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RETIREMENT INCOME AND THE ECONOMY: Increasing Income For The Aged?

An EBRI Policy Forum

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Increasing Income For The Aged?

An EBRI Policy Forum
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Edited by: Dallas L. Salisbury

EMPLOYEE BENEFIT RESEARCH INSTITUTE

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FOREWORD

As the U.S. retired population continues to grow, the retirement income policy debate over who gets how much, who pays, and through what means it is delivered, will become increasingly intense.

As a result of a changing economy, advocates who in prior years simply called for more, have come to realize that there may "temporarily" be limits to economic capacity. They now state that in order to have a decent standard of living in retirement, there may well be a need for reducing preretirement living standards.

Gerontologists, and other scholars foresee growing intergenerational pressures as a retired population that "appears" to be living well asks for more of the economic pie. They predict that it will be increasingly difficult to focus attention on the shrinking, yet significant, segment of the retired who remain in or near poverty.

Recognizing the complexity and growing importance of retirement income issues, the Employee Benefit Research Institute (EBRI) began a wide-ranging program of research and educational programs in the area in 1978. The series of programs and reports have been designed to provide interested parties with the information base needed for comprehensive retirement income policy research and decision making.

A two-volume bibliography published by EBRI in 1979 provides an extensive annotated listing of recent research in the area. An Issue Report published in 1980 provided a basis for determining the adequacy of existing information, an evaluation strategy for assessing policy issues, and identification of major pending policy issues. And, a three-volume Review of Research presents a wide-ranging picture of what we do and do not know today.

During 1981 EBRI will publish major studies on retirement program coverage and benefit receipt, funding and capital markets, and retirement income levels. This Policy Forum, entitled Retirement Income and the Economy: Increasing Income for the Aged? was designed to assist in the formulation of those studies.

The Policy Forum papers highlight current issues, concerns and critical information needs. They articulately present alternative approaches to meeting the nation's retirement income policy challenges, particularly as they affect the economy.

The forum would not have been possible without the support of EBRI members or the tremendous amount of time contributed by the authors and participants. To each, special thanks is extended.

Dallas L. Salisbury
Executive Director
Employee Benefit Research Institute

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issues, particularly in the field of tax policy, Ture pioneered the development of supply-side economics and its application to tax policy over a decade ago.

INTRODUCTION

James A. Curtis, F.S.A.

On behalf of the Trustees and members of the Employee Benefit Research Institute, it's a pleasure to open this policy forum on "Retirement Income and The Economy: Proposals for Expanding Retirement Income."

The present economic state of our nation, combined with the continued growth of the retired population, promise to make the fulfillment of retirement income needs an ever-growing challenge.

We will meet that challenge only if we carefully analyze and develop responsible future policy. Factors such as population demographics and a growing retired population, capital formation needs and the financial problems of our Social Security System, make policy and economic research and education in this area essential.

We must be certain that we fully understand the potential consequences of proposed actions. Such an understanding must be based on a thorough review of the purposes that existing programs are intended to fulfill plus a detailed identification of individuals who do and do not receive benefits from these programs.

After all, the primary objective of all retirement programs is to insure an adequate income for individuals during retirement. The means by which these programs achieve this objective, the policies leading to the development and utilization of the means, and the economic atmosphere surrounding retirement programs are the topics of this forum.

The papers have been kept short. Participants actively participated and the interchange is included.

Dr. Blaydon provides an overview of the likelihood of persons being included in present retirement programs and the likelihood that they will receive benefits. His presentation points out the importance of work history and earnings levels to the determination of who gets what.

Certain questions are relevant to his paper as well as others. How early in one's career should current income be reduced in order to produce retirement savings? What are adequate levels of retirement income? If universal private pension coverage is mandated, what effect will it have on consumer prices, employee wages, small businesses, large businesses, existing plans? What mix of private and public programs should be used to achieve these income levels.

Mr. Salisbury presents a brief summary of alternatives for retirement income expansion. Dr. Tepper's paper provides a challenging analysis of advance funding versus pay-as-you-go systems.

Dr. Tolo reviews the economic experience of foreign nations with Social Security and mandatory pensions, especially the European industrial countries.

Mr. Givens assesses the implications of policy change for large businesses.

Mr. Liebenson and Mr. Jackson look at small businesses.

Dr. Ture's paper represents an overview of the macro-economic consequences of policy change and the implications of the nation's current economic condition.

Taken together, the presentations and discussion provide comprehensive background for decision makers. It should be most helpful to those who wish to develop new initiatives, review present policies, or assess recommendations of such groups as the President's Commission on Pension Policy appointed by President Carter in 1978.

EBRI will continue to provide studies and educational programs as a means of improving the base of available information on which policy decisions can be based.

The membership expresses its thanks to those who have made this forum possible.

ALTERNATIVE APPROACHES FOR INCREASING INCOME FOR THE AGED

Dallas L. Salisbury

The debate over how to provide more retirement income continues. Emphasis on the private sector role is increasing, however, due to "growing recognition" that it will be difficult to further expand Social Security. The debate has focused heavily on need and method, with less attention being given to (1) whether the economy can afford more or (2) how approaches would affect individual and plan sponsor stability or behavior. The economic consequences are especially important at this time.

The perceived need for more income results because a substantial number of the elderly do not receive an "adequate" income. There is an ongoing argument regarding what represents adequacy. The President's Commission on Pension Policy seeks to use as the standard for measuring retirement income adequacy, a combination of both minimum income levels and replacement rates of preretirement earnings. In May, the Commission directed a study of the U.S. Bureau of Labor Statistics intermediate couple's budget as a minimum level of retirement income adequacy and 75% of the couple's budget as the standard for single people. This would mean approximately $7,800 for couples and $5,200 for single persons. This is well above what present public programs provide as a base.

How much the nation has accomplished economically for the aged is also a focus of the debate. The number of elderly with incomes less than the poverty level has declined from 5.5 million in 1959, to 3.8 million in 1976, or from 35% of the elderly population to 15%. After adjusting for taxes, transfer payments and in-kind benefits, approximately 4% of the elderly remain in poverty compared to 6% of all other persons. Of the total population in poverty, after all aid is considered, 9% are over age 65 and 91% are under age 65. Old Age Assistance and Supplemental Security Income were needed by 22.9% of the elderly in 1940, compared to 8.8% in 1977.

The approaches to provide more can be categorized as involving (1) changes in plan standards (vesting or participation) or (2) new approaches (mandatory programs or tax credits).

CHANGES IN PLAN STANDARDS

Approach 1: Participation

The President's Commission on Pension Policy (PCPP) and the Social Security Administration (SSA) define retirement program coverage as having met the formal participation requirements of a pension or profit sharing plan

(commonly one year of service and age 25). This criteria leads to a coverage number of 48% of all workers over age 16 and 53% to 63% of all workers between ages of 25 and 64.

Of those workers who currently meet the plan participation standards set by the Employee Retirement Income Security Act (ERISA), defined as over age 25, with one or more years of service and more than 1,000 hours of work annually with the employer, 63% are covered by a plan.

One can then look at the number of persons working for employers with plans and find that immediate participation of all workers would provide "coverage" for up to 64% of all workers, up to 72% of full-time workers, and up to 75% of full-time workers aged 25 to 64.

When examining uncovered workers, studies indicate that the greatest number earn less than $5,000 per year. For those persons who are full-time career workers, to what extent is Social Security already sufficient? For those who are not full-time career workers, could any work and wage related program provide an adequate income in retirement?

Little analysis has been undertaken to assess the costs and effects of major changes like immediate participation or the increased benefits that would be earned. How would such a change in the law impact large plan sponsors, small plan sponsors, or the decision of firms without plans to form them?

Approach 2: Vesting

The PCPP has estimated that only 25% of retirees can expect to receive a private pension. A primary means of increasing the likelihood of benefit receipt would be faster vesting. An EBRI analysis found that faster vesting could greatly increase the number of vested workers, but the value of benefits would likely be quite low: less than $1,000 for 74% of all workers leaving a plan with less than 10 years of service. The cost increase to achieve these additional benefits could be as high as 27% of present plan contributions, according to both EBRI analysis and a study conducted by PCPP. For present private plans, this could total to more than 1.5 billion dollars per year.

Little analysis of the potential real costs and benefits has been done which would take into account individual and/or firm behavior. What effect might new requirements have on plan formation? And, there are numerous other questions to be explored.

Approach 3: Changes in Tax Treatment of Contributions and Benefits

A number of tax changes have been suggested with the intent of increasing retirement savings.

1. The tax treatment of employee and employer contributions to pension plans and earnings on these contributions should be the same: employee contributions should be deductible.

2. The concept of a tax credit for low and moderate income people to encourage individual retirement savings and employee contributions.

3. The tax treatment of savings specifically for retirement should be the same as the tax treatment of pension plans: more should be able to be set aside on a deductible basis.

Those who support the proposals feel that the tax changes would unify and expand the treatment now available

for employees not eligible for qualified plans, employees of certain charitable organizations and public schools, and self-employed persons. Proponents believe the proposals would make a substantial contibution to the nation's capital base.

Very little analysis of these proposals has been undertaken, particularly as they relate to individual and corporate behavior and the economy. A great deal may be able to be learned from corporate experience with thrift and savings plans.

MANDATORY APPROACHES

The PCPP has "not been persuaded" that any approach short of mandatory programs will meet the objective of adequate retirement income. Principal analysis by PCPP will, therefore, focus on alternative mandatory approaches. In most cases, the option exists for either private or public administration of the program such that it is not necessarily a mandatory private program.

Approach 4: Private Defined Benefit Plan

Administration and funding would be through an employer-sponsored trust fund with actuarially determined contributions. Either a new plan could be created or there could be an amendment to the existing plan.

Participation could be at any one of a number of standards ranging from age 20, one year of service, and 500 hours of work, upward to age 40, one year of service, and 1,000 hours of work.

The benefit to be provided could be calculated in numerous ways. Examples include:

a. ½% per year of service after enactment date times average indexed pay at 65;

b. Survivor's benefit of 75% of vested benefit after 65;

c. Indexed after retirement at 80% of CPI up to 5% per year;

d. Vested after five years with portability possible.

Approach 5: Private Defined Contribution Plan

Administration and funding would be by the employer, with funds distributed to individual accounts with the employer or a financial intermediary. It would either involve a new plan or an amendment to an existing plan. Employer contribution of 3% would be required with possible employee contributions.

Participation could vary as in Approach 4.

The benefit might take a number of forms, including:

a. Annuity at 54;

b. Survivor's benefit of purchased annuity of 75% continuation;

c. Immediate vesting with full portability.

Approach 6: Private Savings Plan

Administration and funding would be by the employer with funds distributed to individual accounts with the employer or an intermediary. All employee's would be eligible to participate.

The benefit might take a number of forms, including:

a. Annuity at 65;

b. Survivor's benefit of pur-

chased annuity or 75% continuation;

c. Immediate vesting with full portability.

Approach 7: Government Defined Benefit Plan

Administration and funding would be through the Social Security Administration (SSA) or a public corporation. Participation requirements could be the same as the present SSA program, or could vary. The program could include contracting out to private providers.

The benefits might take a number of forms, including:

a. ½% per year of contributing service times average indexed pay at 65;

b. Survivor's benefits of 75% continuation;

c. Indexed at 80% of CPI and up to 5% per year;

d. Vested at SSA requirement or with waiting period.

Approach 8: Government Defined Contribution Plan

Administration and funding would be through SSA or public corporation. Participation requirements could be the same as the present SSA program, or could vary. Employer contribution of 3% with possible employee contributions. Could include contracting out to private providers.

Benefit:

a. Life annuity at 65;

b. Survivor's benefit of purchased annuity or 75% continuation.

Approach 9: Expand All of Social Security

This approach would entail increasing benefit levels of the Social Security program in order to provide higher income replacement. Financing would be through a higher payroll tax or general revenues.

Most analysis of this approach indicates that it is not politically or economically feasible, leading persons to look at the other approaches outlined above.

Approach 10: Expand the Social Welfare Component of Social Security

This approach would focus on the low income segment of the total population that, as a general rule, does not have the benefit of pension plan coverage or participation. In addition, many of these persons currently have such low primary Social Security benefits that they receive Supplemental Security Income (SSI) and other in-kind benefits. These persons would probably earn very low benefits even if they were in private plans, as indicated by their need for SSI and in-kind benefits.

A proposal which complements this approach is the creation of a two-tiered program with a first tier demi-grant and a totally separate earnings related benefit. Unlike the way in which the present SSA program mixes social and earned benefits, a two-tiered program would distinctly separate social and earned benefits.

CONCLUSION

Each of these approaches is subject to variations in certain standards, even though important behavioral and economic consequences are not likely to change greatly. In addition, a retirement income policy could be for-

mulated which draws from a number of these approaches.

An assessment of the impact of such proposals on the economy, corporations, and individuals is essential. What would be the incentives and disincentives for liquidating businesses or starting new businesses? What would be the effects and consequences regarding employee mobility? What would be the competitive consequences? What would be the rewards? How would this differ from reactions to higher payroll taxes?

These and other economic impact questions should be articulated and explored. As outlined in the EBRI report, _Retirement Income Policy: Considerations for Effective Decision Making_, it is not possible to answer them with currently available information. That report outlines the type of information needed and how much it will take to get it?

Only with the answers to such questions, and the many other questions raised by the other papers in this volume, will the nation be prepared to move forward with new retirement income initiatives.

RETIREMENT INCOME IN EUROPEAN COUNTRIES: The Economic Connection

Kenneth W. Tolo, Ph.D. *

Introduction

The existence of linkages between retirement income systems and the country-by-country economic, political, and social environments in which these systems have evolved is now acknowledged throughout the industrialized world. As a result, the optimism that underlay social policy planning in advanced societies for the past three decades has been replaced by a restrained hope that the preservation and enhancement of retirement income levels will not be inconsistent with the need to strengthen national economies. No longer are countries inclined to encourage without question the rapid expansion of their retirement systems; government officials have begun to balance their social concerns against economic concerns. This change has led to an acceptance of the need to rethink current retirement income systems and to analyze alternative structural changes more consistent with current and projected economic realities.

The acknowledgement of these linkages has not been accompanied by an understanding of them, however. One major concern continuing to receive attention both in the United States and in foreign countries is how to continue to improve and finance adequate retirement benefits in spite of high inflation and low economic growth rates, destabilizing demographic trends, changing social behavior (e.g., increases in early retirement), and other factors.

Annual inflation rates in the world now range from somewhat less than 5 percent in a few countries (e.g., Norway and Switzerland) to more than 100 percent in others (e.g., Argentina and Israel), with double-digit inflation expected to continue for most of the world through the mid-1980s. In Europe, six countries - Finland, Great Britain, Greece, Italy, Portugal and Spain -- had inflation rates in 1979 exceeding 15 percent, while three other contries -- Denmark, France, and Sweden -- had inflation rates between 9.5 percent and 11.7 percent. Even those countries with lower inflation rates -- the Federal Republic of Germany and Switzerland, for example -- are now concerned about coping with inflation. Prolonged inflation, especially when coupled with declining productivity, low economic

*Dr. Tolo's research on European pension systems is being supported in part by a 1980-81 research fellowship from German Marshall Fund of the United States.

growth, and special factors such as energy price increases, is severely straining the financial resources of social security and private pension systems in other countries as well.

Contributing to the retirement income financing problem in industrialized countries is a pervasive destabilization of demographic trends -- that is, a declining ratio of contributors to pensioners and a general aging of the population. This is even more of a problem in the older European countries than in the United States. Further contributing to increased numbers of beneficiaries have been the early retirement options that have proliferated in industrialized countries in response to social trends, collective bargaining, and rising unemployment. The costs of these measures have exceeded expectations, placing even greater strain on retirement systems.

