviation
ess than 8 yr.:						
35 to 44 yr.	937	5, 111	4, 141	178	3, 577	2,779
45 to 54 yr	1,822	4, 762	4, 547	219	4, 980	22, 733
55 to 64 yr.	2, 252	3,606	4, 241	126	3,149	5,34
65 yr. or more	1,203	803	1, 987	119	1,105	2, 49
to 11 yr.:	-,		-			
35 to 44 yr	1.662	6.334	15,047	203	4, 527	3,972
45 to 54 yr	3,036	5, 722	5,830	233	3, 999	2,75
55 to 64 yr	2, 144	4,268	5, 368	86	3, 534	2,90
65 yr. or more	776	996	3, 204	33	1,148	2, 49
2 yr.:						
35 to 44 yr.	7,999	6, 310	10, 994	381	5, 246	10,68
45 to 54 yr	12, 499	6, 236	13,610	409	4, 326	2,80
55 to 64 yr	2,564	4, 336	4,884	92	8, 456	50,05
65 yr. or more	595	1,348	2,980	18	497	1,32
3 to 15 yr.:		-,	•			-
35 to 44 yr	3, 276	7,409	8,051	98	9,941	43,60
45 to 54 yr	6,934	7, 144	6,736	182	5,621	3,31
55 to 64 yr	1,893	5,105	5, 520	52	3, 849	3, 42
65 vr. or more	719	2,093	5,783	14	1,681	1, 89
6 vr.:		-,			•	
35 to 44 yr	491	7,482	5,933	10	6, 529	8,76
45 to 54 yr	1,725	8,091	6,343	36	6, 451	3,66
55 to 64 yr	´892	6, 423	9, 397	18	3, 513	2,80
65 yr. or more	531	3, 270	15,438	6	864	1,93
7 yr, or more:						
35 to 44 yr.	354	9,254	8, 286	.8	5, 941	4, 32
45 to 54 yr.	1,950	10, 515	12, 418	38	7,771	5,11
55 to 64 yr	1,278	9, 385	11, 366	11	5, 703	4,64
65 vr. or more	58	4, 926	10, 551	5	9,658	8,45

Includes profits and fees of self-employed retirees.

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate:

Level of school completed and age Number Mean Standard deviation Number Mean Less than 8 yr.: 35 to 44 yr 940 1,934 4,433 186 1,621 35 to 44 yr 1,785 2,111 3,017 211 1,760 55 to 64 yr 2,216 2,510 2,878 126 1,667 65 yr. or more. 1,188 2,481 2,170 118 2,002 1,863 45 to 54 yr 3,010 2,311 1,463 232 1,901 55 to 64 yr 2,104 3,117 4,020 89 1,932 65 yr. or more. 784 3,348 3,532 31 2,814 12,914 1,958 412 1,959 55 to 64 yr 2,530 3,341 2,873 97 2,986 65 yr. or more. 600 3,680 2,359 182 2,590 35 to 64 yr 6,918 3,680 2,359 182 2,590 55 to 64 yr 1,884 4,544 </th <th></th> <th>Nonwhite</th> <th>I</th> <th></th> <th>White</th> <th></th> <th></th>		Nonwhite	I		White		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Standard deviation	Mean	Number		Mean	Number	Level of school completed and age -
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							ess than 8 vr.:
45 to 54 yr	1,519						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,787			3, 017			45 to 54 ýr
1 to 11 yr.: 1, 668 2, 032 1, 524 202 1, 863 35 to 54 yr 3, 010 2, 311 1, 463 232 1, 901 55 to 64 yr 2, 104 3, 117 4, 020 89 1, 332 65 yr. or more 784 3, 348 3, 532 31 2, 814 2 yr.: 784 3, 348 3, 532 31 2, 814 2 yr.: 8, 184 2, 248 1, 541 398 1, 795 35 to 54 yr 2, 473 2, 661 1, 5958 412 1, 595 55 to 64 yr 2, 530 3, 341 2, 873 97 2, 096 65 yr. or more 600 3, 694 4, 640 20 3, 705 3 to 15 yr.: 3, 304 3, 037 1, 895 97 2, 382 45 to 54 yr 6, 918 3, 680 2, 359 182 2, 590 55 to 64 yr 1, 883 4, 544 3, 693 52 2, 735 65 yr. or more 713 4, 758 4, 124 15 2, 644 6 yr.:	1, 226			2, 878	2, 510		55 to 64 yr.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2, 424	2,005	118	2,170	2, 481	1,188	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2, 332			1, 524			35 to 44 yr
65 yr. or more 784 3,348 3,532 31 2,814 2 yr.: 35 to 44 yr 8,184 2,248 1,541 398 1,795 45 to 54 yr 12,473 2,661 1,958 412 1,959 55 to 64 yr 2,530 3,341 2,873 97 2,086 65 yr. or more 600 3,694 4,460 20 3,705 3 to 15 yr.: 3 3,037 1,895 97 2,382 45 to 54 yr 6,918 3,680 2,359 182 2,590 55 to 64 yr 1,883 4,544 3,693 52 2,735 65 yr. or more 713 4,758 4,124 15 2,644 6 yr.: 35 to 44 yr 1,724 4,963 3,249 37 4,052 35 to 44 yr 1,724 4,963 3,249 37 4,052 55 to 64 yr 1,724 4,963 3,249 37 4,052 55 to 64 yr 529 6,537 3,331	1, 803						45 to 54 yr
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,274						55 to 64 yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4, 982	2, 814	31	3, 532	3, 348	784	65 yr. or more
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							
55 to 64 yr. 2,530 3,341 2,873 97 2,096 65 yr. or more 600 3,694 4,460 20 3,705 3 to 15 yr: 3 3,304 3,037 1,895 97 2,382 45 to 54 yr. 6,918 3,680 2,359 182 2,550 55 to 64 yr. 1,883 4,544 3,693 52 2,735 65 yr. or more 713 4,758 4,124 15 2,644 6 yr.: 495 3,767 2,012 11 2,959 45 to 54 yr. 1,724 4,963 3,249 37 4,653 55 to 64 yr. 1,724 4,963 3,249 37 4,653 7 yr. or more: 529 6,536 4,898 5 3,072 7 yr. or more: 363 4,257 2,645 11 2,681 35 to 44 yr. 1944 5,375 2,480 37 4,112	1, 425						35 to 44 yr
65 yr. or more	1,811	1,959					45 to 54 yr
3 to 15 yr.: 3, 304 3, 037 1, 895 97 2, 382 35 to 44 yr6, 918 3, 680 2, 359 182 2, 590 55 to 64 yr6, 918 3, 680 2, 359 182 2, 590 55 to 64 yr6, 918 3, 680 2, 359 182 2, 590 55 to 64 yr7, 000 1, 883 4, 544 3, 693 52 2, 735 65 yr. or more7, 13 4, 758 4, 124 15 2, 644 6 yr.: 4 yr4953 3, 767 2, 012 11 2, 959 45 to 54 yr654 1, 724 4, 963 3, 249 37 4, 052 55 to 64 yr657 3, 331 17 3, 633 65 yr. or more. 529 6, 536 4, 898 5 3, 072 7 yr. or more: 363 4, 257 2, 645 11 2, 681 35 to 44 yr	1, 492	2,096					55 to 64 yr
35 to 44 yr 3, 304 3, 037 1, 895 97 2, 382 45 to 54 yr 6, 918 3, 680 2, 359 182 2, 590 55 to 64 yr 1, 883 4, 544 3, 693 52 2, 735 65 yr. or more 713 4, 758 4, 124 15 2, 644 5 yr. ir 713 4, 758 4, 124 15 2, 644 5 yr. ir 713 4, 758 4, 124 15 2, 644 5 yr. ir 713 4, 758 4, 124 15 2, 644 5 yr. ir 1, 724 4, 963 3, 249 37 4, 052 55 to 64 yr 894 6, 537 3, 331 17 3, 633 65 yr. or more 529 6, 536 4, 898 5 3, 072 7 yr. or more: 363 4, 257 2, 645 11 2, 681 45 to 54 yr 1, 944 5, 375 2, 480 37 4, 112	3,906	3,705	20	4, 460	3,694	600	65 yr. or more
45 to 54 yr 6, 918 3, 680 2, 359 182 2, 590 55 to 64 yr 1, 883 4, 544 3, 693 52 2, 735 65 yr. or more 713 4, 758 4, 124 15 2, 645 35 to 44 yr 41 15 2, 645 12, 959 12, 959 35 to 44 yr 495 3, 767 2, 012 11 2, 959 45 to 54 yr 1, 724 4, 963 3, 249 37 4, 052 55 to 64 yr 894 6, 537 3, 331 17 3, 633 65 yr. or more 529 6, 536 4, 898 5 3, 072 7 yr. or more: 363 4, 257 2, 645 11 2, 681 45 to 54 yr 1, 944 5, 375 2, 480 37 4, 112							3 to 15 yr.:
55 to 64 ýr	1,698						35 to 44 yr
55 to 64 yr	1,773						45 to 54 yr
65 yr. or more 713 4,758 4,124 15 2,644 6 yr. : 35 to 44 yr 495 3,767 2,012 11 2,959 45 to 54 yr 1,724 4,963 3,249 37 4,052 55 to 64 yr 894 6,537 3,331 17 3,633 65 yr. or more 529 6,536 4,898 5 3,072 7 yr. or more: 363 4,257 2,645 11 2,681 45 to 54 yr 1,944 <t,5,375< td=""> 2,480 37 4,112</t,5,375<>	2, 214						55 to 64 yr
35 to 44 yr 495 3,767 2,012 11 2,959 45 to 54 yr 1,724 4,963 3,249 37 4,052 55 to 64 yr 894 6,537 3,331 17 3,633 65 yr. or more. 529 6,536 4,898 5 3,072 7 yr. or more: 363 4,257 2,645 11 2,681 45 to 54 yr 1,944 5,375 2,480 37 4,112	1,279	2,644	15	4,124	4,758	713	65 yr. or more
45 to 54 yr 1,724 4,963 3,249 37 4,052 55 to 64 yr 894 6,537 3,331 17 3,633 65 yr. or more 529 6,536 4,888 5 3,072 7 yr. or more: 363 4,257 2,645 11 2,681 45 to 54 yr 1,944 5,375 2,480 37 4,112							
55 to 64 ýr 894 6, 537 3, 331 17 3, 633 65 yr. or more: 529 6, 536 4, 898 5 3, 072 7 yr. or more: 363 4, 257 2, 645 11 2, 681 45 to 54 yr 1, 944 5, 375 2, 480 37 4, 112	1,529						
55 to 64 yr	2,256						45 to 54 yr
7 yr. or more: 35 to 44 yr	2, 501				6, 537		55 to 64 yr
35 to 44 yr 363 4,257 2,645 11 2,681 45 to 54 yr 1,944 5,375 2,480 37 4,112	311	3,072	5	4, 898	6, 536	529	65 yr. or more
45 to 54 ýr							
	2,149						35 to 44 yr
FE & CA	2,207						45 to 54 yr
	3, 155	3, 916	11	5, 121	7, 387	1, 275	55 to 64 yr
64 yr. or more 571 6, 415 3, 920 5 5, 341	5, 516	5, 341	5	3, 920	6, 415	571	64 yr. or more
		,			,		