A second major area of concern in industrialized countries today is the economy -- and, in particular, low economic growth and the associated problems of national economies, compounded by inflation. As the problems created by economic recession have become more evident and more prolonged, government policymakers have become more aware of the substantial impact of retirement costs (especially social security costs) on the economy. Designed and reshaped in times of economic crises, and useful then as economic recovery instruments, these systems increasingly are recognized as burdens (or at least potential burdens) on scarce economic resources. Moreover, although their precise effects on productivity, efficiency, and growth are uncertain, current retirement policies and resource flows (especially from the social security system) to the public sector and to labor appear to place undue emphasis on consumption at the expanse of investment, capital formation, and savings. They also apparently contribute to imbalances in the supply and flow of labor.

These two major areas of concern in industrialized countries -- expansion of retirement benefits and economic decline -- emphasize the interrelationships between national (and international) economic conditions and national retirement income systems of which policymakers are now aware (at least in general terms). These concerns point out the need for central governments in industrialized countries to act responsibly to coordinate retirement and economic policies and to "protect" the integrity of both the economy and retirement income.

Two types of government intervention are thus possible: actions (e.g., indexation of benefits) to "protect" the financial soundness and benefit levels of the social security and private pension systems against economic fluctuations, and actions (e.g., de-indexation or cutbacks of certain social security benefits) to maintain a strong economy against the possible adverse effects of retirement income policies. Insights into the responses of European industrialized countries with regard to these two areas of concern perhaps can provide insights useful to the retirement income policy discussions and studies now in progress in the United States. It is to these foreign government responses that this paper is addressed.

A word of caution is in order. In comparative appraisals of national social policies and systems, it is important to recognize the country-specific characteristics of a system. Retirement systems and government actions in Europe, for example, reflect local social policy traditions as well as "solutions" to local economic and political crises. Just as our Employee Retirement Income Security Act (ERISA) in its present form would not work in foreign countries, neither should we in the United States expect to be able to use, without change, European social security or private pension schemes. Claims of "since 'X' is working in Europe, 'X' will work here" need to be

examined critically so that we better understand the real nature of "X" within the European context, as well as its limitations, strengths, and potential applications in the United States retirement system. Nevertheless, descriptions of the economic and retirement system connections of other nations and of their governments' actions are informative as we appraise policy and program alternatives for providing Americans with retirement income levels consistent with United States resources and a sound economy.*

Improving Retirement Income: Approaches of European Governments

In western European and other industrialized countries, the central government has been a more active intervenor than the national government in the United States with respect to improving the retirement income of its citizens in response to high inflation and low economic growth, an aging population, and social trends. This intervention is especially evident through the scope and financing of broadly defined social security systems and through the stimulation of private pension plans and private (individual) savings to supplement social security benefits. Primary attention in this section will be directed to social security improvements and mandated private pension plans.

Social Security Systems.** The scope of social security systems in the industrialized countries of Europe is often substantially broader than in the United States. In our country, the phrase "social security" usually includes only old-age, survivors, and disability insurance (OASDI). In western European (and other) countries, social security systems generally provide comprehensive "income security," including not only OASDI but also national health insurance, unemployment insurance, workers' compensation, cash sickness and maternity benefits, family allowances, and even, in some instances, housing assistance. (Of the 134 countries reporting some form of social security in 1979, all 134 had work-injury compensation; 123 had OASDI; 75 had sickness and maternity benefits; 67 had family allowances; and 31 had unemployment insurance.)

The comprehensive coverage of the individual worker that characterizes the social security systems of Europe also applies to the population as a whole. Whether a country has a social security system composed of a basic flat (or universal) benefit (e.g., the Netherlands) or a basic earnings-related benefit (e.g., the Federal Republic of Germany, France, Italy, and Switzerland, plus Japan), or has a two-tiered social security system composed of both types of benefits (e.g., Finland, Great Britain, and Sweden, plus Canada), its goal is universal coverage and its entitlement concept generally is much broader than that of the United States (where benefits are "earned" through work). Even when the basic earnings-related benefit is not universal,

*Pension Plan Termination Insurance: Does the Foreign Experience Have Relevance For the United States?: An EBRI Policy Forum. Edited by Kenneth W. Tolo, EBRI: Washington, D.C., 1979.

**For a comprehensive worldwide listing of the major elements of social security systems, see: Social Security Programs Throughout the World, 1979, Research Report No. 54. Washington, D.C.: Office of Research and Statistics, Office of Policy, Social Security Administration, U.S. Department of Health and Human Services, 1979.

however, the concept of universality is still accepted. In Switzerland, for instance, everyone (except nonemployed married women) is required to pay contributions during his or her years of working age, whether or not he or she actually is working.

Governments have adopted three approaches to providing adequate social security benefits in the face of variations in economic conditions: (a) adjustments according to specific principles and rules established in advance by legislation; (b) adjustments based on general principles embodied in legislation which did not specify the mechanism for or extent of such adjustments; and (c) ad hoc adjustments made by governments as circumstances require. Adjustments made on the basis of one or more indexes are referred to as "indexing." The United States system of indexing social security wage records is similar to that of the Federal Republic of Germany, under which wage records are indexed to changes in national average wages. Some foreign countries avoid the indexing of wage records by computing retirement benefits as a percentage of the highest earnings or the most recent earnings.

With respect to social security benefits, essentially all industrialized countries adjust them for inflation. Currently, about 50 countries have adopted some type of automatic indexing, with 30 of these countries adding provisions to their social security systems in the last ten years. Most other industrialized countries (e.g., Canada, Japan, and Sweden) have price-indexed social security benefits, as has the United States. A few countries (e.g., the Federal Republic of Germany, France, and the Netherlands) use a wage index, while still other countries (e.g., Finland, Italy, and Switzerland) use a combination of wage and price indexes.

These actions by governments in industrialized countries, especially in western Europe, to improve social security benefits have been accompanied by two primary government approaches to financing them: by substantial -- and still increasing -- payroll tax rates and by general revenue financing. Whereas the financing of social security (i.e., OASDI) programs in the United States is essentially from payroll taxes shared equally by employers and employees, the broader social security coverage in other countries is often possible only through higher payroll tax rates and general revenue financing.

That the payroll tax rates both for OASDI benefits and for all social security programs are generally higher in European countries than in the United States is evident from Tables 1 and 2. Only one of the nine listed European countries (namely, Switzerland) had a lower (total) OASDI payroll tax rate in 1979 than did the United States, and five had rates between 18 and 29 percent. Including the full range of social security programs (with the exception of health insurance), every European country listed in these two tables had a higher 1979 total social security payroll tax rate than the United States. The amount of payroll that is required to support program benefits in each of France, Italy, and the Netherlands is about 50 percent, with four other countries listed in Tables 1 and 2 having percentages exceeding 30 percent -- compared to 16.46 percent in the United States. Adding health insurance contributions from payroll increases both the European percentages and the U.S.-Europe differences.

Payroll contibution rates have increased substantially since 1971, as Table 1 also shows. These increases are partly due to inflation and program expansion, but are primarily due to the aging of populations in industrialized countries and to other factors that have led to higher benefit levels. Also increasing substantially since 1979 have been contribution ceilings. In each country included in Tables 1 and 2, the contri-

bution ceiling (with respect to the payment of payroll taxes) has increased at a faster rate than prices since 1971.

Table 2 illustrates that in all but one of the countries listed the employers pay a higher contribution to social security programs (broadly defined) than do the employees. This results in part because workers' compensation and family allowance program contributions are usually paid only by employers. A comparison of OASDI contribution rates shows that these costs are shared more equally among employers and employees.

In other industrialized countries, especially those in which the payroll tax rates are low, general revenue financing of social security benefits as a means to supplement payroll tax contributions is common. This financing ranges from 60 percent of social security benefits in Canada to less than 5 percent in the Netherlands. In most European countries the percentage is between 15 and 30 percent. Yet in the United States this governmental contribution is less than 1 percent. (In Australia, the OASDI system is fully financed from general revenues, but the benefits are payable under an income test.) The primary methods used by foreign governments to determine their general revenue contributions are: (a) annual benefit subsidies regulated by legislative provisions (e.g., Federal Republic of Germany, Italy); (b) deficit replacements (e.g., Netherlands); (c) designated percentages of total social security program costs (e.g., Switzerland); and (d) program contributions targeted to specific benefit areas (e.g., Sweden, France).

As a concluding comparative measure of the major financial commitments of industrialized countries to an adequate social security system, Table 3 lists OASDI and social security (broadly defined) expenditures as percentages of gross national product (GNP). Most other industrialized countries spend a much greater percentage of their GNP on both categories of expenditures. Recent data suitable for country-by-country comparisons (Table 3) show that in 1974 the United States spent 11.9 percent of its GNP for all types of public income security programs, only about one-half of the percentages of GNP spent by major European nations in that year. United States expenditures for OASDI as a percentage of GNP also were less than the corresponding expenditures in European systems.

Mandatory Private Pension Plans.* The active stimulation of private pension plans has become an increasingly important element in governmental strategies to meet income replacement goals. Such stimulation has been more acceptable to labor and management and also easier to achieve in western European countries than elsewhere. For example, private pension plans are considerably more coordinated -- and often more integrated -- with social security systems in European countries than in the United States. With target replacement rates generally ranging from 65 to 80 percent of preretirement income, western European countries have achieved general acceptance among their respective populations that private pension plans should provide 10 to 30 percent (depending on the country's social security benefit level) of the final benefit. Thus, whereas roughly 63 percent of the United States prime age

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*For additional information on mandatory private pension plans in Europe, see: Max Horlick and Alfred M. Skolnick, Mandating Private Pensions: A Study of European Experience, Research Report No. 51. Washington, D.C.: Office of Research and Statistics, Office of Policy, Social Security Administration, U.S. Department of Health, Education, and Welfare, 1978.

TABLE 1
Social Security Contribution Rates as Percent of Payroll, Selected Countries, 1971 and 1979

Country	All Programs[1]		Old Age, Invalidity, and Survivors Insurance		Health Insurance	
	1971	1979	1971	1979	1971	1979
Austria	32.85	37.50	17.50	19.50	6.10	9.40
Belgium	38.55	35.30	13.40	14.00	8.75	8.25
France	29.40	47.45	8.75	12.90	15.75	17.95
Germany, West	27.90	33.78	17.00	18.00	8.10	11.28
Italy	44.66	49.57	18.98	23.76	12.95	13.59
Japan	15.15	18.55	6.20	9.10	7.00	8.00
Netherlands	46.45	50.80	16.70	28.10	15.25	18.97
Sweden	15.35	31.85	11.80	20.30	3.20	10.60
Switzerland	11.80	17.80	5.80	9.40	3.10	4.60
United Kingdom	10.30	16.50	-	-	-	-
United States	13.40	16.46	9.20	10.16	1.20[2]	2.10[2]

[1]Includes any or all of the following programs: Old-age, invalidity, and survivors; sickness and maternity; work-injury; unemployment; or family allowances.
[2]Includes the Medicare program only.

Sources: Based on Social Security Programs Throughout the World, 1979 and previous issues, Department of Health and Human Services, Social Security Administration; and The Cost of Social Security, International Labor Office, Geneva, various issues.

TABLE 2
Employer and Employee Contribution Rates as Percent of Payroll, Selected Countries, 1979

Country	All Programs[1]			Old-age, Invalidity, and Survivors Insurance Program		
	Total	Employer	Employee	Total	Employer	Employee
Austria	37.50	24.40	13.10	19.50	10.25	9.25
Belgium	35.30	25.40	9.90	14.00	8.00	6.00
France	47.45	37.41	10.04	12.90	8.20	4.70
Germany, West	33.78	17.64	16.14	18.00	9.00	9.00
Italy	49.57	42.12	7.45	23.76	16.61	7.15
Japan	18.55	9.45	9.10	9.10	4.55	4.55
Netherlands	50.80	27.05	23.75	28.10	10.35	17.75
Sweden	31.85	31.65	.20	20.30	20.30	-
Switzerland	17.80	7.60	10.20	9.40	4.70	4.70
United Kingdom	16.50	10.00	6.50	-	-	-
United States	16.46	10.33	6.13	10.16	5.08	5.08

[1]Includes any or all of the following programs: Old-age, invalidity, and survivors; sickness and maternity; work-injury; unemployment; or family allowances.

Source: Joseph G. Simanis, "Worldwide Trends in Social Security, 1979," Social Security Bulletin, Vol. 43, No. 8 (August 1980), pp. 6-9.

TABLE 3

GNP and Social Security Expenditures in Selected Countries: 1974[1]
(In millions of national currency units, except for percentages)

Country	GNP	Social Security[2] Amount	Social Security[2] As Percent of GNP	OASDI Amount	OASDI As Percent of GNP
Belgium (franc)	2,105,000	434,835	20.6	123,983	5.9
Canada (dollar)	128,050	16,940.3	13.2	4,121	3.1
France (franc)	1,324,800	287,207.4	21.7	53,858	4.1
Germany, Federal Republic (mark)	997,000	221,583	22.3	78,482	7.9
Japan (yen)	115,429,000	7,260,559	6.3	723,449	.63
Netherlands (florin)	188,130	47,439.3	25.2	11,191.6	6.3
Sweden (krona)	248,640	60,771.1	24.5	17,854.0	7.2
United Kingdom (pound)	73,620	10,426	14.2	3,320	4.5
United States (dollar)	1,381,200	164,710	11.9	54,870	4.0

[1]Data for calendar year except: Canada, Japan, and the United Kingdom, data for fiscal year ending March 31, 1974; United States, data for fiscal year ending June 30, 1974.

[2]Broadly defined to include expenditures under public medical care systems and cash payments under public welfare programs.

Source: GNP data from International Financial Statistics, International Monetary Fund, various issues; social security data derived by Social Security Administration from The Cost of Social Security: Ninth International Inquiry, International Labour Office, Geneva, 1978.

Source: Stanford G. Ross, "Social Security: A Worldwide Issue," Social Security Bulletin, Vol. 42, No. 8 (August 1979), p. 4.

full-time labor force participates in private pension plans, about 65 to 90 percent of the workers in each of the Federal Republic of Germany, Finland, France, the Netherlands, Sweden, and Switzerland are so covered.

Government encouragement of private pension plans in Europe has been more explicit in recent years through actions to mandate their formation by employers. The general acceptance and prevalence of private pension plans in Europe has facilitated these initiatives by lessening substantially the problems of vesting and portability. The fact that private pension plans have been included in nationwide labor-management negotiations for many years also has helped, as has the broad acceptance by European workers of the idea that take-home pay is only one of several components of total compensation.

Several European countries now are committed to achieving an expanded level of private pension plan coverage through some system of mandatory (or "guaranteed") universal employer-sponsored pension plan system integrated with the social security system in that country. However, there is among these countries neither an agreement of the form a mandated system should take nor a universal and fully functioning system of mandated private pension plans. In Finland, a legally mandated universal system is being phased in gradually, with complete implementation within the next 20 years. Under this system, an employer may elect to establish an approved pension fund or to take out employment pension insurance with one of nine licensed insurance companies. In Switzerland, the electorate approved in 1972 a constitutional amendment calling for mandatory private pension plans on top of the country's basic earnings-related social security system.

The requisite legislation is being prepared, with implementation possible in 1981. In the Netherlands, where approximately 80 percent of the workers are covered by private pension plans, the concept of mandatory private pension plans has been accepted by labor and management as a supplement to the basic flat social security benefit system. However, world (and European) recession and sharp inflation have led to delays in the passage of implementation legislation here as well.

Two other forms of "guaranteed" private pension plans also exist in Europe. In France and Sweden, collectively bargained agreements of nationwide federations, which cover 80 to 90 percent of all wage and salaried workers, must include private pension plan arrangements. As another quasi-mandatory approach, employers in Japan and in Great Britain may "contract out" for the earnings-related second tier of benefits that exists in these countries. Instead of participating in this second layer of the national social security system, an employer may cover his or her workers under a private plan if specified conditions are met (e.g., the plan must have benefits meeting or exceeding those of the national system). By 1978, three-fourths of British private pension plans had elected to "contract out."

This suggests that European countries actually having in place an operational system of "mandatory" private pension coverage have arrived there through evolution and negotiations. The Netherlands and Switzerland have indeed sought to implement such a system through statute, but full implementation has been delayed because of problems and disagreements. Thus, collective bargaining is preferred to legislation in Europe as an implementation approach for broader private pension plan coverage.

Other Government Initiatives. Since the level of social security benefits in Europe is higher than in the United States, many European employers have

not found it overly burdensome to preserve private pension plan benefit levels in the face of inflation. This has lessened the need for government intervention in this regard. In addition to the mandatory pension plan initiatives summarized above, however, a few other approaches have been adopted. For example, the Federal Republic of Germany has enacted legislation which requires that companies periodically (at least once every three years) review -- and, if necessary, adjust -- benefit levels for the effects of inflation. In Great Britain, the government encourages the establishment of private pension plans by accepting the financial responsibility for increasing a retiree's private pension benefit by the additional amount the retiree would have received had he or she been covered under the government's second tier of coverage. In Sweden, annual collective bargaining agreements provide adjustments in the form of bonuses linked to price increases.

Preserving the value of vested benefits under private pension plans is also of particular concern to several European governments. In Switzerland, for example, discussions about implementing a system of mandatory private pension plans have included proposals for separately financing vested benefit adjustments to cover general increases in earnings levels by imposing a charge on all employers.

Another area of government interest is the encouragement of private savings as an important "leg" on the retirement income "stool." The rates of private savings in the European industrialized countries are substantially higher than the United States rate, even though these other nations have much more expansive and expensive social security (and total retirement) systems. American households saved less than 6 percent of national disposable income in 1977, according to Organization for Economic Cooperation and Development (OECD) data. This contrasts with 10 to 11 percent in each of Sweden and Great Britain, 13 percent in each of the Federal Republic of Germany and Canada, and 21 percent in Japan. A specific example of a governmental initiative in this area exists in the Federal Republic of Germany, which since the early 1960s has had a voluntary program of subsidized savings. This program provides a bonus from general revenue to workers who deposit their funds in special long-term savings accounts, invest in housing, or keep shares in their employers' firms. Through collective bargaining, arrangements for employer contributions to these subsidized savings plans also are possible.

<u>Strengthening National Economies Through Retirement System Adjustments: Approaches of European Governments</u>

The types of initiatives summarized earlier have been the common responses of European governments in their efforts to rationalize retirement income levels with inflationary pressures and with the demographic and social trends that threaten the financial integrity of retirement systems. But, as pointed out before, the interrelationships between a country's economy and its retirement system also must be looked at from a national economic perspective: What kinds of governmental initiatives to lessen the "negative" impact of a nation's retirement system on its economy might be appropriate and feasible?

That the national economies of European (and other) industrialized nations are facing uncertain times characterized by low economic growth, declining productivity, and high inflation is not in dispute. In no major industrialized nation was the unemployment rate in November 1980 lower than it was in November 1979. Industrial production over the same time period was down at an annual rate of 5 percent or more in each of Canada, the Federal Republic of Germany, Italy, and Great Britain, as well as the United States, with France

and the Netherlands also showing declines of at least 2 percent over the same time period. The average annual inflation rate in 1981 in the major industrial countries is likely to approach 9 or 10 percent.

Even the Federal Republic of Germany, whose economy for years has been blessed with the lowest inflation and unemployment in the industrialized world and which is still projected to be able to keep inflation at about 4 percent in 1981, faces the 1980s with economic nervousness. Its real GNP, which increased at an average annual rate of 4.6 percent in 1979, is forecast to grow by only 2 percent in 1980 and to experience virtually no growth in 1981. Germany's huge social welfare network -- and a strong commitment to expand it -- now make West German labor costs (i.e., the wages plus social benefits that employers pay) considerably more expensive than those in the United States, Japan, Italy, France, or Great Britain, thereby creating the potential for weakening even further the German economy. As a November 16, 1980 New York Times article headlined, "Now the 'Swedish Disease' Has Struck West Germany."

What, then, have been and what are the actions and proposed responses of foreign -- especially western European -- governments to the declining state of their national economies and to the economic ills associated with this decline? Are these governments taking into account the economic implications of spiraling social security and pension costs resulting from legislated index-based adjustments, a "graying" of the population, and early retirements of unanticipated magnitude? Do their potential responses include benefit limitations (i.e., cost containment) and increases in contributions as alternatives to the more common upward adjustments in retirement income associated with indexation? In general, although government responses thus far have been limited in scope, the indications are encouraging. Clearly, government policymakers are becoming more aware of the need to try to balance economic policy with social welfare policy, as the several actions noted in this section suggest.

Understandably, European governments, in view of their economic histories and the characteristics of their labor-management relations, are cautious about instituting dramatic and substantial "negative" adjustments in retirement systems for the purpose of strengthening their national economies. Strong and effective economic policies are likely to require limitations in both government programs and individual welfare -- both of which tend to be political liabilities. Many European governments, particularly in those countries -- and there are several -- in which the annual inflation rate has exceeded 10 percent or so, simply are not sufficiently stable to survive the political turmoil resulting from major "negative" retirement income adjustments, even if intended to achieve greater economic stability and growth.

Although the European political environment may preclude dramatic actions and although actual reductions (as contrasted with stabilization) in social security and private pension benefit levels are very unlikely, nevertheless several countries are taking or discussing actions to manage the costs of their retirement systems so as to strengthen their social security systems. Table 4 identifies several of these recent actions and proposals. In addition, while not included in Table 4, the delays in the Netherlands and in Switzerland in implementing mandatory private pension plans appear to be due in part to concerns about the impact of such a system on the national economy, and thus in one sense are also government actions (i.e., non-responses) to manage retirement system costs.

The difficulties governments face in making even minor "negative" adjust-

TABLE 4

Social Security System Adjustments to Strengthen National Economies: Selected Recent European Actions and Proposals

Austria

- Placed a ceiling on the maximum amount of child's benefit payable under the disability program.

Belgium

- Placed a limit on indexed increases.

Federal Republic of Germany

- Placed a temporary limit on benefit increases from indexation, limiting the automatic adjustment to 4.5 percent in 1979 and 4 percent in 1980 and 1981.
- Decided that if average earnings fall below long-range estimates, limitations on benefit expenditures (or additional contribution increases) could be required.
- Temporarily suspended automatic adjustments of the formula to raise the contribution ceiling as these adjustments applied to earnings levels for benefit computation purposes; the ceiling on earnings levels for contribution purposes continues to be adjusted the full amount provided for in the formula.

Finland

- Placed a limit on indexed increases.

France

- Proposed extension of compulsory contributions for health insurance to retirees.

Great Britain

- Announced in March 1980 that sickness, unemployment, disability, and maternity benefits were to be raised at the next annual adjustment 5 percent less than what would be required to keep them in line with prices.
- Passed in May 1980 a law that abandons the present formula of adjusting old-age pensions by the higher of wages and prices, and reverts to the prior method of indexing benefits only to price changes.
- Postponed introduction of a noncontributory invalidity pension for housewives.
- Considering taxing social security benefits that now are tax-free.

Italy

- Changed the calculation of benefits for the highly paid worker so that earnings increases arising solely from inflation are no longer considered part of the earnings base for benefit calculations.
- Passed legislation to combine its various medical benefit funds to eliminate benefit disparities and effect administrative savings.

Netherlands

- Proposed cutbacks in sickness and unemployment benefits for non-breadwinners.
- Delayed extension of a new basic invalidity benefit to housewives and women receiving survivors benefits.

Switzerland

- Reduced dependent spouse's benefits by raising the qualifying age.

ments in retirement benefits is reflected in the responses of workers to the actions and proposals listed in Table 4. Although they will help employers control their social security program contributions, these actions and proposals also lead employees to place greater pressure on employers to fill the retirement income gaps caused by social security benefit limitations with increased private pension benefits -- another result of the integrated retirement income systems in Europe. Specifically, the first action listed under each of the Federal Republic of Germany and Italy in Table 4 has created pressure on employers in these two countries to provide additional private pension benefits.

These difficulties suggest that major curtailments of social security benefits, even if activated only in the future and without affecting current beneficiaries, are unlikely to be politically feasible. Potentially more effective, as well as far-reaching, might be basic structural changes to lessen the economic impact of inevitable, albeit controlled, social security benefit increases. Changes being discussed in Europe include:

- to increase the stability of revenue sources for social security financing through diversification, by lessening the current reliance on the payroll tax system, which is too closely tied to business cycles and economic downturns;

- to integrate social security programs with general systems of taxation;

- to develop policies which encourage people to work longer, either by increasing monetary incentives or by gradually extending the retirement age;

- to encourage an increased birth rate through childcare arrangements or family allowances to stabilize demographic trends;

- to implement partial pension systems as a means to encourage part-time work in traditionally post-retirement years;

- to reappraise the traditional relative roles of employers and employees in contributing to social security systems; and

- to provide a lump sum payment of social security benefits upon retirement, thereby avoiding the need to index benefits.

Turning to private pension cost containment measures being taken or discussed in Europe, it is useful to reemphasize that European employers accept, more readily than North American employers, the concept that employee pay increases should at a minimum keep peace with inflation. In Belgium and Italy, for example, pay levels are directly linked to the respective cost-of-living index. The Federal Republic of Germany has a legislative requirement that employers periodically review private pension plan benefit payments to respond to inflation.

In this work environment, where there is broad acceptance of the concept of preserving individual income in the face of inflation, the employer is under substantial pressure from employees to preserve the value of benefits paid and the value of benefits vested in former employees. Thus, employer/employee-induced reductions in these benefits are unlikely. Nor are government measures directed at employers to limit private pension plan costs in order to strengthen national economies likely to occur in European countries, because European social security systems are so broad that they provide governments with a myriad of options for government actions.

Concluding Remarks

In the United States has emerged, with relatively little public awareness of its scope, an income security system whose expenditures exceed those of any other national government activity, including defense. In fiscal year 1981, an estimated 25 percent of the total federal budget is directed toward the "income expectations" of the elderly. Assuming a continuation of current retirement policies and inflation rates, the Urban Institute estimates that 63 percent of the federal budget in 2025 (the year that current 20-year olds will be 65 years of age) will be expended on programs for the aged.

Private pension plans and state and local government retirement programs also have substantial economic impact, paying combined benefits of $40 billion in 1980. Within 15 years, annual private pension plan benefits alone may exceed $100 billion.

Clearly, the scope of the United States retirement income systems is such that government decisions regarding their improvement and financing are substantially influenced by economic conditions, and conversely. The United States can no longer give primary attention only to establishing retirement programs and adjusting benefit levels on an _ad hoc_ basis in response to economic, demographic, and social conditions. It must analyze closely the long-term impacts of potential adjustments both on retirement income and on the economy.

The United States has the responsibility to meet the income needs of the elderly, but to do so effectively it must temper the psychology of entitlement that increasingly is manifested in our country -- and this, in turn, will require difficult decisions by the government not to dismantle or to weaken fundamentally the retirement systems in the United States but to shape (or reshape) them so they reinforce long-term economic growth.*

What remains undetermined are the government actions that the United States should take. Some participants in the national debate over these issues have suggested that the retirement income approaches of Europe would be appropriate for adoption and implementation in the United States. Indeed, as this paper points out, the retirement income and national economic problems of the industrialized European nations are somewhat similar to those now faced by the United States.

But actions and "solutions" in European retirement system environments, even were their economic impacts known and understood, cannot simply be adopted _in toto_ in the United States. The problems of transfer are primarily reflective of the political and social traditions and practices influencing the maturation of the European systems: European social security systems emerged from, and have been shaped by, national political instability and the compromises of turbulent eras in the past. Other contributing factors relate more directly to the labor-management structure in Europe. Centralized collective bargaining arrangements in Europe and the general strength of European unions have resulted in high rates of worker participation in unions and have irrevocably linked social security benefits to wage negotiations to an extent neither present nor anticipated in the United States. This latter European

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*The concept of income adequacy has been subject to ongoing debate in the United States. It is clear that there may be a substantial difference between the income needs the United States must accommodate and the income wants of retired persons.

characteristic has led to payroll contribution rates and program coverage far exceeding those in the United States, as well as to substantial government financing for social security programs in some European countries. Private pension plan benefits are integrated with social security benefits to meet nationally-accepted income replacement rates. European workers apparently place less emphasis than American workers on take-home pay as well, accepting the view that total compensation, including retirement benefits, is of primary importance.

Current European retirement systems have evolved; programs have not been created and implemented at one point in time. They have been broadened gradually, through collective bargaining and government actions, into integrated public-private systems. In those few countries where they have been implemented in some form, mandatory private pension systems have been a natural extension, through the labor-management industrial structure, of existing retirement income systems. A comparable tradition and environment does not exist in the United States, where mandating private pension plans would be a major change in retirement income policy to which inadequate attention has been directed and for which the necessary employer-employee support structure does not exist. The national-state-local system of government in the United States, the dispersal of retirement policy decisionmaking responsibility within the executive branch, and the lack of a centralized economic planning capability are other attributes that distinguish the United States from its European allies.

Nevertheless, while "solutions" appropriate to retirement income and economic problems in a European country may be inappropriate in the United States (or even in another European country), an overview of the European experiences does provide us with a greater general awareness of the existence of national economic and social welfare linkages. We are made more aware of the government actions that are possible under the two broad types of government intervention being used or proposed to influence these linkages -- yet we are at the same time unable to understand fully the effects of these actions. Examining the European experiences, we more readily accept the importance of political and social, as well as economic, factors in assessments of the impact and feasibility of proposed approaches -- yet we still lack the assessments themselves. Thus, some European approaches look promising and deserve consideration in the United States context, but their possible application will first require serious assessments of their impacts.

It is important, therefore, that the analyses of retirement policy and program alternatives being conducted or planned in conjunction with the growing discussions regarding the United States retirement system and economy include attention to the following assessments.

- assessments of potential long-term impacts on European retirees and retirement income levels resulting from European governments' actions and proposals to improve benefits in response to high inflation, social trends (e.g., early retirement), and demographic trends;

- assessments of potential long-term impacts on European economies resulting from European governments' actions and proposals to adjust retirement benefits (especially social security benefits) (e.g., examine the impacts of the actions listed in Table 4);

- assessments of the relative effectiveness with respect to economic and retirement income "stability" of different European governments' actions and proposals within the different retirement systems in western Europe (e.g., examine

relationships between the "stability" of selected European economies and the mixes of employer-employee contributions to social security);

- assessments of potential economic impacts (with respect to short-term and long-term costs, explicit and implicit retirement income goals, etc.) on the United States retirement system and on retirees resulting from the application of European governments' actions and proposals designed to improve retirement benefits or to adjust social security benefits (e.g., examine the effects of benefit indexation on production costs, price changes, capital formation, and the supply of labor); and

- assessments of the potential political and social impacts in the United States of the actions and proposals identified in the preceding assessment category, in view of the emerging recognition that political and social factors may influence the success or failure of a government action as much as economic factors (e.g., examine the impact and feasibility of mandating private pension plans for low-income workers who may require minimum levels of take-home pay).

The United States must manage its retirement income growth in a manner consistent with a sound economy, including full employment and price stability -- and we can. But although we must not delay necessary government actions and intervention, we also must not prematurely act to promulgate or revise government retirement income and economic policies whose long-term impacts are unassessed. Prior to any major actions, we need a greater understanding of the economic, political, and social impacts on American social security and private pension systems of alternative proposals for policy and program adjustments -- including the European approaches suggested in this paper.

Forum Discussion

MR. SCHULZ: I have just returned from a five week trip to the Far East, talking with people interested in economic security in India, Malasia, Taiwan, Korea, Japan, and a number of other countries. What struck me on that trip was amazing similarity in the issues that were being discussed by those countries, even those in very early stages of development, of their economy and their pension systems. Their situation is even more complicated than ours because it's not just Social Security versus private pension versus personal saving. They also have forced savings schemes in many of the large countries called provident funds which have accumulated significant financial assets and play a very important economic and political role in the country.

Also, in two countries, Taiwan and Korea, you have important severance pay systems which take on many of the characteristics of primitive income maintenance.

The issues are similar. The government is interested in how to increase savings for development and how to maintain their position in international competition.