TABLE 2.—NUMBER OF RETIREES REPORTING INCOME FROM MILITARY RETIREMENT PENSION, AVERAGE ANNUAL INCOME FROM MILITARY RETIREMENT PENSION AND STANDARD DEVIATION OF AVERAGE BY LEVEL OF SCHOOL COMPLETED, AGE, AND RACE, 1965

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate.

TABLE 3.—NUMBER OF RETIREES REPORTING OTHER FAMILY INCOME, AVERAGE OTHER FAMILY INCOME, AND STANDARD DEVIATION OF AVERAGE BY LEVEL OF SCHOOL COMPLETED, AGE, AND RACE, 1965

		White		Nonwhite		
Level of school completed and age	Number	Mean	Standard deviation	Number	Mean	Standard deviation
Less than 8 yr.: 35 to 44 yr 45 to 54 yr 55 to 64 yr 65 or more yr	934 1,810 2,245 1,193	937 1,033 971 640	1, 675 2, 131 4, 655 1, 560	178 220 124 118	1,026 2,512 548 413	2, 543 24, 571 1, 347 1, 073
9 to 11 yr.: 35 to 44 yr 45 to 54 yr 55 to 64 yr 65 or more yr	1,662 3,012 2,130 762	1,136 1,098 983 920	2, 014 1, 993 2, 785 2, 742	205 229 85 31	891 928 1,463 1,027	1,617 1,737 2,546 2,075
12 yr.: 35 to 44 yr 45 to 54 yr 55 to 64 yr 65 or more yr	7,986 12,464 2,552 588	1, 182 1, 297 1, 122 842	2,355 3,870 2,733 1,963	379 410 92 19	1,271 1,199 929 1,026	2, 039 2, 081 1, 598 2, 720
13 to 15 yr.: 35 to 44 yr 45 to 54 yr 55 to 64 yr 65 or more yr	3,264 6,904 1,881 719	1,346 1,376 1,214 1,309	5, 845 3, 399 2, 945 3, 020	94 182 51 14	1,775 1,622 1,338 1,284	4, 003 2, 352 1, 726 1, 775
16 yr.: 35 to 44 yr 45 to 54 yr 55 to 64 yr 65 or more yr	490 1, 717 887 533	1, 481 1, 526 1, 571 2, 371	2, 204 2, 968 5, 947 13, 547	9 36 18 6	2,567 1,700 1,269 445	3,100 3,269 2,781 995
17 or more yr.: 35 to rr yr. 45 to 54 yr. 55 to 64 yr. 65 or more yr.	353 1,940 1,269 575	1,516 1,547 1,553 1,556	3, 280 3, 178 4, 544 3, 399	8 37 11 5	1,463 3,255 1,709 1,610	2, 612 3, 939 3, 158 2, 274

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate.