Private firms are very concerned about the extent to which it's legitimate to use pensions or provident funds or severance pay mechanisms as management tools in terms of assuring a quality labor force and the maintenance of that labor force.

A concern they face which is faced by this country and Europe; if you get locked into a particular compensation package, and you decide you want to go in a different direction, how do you start again? You can't. All of them are confronted by some of the real problems associated with this situation.

Another informative point for this country is the experience they're having with inflation. The problems are particularly grave for funded systems.

There is a rather massive crisis developing in the funded end in each of these countries because inflation is higher than the rate of return: the interest rate being paid on the individual accounts in the case of provident funds. Quite naturally, both the participants and the government are reluctant to depend on those funds for various kinds of financing within the government.

There is a commonality around the world with these problems, even in the developing countries, which we tend to not even talk about.

DR. TOLO: I agree entirely with respect to the commonality, and that's true, as you suggest, not only in European countries. Second, I think it's necessary to look at the approaches that have been taken, and that's where the setting becomes important: the social, the political and the economic setting.

RETIREMENT PROGRAM COVERAGE

Colin Blaydon, Ph.D.

Growth of the private pension system is one of the major accomplishments of our economic system in the last two decades.

Currently, there are over 50 million jobs covered by the private pension system. This is up from 20 million jobs in 1960, an increase of 163 percent. This growth outstripped the 41 percent growth in total jobs during the same period.

While more than 30 million jobs were being newly covered by the private pension system, less than 30 million jobs were being created by our economic system.

In addition, there are now over 35 million participants in private pension plans. That is more than double the 17 million participants of 1960 (Table 1). Finally, and probably most significant, there are over 20 million vested workers today (Table 1). That's more than 14 times the number that there were in 1960 when there were less than two million vested workers.

The private pension system not only kept pace with the growth in jobs, it greatly broadened its coverage over this two-decade period.

But what about recent trends? Is this expansion of the private system ending? Table 1 indicates that the proportion of covered jobs started to level off in the late seventies at between 65 and 70 percent of total private jobs in the economy. The proportion of those who had a vested benefit moved strongly and steadily upward over this period, and continued that pace. The number that were newly vested grew by ten percentage points in the last ten years, and that growth continues.

FACTORS AFFECTING COVERAGE

The question raised as these numbers are assessed is whether we can or should do anything to expand coverage of the private pension system. To answer that, I think we need to understand why coverage levels have largely stabilized and to speculate on what, without any further policy changes, can be expected over the years to come.

Coverage is affected by worker characteristics and industry characteristics.

WORKER CHARACTERISTICS

One major factor, for example, is youth (Table 2). With the baby boom, workers under age 25 went from 19 percent of the work force to 26 percent of the work force over the last 20 years. Sixty percent of these under age 25 workers are not covered by private

pension plans. The under 25 group constitutes approximately 25 percent of all of the workers that private pension plans don't cover in the economy as a whole.

Another important factor is part-time work (Table 3). Nearly 18 percent of the work force worked fewer than one thousand hours during 1979. Over one-third of all workers under age 25 work fewer than one thousand hours. Nearly 75 percent of these part-time workers are not covered by private pension plans.

Another major factor is frequent job change (Table 4). Nearly 30 percent of all workers will remain at their current job less than one year. Again, this is strongly affected by the age structure of our work force. Sixty percent of workers under age 25 hold their jobs less than one year. The last relevant work force characteristic is low-wage employment. Forty-eight percent of all non-covered workers work in low-wage establishments, that is establishments below $5 per hour. Most dramatically, about 90 percent of all workers in establishments that have an average wage equal to the minimum wage are not covered. With automatic upward adjustments in the minimum wage the funds are not likely to be available for establishing new pension plans.

INDUSTRY CHARACTERISTICS

Industry characteristics are also related to coverage (Table 5). Lowest coverage rates are found in trade and service businesses. Coverage is less than 60 percent of total private employment compared to 82 percent coverage in manufacturing. Over the past ten years trade and service businesses have been responsible for tremendous new job creation.

Firm size is also important (Table 7). Over three-quarters of new jobs are in firms with fewer than 50 employees, and these firms are the ones with lowest coverage. Coverage is less than 50 percent in firms with fewer than 50 employees, compared with 78 percent coverage for moderate size firms, those between 100 and 500.

Firm age must also be considered, although very little information is available on this factor. Firm age is generally useful as a measure of financial strength. Nearly 80 percent of the new jobs created over the last ten years were in firms that were less than four years old.

These workforce and business characteristics will limit the further expansion of private pension coverage. One must note, however, that private plans award benefits based upon length of service and level of earnings. Even if many of today's uncovered workers were to become covered, gain participation, and become vested, they would earn very small benefits.

THE FUTURE

Observations can be made about what the future will bring in the absence of policy changes. As the trailing edge of the baby boom reaches the stage of full career maturity and participation in the late eighties; as coverage growth slows in the industries that have been most rapidly growing; as the pressure for large scale job creation slows with full labor force absorption of the baby boom; we can expect continued slow growth in coverage over the near term (Table 9). Participation will rise and vesting will continue to strongly increase.

What does this mean about the probability of workers receiving pension benefits and the size of the benefits that they may receive upon retirement?

In the future, taking the work force as a group, the percentage of workers receiving benefits will grow, as will the average size of the benefits earned.

First, labor force growth of the last 20 years will mean more workers covered for longer portions of their working life.

Second, where individuals are not currently covered, they nevertheless have a high probability of becoming covered as they grow older and establish full-time career patterns. Table 10 presents results of a simulation of a young worker under different work pattern assumptions. The basic assumption is that he has a 50 percent probability of being covered every time he changes his job. As the numbers indicate, the probability of his receiving a retirement benefit is substantial. The numbers also indicate that there may be natural limits to pension coverage. Efforts to expand coverage may be of only limited usefulness and limited effectiveness. About 85 percent of the work force is full-time and has one year of service. If policy changes did nothing more than increase incentives for coverage of the work force, while leaving participation rules constant, there is a natural limit that doesn't get you much closer than 85 percent of the work force. This compares with current statistical estimates indicating that 65 to 70 percent of full-time workers over age 25 are covered today. There is some range for improvement, but you can't take it all the way to 100 percent.

Finally, the statistics indicate something about the types of people who may not be covered, even with a broadening of private pension coverage: Part-time workers, workers with discontinuous work histories, workers in low wage employment and frequent job hoppers. The first three are characteristic of large sectors of our work force. Even if these groups were covered by private pension plans the benefits they would earn would likely be very small. This will be the case with any program which bases benefits on years of service and level of earnings.

CONCLUSION

Policy makers cannot look at the issue of coverage in isolation. The private pension system was principally designed to provide benefits to long service workers, and may be an inappropriate mechanism for certain segments of the work force. New approaches may be necessary for these groups to complement present programs. For those in greatest need, if they are to be assisted, it may have to be through social welfare programs.

TABLE 1

SUMMARY OF ESTIMATES OF PRIVATE PENSION PLAN COVERAGE, PARTICIPATION, AND VESTING, SELECTED YEARS 1960-1979
(Millions of People)

Year	Jobs 1/	Jobs Covered by Private Pension Plans 2/ (As % of Total Jobs)		Active Participants 3/ (As % of Covered Jobs)		Workers Vested 4/ (As % of Active Participants)	
1960	45.8	19.2	(42%)	17.4	(93%)	1.5	(9%)
1965	50.7	24.5	(48%)	21.0	(86%)	3.2	(15%)
1970	58.3	34.5	(59%)	25.9	(75%)	7.9	(30%)
1975	62.3	40.5	(65%)	29.9	(72%)	14.1	(47%)
1979	73.9	50.5	(68%)	36.6	(72%)	21.0	(57%)

Sources:

1/ Department of Labor, Bureau of Labor Statistics as presented in the Economic Report of the President, 1980. Data for all years include all full-time and part-time wage and salary workers in the private, non-farm economy.

2/ Estimated from the Bureau of Labor Statistics Expenditures for Employee Compensation Surveys, 1966, 1968, 1970, 1972, 1974 and 1977. Data include workers in the private non-farm economy whose employers made contributions to private retirement plans.

3/ ICF estimates based on the Social Security Administration's analysis of pension supplements to the April 1972 and the May 1979 Current Population Surveys.

4/ Based on ICF Incorporated, Coverage, Participation and Vesting in Private Pension Plans (1977) and Gayle Thompson Rogers, "Pension Coverage and Vesting Among Private Wage and Salary Workers, 1979: Preliminary Estimates from the 1979 Survey of Pension Plan Coverage", Social Security Administration, (June 1980).

TABLE 2

PERCENTAGE OF TOTAL LABOR FORCE IN EACH AGE GROUP, HISTORICAL AND FORECASTED, 1960-2000

Year		14-24		25-54		55-Over	Total
1960		19.0		63.7		17.2	100%
1970		24.5		58.9		16.6	100%
1980		25.7		60.4		14.0	100%
1990		18.9		67.4		13.7	100%
2000	(I)	21.2	(I)	65.6	(I)	13.2	100%
	(II)	18.6	(II)	67.7	(II)	13.6	100%
	(III)	16.4	(III)	69.6	(III)	14.0	100%

Note: Year 2000 projections differ according to assumptions of ultimate cohort fertility. Demographic parameters correspond to Census Bureau population series, indicating resulting numbers of births per female. Series I is 2.7 births; Series II-2.1; Series III-1.7.

Source: Historical data are calculated from Employment and Training Report of the President, 1978, Table A-2. Projections are from Joseph M. Anderson, "An Economic-Demographic Model of the United States Labor Market", forthcoming in Research in Population Economics, edited by Julian Simon, JAI Press, 1980.

TABLE 3

CHARACTERISTICS OF WORKERS[1/] BY
AGE AND ANNUAL HOURS WORKED, 1978

Annual Hours Worked 2/	Percentage of Workers Aged: 16-24	25-64	65 and Older	16 and Older
1-500 Hours	20.3%	5.6%	24.1%	9.1%
500-1,000 Hours	16.0%	6.3%	20.7%	8.9%
Subtotal	36.3%	11.9%	44.8%	18.0%
1,001-1,500	14.6%	8.3%	17.3%	9.8%
1,501 or More	49.1%	79.8%	37.9%	72.2%
Subtotal	63.7%	88.1%	55.2%	82.0%
All Workers	100.0%	100.0%	100.0%	100.0%

1/ Not directly comparable with work force data Table 1. Data in this table are for workers age 16 and older and include proprietors, self-employed persons, domestic servants and unpaid family workers in addition to wage and salary workers.

2/ Calculated as the number of hours worked during the survey week times 50 weeks.

Source: ICF analysis of individuals reporting work experience in March, 1978. Based on an analysis of Current Population Survey data from March, 1978.

TABLE 4

CHARACTERISTICS OF WORKERS BY AGE AND YEARS
OF SERVICE ON CURRENT JOB, 1978

Age	Percentage of Total Workforce with Tenure[1/]					
	Less 1 Year	1-2 Years	3-5 Years	6-10 Years	11 or more Years	Total
Under 25	58.9	27.4	9.6	4.1	--	100.0%
25-29	34.8	26.1	19.6	18.1	1.4	100.0%
30-44	22.6	19.2	14.2	22.6	21.4	100.0%
45-54	13.4	11.7	10.6	19.6	44.7	100.0%
55-64	10.2	9.3	8.5	18.6	53.4	100.0%
65 and Older	10.7	10.7	10.7	14.3	53.6	100.0%
All Workers	28.8	19.2	12.5	16.7	22.8	100.0%

1/ Not directly comparable with workforce data in Table 1. Data in this table are for workers age 16 and older and include proprietors, self-employed persons, domestic servants and unapid family workers in addition to wage and salary workers.

Source: ICF analysis of individuals reporting work experience in January 1978. Based upon an analysis of Current Population Survey data from January 1978.

TABLE 5

EMPLOYMENT GROWTH BY INDUSTRY, 1960-1979

Industry	Percentage Change 1960-1979
Manufacturing	25%
Mining	43
Construction	59
Transportation	30
Finance	92
Trade	76
Services	130
All Industries	61

Source: U.S. Department of Labor, Bureau of Labor Statistics as presented in the *Economic Report of the President, 1980*, Table B-34, p. 242.

TABLE 6

PERCENTAGE OF JOBS COVERED BY INDUSTRY, 1968, 1974, 1977

Industry	1968	1974	1977
Manufacturing	73%	80%	82%
Mining	82	70	71
Construction	52	67	58
Transportation	77	77	78
Finance	61	72	86
Trade	38	50	52
Services			60
All Industries	55	64	67

Source: Unpublished data from the Bureau of Labor Statistics, Expenditures for Employee Compensation Surveys, 1968, 1974, 1977.

TABLE 7

JOB CREATION AND COVERAGE BY FIRM SIZE

Firm Size (Number of Employees)	Percentage of Net New Jobs Created 1/	Percentage of Jobs Covered 2/
0-20	66.0%	46.0% (0-100)
21-50	11.2	
51-100	4.3	
101-500	5.2	78.0
500 or More	13.3	94.0
All Sizes	100.0	67.0

Sources:

1/ David L. Birch, The Job Generation Process, MIT Press, (Cambridge, Massachusetts), 1979, p.30. These data refer to the percentage of net new jobs created between 1969 and 1976.

2/ Unpublished data from the Bureau of Labor Statistics Expenditures for Employee Compensation Survey, 1977.

TABLE 8

JOB CREATION BY AGE OF ESTABLISHMENT

Age of Firm	Percentage of Jobs Created
0-4	79.6%
5-8	9.4
9-12	5.9
13 or More	5.1
All Ages	100.0

Source: Birch, The Job Generation Process, p. 32. The data refer to the percentage of gross new jobs created between 1974 and 1976.

TABLE 9

ESTIMATES OF THE PERCENTAGE OF PRIVATE JOBS COVERED IN EACH INDUSTRY, 1980-1995

Industry	1980	1985	1990	1995
Manufacturing	85.3%	88.0%	89.3%	90.1%
Mining	74.0	75.9	76.9	77.6
Construction	66.6	72.2	75.1	76.7
Transportation	79.5	81.0	81.8	82.3
Finance	88.4	89.8	90.5	90.9
Trade	56.0	58.0	59.0	59.6
Services	63.5	65.8	66.9	67.5
All Industries	70.7	72.7	73.5	73.9

Source: ICF estimates based on the methodology developed in A Private Pension Forecasting Model, ICF Incorporated, (1979).

TABLE 10

ILLUSTRATION OF BENEFIT RECEIPT FOR HYPOTHETICAL GROUP OF MALE 20-YEAR-OLD WORKERS

	Percent of Workers Age 20 Assumed to be Covered		
Percent of Workers Aged 62 [a/]	30%	45%	70%
1. Eligible for Benefits			
o Normal/Early	61%	68%	75%
o Other	9%	9%	11%
Subtotal	70%	77%	86%
2. Ineligible for Benefits			
o Never Covered	27%	20%	11%
o Never Vested	3%	3%	3%
Subtotal	30%	23%	14%
Total	100%	100%	100%

a/ 34 percent of the original group of workers is assumed to die before reaching 62.

Source: ICF estimates.

Forum Discussion

MR. SCHULZ: What percentage of the part-time work force is young? This is important since you would expect to find these part-time people eventually moving into full-time employment. Also, do you have statistics on the important phenomena having to do with female participation, where you don't necessarily find women, as these people become older, moving into full-time employment. I won't ask you to say what is the rationale for not covering those women, but that's another question that you have to get into in policy questions.

What I did say is that 18 percent of the work force works fewer than a thousand hours. Our estimates are that about one-third of all young workers under age 24 work fewer than a thousand hours, and that about three-quarters of all of those under a thousand hours are not covered.

MS. CONNELLY: Of the 18 percent of the work force that works less than a thousand hours, 9 percent is between the ages of 25 and 64, and 9 percent is either under age 25 or over age 65. Our assessment is that approximately eight percent of the work force is under age 25 and works a thousand hours.