		White		Nonwhite		
Level of school completed and age -	Number	Mean	Standard deviation	Number	Mean	Standard deviation
Less than 8 yr.:						
35 to 44 yr	930	116	501	176	197	513
45 to 54 yr.	1.811	163	670	218	125	396
55 to 64 yr	2, 244	333	962	123	278	765
65 yr. or more	1, 194	1.066	1,942	119	606	947
9 to 11 yr.:	-,	-,	-,			
35 to 44 yr.	1.652	115	538	204	125	412
45 to 54 yr	3,012	168	607	228	127	426
55 to 64 yr	2, 132	356	1, 191	84	134	378
65 yr. or more	773	1,291	3,072	31	650	657
12 yr.:		-,	•, •··=		••••	••••
35 to 44	7,983	223	8, 964	377	114	385
45 to 54 yr	12, 454	256	8, 089	409	153	568
55 to 64 yr	2, 554	378	1, 344	92	179	472
65 vr. or more	593	1, 414	2,200	19	716	892
13 to 15 yr.:		-,	-,			
35 to 44	3, 251	194	749	96	248	636
45 to 54 yr	6, 893	266	891	180	201	649
55 to 64 yr	1,880	507	1.263	51	136	668
65 yr. or more	717	2, 227	5, 226	14	987	1,122
16 yr.:	/1/	2,227	0, 220	• 1	507	*, ***
35 to 44 yr	487	354	859	9	92	202
AS to 54 ur	1,716	632	1. 897	36	121	404
45 to 54 yr	883	1.092	2, 208	18	326	792
55 to 64 yr	529	3, 307	5, 532	6	827	1,462
65 yr. or more	525	5, 507	5, 552	U	047	1,402
17 yr. or more:	352	361	938	8	100	162
35 to 44 yr	1,939	573	1,353	36	269	577
45 to 54 yr		1.335	2,763	11	1.475	2, 832
55 to 64 yr	1,266			5		
65 yr. or more	576	3, 626	5, 056	5	3,138	4, 968

TABLE 4.—NUMBER OF RETIREES REPORTING OTHER ANNUAL (NONWAGE) INCOME, AVERAGE OTHER ANNUAL (NONWAGE) INCOME, AND STANDARD DEVIATION OF AVERAGE BY LEVEL OF SCHOOL COMPLETED, AGE, AND RACE, 1965

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate

TABLE 5.—NUMBER OF RETIREES REPORTING MONTHLY EXPENDITURE AT COMMISSARY, AVERAGE MONTHLY EXPENDITURE AT COMMISSARY, AND STANDARD DEVIATION OF AVERAGE BY LEVEL OF SCHOOL COMPLETED, AGE, AND RACE, 1965

		White		Nonwhite		
Level of school completed and age -	Number	Mean	Standard deviation	Number	Mean	Standard deviation
ess than 8 yr.:						
35 to 44 yr	1, 177	53	40	228	48	37
45 to 54 yr	1, 927	45	38	245	45	36
55 to 64 yr	2, 292	36	35	136	42	34
65 yr. or more	1,242	26	31	126	38	31
to 11 yr.:	-,					
35 to 44 yr	2.071	55	40	279	56	35
45 to 54 yr	3, 221	48	38	258	48	35
55 to 64 yr	2, 178	41	36	99	48	33
65 yr. or more	808	35	33	34	42	30
2 yr.:		••		•		••
35 to 44 yr	10,947	60	39	601	56	35
45 to 54 yr	13,833	55	38	472	50	35
	2,679	46	36	105	43	35
55 to 64 yr	616	36	34	21	38	27
65 yr. or more	010		34	21	50	21
3 to 15 yr.:	4 000		37	147	60	20
35 to 44 yr	4, 362	66	3/	147		36 35
45 to 54 yr	7,736	62	37	202	59	5
55 to 64 yr	1, 972	51	36	53	48	3
65 yr. or more	734	36	34	15	40	29
Syr.:						
35 to 44 yr	669	69	37	13	73	30
45 to 54 yr.	1,996	61	37	41	54	39
55 to 64 ýr	956	47	37	19	57	23
65 yr. or more	541	33	33	6	31	34
7 yr. or more:						
35 to 44 yr	519	67	38	13	62	35
45 to 54 yr	2,252	60	38	43	65	35
55 to 64 yr	1, 357	46	37	13	44	38
65 vr. or more	587	31	33	Š	18	17

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate S3-200-67-pt. IV-14 •

APPENDIX C

MEAN WEEKS WORKED IN 1965 OF WHITE RETIREES BY LEVEL OF SCHOOL COMPLETED AND AGE

	Years of school completed						
Age in 1965	Less than 8	9 to 11 yr.	12 yr.	13 to 15 yr.	16 yr.	17 or more yr.	
35 to 44 yr 45 to 54 yr 55 to 64 yr 65 or more yr	42. 8 40. 0 31. 4 8. 1	44. 9 42. 9 33. 2 9. 5	45. 2 43. 9 34. 9 12. 2	45. 8 44. 6 34. 1 12. 8	40. 5 42. 5 31. 9 12. 2	42. 3 43. 5 36. 5 9. 3	

Source: Office of the Assistant Secretary of Defense (Manpower), Compensation and Career Development Directorate.

Appendix D

COEFFICIENTS AND STANDARD ERRORS OF DUMMY VARIABLES USED IN THE ANALYSIS

	Dependent variable								
	Lı	L1	L ₂	Lı	L1/1-L1	L1/1-L1	L2/1-L2	L ₂ /1-L ₂	
Age dummies:									
45 to 54 yr	·····	0.0033		-0.0145 (.0675)		*-0.6368 (.2383)	*-0.2936 (.1652)	t-0.8393 (.2350)	
55 to 64 yr	*-0.0639 (.0330)	0506 (. 1170)		0637 (.1772)	†-0.1555 (.1876)	†-2.066 (,6251)	†—. 9983 (. 3199)	t-2.728 (.6166)	
65 yr. or more.	• 4242 (.1190)	3865		3495 (. 3664)		1-4.472 (1.293)		†-4.392 (1.275)	
Education dummie		(12.21)		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		()		• •	
9 to 11 yr		.0066		0039 (. 0569)	. 2775 (. 2339)	. 03178		*—. 0493 (. 1979)	
12 yr	. 0227 (. 0133)	. 0399 (. 0579)	†0.0812 (.0217)	. 0310 (. 0874)	*. 6967 (. 2998)	†. 02005 (. 3092)	†. 4498 (. 1288)	+. 0711 (. 3050)	
13 to 15 yr		. 0313 (. 1045)	t. 0699 (. 0241)	0198 (.1582)	ti.210 (.4607)	† 1700 (. 5583)	*. 3245 (. 1479)	† 5387 (, 5507)	
16 yr	*0793 (.0312)	0327			1.159 (.6963)	-1.156 (.9094)		— 1. 469 (. 8970)	
17 yr. or more_	* 0930 (. 0369)	0399 (. 1723)		1708 (. 2608)	f. 8244 (. 8664)	-1.195 (.9202)	4491 (. 3114)	-1.542 (.9076)	

†Significant at the 0.01 level (2-tail test). *Significant at the 0.05 level (2-tail test).

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THE EFFECT OF NONVESTED PENSIONS ON MOBILITY: A STUDY OF THE HIGHER EDUCATION INDUSTRY*

BY MELVIN LURIE**

Examining the higher education industry, this study tests the view that nonwage benefits such as nonvested pensions have resulted in the immobilization of labor. Separation experiences of institutions having vested and nonvested plans are compared, the data showing that, in the aggregate, faculty in institutions of higher education do not seem to allow their mobility decisions to be influenced by losses in pension plan equities.

In the past two decades, the American labor force has taken an increasing share of its income in the form of nonwage benefits. The impact of this change on the long-term voluntary quit rate has been regarded by many economists¹ as detrimental to the economy. Some of the reasons for this view have been summarized by A. M. Ross in this way:

"It is said that seniority systems, health and welfare plans, and negotiated pensions have chained the worker to his job; that the adaptability and flexibility of the labor force are being sacrificed; and that a new industrial feudalism is being built. The crux of the problem, it is held, is that the worker can no longer afford to quit his job."²

Ross, however, after studying the movement of quit rates in manufacturing industries from 1910 to 1956 dissented from the majority view and concluded that "little evidence can be found for the proposition that labor resources have become immobilized."³

The quit rate series computed by Ross showed that the two major causes of quit rate variation were the business cycle and the dislocations of war. Since Ross' interest was limited to the trend of quit rates, he removed the effect of the business cycle from his analysis by considering only years in which the rate of unemployment was between 3 and 6 percent of the civilian labor force. Furthermore, he omitted from his analysis the war periods, 1917-20 and 1942-47. With the remaining years, he estimated that the monthly quit rate in manufacturing had decreased from an average of 6.2 percent for the years 1910-12, 1920, and 1923, to an average of 1.5 percent for the years 1949-50 and 1954-56.

^{*}Reprinted from Industrial and Labor Relations Review, vol. 18, No. 2, January 1965.

^{**}Professor, University of Wisconsin, Milwaukee, Wis. The author wishes to acknowledge the helpful comments of H. Gregg Lewis and Elton Rayack on an earlier draft of this article.

¹ For example, see Ewan Clague, "Long Term Trends in Quit Rates," Employment and Earnings, December 1956, vol. 3, p. vil. ³ A. M. Ross, "Do We Have a New Industrial Feudalism," American Economic Review, vol. 48, December 1958, p. 903. ⁵ Ibid., p. 918.

If the data had shown that a sharp decline in quit rates had occurred only in the years following World War II, one could argue that nonwage benefits were indeed chaining the worker to his job. But Ross shows that the sharpest decline in quit rates occurred during the middle 1920's, when nonwage benefits were a small fraction of total benefits. According to Ross, the decline in quit rates in the 1920's was due to a sharp drop in immigration, to an increase in the skill composition of the labor force, and to the adoption by management of the human relations approach to personnel administration. The continued decline in quit rates from the 1920's through the 1950's is explained by Ross primarily in terms of the spread of unionism, the aging of the labor force, and the greater stability of manufacturing employment.

Ross' conclusions rest largely on a period comparison of quit rates in American manufacturing industries over four decades. This series was pieced together from three sources and, as Ross readily admits, "there are grave difficulties in using the available time series for comparative purposes." ⁴ Since Ross' conclusions run counter to my expectations and apparently to those of most economists, it seemed appropriate to evaluate the same question that Ross has raised using a different method and different data. Instead of the hypothesis that all nonwage benefits reduce mobility, I restricted my hypothesis to the one nonwage benefit that is considered the major deterrent to mobility—the pension system; instead of testing by time series, I tested by cross-section analysis; and instead of studying all manufacturing industries, this study is restricted to one industry and that industry happens to be in nonmanufacturing.

The crucial factor determining cost of movement under alternative pension plans is the extent to which the plan is vested in the employee. There are three predominant kinds of vesting arrangements. The first is a fully vested plan with immediate vesting-this plan guarantees the employee immediate equity in his pension, based on all of the employer's contributions in the employee's behalf, should his employment be terminated, voluntarily or involuntarily, before he reaches retirement age. The second is a nonvested plan—this plan allows the employee to withdraw only his contribution to the pension system (in some instances without interest) if his employment is terminated before he reaches retirement age.⁵ These plans represent the extremes in terms of their cost effects on an employee's propensity to move. A third type of pension plan with an intermediate cost effect is a deferred vesting plan; such plans become vested after an employee meets specified prerequisites, such as a minimum length of service with the firm or a minimum age or both.

To do the kind of industry study of employee mobility described above, one needs an industry: (1) In which there are many firms having pension systems; (2) for which information is available concerning the extent to which these pensions are vested; and (3) in which there is almost an equal distribution of firms with fully vested and nonvested plans. In a study of 300 selected pension plans in American industry in 1958, Koladrubetz found that, although vesting was provided in 174 plans, only one of these plans provided for immediate,

⁴*Ibid.* ⁵ If the plan is noncontributory, then the employee receives nothing upon termination of his employment before retirement age is reached.

full vesting.⁶ The majority of "vested" plans (154) provided for deferred vesting, with 75 percent of the plans specifying a prerequisite of either 10 or 15 years of service. On the basis of this study I concluded that one was unlikely to find a manufacturing industry with a large enough number of immediate, fully vested plans to allow a comparison to be made between mobility under contrasting vesting schemes. Among nonmanufacturing industries, only the higher education industry was found to have the kind of vesting distribution of pension systems that would allow an interfirm cross-section analysis to be made.

DATA AND METHODOLOGY

To make a cross-section analysis of the mobility (herein defined as voluntary separations) of employees in firms with vested as contrasted to employees in firms with nonvested pension plans in the higher education industry, one needs (1) data to classify pension plans in American colleges and universities according to the extent of vesting; (2) data on the voluntary separation rates of faculty, by institution; and (3) data to standardize the sample—that is, to hold "constant" the impact on voluntary separation rates of factors other than the extent of vesting.

Greenough and King's study of pension plans in American colleges and universities furnishes a description of the vesting provisions in most institutions of higher education (hereafter, IHE).⁷ The voluntary separation rates of faculty, by institution, have, to my knowledge, never been collected; therefore, these data were secured by mailed questionnaires. Data to standardize the sample were drawn from higher education source books, of which the U.S. Office of Education's annual Education Directory was the most useful. Section 1 of the appendix contains a detailed discussion of the collection and use of the data.