MR. GIVENS: Dr. Blaydon, your tables are wonderful. They produce a tremendous amount of information, but it's striking that on Table 8, 80 percent of the jobs created between '74 and '76 were created in firms which were less than five years old. That just astonished me.

If 80 percent of the gross jobs added in this period came from firms that were less than five years old, very likely a very large proportion of the ones that disappeared were with firms that were less than five years old. What is the net contribution?

MR. BLAYDON: I don't have that number.

MR. WOODRUFF: I have two comments. One of them you've heard before. Just because a firm contributed to a pension plan does not mean that all the workers employed by that firm either currently are participants or could expect to be participants if they continued on their current job. When we're looking at the job coverage, what is labeled here as job coverage statistics, we should realize that it's an estimate.

MR. BLAYDON: It is all jobs in firms that offer pension plans, whether or not they offer them to all of the jobs or not. Therefore, it does overstate coverage to some degree. It does give an indication of where the particularly important numbers regarding

participation and vesting might go in the future.

MR. WOODRUFF: It might be a good measure, for example, of the administrative difficulty if you imposed a mandatory pension requirement, or some such heretical idea, of how many firms out there already have an administrative mechanism to handle a pension fund. I don't think it is a good measure of how many workers would or would not necessarily be affected.

The other comment I wanted to make is that another way of cutting the data would be to look at those who are not covered.

MR. BLAYDON: In our larger analysis we do look at characteristics of the uncovered. Another important factor is industry growth, but we shouldn't overplay that. If you look at the distribution of jobs within the work force by industry sector, it has not changed all that dramatically. While the growth has been smaller in manufacturing, it is such a huge base that a large portion of the job creation that occurred over the last 20 years did occur in manufacturing. We shouldn't let high growth rate numbers applied to a small base obscure that fact.

CONSEQUENCES OF PROVIDING FOR RETIREMENT INCOME THROUGH ADVANCE-FUNDED VERSUS PAY-AS-YOU-GO PROGRAMS

Irwin Tepper, Ph.D.

INTRODUCTION AND SUMMARY

Retirement income programs in the United States today are a mix of advance-funded and pay-as-you-go systems. The bulk of the private pension system is funded whereas social security is not. Some public employee retirement plans are funded, some are pay-as-you-go. This paper analyzes the consequences of funding retirement systems. It will focus on the steady state or long-run impact of funding. To do this it is assumed that the decision to fund versus pay-as-you-go is taken at the time the plan is established. This avoids any one-time problems created by switching financing schemes when benefit accruals have previously occurred. The plan is assumed to have defined benefits. In addition, only the effects of the funding decision are analyzed. The equally important effects of establishing pension plans, about which much has been written, are not dealt with.[1]

This paper covers a number of aspects of the funding vs. pay-as-you-go comparison. First, the impact of funding on benefit security and on the economic position of all affected parties is assessed. Second, the shifts in the tax burden in the economy that result from funding will be discussed. In this context it is assumed that current tax policy will continue; where appropriate, potentially desirable changes in tax legislation are discussed. Third, the effect on saving and capital formation is analyzed. Fourth, the question of intergenerational transfers is dealt with.

The effects of funding fall into two categories. There are the primary effects - those that result directly from funding. Then there are the secondary effects - those that result from actions that are taken by those who are affected by the funding decision (e.g., plan participants, sponsors, the government). Notwithstanding the fact that the actions of concerned parties cannot be predicted with certainty, the approach taken in this paper is to identify rational alternatives given the impact of the funding decision of their economic position. The paper also relies heavily on the

[1] This is important to keep in mind. For example, the impact of social security on saving has received much attention but is not considered herein. The impact of funding the system is, however.

ability of private market mechanisms to facilitate adjustments; in economists language, perfect and efficiently operating labor, product and financial markets are assumed.

A few key concepts stemming from this approach underlie the conclusions reached. First, funding a pension system reduces future outlays to pay pension benefits. Tax factors provide a strong incentive for all but financially weak sponsors to accelerate outlays. One aspect of the rationality assumption made in this paper is that all affected parties understand the economics of funding and factor it into their financial decisions (the possibility of them failing to do so is also discussed). Second, this paper separates funding from the recognition of the incidence of pension cost. While it is often stated that one of the benefits of funding is to force a proper recognition of the cost of pension accruals, funding is not needed to accomplish this. A proper actuarial valuation can be made and a cost established whether or not the plan is funded.

Third, a key contention underlying the analysis in this paper is that the method of financing a funded system and its investment policy are crucial determinants of the effects of funding. Each operates on different considerations and only one of these, investment policy, can be regulated; financing cannot be.

The major conclusions reached concerning private pension plans are:

(1) The security of a funded plan is heavily dependent on the capital structure of the company and the investment policy of the pension fund.

(2) The current tax provisions provide benefits to sponsors who fund their pension system. Firms in high tax brackets, which are presumably the larger, more profitable firms where the chance of plan insolvency is low, have more to gain relative to their other opportunities. Hence the system promotes funding in plans where it is least needed.

(3) The impact of funding on aggregate saving and, hence, capital formation is likely to be small. The funding of corporate pensions more than likely is accomplished by a series of paper transactions.

(4) When all information about the pension fund is properly disclosed, the market for corporate equity will act in a way that minimizes any intergenerational transfers associated with pay-as-you-go.

A non-funded pension arrangement which establishes pension liability as a claim equal in priority to the creditors of the company (e.g., a book reserve approach) may provide more benefit security than funded plans. In the unfunded approach employees would get a deduction for incurring pension expense and accrued pension liability would appear on the balance sheet and be protected similar to debt. So long as pension libability was a formal obligation of the firm on the balance sheet, creditors would adjust their loans to companies to assure a high degree of solvency. A tax deduction for accrued pension expense, not matched by cash contributions may be appropriate.

In analyzing the effect of funding on public employee retirement systems and social security the approach taken in this paper is to make maximum use of the similarities among these plans and the private retirement system. It is argued that the contributory aspect of social security and many public plans is not a key factor in assessing the implications of funding, so long as labor markets function properly. The major differences that do affect conclusions about funding are (1) a greater

decision to fund will impact on an affected party and (2) a less robust market mechanism for facilitating adjustments. Because of these differences intergenerational transfers are more likely and savings will be affected to a greater degree.

The analysis contained in this paper provides a basis for questioning some of the conventional wisdom about funding, but it does have some limitations. It focuses only on long-term effects but clearly the intermediate term impact is also important. Many distributional considerations are not elaborated on. In addition, actual circumstances may deviate from some of the behavioral and market adjustment assumptions that are utilized; this will lead to changes in predictions. In addition, not all of the behavioral possibilities (e.g., the work/leisure tradeoff) have been explored.

THE FINANCIAL DYNAMICS OF PENSION PLANS

In preparation for the discussion of the economic consequences of funded versus pay-as-you-go schemes this section describes the relevant financial dynamics of a pension plan. Figure 1 presents per capita forecasts for the value of the benefits that would be accrued each year, the benefits would be paid and the pension liability that would be accumulated over the active and inactive status of a group of participants who enter the workforce and begin being covered by a plan at age 20.[2] As can be seen, the value of the benefits earned in each year increases with age as the participants approach retirement. The liability grows in the active status as additional benefits are earned and as the participants approach retirement. This liability is liquidated in the inactive status as benefits are paid out. Despite the fact that the actual payments are made in retirement, the plan's cost is incurred at the time the benefits are accrued. When the plan is not funded, the sponsor is effectively borrowing back the money that should have been paid out to meet the plan's cost and, as a result, incurs an unfunded liability. This is important to keep in mind. One of the often-mentioned advantages of funding is to force sponsors to make the proper recognition of the incidence of cost. But funding is not necessary; sponsors of pay-as-you-go systems can be required to recognize cost when benefits are earned, using appropriate actuarial procedures.

Figure 1 is useful for discussing the "demographic problem" of pay-as-you-go systems and the "investment problem" of funded systems.[3] The demographic problem encompasses the benefit security and intergenerational transfer issues that are often discussed. Subsequent generations are relied upon to meet the benefit payments and, in effect, assume the plan's unfunded liability. The sequence of events continues until one generation becomes either unwilling or unable to meet the claims.[4] In a private plan the "next generation" is the subsequent employees and owners of

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[2] This is a closed group projection. The value of accrued benefits would be equal to pension expense under the unit credit funding method. Other methods would produce different patterns of pension expense.

[3] See [5] for useful amplification.

[4] The average level of benefit payments is higher than the average level of the value of accrued benefits for two reasons: (1) the length of employment exceeds the length of retirement, (2) the time value of money is factored into the calculations.

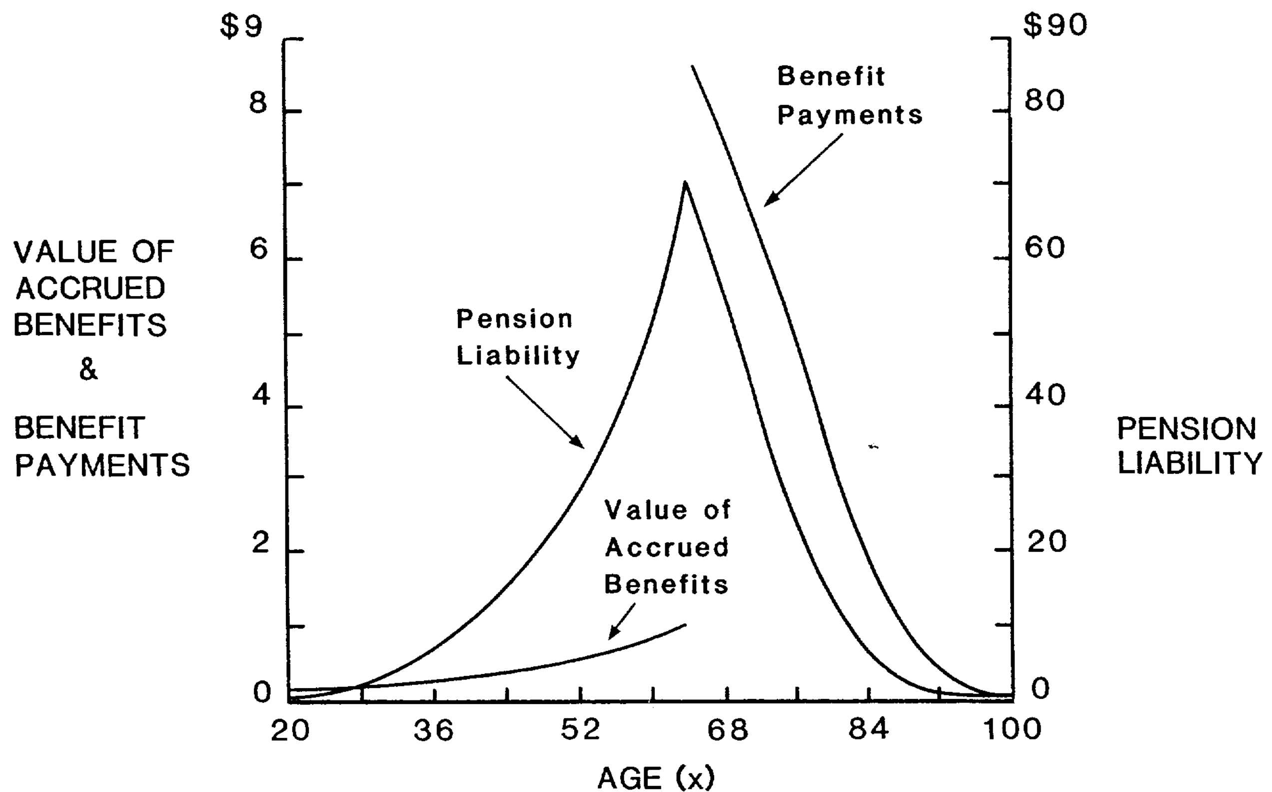

Figure 1.

Per Capita Forecasts of the Value of Accrued Benefits, Benefit Payments and Pension Plan Liability for a Group of Employees

Notes:
- o Values stated are per dollar of benefits accrued
- o Plan is a flat dollar benefit; no liberalization
- o Value of Accrued Benefits is the annual increment to pension liability; the unit credit funding method would establish this value as the plan's cost for the year.
- o Ten year vesting; actuarial interest rate = 6%; entry age is 20

Source: I. Tepper and A.R.P. Affleck. "Pension Plan Liabilities and Corporate Financial Strategies." Journal of Finance, (December 1974).

the firm. If the firm shrinks in size, benefit payments will be large in relation to revenues, salaries, etc., and profits will shrink. It puts the firm in a financial bind, and pressure will be put on the new generation of employees to take a wage cut so that benefits can be paid. In the worst case, bankruptcy could occur as the firm would be unable to meet its obligations. As discussed below, the effects of these possibilities can be minimized by proper disclosure and upgrading of pension claims. In a public retirement system the "next generation" is the employees and taxpayers of the governmental unit. If the tax base declines there may be taxpayer resistance to paying the high levels of taxes needed to meet the benefits.[5] Also, to the extent that plans are contributory (as they typically are), employee contributions will provide a smaller fraction of the cost and there will be pressure to increase the rates at which employees contribute. Hence, the burden falls on both the taxpayers and employees. In social security it is the next generation of covered participants and employers who share the burden. The overall demographics of the country (e.g., the dependency ratio) is the key factor and much has been written about this problem.[6]

Funding a pension system will overcome these demographic problems but leads to the "investment problem," the problem of meeting the plan's assumed real rate of return. Related to this problem is the social question of the impact on savings and capital formation.

Figure 2 presents a more realistic way of looking at pension fund dynamics. New entrants are added to the projections as participants become inactive so that a constant size workforce is maintained.[7] It can be seen that, after a long time, the plan settles down into a stationary state.[8] At this time pension payments are roughly five times the value of accrued benefits (for the particular set of assumptions used). The benefit stream would be the outlay required under a pay-as-you-go scheme. Had the plan's accrued benefits been funded, the required outlay would be much lower. The shortfall between the benefit payments and cash contribution comes from earnings on the pension fund. (A fundamental condition of the stationary state is that contributions plus earnings on the fund equal the benefit outflow.) In this particular example, if the system is funded, the earnings on the fund are relied upon to finance the major share of the benefits. At any point in time, the funded system would have enough resources to meet the plan's benefit obligations even if no further contributions were made; payments would be made from interest plus liquidation of principal.

FUNDING OF PRIVATE PENSIONS

Benefit Security

It is often argued that the primary reason for funding is to provide benefit security. In a pay-as-you-go system the beneficiaries (and the PBGC as an insurer of a fraction of the benefits accrued) are in an inferior position to

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5 See [11].