To standardize the sample, a deflation procedure was used; that is, I divided the voluntary separation rates of one academic rank of faculty by the rates of another rank of faculty in the same institution. If, in a given institution, a factor (other than the extent of vesting) affects the average separation rate of faculty in the four academic ranks in the same direction and in approximately the same amount, then the deflation process provides a method of minimizing the effect of this factor on relative (interfirm) separation rates. Section 2 of the appendix is devoted to a more complete treatment of the methodology used.8

THE EFFECT OF NONVESTED PENSION PLANS ON FACULTY SEPARATION RATES

What predictions can be made about the voluntary separations of faculty under vested and nonvested pension plans? Voluntary separation under a fully vested pension plan is almost without financial

⁶W. W. Koladrubetz, "Vesting Provisions in Pension Plans," Monthly Labor Review, vol. 82, July 1959, pp. 745-746. ⁷W. C. Greenough and F. P. King, *Retirement and Insurance Plans in American Colleges*, New York, 1959. ⁸ For a similar use of the deflation procedure, see M. Lurie, "The Effect of Unionization on Wages in the Transit Industry," *Journal of Political Economy*, vol. 69, December 1961, p. 562.

cost; for the faculty member, if he moves, receives during his retirement years a sum representing the contributions of his employer as well as his own contributions for the years of covered service (plus accumulated interest). The nonvested plan, however, imposes a heavy financial burden on the faculty member who leaves an institution before retirement age.

Estimates of the financial cost of movement under a nonvested system are given in table 1. It is clear from these data that the financial cost of leaving an institution with a nonvested plan increases at a decreasing rate with years of covered service; and that, after 15 years of service, for example, the cost of moving to another position becomes large enough (\$4,997 lump sum or \$333 annually to retirement age) to cause a senior faculty member to deliberate carefully before departure and, in some cases, to decide against leaving."

TABLE 1FINANCIAL COST OF MOVE	AENT UNDER A NONVESTED PENSION SYSTEM 1
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Age individual leaves nonvested plan	Net additional sum needed by individual to make up for lost pension benefit	
(1)	(2)	(3)
5 0 5 0 6 0	\$561 2,020 4,997 9,458 16,742 26,881	\$28 116 333 781 1,925 5,725
Assume salary scale as follows: 30 to 34		

50 to 65..... Notes: The net additional sum needed by a faculty member to buy the same retirement benefits that he would have received had he not moved is given in columns (2) and (3). Column (2) is the lump-sum figure and column (3) is the annual amount he would have to pay until retirement age is reached (assumed to be 65). The costs of movement under a non-vested system have been determined in the following manner: first, I assumed an age of entry into the pension system (age 30), a salary scale, a contribution rate (5 percent), and an interest rate (3 percent); second, I computed the total pension income lost; third, the total pension income lost was converted to the single sum needed to replace the lost benefit; and fourth, I subtracted from the lump-sum cost, the amount of the individual's contribution returned on leaving the pension system (computed at 3 percent compound interest).

The question to be considered here, however, is not whether it is more costly to move under a nonvested pension plan (for it clearly is), but whether faculty consider this cost a major obstacle to their mobility. If they do, in fact, act like Homo Economicus, then, other things equal, voluntary separation rates will be lower in IHE with nonvested plans as compared to separation rates in IHE with vested plans. Of course, the crucial problem in this study and all cross-section studies is whether the comparison is made with "other things equal." As indicated earlier, the methodology of correcting for the effects of other factors is discussed in the appendix, section 2.

The age of faculty is one of the factors discussed in the appendix as having an impact on separation rates; for it is clear that mobility

[•] Few components of faculty income other than pensions have the distinctive feature of increasing in value with increased employment. Life insurance, hospitalization, surgical, and major medical plans can be bought by the mobile professor at most IHE at about the same price. The rewards and privileges forthcoming to senior staff for long-time loyalty and service, although often not quantifiable, undoubtedly reduce the mobility of professors. But this kind of immobility is likely to be distributed randomly among all IHE; or, at least, we do not expect that general academic immobility will be associated with the fact that an institution has a vested or nonvested pension system.

decreases with advancing age. The age distribution of faculty, by institution, was not available to me. Hence, academic rank was used to approximate the value of this variable. Academic rank was also used as a surrogate for the length of service of faculty. If age and seniority do vary systematically with rank, the deflation process will eliminate their effects on relative separation rates. However, we would like to eliminate only the effect of age-for, only by varying the length of covered service can we bring to the surface the differential effects on voluntary separation rates of vested and nonvested pension plans.

A one step computation was used that allowed the length of service to vary, and at the same time allowed for the correction of the effects of other factors by the deflation of the average separation rate of one academic rank of faculty by the rate in another rank in the same institution. To accomplish both ends, three ratios of average separation rates for each IHE were computed : full professor/associate professor, full professor/assistant professor, and full professor/instructor.10 Since the denominators represent fewer years of covered service than the numerators, the values of each of these ratios should be less than unity; and in each of the 437 IHE studied, the ratios were less than one. Furthermore, the ratios were arranged with decreasing covered service in the denominators; therefore, the values of the ratios should decrease and, indeed, they did.

The test of the hypothesis that nonvested pension systems reduce the voluntary separation rates of university professors may now be made by comparing, for given lengths of service, voluntary separation rates in vested and nonvested IHE. If the vested ratios are larger than the nonvested, the hypothesis is supported; if smaller, the hypothesis is rejected.

TABLE 2.--VOLUNTARY SEPARATION RATES, ACCORDING TO LENGTH OF COVERED SERVICE, IN VESTED AND NONVESTED INSTITUTIONS OF HIGHER EDUCATION, 1959

Relative covered service 1	Vested	Nonvested	Ratio of vested to nonvested
	(1)	(2)	(3)
Professor or associate professor Professor or assistant professor Professor or instructor	0.311 .272 .135	0.526 .273 .156	0.591 .996 .865

1 As measured by academic rank.

As is shown in table 2, the ratios of separation rates in nonvested IHE exceed those in vested IHE in each of the three measures of covered service.¹¹ Thus, the hypothesis appears to be rejected, and it must be concluded that, for the higher education industry as a whole, nonvested pension systems do not hinder mobility. As indicated in the introductory section, this is the same conclusion reached by Ross after studying quit rates in American manufacturing industries.

¹⁰ The ratios involving instructor and assistant professor are probably less reliable than those involving associate professor. For, in the lower ranks, it is not always easy to dis-tinguish between a voluntary and an involuntary separation. Say you are an assistant professor and you know that you will not receive tenure when this decision is made next year: therefore, you resign this year. This separation would probably be recorded as volun-tary. Thus, there is some overstatement of voluntary separation rates at the lower ranks. ¹¹ The sample of IHE underlying table 2 consists of 339 colleges and 98 universities; i.e., all of the IHE that supplied separation rates except 83 IHE with deferred vesting or vested pension systems adopted after 1951.

Another way of looking at the data is in terms of column (3) of table 2, which is computed by dividing the vested separation rates in column (1) by the nonvested rates in column (2). Column (3), "faculty sensitivity ratio," measures faculty sensitivity to losses in retirement equity resulting from voluntary departure under a nonvested pension system. If the faculty sensitivity ratio is less than one, as the three ratios are in table 2, then faculty do not consider equity losses in their retirement fund as an impediment to their mobility; a ratio exceeding one would indicate the converse. Subsequent tables present relative separation rates in terms of faculty sensitivity ratios.

SUBDIVISIONS OF SAMPLE

We now turn to subdivisions of this sample to see whether the hypothesis continues to be rejected. The subdivision method allows comparisons to be made between separation rates of more homogeneous classes of IHE. Some of these subclasses, however, contain a small number of observations. Therefore, there may be large sampling error present. The faculty sensitivity ratios for "colleges" and "universities" separately are presented in table 3.¹² These data show that there is a marked difference in the attitudes of college and university faculties in willingness to consider pension equities as a casual factor in their mobility decision. Although the sensitivity ratios of college faculties continue to be less than unity, indicating that voluntary separation rates in nonvested colleges exceed those in vested colleges, the ratios for university faculties are substantially greater than unity and, in addition, they are uniform for the three lengths of service considered. Thus, among faculty in "universities," the extent to which a pension plan is vested appears to be one of the factors considered when the decision is made as to whether or not to resign.

. TABLE 3.—FACULTY SENSITIVITY RATIOS, ACCORDING TO LENGTH OF COVERED SERVICE, IN VESTED AND NON-VESTED COLLEGES AND UNIVERSITIES, 1959

Relative covered service	Colleges	Universities
Professor/associate professor Professor/assistant professor	0.418	1. 293
Professor/assistant professor Professor/instructor	. 884 . 698	1.226 1.269

How can this differential behavior between "college" and "university" faculty be explained? We can only speculate. I suspect that colleges and universities attract faculties with different mobility sensitivities because of different product-mixes; i.e., colleges produce primarily higher eduction, while universities produce higher education and research. Monetary success in higher education depends to some extent on actual mobility or the threat to move; and this mobility depends in turn largely on the reputation acquired in research and publication as contrasted to teaching. The faculty member with substantial

¹² Same sample as in table 2.

investment in his research training knows in advance that his opportunities to further his research potential and to use it for advancement will be greater in a university than in a college. On the other hand, the faculty member without research potential will probably choose to be employed by a college for he knows that his market power will be low and mobility for him will not offer large rewards. One might argue then that the university faculty member, on the average, has a propensity for mobility and, if he finds himself in, or is clever enough to choose, an institution with a vested pension plan, he might very well take advantage of the chance to make a costless change; the college teacher, however, has little inclination to move and, therefore, will probably be indifferent to the extent to which his pension plan is vested. Even if the pension is vested, the college teacher may not take advantage of this feature.

TABLE 4.—FACULTY SENSITIVITY RATIOS, ACCORDING TO LENGTH OF COVERED SERVICE, IN COLLEGES AND UNIVERSITIES, BY TYPE OF CONTROL, 1959

Relative covered service	Colle	eges	Universities	
	Privately controlled	Publicly controlled	Privately controlled	Publicly controlled
Professor/associate professor Professor/assistant professor Professor/instructor	1.547 .986 .609	(1) 0. 010 . 002	4. 688 1. 975 2. 279	0.654 1.648 1.014

1 No voluntary separations at rank of associate professor among publicly controlled vested colleges.

Table 4 presents sensitivity ratios for colleges and universities subdivided by type of control. In the five situations where comparisons can be made, the sensitivity ratios in privately controlled IHE are substantially greater than those in publicly controlled IHE. There is, however, large sampling error in these estimates, for only a small fraction of publicly controlled IHE have vested pension plans. The university sample probably gives more accurate results because the percentage of vested universities that are publicly controlled and the percentage of nonvested universities that are privately controlled are somewhat larger than in the college sample.¹³ Also the universities have fewer factors affecting voluntary separation rates than the colleges.¹⁴ It appears from the data in table 4 that the mobility decision of faculty in privately controlled colleges and universities is more readily influenced by equity losses in pension systems than the mobility decision of faculty in publicly controlled colleges and universities.

¹³ Among colleges, 91 percent of those that are privately controlled have vested pension systems; among universities, 80 percent of those that are privately controlled have vested pension systems.

Systems: among universities, so percent of those that are privately controlled have verted pension systems. ¹⁴ A much smaller percentage of universities are affiliated with church groups and very few universities have faculties predominantly female or Negro. In the sample of 98 universities, six are affiliated with religious groups (one Protestant and five Roman Catholic), thus the influence of religious control on separation rates cannot be large. The largest percentage of female faculty among universities is at the University of Hawaii where 35 percent of the total faculty are women. No information is available on the percentage of Negro faculty in universities but this figure is assumed to be small. It is probable, therefore, that neither sex nor the race composition of faculty in particular universities is large enough to affect relative separation rates.

Deletion encode comine	Publicly controlled		
Relative covered service -	South	Non-South	
Professor/associate professor Professor/assistant professor	0.185	0. 514 1. 020	
Professor/instructor	(1)	. 648	

TABLE 5.-FACULTY SENSITIVITY RATIOS, ACCORDING TO LENGTH OF COVERED SERVICE, IN PUBLICLY CON-TROLLED UNIVERSITIES. BY TYPE OF CONTROL AND REGIONAL LOCATION, 1959

¹ No voluntary separations among instructors in vested southern universities.

The data can be further subdivided to pick up the attitudes of other subsections of faculty toward movement under nonvested pension systems. Continued subdivision, however, reduces the sample so that the results become less reliable. One more subdivision is, however, made in table 5 to find out whether faculty in southern universities are as mobile as faculty in nonsouthern universities.¹⁵ Type of institution and control of institution are held constant. The faculty sensitivity ratios seem to indicate that nonsouthern faculty are more aware of the financial costs of moving under nonvested systems than their southern colleagues.

The calculated choice of faculty may also explain differences in faculty sensitivities toward vesting that appear to be based on control of and regional location of IHE. Again, if a faculty member desires research opportunity and anticipates mobility, he may choose privately as opposed to publicly controlled IHE and may prefer being employed in nonsouthern rather than southern IHE. Thus, the faculty with the most effective market power are likely to be employed in vested universities that are privately controlled and located in the non-South; the faculty with the least market power are likely to be employed in nonvested colleges that are publicly controlled and located in the South.