6 See [5] for example.

7 This is an open group projection. It allows for both non-retirement and retirement decrements in service.

8 Trowbridge [13] has examined the stationary state in detail.

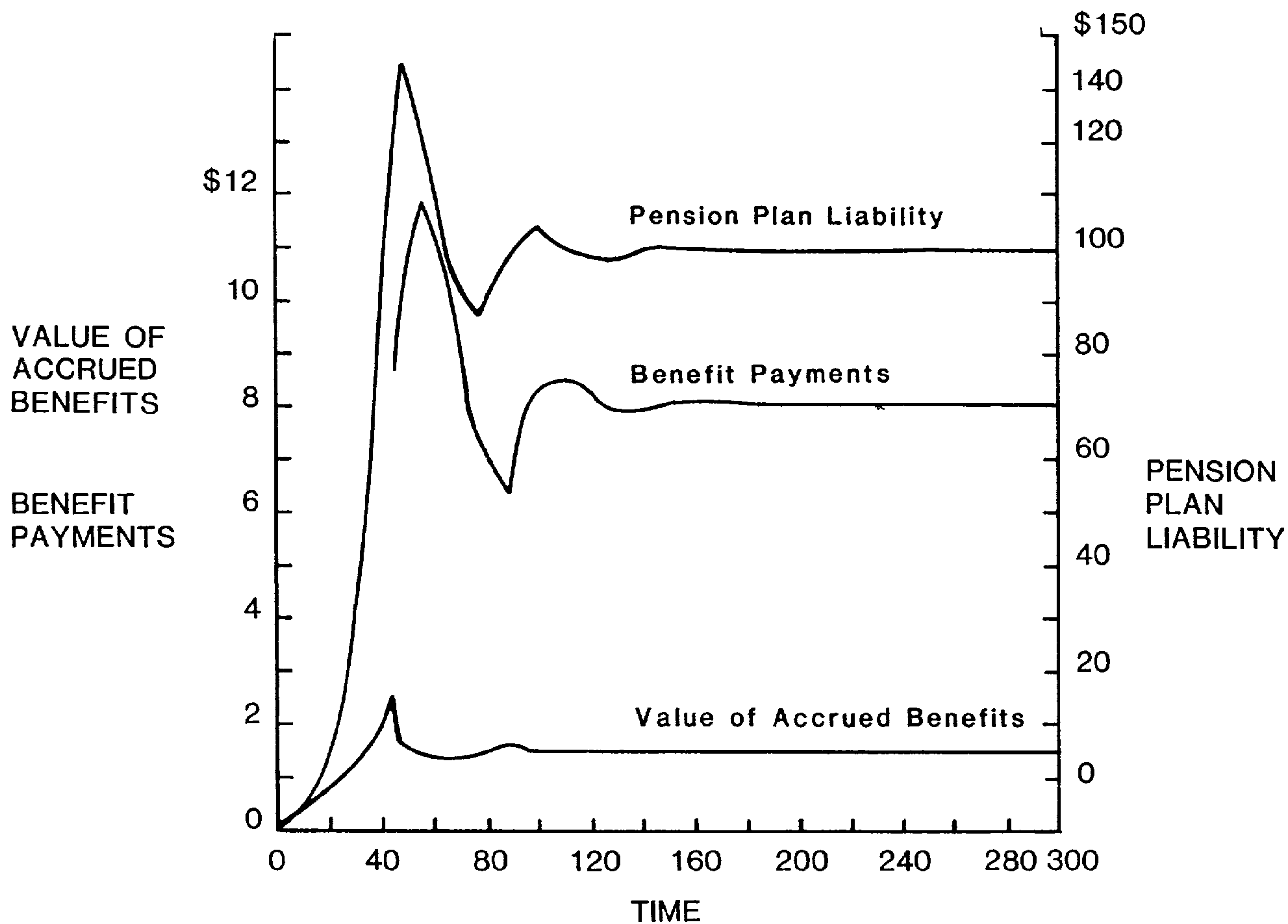

Figure 2.

Per Capita Forecasts of the Value of Accrued Benefits, Benefit Payments and Pension Plan Liability for a Non-Growing Work Force, with New Entrants Replacing Departures.

Notes: See Figure 1

Source: I. Tepper and A.R.P. Affleck. "Pension Plan Liabilities and Corporate Financial Strategies." Journal of Finance, (December 1974).

the creditors with respect to claims on corporate assets.[9] There is no legal document to restrict management from making decisions which weaken their position. It is possible that the pension liability will turn out to be a claim junior to the equity since distributions to the company's shareholders could take place prior to settling pension claims. In a funded plan the segregated pool of assets that is accumulated collateralizes the sponsor's obligation. This places at risk more of the capital of the creditors and stockholders (they also benefit from the tax advantages of funding as discussed below).[10]

The money that is put into the pension plan must come from one of three sources: (1) increased retention of earnings, (2) transfer of corporate assets, or (3) increased financing.[11] If earnings are used it is the stockholders who suffer the increased exposure. Money that they could have been invested outside the firm is now locked into the pension fund. If corporate assets are transferred to the pension plan (e.g. cash) or if debt is increased then the position of the company's creditors is weakened. If equity financing is used, then it is the shareholders who, in general, are worse off.

The investment policy of the fund plays an important role in determining how much of an increase in benefit security has taken place. To the extent that funds are invested in the sponsor's stock then there has not been any material change in the likelihood that the company will meet its obligations. If funds are invested in debt issued by the sponsor then the claim of the beneficiaries and the insurer is upgraded to the status of an unsecured creditor. In either case, the claimants are still heavily dependent on the company to meet its pension obligations. At present there is a 10% limitation on investing in corporate securities. If the pension fund is invested in a diversified portfolio of corporate bonds and stocks, then the claimants do not rely on one firm to meet its commitments but instead rely on the corporate sector as a whole to meet its obligations. In effect the claimants' risks are pooled with those of other corporate pension plans. It is true, however, that to the extent that the pension funds are invested in equities, pension claimants have a claim on the corporate sector junior to creditors. The situation described above is generally the case today: eighty percent of corporate pension assets are invested in corporate stocks and bonds. Of this investment in corporate securities, 70% is in stocks.

When pension assets are invested in securities outside the corporate sector the chances that the corporate sector will pay its pensions may not be increased much. If, for example, government bonds are held, then it is the taxpayers at large that secure these claims. If mortgages or residential real estate is acquired, it is individuals who will meet the payments. Neither will be good debtors unless income is generated by firms in the economy.

The increase in benefit security that occurs as a result of increasing the amount of capital at risk is, in effect,

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[9] See [7], [12].

[10] It is assumed that the sponsor does not raise prices to obtain the cash. If the pension expense has already been accrued and recovered, it is unlikely that this would be done.

[11] Important tax considerations are added to this analysis shortly.

a wealth transfer from the owners' of the firm to the claimants (this assumes that creditors have protected themselves). The owners can be expected to seek other forms of compensation in order to recover this lost wealth. To the extent that they are successful, the economic position of all parties will tend to return to the status that existed prior to the funding of the plan.

One often-stated consequence of funding runs counter to the line of reasoning presented above. It is contended that improved funding often leads to the liberalization of pension benefits, which further increases the value of the employee compensation package. The presumption in this line of reasoning is that since the plan is better funded, the company and its investors are better off and can afford to pay more. However, this depends upon the source of the improved funding. If the money came from company contributions, as it would in a decision to move from a pay-as-you-go to a funded arrangement, then the improved funding has weakened the financial position of the company and/or its investors and for the company to liberalize benefits would further erode their position. If the source of improved funding was an unexpected event such as superior investment performance, then the company and its investors are wealthier and it is reasonable to imagine the situation in which improved funding leads to improved employee compensation. Funding does provide tax benefits, however, which can be shared with participants. This would be an explanation for funding and benefit liberalizations to go hand-in-hand.

Another prevailing belief that is inconsistent with the analysis presented above is the notion that funding transfers ownership of the investments in the corporate pension fund to the beneficiaries.[12] The opposing view is that the assets in the pension fund are under the ownership and control of the sponsor and are simply placed as collateral. The only time that the company would relinquish ownership and control is in plan termination and, in this status, it is the beneficiaries that would receive ownership and control.

Because in a funded system the claimants have a position junior to that of the creditors (and, possibly the stockholders) and are thus, heavily reliant on pension fund assets for benefit security, a funded system may not be the best approach to achieving this goal.[13] An unfunded scheme in which pension liability was given the status of a claim equal to corporate debt (i.e. a book reserve approach) might prove to be a superior way to provide benefit security. Creditors would pay much more attention to pension liability and the markets would restrain companies from issuing an unreasonable amount of total claims (i.e., pension liability plus debt) on themselves. The increase in security that is brought about by elevating the status of pension claims could more than offset the reduction in security that results from not having a pension fund.

Tax Considerations

The bulk of corporate pensions are qualified by the Internal Revenue Service to receive special tax treat-

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[12] See Drucker [3].

[13] Regulating the investment policy of pension funds would improve existing arrangements.

ment. Specifically, contributions to the pension fund, subject to maximum limitations, are deductible at the time they are made and earnings on pension fund investments are not taxed. Each of the two tax provisions, taken separately, results in a deferral of (not an exemption from) taxes. All pension benefit payments, whether they come from a pension fund or from the company directly (in a pay-as-you-go scheme) will be deductible as a business expense. The difference is in the timing of the deduction. A shift from pay-as-you-go to a funded plan reduces current taxes and increases future taxes thus creating a deferral. Similarly, not paying taxes on pension fund earnings at the time they are earned will result in an eventual tax payment on these earnings. At some point in the future, contributions to the plan will be reduced by an amount equal to the accumulation of untaxed income (assuming the plan's liabilities are unchanged).[14] At that time taxable income will increase by this amount and hence taxes will increase.

These deferrals are interest free loans from the government. The firm benefits from these deferrals because it has the government's money to invest in the pension fund. The after-tax interest that accumulates on these deferrals enhances the rate of return the firm earns on its pension fund. The net result is that the company earns the pre-tax rate of return on its investment. (See [6] and [10]). This rate of return will almost always compare favorably to other corporate opportunities.

The simplest way for the company to take advantage of this tax situation is to raise debt to finance the contributions to the pension fund and to invest pension fund assets in bonds.[15] These transactions will produce a completely arbitraged position in which the firm earns tax-exempt income on its investment in the pension fund and pays tax-deductible interest costs on the financing. The arbitrage positon eliminates the often-mentioned risk of exposure of the pension fund to inflation. Any losses that occur in the pension portfolio will be offset by gains on the debt that was issued by the company to finance pension outlays. Similarly, there is no increase in business risk and/or leverage since the arbitrage matches fixed streams of payments. Hence, the tax structure provides a powerful economic incentive for a company to fund, once it is committed to granting pension benefits. Firms that do not take advantage of the tax structure put themselves at a competitive disadvantage.

The benefits of setting up a funded scheme will be larger the higher the tax bracket the company is in, the less chance there is of bankruptcy and/or plan termination and the less the company is able to defer taxes on its non-pension investments. In other words, the effect of the tax incentive is to stimulate funding in plans where the chance of termination is the lowest. In general, larger and/or more profitable firms will receive a disproportionately large tax benefit. However, tax benefits exist for all firms and only in unusual circumstances would a company be expected to opt for a pay-as-you-go versus a tax-qualified funded scheme. Such circumstances would include a situation of capital rationing where the firm is unable to raise

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[14] The funding patterns and the adjustments made to them as a result of altering contribution schedules and/or the accumulation of pension fund earnings are determined by the plan's actuarial cost methods.

[15] Other schemes will work. See [2] and [10].

money in excess of internal needs at rates of return comparable to that of the return that would be earned in the pension fund. It also might be that the perceived costs of administering a funded plan including the cost of compliance are prohibitive. These impediments to establishing a funded plan would more likely exist in small firms than in large ones.

The tax benefits increase the wealth of the firm to the detriment of the government. The likely response of the government would be to increase corporate tax rates to recoup the lost revenues. As this happens firms will pay back the taxes saved by funding their pensions and will return to their wealth positions prior to funding. The best a firm can do is attempt to stay even; firms that don't fund will pay higher taxes than they previously did. The firms that did fund will benefit in the form of a lower tax bill because of this. There is also the possibility that the tax burden will shift to other sectors and/or the government will finance the deficit by borrowing.

Saving/Capital Formation

Saving equals investment is a fundamental identity in national income accounting. Another way of saying it is that the physical amount of new capital that is produced is the amount of national output that is not consumed. This relationship is not altered by increases in the amount of financial claims outstanding, per se; the financial system facilitates the saving-investment process. It is important to determine whether a funded pension system can be expected to lead to any increase in savings in the economy after all transactions have been made. In order for this to happen consumption must be reduced or national income increased.

If companies financed the bulk of their contributions to corporate pension funds by issuing securities, there is no net effect on savings. Consider the

case in which the securities that pension funds buy are issued by other corporations. (This is the most important case since roughly 80% of pension fund assets are invested in corporate securities.) It is easy to see that there has been no net increase in savings. In effect, each corporation has been both a buyer and seller of securities. Each has issued a paper claim in exchange for similar securities of other corporations.[16] If pension fund assets are invested outside of the corporate sector (the major non-corporate pension fund assets are government bonds, mortgages and a host of alternative vehicles) then corporations must have been able to sell their own securities outside of the corporate sector to finance these purchases. Again, there is no net new money flowing into savings directly. It is possible that these transactions will have an effect on the savings behavior of the participants in these transactions, but these effects are likely to be small.

If, on the other hand, corporations finance pension fund contributions out of cash income then there is a direct increase in corporate saving (i.e., retained earnings). The holder's of the company's stock experience reduced dividends as this money is put into the pension fund. They can be expected to recover the lost dividend income by decreasing their own personal saving, if they react rationally. Since the company has increased its investment in securities, shareholders can afford to liquidate some of their own (including some of their holding in the company's stock) and still have the same total level of investment. When this happens

[16] The situation in which a firm invests in its own securities is even more transparent.

there is no increase in total saving but there is a reduction of securities held by individuals and an increase in institutional holdings. This institutionalization process has probably been the dominant feature of the funded plans. Finally, if firms transfer assets (e.g., cash) to the pension fund there is no change in saving.

The tax effects discussed above also affect saving decisions. In the current situation, where the government permits deductions for cash contributions, funding decreases corporate taxes and increases corporate income and cash flow by an amount equal to the company's tax rate times its contribution. The increase in corporate income has been matched by a reduction in government receipts so that national income doesn't change. The extra cash that the company has goes into the pension fund and reduces its financing requirements. This increase in corporate savings is mirrored by a reduction in the tax revenues of the government and, hence, a reduction in government saving. The two cancel out. If the government's spending plans are unchanged it will either have to increase taxes or issue more debt. Only a tax increase will offset the reduction in government saving but it will reduce saving of the taxed entities. Again, the effects will cancel.

Combining the effects, it is difficult to imagine a set of circumstances in which the funding of private pensions will lead to a substantial increase in saving and capital formation in the economy. The biggest potential increase would come if companies financed their after-tax contributions to pension funds out of cash income, if individuals responded to lower dividends by reducing consumption and if the government increased taxes to offset the loss in tax revenue resulting from a deductibility in contributions. As discussed before, this behavior would not be anticipated if all parties were rational.

It is possible that the rational responses described above will not take place. Funding can lead to an increase in saving if investors fail to perceive themselves at least as well off when contributions are made. In this case they will reduce both consumption and saving and the net effect will be for saving in the economy to increase. But in subsequent years when the company's financial position is improved because it has funded the pension plan, investors can be expected to consume more than they would have had the plan not been funded. This would lead to a reduction in aggregate saving. The initial increase in saving will be followed by a decline and in the long run an equilibrium will be achieved where funding had no effect on saving. The increase in capital formation would only be temporary.

Intergenerational Transfers

In a private pension plan the most significant intergenerational transfers that might take place are associated with the stockholders of the company. In a pay-as-you-go system no payment will be made when the plan starts unless benefits are granted retroactively to inactives. As time passes, the contributions will increase to the point where they will be larger than if the plan had been funded. This happens because, unlike the funded plan, there is no income from investments to meet part of the cost of the plan.

It is not necessarily true, however, that future generations of stockholders of the company will be worse off just because the plan had not been prefunded. If the company had properly matched revenues and expenses in its income statement then the accrued pension expense would not be affected by the decision to fund. The only difference would be that the company, by not making contributions, incurred unfunded pension liability. In effect, it has borrowed money from the plan's participants. When the existing gen-

eration of stockholders sells the company, its earnings record will be no different than it would have been had the plan been funded, but the company would have the accumulated unfunded pension liability on its books. Buyers of the company would pay less for it than they would have had the company funded its pension obligation. As a result, there is no intergenerational transfer due to lack of funding.

Even if the company had not matched revenues and expenses properly, and had not established the liability on its balance sheet, prospective buyers would still be able to determine how much less they should pay for the company if they had complete and accurate information about the accrued benefits of the plan. In principle, they should be able to make the calculation themselves. Increasingly, attention to unfunded pension liability is being considered in mergers and acquisitions and there has been a trend toward fuller disclosure of the data needed to evaluate pension claims.

PUBLIC PENSIONS AND SOCIAL SECURITY

In the analysis of funding issues, two key differences exist between private pensions and public pensions/social security. The first is that the latter are (generally) contributory. The second is that it is more difficult for affected parties to predict and understand the changing economics of these plans and to make compensating transactions. As a result, some intergenerational transfers and changes in saving are likely. These differences limit the applicability of the analysis of private pensions, but the discrepancies may be small.