Let us now turn to the data on faculty salaries. The USOE salary survey for 1959-60 supplied the average salary,16 by academic rank, for each IHE (over 1,400) that responded to their questionnaire. From these data, I took the salaries, by rank, for those IHE that also re-sponded to my questionnire.¹⁷ I weighted the salary in each rank by the number of faculty in the rank for each IHE, and, after classifying each institution as vested or nonvested, was able to compute a weighted vested and nonvested salary by rank for all IHE, and for colleges and universities separately.18

These data are presented in table 6. The absolute salary differentials between all vested and nonvested IHE are not large nor are the differentials in the same direction. Our interest, however, lies with the ratios of salaries; for, if the deflation process is to be effective in eliminating salary differentials as a factor explaining relative voluntary separation rates, these ratios must be similar in vested and nonvested IHE. The salary ratios for all IHE suggest that there is vol-

 ¹⁵ There were 17 southern universities, of which only one had a vested pension system;
 ¹⁶ there were 45 nonsouthern universities, of which 12 had vested pension systems.
 ¹⁹ U.S. Office of Education, "Higher Education Planning and Management Data, 1959-60,"
 ¹⁷ Among the colleges, 250, or 74 percent, of my sample were present in the USOE salary
 ¹⁸ Copies of the original salary runs supplied by W. Robert Bokelman of USOE made this computation possible

computation possible.

untary movement from nonvested to vested IHE; thus, the relative voluntary separation ratios of table 2 understate the impact that vesting has on voluntary quits.

TABLE 6.—FACULTY SALARIES AND SALARY RATIOS BY RANK, EXTENT OF VESTING, AND TYPE OF INSTITUTION, 1959-60

	Average salaries					
	All IHE		Colleges		Universities	
	Vested	Nonvested	Vested	Nonvested	Vested	Nonvested
Professor Associate professor Assistant professor Instructor	\$10, 100 7, 400 6, 200 5, 200	\$9, 100 7, 300 6, 300 5, 200	\$8, 400 6, 600 5, 800 5, 200	\$8,600 7,100 6,300 5,400	\$11,200 7,900 6,500 5,300	\$9, 500 7, 400 6, 200 5, 000
	Salary ratios					
Professor/associate professor Professor/assistant professor Professor/instructor	1.37 1.64 1.94	1.25 1.45 1.75	1.27 1.45 1.62	1.21 1.37 1.59	1.42 1.72 2.11	1.28 1.53 1.90

Source: U.S. Office of Education, "Higher Education and Management Planning Data," 1959-60.

Much of the movement from one academic job to another probably takes place between "colleges" or between "universities." Therefore, a breakdown of average salaries and salary ratios, by rank and type of institution, is also presented. In table 6, the average salary in nonvested colleges is slightly higher (\$200 to \$500) for all ranks than that in vested colleges. But, for the universities, the average salary in vested universities is slightly higher (\$300 to \$500) than that in nonvested universities, except for the rank of full professor where the salary paid in vested universities is substantially higher (\$1,700) than that paid in nonvested universities. The salary ratios are, in fact, quite close for "colleges" and I, therefore, anticipate that salary differentials between vested and nonvested colleges will not affect the conclusions drawn on the basis of the voluntary separation data in table 3. For "universities," however, it is clear from the ratios in table 6 that salary differentials in favor of vested universities understate the extent of the voluntary movement between universities due to vested pension plans.

It does seem strange that the salary differentials among vested and nonvested universities range from \$300 to \$500 at the three lower ranks, and then jump to \$1,700 at the full professor rank. If this is a persistent differential at the full professor rank, why is it not diminished by the movement of full professors from nonvested to vested universities?

It may very well be that salary differentials between vested and nonvested universities are the result rather than the cause of differences in voluntary separation rates. One could argue that, since the full professor in a nonvested institution is "locked in" by his pension plan, he pays a price for his immobility in lower salary as compared with his counterparts in vested institutions and with his more mobile junior colleagues in the same institution. If one assumes that an administration seeks, with the income available for professorial services, to maintain and improve its instruction and research, does it not follow that it will, unintentionally to be sure, transfer income from those who are not mobile to those who are? If administrators do act in this way, then the salary structure of nonvested IHE will be compressed and this narrowing will show up, as it does in table 6, with an increasing differential in salaries between vested and nonvested IHE as academic rank advances.

The data on average faculty salaries, by rank, presented in table 6, tells very little about the dispersion of the salaries of faculty around the mean salary of each rank. Large salary dispersion may mean that the college or university is giving substantial cash awards to its most competent faculty in order to reduce their mobility. If salary dispersion is greater in vested than in nonvested IHE, then the voluntary separation rate because of vesting will be understated in the present study.

Why would a college or a university want to have a vested pension system? Vesting has several undesirable features: first, it is more expensive, for the IHE has to pay the retirement benefits of those who leave as well as those who stay; and second, vesting makes it easier for senior faculty to move. Since most IHE use an elaborate weedingout process to select their tenured faculty, it would seem unwise for them, in effect, to subsidize their departure. If IHE do adopt vesting, it must mean that they are either unaware of these consequences or, what is more likely, they have other methods of discouraging the mobility of the senior staff. The most important immobilizing device is money. Thus, the so-called merit increase is really a tax on mobility; it is the antithesis of severance pay.

The data on salary dispersion in higher education were not available according to the extent of vesting of pension systems. I have, therefore, used "control" as a surrogate for vesting; for, as will be recalled, most privately controlled IHE have vested pension systems and most publicly controlled IHE have nonvested systems. The dispersion data are presented by type of IHE, for again "colleges" and "universities" show distinctly different results. Quartile deviations, by control and type, are presented in table 7. It should be noted that privately controlled (vested) universities have wider salary dispersion than publicly controlled (nonvested) universities; thus, for universities, voluntary separations because of vesting are understated in table 3. But, for colleges, the pattern is reversed—publicly controlled (nonvested) colleges have wider salary dispersion than privately controlled (vested) colleges, and, thus, the voluntary separations because of vesting in table 3 are overstated. The conclusions drawn earlier from the separation data have been reinforced. Nonvested pension systems retard the mobility of university faculty members but do not affect the mobility of college faculty members.

TABLE 7.—QUARTILE DEVIATIONS IN FACULTY SALARIES IN COLLEGES AND UNIVERSITIES, BY RANK AND
CONTROL OF INSTITUTION, 1961-62

	Colleges		Universities		
	Privately controlled	Publicly controlled	Privately controlled	Publicly controlled	
	(vested)	(nonvested)	(vested)	(nonvested)	
Professor	585	2, 660	2, 035	1, 225	
Associate professor		770	810	550	
Assistant professor		525	555	360	
Instructor		745	185	395	

Source: U.S. Office of Education, "Higher Education Planning and Management Data," 1962.

SUMMARY AND CONCLUSIONS

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 IHE showed that, for the higher education industry as a whole, mobility was as large in nonvested IHE as it was in vested IHE. This finding supported Ross' conclusions that labor resources have not become immobilized because of the increased use of pensions and other non-wage benefits.¹⁹

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 suggested that the differential behavior of faculty could be explained, at least in part, by differences in research potential. We also speculated that those faculty 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 IHE were more sensitive to vesting than faculty in publicly controlled IHE, and (b) faculty in nonsouthern IHE were more sensitive to vesting than faculty in southern IHE. Again, we speculated that faculty who anticipated gains from being mobile would choose employment in privately controlled nonsouthern IHE.

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. For example, university faculty are affected by the vesting of pension plans. It may be suggested that, if the aggregate data on industrial workers were subdivided by occupation, similar differential effects would be observed.

¹⁹ For a similar conclusion based on an attitude survey of male production workers in two Columbus, Ohio, firms, one with and one without a pension plan, see H. S. Parnes, "Workers' Attitudes to Job Changing: The Effect of Private Pension Plans," in Gladys L. Palmer et al., "The Reluctant Job Changer," Philadelphia, 1962.

Appendix

1. THE DATA

In their comprehensive study of retirement plans in American colleges, Greenough and King (see footnote 7) sent questionnaires to all IHE (1,377) offering at least the bachelor's degree. They received 1,096 usable replies. To obtain a more homogeneous group of IHE, the present study is limted to the 637 IHE replying to Greenough and King that (1) had liberal arts programs, and (2) had been accredited by one of the six regional accrediting associations in the United States. Questionnaires requesting information on faculty separations were sent to these 637 IHE, and 504 (79 percent) replied. The 504 responding IHE represented 55 percent of all faculty and 89 percent of all faculty in accredited IHE in the United States.

Each IHE was asked to supply the number of voluntary separations (termination of employment initiated by the employee); the number of involuntary separations (termination of employment initiated by the employer); and a catchall category of terminations for military duty, disability, and the like. These data were collected, by academic rank, for specified departments. (See below.) The total number of faculty in each of these departments, by rank, was also collected. From these data, percentage separation rates were computed, by rank and department (really subject field taught), for the faculty in each IHE responding.

As indicated above, the subject field to which a faculty member devotes a major part of his teaching time (as indicated by his department affiliation) is held constant in this study. The voluntary separation rates of faculty are dependent on the job alternatives available and these alternatives are, in turn, dependent upon the faculty member's training. For example, the academic physicist commands a wider range of job alternatives than the academic historian. The study was limited to faculty in 10 subject fields (all in liberal arts) with the largest enrollment, subject to the provision that there was at least one field in the biological sciences, the humanities, the physical sciences, and the social sciences. The subject fields were chemistry, economics, English, foreign languages, mathematics, music, physics, political science, psychology, and zoology.

In all studies where the kind of data collected depends upon voluntary response, it is important to test for systematic bias in the data resulting from the nonresponse. A chi-square analysis was made of the differences between the IHE that responded and those that did not. The analysis indicated that no significant differences existed (at the 5-percent level). I, therefore, concluded that the data do not bear a serious nonresponse bias.

In the higher education industry, a small fraction of the IHE have plans with deferred vesting. Deferred vesting plans that require a long period of coverage before vesting is achieved impose the same restraints on mobility as nonvested pension plans. I, therefore, defined a deferred vesting system as nonvested if the plan did not vest fully within 5 years. There were also 21 IHE with deferred vesting systems that vested within 5 years. Since this group was so small, they were excluded from the study. Sixty-seven IHE that shifted from nonvested to vested pension systems after 1951 were also excluded, for the reason that the faculty in these IHE would not have had enough covered time to have their mobility decisions affected by the vesting of their pension systems.

There remained in the study 339 colleges and 98 universities, or 87 percent of the respondents. Of those remaining, 47 percent had vested pension systems and 53 percent had nonvested systems.

2. METHODOLOGY

This study consists basically of a cross section comparison of average separation rates between IHE having vested and those having nonvested pension system. In all cross-section studies, it is necessary to standardize the sample or hold "other factors constant." It is clear that there are factors, other than the extent of pension vesting, that do affect the voluntary separations of faculty. The question here, however, is whether they affect relative separation rates—do these factors cause separation rates to be different between IHE with vested and those with nonvested pension plans? Alternatively, are there factors that correlate with the extent of vesting in such a way that the failure to control the impact of these factors will lead to biased results?

I suspected that there were nine such factors and have divided them into three groups. The first group consists of factors associated with the institution: Type of IHE (college or university), administration of IHE (privately or publicly controlled), regional location of IHE (South or non-South), and the size of city in which the IHE is located (particularly the small town and the very large city). The second group consisted of factors associated with the faculty (age, race, sex, and subject field taught). The third group concerned the income of faculty, subdivided into cash and noncash income.

Several of these factors are not quantitatively important in this industry; that is, even if there were a maldistribution among vested and nonvested IHE, the comparison error resulting would be very small. An example is the race of faculty. There are few nonwhite faculty members in the United States (less than 5 percent of total faculty according to the 1960 census. Therefore, a concentration of nonwhite faculty in either vested or nonvested IHE would not lead to substantial bias in relative separation rates.

The factors in all three groups have in common one characteristic that makes it possible to reduce, if not substantially to eliminate, their impact on relative separation rates. This characteristic is that their impact on the separation rates of faculty in a given IHE is roughly the same for all faculty members. Assume that voluntary separation rates are higher in IHE located in very large cities than in IHE located in small towns. If, also, big city IHE have vested pension plans and small town IHE have nonvested ones, then an uncorrected comparison between these IHE would show higher rates among vested IHE—due in part to the effect of city size. But, if separation rates are higher in larger cities, they are higher for all faculty; and, if lower in towns, they are lower for all faculty. Thus the effect of city size on relative separation rates can be substantially eliminated by dividing the rates of individual or groups of faculty members by other individual or groups of faculty members in the same IHE. It was found convenient to group faculty by academic rank. The deflation procedure

described above was, therefore, accomplished by deflating the voluntary separation rates of one academic rank of faculty by another in each IHE in the sample. The resulting figure is meaningless in itself but it does give a corrected measure of relative separation rates.

The third group of factors-that relating to the income of facultywarrants further discussion. Income differentials between IHE whether they take the form of differences in income levels or income increments, may be a major cause of voluntary separations. Faculty income can be defined as consisting of cash and noncash income; the latter is comprised of a varied package of benefits ranging from employer contributions to insurance plans to subsidized housing. The noncash income received by faculty may be a large fraction of total income. It is convenient in this study to distingiush between cash and noncash income because the value of fringe benefits (with the exception of pensions and tuition for faculty children) does not generally vary with faculty rank. Thus, the value of fringe benefits in a given institution is reducd to unity by the deflation process. There can, therefore, be no effect on relative (vested versus nonvested) mobility because of absolute fringe benefit differentials between IHE. Salary income, however, clearly varies with rank, but systematically with higher average salaries in the higher ranks. If, in fact, a systematic salary relationship exists between ranks, that is, if high (or low) salaried IHE pay high (or low) salaries to all ranks, then the deflation procedure will yield constant ratios of salaries or salary changes between vested and nonvested IHE, and the impact of salary differentials as a factor affecting voluntary separation rates between vested and nonvested IHE will again be minimized. The effectiveness of the deflation procedure on salaries is discussed in the text (pp. 231-232).

Ο