If labor markets function properly, the contributory aspect of public pensions/social security does not play a major role. For a given level of benefits and other forms of non-wage compensation, an employee will receive a level of wages such that the total package has a value equal to his productivity. If employees are required to make contributions to a pension fund, this would reduce their compensation unless, as can be expected, their wages would be increased. The employee (and the sponsor) are indifferent between higher wages accompanied by mandatory contributions and lower wages when the full burden of funding falls on the sponsor. As a result, the analysis funding these pension systems is equivalent to that of a non-contributory plan where the wage adjustments have taken place.[17]

In private pension plans, so long as good information is available the value of the enterprise adjusts to changes in its financial condition. This marketplace mechanism will work to minimize any undesirable impact of pension funding on the current owners. In public retirement systems a fully reflective marketplace is not available. The value of property and/or enterprises in the governmental unit will reflect, to some extent, changes in taxation (i.e., property, sales and income taxes) that will accompany funding decisions. Taxpayers who are called upon to make higher levels of contributions to fund a pension system will experience lower taxes in the future (because pension contributions will be lower), and, to the extent that they own property and/or a business, can expect the value of the latter to rise to reflect the outlook for lower taxation. In the social security system the value of corporate sponsors would increase to reflect lower future social security payments. To the extent that these mechanisms do not function properly, funding decisions will produce intergenerational trans-

[17] The non-deductibility of employee contribution in social security makes the contributory affect undesirable. See discussion below.

fers and will most likely affect savings.

Benefit Security

Benefit security is typically not a big issue in public retirement systems. It is widely believed that government units sponsoring these plans are perpetual organizations and that the tax base they draw upon is a more diversified source of funds than a single firm and it will provide whatever funds are necessary. Recent events suggest that this may not be a good assumption. The New York City experience, and the general move toward reducing taxes, suggest that taxpayers might not be willing to continue to support an expensive government, particularly when something can be done about it. The something could take the form of either a taxpayer revolt or exodus to a lower tax domicile. It is also true that some governmental units rely heavily on a non-diversified base of economic activity for support. In these instances the public retirement system is not much safer than one sponsored by one large company.

A non-funded public system with pensions having a claim equal to that of creditors would operate much like its counterpart in the private sector. Creditors of the governmental unit will factor pension claims into their decision to lend, thus forcing fiscal responsibility. Similarly, funded public systems are subject to the same investment policy problems as a private system.

The social security system is widely perceived to be immune to benefit security problems since it draws on the tax base of the entire nation and that the government will not renege on any promises. It should be kept in mind, however, that social security liability is a national debt and that it is much larger than the amount of federal debt outstanding.[18] While unlikely, it is possible that, if the country experiences severe economic difficulties, the ensuing political battle over economic resources could lead to a reduction in benefits previously earned.

Tax Considerations

There is no deduction for employer contributions to a funded public retirement system. Similarly, there are no deductions when benefits are paid out in a pay-as-you-go scheme. Hence, non-deductibilty is a neutral factor in a public retirement system just as the deductibility feature is in a private system. Since employee contributions are also non-deductible, the tax system does not favor either source of funding. Earnings in the pension fund are tax-exempt so that public plans earn a pretax rate of return. Given that the governmental unit can finance pension outlays at a low tax-exempt rate it will find funding attractive. Unlike the sponsor it has alternatives to this arbitrage (e.g., bond anticipation financings) but these are limited by the Internal Revenue Service.

The tax position of an employer in the social security system is identical to the employer's situation in a private pension plan. A deduction is taken for contributions and the earnings on the trust fund are tax-exempt. Employee contributions, being non-deductible are an undesirable aspect of the system.

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[18] As of January 1980 Social Security was estimated to have an unfunded liability on a closed group basis of about $5 trillion. Federal government debt outstanding at that time was under $1 trillion. For the Social Security figures see Actuarial Study No. 83, Long-Range Cost Estimates for Old-Age, Survivors, and Disability Insurance System, 1980, Social Security Administration.

It would be more efficient for employers to fully fund it. For a fixed level of benefits, sponsors should (all else equal) wish to have the system funded so that they can capture the tax benefits identical to the ones they receive in a private plan. However, some important other considerations limit this conclusion. First, there is a reasonable chance that, if employer contributions to fund the system are deferred, their full value will not be charged the employer in later years. The general revenue base of the government could be used. Second, the employer would not have control over the investments of the fund. Third, it is possible that a well-funded social security system would lead to increased coverage and/or benefits, setting back the funding progress of the system. Finally, the price of the company's equity may fail to capture the effects of funding on the value of the firm.

Saving/Capital Formation

Funding of a public retirement system would increase contributions and it would reduce the incidence of future contributions. For the tax reasons discussed above the sponsor is better off. If money is borrowed to meet the excess outlays, the loan could be repaid out of future reductions in pension payments. There will be no effect on saving but there will be distributional effects in the capital market that will depend upon the investments of the pension fund. If taxes are raised, taxpayers will (1) liquidate investments, (2) borrow, or (3) reduce consumption to make the extra tax payments. The first two alternatives will produce no change in savings. If individuals reduce consumption to meet the increased pension outlays, saving will increase for a period of time but the reverse will happen in the periods where taxes and contributions are lower than they would have been under a pay-as-you-go scheme. To the extent that individuals perceive themselves to be no worse off for having made increased contributions, they will not reduce consumption.

The employer's role in funding of the social security system is analogous to the funding of a corporate-sponsored pension system. As discussed previously, because of the tax considerations and the fact that increased initial social security outlays will reduce future contributions, the company's economic position is enhanced if corporations issue securities to finance the increased outlays. There will be little effect on aggregate saving. There will be an important effect on the supply and demand for different securities, however. In particular, if the social security system invests in government bonds then yields on them will fall while the opposite will happen to corporate securities. Corporations can alternatively pass the burden of funding the system on to individuals by either raising prices or reducing dividends. These transactions will have a positive effect on aggregate saving for some time if individuals reduce consumption in the belief that their wealth has been eroded but the opposite set of events will occur at some point in the future.

Intergenerational Transfers

In a public retirement system, when employee compensation is unaffected by funding decisions, it is the taxpayers who may experience an intergenerational transfer. Increased funding will lead to future reduction in pension outlays and this will mean lower future taxes. The most likely candidates for the reduction are income, sales and property taxes. The taxpayer will obtain some of the tax-reduction benefit directly and to the extent that he/she owns property and/or an enterprise, the value of these holdings will increase because of the reduced tax burden in the area. The properties act like the equity of a company in the private system in that it can capitalize the value of pension funding.

The much-discussed intergenerational transfers of social security are minimized in the framework utilized in this paper. The analysis of funding the security system is identical to that of a private plan; the employers de facto fund the system and the value of the company increases because funding has reduced future benefit payments. The crucial question is will the market for the company's equity adjust to reflect funding decisions?

REFERENCES

1. F. Black. "The Investment Policy Spectrum: Individuals, Endowments and Pension Funds." Financial Analysts Journal, (January-February 1976).

2. F. Black. "The Tax Consequences of Long-Run Pension Policy," Financial Analysts Journal, (July/August, 1980).

3. P. F. Drucker. The Unseen Revolution, Harper and Row, (1976).

4. B. N. Friedman. "Public Pension Funding and U.S. Capital Formation: A Medium-Run View" (with discussions and reply), Funding Pensions: Issues and Implications for Financial Markets, Federal Reserve Bank of Boston, (October, 1976).

5. W. C. L. Hsiao. "Demographic Changes and Funding for Pension Plans" (with discussion by N. Keyfitz), Funding Pensions: Issues and Implications for Financial Markets, Federal Reserve Bank of Boston, (October 1976).

6. P. H. Jackson. "Investment Aspects of Pension Fund Prepayments." Proceedings of the Conference of Actuaries in Public Practice, Vol. 27 (1977-1978).

7. W. F. Sharpe. "Corporate Pension Funding Policy." Journal of Financial Economics, (June 1976).

8. I. Tepper and A. R. P. Affleck. "Pension Plan Liabilities and Corporate Financial Strategies." Journal of Finance, (December 1974).

9. I. Tepper and R. D. Paul. "How Much Funding For Your Company's Pension Plan?" Harvard Business Review, (November-December 1978).

10. I. Tepper. "Taxation and Corporate Pension Policy." Journal of Finance, forthcoming.

11. R. Tilove. Public Employee Pension Funds, Columbia University Press, (1976), Chapter 8.

12. J. L. Treynor, Regan and Priest. The Financial Reality of Pension Funding Under ERISA, Dow Jones-Irwin (1976).

13. C. L. Trowbridge. "Fundamentals of Pension Funding." Transactions of the Society of Actuaries, (1952).

Forum Discussion

MR. RUDNEY: Professor Tepper has made a finding here with respect to the effect of pension funds on savings and capital formation which I think is rather shocking in terms of conventional wisdom.

As I heard him, his assumption is that the funds are obtained either from retained earnings or from dividends, that is from profits, and that the trade-off is between pension contributions and profits.

I thought that conventionally or, at least, a very strong school of thought in economics holds that pension contributions are effectively a compensation item and that over the long run those contributions are trade-offs for other wages. If they are not trade-offs for other wages, I was under the impression that they would be production costs and would be reflected in high prices. How do profits come into this picture and are his assumptions really tenable?

DR. TEPPER: I think we have to be clear to distinguish between whether I'm analyzing the incidence of granting a pension benefit or whether I'm analyzing funding of a benefit. I am only looking at the second question, not the first. I assume that the benefits have been granted by the system and that any adjustment in the trade-off between current and deferred wages has taken place. The question I'm looking at is whether the expense on the income statement (since the deferred wage has been given), whether funding, in fact, does have any effect on saving and capital formation. In that setting, the conclusion that I reach is that the trade-off is not between funding and dividends and retained earnings. Rather, it's between funding and external sources of financing.

MR. SWICK: He's already beat me to the question I was going to ask him, but I have a second question on the same subject.

Given that the pension has been promised, if we put the money into a pension fund, we get a tax deduction for it. If we pay the money out in dividends to shareholders, taxes are paid first, and the net is paid out to shareholders, and, I guess I sort of wonder where Professor Tepper sees that tax money going. Do you consider that part of the overall savings?

DR. TEPPER: Yes, even though that's not very clear in the version of the paper you've got. The effect of the tax deduction taken at the time the contribution is made is to reduce the incidence of corporate taxation and, in effect, increase corporate savings,

since corporate saving is the residual after taxes. That's basically been offset, however, because those tax receipts have been lost to the government. The government's definition of savings is taxes minus expenditures, so the company has had increased saving due to less taxes paid. The government in aggregate has lost that dollar of taxation so there's been dissaving on the government's part.

If you think about the tax structure as being a transfer from firms to the government, that saving effect has been nullified and neutralized. What the companies gain in terms of saving has been offset by loss in the government.

Now the interesting question is what does the government do about it? Does it finance the deficit, or does it, in fact, raise taxes? There are very important distributional effects there, George, which I haven't addressed at all in this paper, but the aggregate amount of savings will not change no matter what the government does.

MR. WOODRUFF: The concern that I have is in the intergenerational transfer section. I think it would be helpful to indicate that between generations of workers there may be at least some degree of wage pension trade-off.

For instance, in the last round of auto industry bargaining there was a very explicit trade-off, a decision to lower current compensation on the part of the workers in that bargaining in order to provide for pension increases for retirees. I think that this provides some indication that costs that may not have been recognized by one generation may be borne by another in their pension entitlements, even in an advance funded private pension setting. Even if you disagree with that conclusion, it would be interesting to see you discuss it. There may also be other intergenerational transfers.

DR. TEPPER: There are definitely participant intergenerational transfers which I haven't talked about. Jim, you started this discussion by saying that the investment community may not like this one.

I think some of you know that Fischer Black (at MIT) and I have a companion set of papers. One came out in the Financial Analysts Journal, and mine is coming out in the Journal of Finance. They suggest that if a system is funded, it should be funded in bonds as opposed to equities, to maximize tax advantages. I've made that point in a number of places, and I've got half the investment community upset at me. None of the equity managers want to talk to me now.

MR. SWICK: I wanted to raise one other point. I think I was pleased with one thing I heard you say.

Some of us believe that Title IV of ERISA was bankruptcy legislation, not pension legislation. I think I heard you say that an important ingredient in any consideration of funding versus non-funding is a thorough review of the bankruptcy laws. I certainly think that's true. For example, in Germany the book reserves have no priority in bankruptcy, but they do have a subsidiary reinsurance program.

MR. SALKIND: I'd like to ask why you think that a book reserve system which is essentially geared to the economics of one company provides more economic security than a portfolio of equity investments which are related, let's say, to overall economics.

DR. TEPPER: I hope I didn't state that. It necessarily is true that the non-funded system in which priority claims in bankruptcy are higher is necessarily better than the system we now have. In our advance funded system claims are junior but you have a portfolio. I just suggested that it may not be the case that one system dominates the other. It may very well be different for different companies.

MR. SALKIND: Why is it relevant when all the defined benefit plans have a termination insurance guarantee from the PBGC?

DR. TEPPER: When I talk about claimants on the pension system, I lump PBGC in with the beneficiaries. I assume that the beneficiaries are going to be made largely whole with respect to the benefits that they accumulate and vest. I'm concerned more in this paper when I talk about benefit security with making sure that the sponsor, in fact, is the one who pays the benefits he promises. I've been careful to try to lump PBGC's claim in with the beneficiaries and treat them as a class claimant on the plan.

MR. JACKSON: I expected one of the actuaries in the audience to question your statement that advanced funding is not necessary as a means of conveying to a plan sponsor the true cost of the program.

I think many actuaries have had a problem, in the public plan area, controlling the benefit promise for plans that are not well-funded, when the only control is the current out-of-pocket cost of pensions. I think many probably have the same feeling that I do. If I gave a client a theoretical figure that he did not have to pay into a pension plan and a long discussion of why that was the true cost, at the end of my discussion, I'd find him asleep. The client would not be convinced that the cost was high. I have some reservation about removing this direct connection between promising more in benefits and putting more in a fund. It seems to me that it does serve as a break on the over-promising which has been one of our problems in the past.

DR. TEPPER: I agree with that. The sponsor may fall asleep. But, in a public retirement system, I doubt that the taxpayers or the voters would fall asleep if you gave that information out to the public. You guys are supposed to be working for the beneficiaries and are supposed to be letting people know what the true costs of obligations are.

Recently there was an actuarial valuation of the military retirement system. The actuarial cost was much higher than what they're paying out in benefits, and the unfunded liability was very high. The Pentagon said this was all meaningless, however, because the program isn't funded anyway. They argue that because it is a pay-as-you-go system, the true numbers don't mean anything.

Well, I think, in fact, they do mean something.

MR. HUTCHISON: I agree with Paul Jackson. We do a lot of work in the public field. The city councils and county commissioners tend to vote more and more benefits without adequate funding. We've seen them come to the stage where they've had to terminate promises, suspend enrollment and so forth. When they have a fully funded program, it does tend to temper their political desires to give benefits and not put up the money. I agree with Paul that they need a front-end cost, not a 99-year mortgage cost to pay off those benefits.

MR. SWENSON: Those of us who are not participating in the Civil Service Retirement System are plan sponsors of the Social Security program. The Office of the Actuary a year or two ago did prepare an actuarial valuation for the Social Security program based upon an approach analagous to the minimum funding standards of ERISA. This is a participant group that is very learned. I would be curious to know how many within this room are familiar with the results of the study by a show of hands. It appears that roughly ten percent, perhaps 15 percent, are aware of the study. The study indicated that if Social Security were funded on a basis analagous to the minimum funding standards of ERISA the funding require-

ment would be about 24.5 percent of payroll just to cover the wage-related benefits. It also indicated unfunded liability of 3.7 trillion dollars.

DR. TEPPER: I just saw a recent study which showed a Social Security unfunded liability of 5 trillion dollars. This is about five times the national debt. How many people are aware of that, the order of magnitude of the government liability inherent in the Social Security System?

MR. ROBERTSON: Yes, Dr. Tepper. I think it's an unfunded accured liability whether or not you can borrow from future generations.

MR. ISAACSON: There's little or no funding going on in the public sector. I think participants do get very concerned about underfunding of their programs and have an active interest in insisting that the funding go on. It seems to me that book reserving wouldn't assure these people that future pension promises are secure.

I can site several lawsuits brought by participant groups in the public sector demanding that funding be carried out.

MR. BASSETT: I feel that an approach where you don't have a funded system is too subject to abuse. Under a book reserve system there could be several kinds of abuses that would be very difficult to police. One being, of course, the granting of benefits without recognizing the full cost. Another regards how the money is being used that's on the book reserve. We now police how the funds are invested, and only some ten percent can be invested in obligations of the sponsoring organization. If you book reserve it, you're saying 100 percent can.

RETIREMENT POLICY AND LARGE BUSINESS

Harrison Givens, Jr., F.S.A.

My assignment is to talk to you about prospects for retirement plans from the point of view of the large employer. These prospects are certainly shaped quite directly by the role of Social Security, and they would certainly be affected by requirements for mandatory pension plans, vesting liberalization, portability (which means many things to many people), and deductible employee contributions. There are other current proposals that would affect large plans, but these seem to be of special significance.

Social Security

Our Social Security program, of course, has its problems. This is not the time to go into them, but there is the short-term financial problem of the next several years, and the long-term financial problem that will reach us soon after the century turns.

Perhaps even more difficult to solve are the conceptual problems of what it is that society wants a Social Security program to deliver. There is the tug of war between equity and adequacy, the question of what is retirement -- is it retirement from the work force, or from a particular company -- and what are reasonable retirement expectations? What is the role of government in requiring that things be done, and in encouraging things to be done? What are the work pattern differences between men and women, between single and married? What role should there be, if any, for dependent benefits? What about welfare benefits?

In all this, Social Security affects employer programs in two quite different ways: obviously, it preempts certain benefit areas, because there's just so much income you can reasonably replace in retirement, death, or disability. More subtly, it embodies (more or less) society's current consensus on one's financial responsibilities toward others, and on when (or whether) workers should retire.

Perhaps our Social Security program will remain fairly close to what it is today. In any case, it does seem reasonable now to suppose that its pressing financial problems will keep it from expanding significantly, and that accordingly there will continue to be at least the present need for private employer programs.

Mandatory Pensions

If Social Security does not and cannot expand, how shall the country do a better job of assuring reasonable retirement income for most workers? Let's turn to mandatory benefit

programs. In appearance, the large employer has no great problem: we already have a plan, so requiring us to have a plan doesn't do anything particularly to us.

I think there are some disagreeable realities, however. Certainly there may well be additional benefit deliveries because of earlier vesting, and because of earlier eligibility requirements.

Less obviously, it will be awkward for defined benefit plans to comply with a defined contribution standard in the case of younger and short-service employees. A significant question is whether the requirement will be applied to each year separately, or cumulatively. As an example, for a $12,000 per year employee a 1% plan provides a benefit of $10 a month per year of service. A very liberal plan may provide an accrual of $20 a month. But a 3% contribution is $360. If the employee is age 25, the cost to provide then a dollar a month beginning at 65 is about $5, so a 3% contribution, or $360, would generate an accrual for this year's service, not of $10, or $20, but of $72 a month! At higher ages, of course, and even on average, a 1% plan will cost more than 3% of payroll. Although most employees will be in your service for more than one year, the question remains whether you must meet this 3% requirement each and every separate year, or merely over the 20 or 30 years the employee will be with you.

There's also a potential in a mandatory program, even for plans that provide the required benefits, of a disproportionate administrative expense from tracking many more people for small benefits. We'll come to that more specifically in a moment, in the area of vesting.

Finally, mandatory pensions may well bring a change in employee attitudes. It changes the nature of your retirement plan dramatically. Does anyone today thank the employer for providing Social Security benefits?

Earlier Vesting

Clearly, the intention of requiring faster vesting is to increase the number of people who reach retirement with a private pension benefit. But good intentions aren't good achievements, and the overall result may even be negative, as we shall see.

For the large employer, there's generally little increase in the number of people vested by going from 10-year vesting down to the 4/40 rule, or even to 100% after three years, because few people terminate after, say, three years and before ten.

Further, if they do, they leave with a fairly small amount of benefit value. EBRI has already made the point, so let me come to the same conclusion a little differently. Let us start with a benefit of $100 per month at 65. That's worth at age 65 around $10,000. Let's use for convenience an interest rate of 7% interest, simply because at that rate money doubles every ten years. If a benefit of $100 per month is worth $10,000 when the person is age 65, then, forgetting all about mortality, at age 55 it's worth only $5,000, because that is the figure that will double to $10,000 in ten years. Going on, at age 45 it's worth only $2,500; at 35 it's worth only $1,250; and so at 25 a benefit to begin at age 65 of $100 a month is worth only $625. To be benefited by more rapid vesting, an employee must leave with less than your old requirement of, say, ten years of service but more than your new rule requires, say three. Say, then, that on average he leaves with five years of service, and each year of service provided him with $12 a month. Then his $60 per month benefit would be worth at the point of termination 60/100ths of a number we just saw was between $600 and $1,200. So the average

vested benefit for those who benefit by a liberalization of present rules is worth about $500, and you're going to keep track of that for 30 or 40 years before you start to pay it. Such a benefit is clearly a candidate for cashing out.

So, in the case of a larger employer, faster vesting may look useful, but it provides trivial retirement benefits at unreasonable expense, or it provides modest severance benefits and no retirement security.

The case is somewhat different for small employers that have plans. In recent years they have widely been required by the Treasury to have 4/40 vesting anyway, so going to 4/40 would have little effect, and going to 3/100 wouldn't have much more.

What about small employers who don't have pension plans now? Will they be encouraged by this requirement to adopt them in the future? It doesn't seem likely.

Finally, what about present ingenious arrangement designed specifically to grapple with the problem of high turnover? I am thinking of multi-employer plans, which came into being mainly in industries where workers have little continuing connection with an individual employer, but a reasonable connection with a trade or craft. For such plans, faster vesting requirements would presumably relate to attachment to the industry, rather than to an individual employer. If the connection of labor to the industry is strong, then, as with large employers, the cost impact may be minor in relative terms, though large in total dollars. If the connection with the industry is tenuous, however, many new accounts of small benefit value could be created, providing a disastrous load, given the new disciplines of the recent multi-employer bill, and these plans shouldn't be given anything else now to digest.

Portability

Portability strikes me as a solution in search of a problem.

Does portability mean that when you leave with just a few years of service you don't forfeit your accrued benefit? If that's all it means, it's just vesting, and why do we have to be put to the confusion of maintaining a synonym?

More likely, it means that, in some sense, when you leave the plan you do not lose the value of the benefit that you have accrued. If you take that value away in the form of the same benefit specifications that you accrued, payable not from the plan that created it but some other instrument, how are you going to compensate that other instrument correctly -- what's the fair value of that benefit? And how is that other instrument going to administer it? A frequent answer is to turn it over to the Social Security Administration, or to create a Universal Private Pension System Corporation. Let's spare those private plans the bother of administering all those pesky little benefits, and set up a government agency to do what is too difficult for the private sector to administer. Do you really think that some independent organization can administer more inexpensively the bewildering array of private benefits that are created by the very private plans that you are taking those benefits from? It doesn't seem likely.

Perhaps you really don't need to preserve all the tiresome variations found in the universe of independent, private plans -- you need only take away the cash value of the benefit, and avoid the proliferation of benefit provisions, different starting dates, different factors for early retirement, different factors for optional forms of benefit, different death benefits, different disability benefits, and the

like. Yet there is still the question of setting a fair value for the benefit. Fair to whom, and by whose rules? But if you can solve the question of a fair cash value to take away from the plan, there is surely no need for a government agency when present IRA vehicles work so well and within the private sector.

Notice also that starting with the cash value of the accrued benefit at the point of termination implies a significant departure in benefit results thereafter. A simple, non-contributory plan provides as a vested benefit a deferred income, normally beginning at age 65. There is no benefit if the employee dies before starting income unless death is within ten years before age 65 and after the employee elects a qualified joint and survivor benefit. On the other hand, by starting at the point of termination with the cash value of the accrued benefit, it is inevitable that death at any time before retirement would provide a death benefit equal to the current value of the account, which would be more favorable than the plan's provision of no death benefit or only the qualified survivor protection. Conversely, if the employee survives to retirement, the original cash value will not provide as high a retirement income as the figure in which he was vested. The acturial explanation is that you discounted the age 65 benefit for both interest and mortality, and then brought the value forward at interest only. The lay explanation is that the cash value equivalent at termination cannot provide more death benefit for those who die before retirement without providing less retirement benefit for those who survive to retirement.

Now, here's a philosophical problem for you. When an employee leaves with five years of service, requiring the plan to pay over in cash the fair value of the accrued benefit really requires that the departing employee's benefit be fully funded at termination, or earlier than the benefit of the employee that continues to work for you. Why should the departing employee have priority in funding over the continuing employee?

A final version of portability is to keep the credit -- somewhere -- so that if an employee works 40 years, perhaps a year each in 40 companies, he will still have accumulated some kind of benefit when he reaches 65. But from whom, and how much, and who is going to pay for it? It seems to be simply a complicated way of having mandatory pensions with immediate eligibility and vesting; but it that's what you want, why don't you say so? So portability indeed seems to be a solution in search of a problem.

Deductible Employee Contributions

This concept is generally proposed as a poor relation to an IRA. If you're not covered by a qualified plan today, you can deduct $1,500 by putting it into any of several media -- a bank, an insurance company, a mutual fund, government bonds, etc. The limited version of this new concept would say that even if you are covered by a qualified plan you can still deduct some lesser amount that you contribute to that plan.

That limited, poor-relation concept has been broadened recently to propose that all workers can have deductions for retirement savings, with the same limits, regardless of employment status or the extent of employment benefits. This larger proposal retains the same broad choice of vehicle that now applies for IRA's, and adds the additional choice of contributing to a qualified plan if the employee is in one, and the plan is willing to administer deductible contributions, and the employee chooses to take a deduction for contributions to the plan.

Further, the broader approach also tries to target in on lower-paid people, for whom the motivation of tax deducti-

bility is small. They may pay little or no income tax anyway, and they're the ones who are most hard pressed to find money to save. The idea is to give them additional incentives. An often-cited example is the situation in Germany, where the $5,000 per year employees who puts aside $200 this year and keeps his hands off it for seven years will find another $200 there put in by the government: it's really a government thrift plan. It works very well in Germany, with something over 90% of that sector of the population participating. We're not Germany, so maybe 50%, maybe 35% -- but this is choosing the voluntary route to encouraging the same objective we're talking about: how do you get more people to arrive at retirement with a private pension -- without having harmed these people by requiring for retirement savings what they really needed (or wanted) for other uses?

This broader view could well bring strength for the first time to individual retirement savings, which now is only the feeblest third leg of the three-legged stool of retirement security. Indeed, this source could well approach in time the magnitude of amounts now put aside by employers for qualified plans.

The Large-Employer Perspective

In my experience, large employers view all the proposals we have discussed as efforts to increase the number of people who arrive at retirement with a private pension. As to means, however, they don't like compulsion. They prefer "thou may" to "thou must." And they view individual judgment as superior to uniformity. They do agree on the objective -- it is desirable for everyone to retire on a reasonable income -- but they wonder if it is more desirable than everything else. Choices must always be made -- will we expand choices, or narrow them? Paul Jackson's paper makes the point marvelously: Is saving now for later retirement really so much more important than health [illegible] now and life insurance now [illegible] ever else that the company and [illegible] yees would have chosen in advance [illegible] sion plans, if allowed to do so?

Finally, it is critically [illegible] to large employers that pensi[illegible] prosper among smaller [illegible] pension plans fall [illegible] employers and are use[illegible] ger employers, their soci[illegible] under attack. The [illegible] is perhaps unstable: [illegible] r it will deteriorate. [illegible], a grave concern to larg[illegible] 4,000 small, defined [illegible] still terminate eac[illegible] a good reason for lar[illegible] exert themselves to [illegible] system work for all.

Forum Discussion

MR. RUDNEY: Harrison used hypothetical examples to make a case that mandatory private pensions would represent a burden on large employers. I'd like to use a hypothetical situation and ask him what public policy posture he would take under this hypothetical situation.

Let's assume that the world is very simple and that there is one very large employer and one small employer. The large employer is the Harrison Givens Firm and the small employer is the Paul Jackson Firm. The large firm is financing its pension plan by a seven percent contribution, and makes a six percent contribution for Social Security, for a total of 13 percent.

The small employer, the Jackson Firm, has no pension plan, and makes a six percent contribution for Social Security.

There are a thousand employees in the Givens Firm, and a 100 employees in the Jackson Firm. Both are politically oriented. The Jackson Firm employees go to Congress. They argue that they see inequity and would like to have more wage replacement. The Congress says we'll give it to you on a three percent basis. Do you want it as three percent of Social Security taxable wages or do you want us to mandate that the small firm provide it? If we do this, the large firm has to pay three percent more, of course, because it's on a universal rate. So the rate goes up from six percent to nine percent.

The policy question that arises here is which approach you take. I'm raising this because there is a view that holds that small business, if it is not contributing to a private pension, is imposing the social cost on other firms who are doing the job in the private pension area. This is the so-called free rider situation. If large businesses are really interested in cost, what should be the posture of big business?

MR. CURTIS: Harrison, do you want to answer that?

DR. TURE: Will the gentleman yeild? Gabe, before anyone went to Congress, what was the situation with respect to the marginal value of productivity of the two groups of workers? Did they have the same aggregate compensation, or was one at a higher pay?

MR. RUDNEY: I think you're making this a little too sophisticated for me.

DR. TURE: No, absolutely not.

MR. RUDNEY: Let me just ask Harrison a question. I can understand it depends

on marginal productivity and a lot of other things. But in the politics of increasing retirement income do we want to do it by taxation, or do we want to do it through the private sector? I hold the view that it is better for our society and our economy to have the private sector perform this function given the positive saving and capital formation implications.

MR. GIVENS: I'm willing to take a crack at that, but it's a complex set of questions.

First, you say that whether the employees work for large companies or small companies they go to Congress and ask for benefits. When you start with such a false premise, your conclusion isn't worth much. If wishes were horses, then beggars could ride, but wishes aren't horses, so it doesn't matter what conclusion you come to. If the employees of the small companies go to Congress and ask for real benefit increases, the premise is false. Congress cannot create benefits. It can only redistribute existing benefits.

The second thread is the one that Dr. Ture was going to probe you on. The small employer may not be able to afford the benefits that the larger employer pays, nor could the larger employer when he was small. What you're saying in effect is that the small employer should not be so busy producing jobs. He should produce fewer jobs so he can afford the full range of benefits that the larger employer can. I don't think that's a socially desirable conclusion.

Now another thread is that you ask us to disregard values. What's the political answer? God help us. That's why we're here today.

DR. TURE: May I add to an excellent response? Gabe, I really wasn't trying to put you on. Go on the assumption, that marginal productivity is the same in both firms. Then you must assume compensation is the same. You're saying in effect that one group of employees says, we want additional compensation paid to us in a disguised form. The consequence of that, if the Congress acceded to it, is just what Mr. Givens pointed out, disemployment. The employees who remain will be benefitted. They will be the transferees. The transferors will be those who are disemployed and are no longer working for that company. I don't see any particular public policy gain involved in that.

Your next question is whether there is anything to be gained requiring the private sector to do it instead of having it paid through a payroll tax. The private sector could have been doing it all along. But, by assumption, all you had was the difference in the composition of the pay package, not a difference in the amounts. You have to ask yourself why didn't employees wish to have a pay package that consisted more of deferred saved earnings in the small firm as opposed to the large? You made this up.

MR. GIVENS: Exactly. If you had mandatory earlier, you would have more pensions. You would have had less of something else at the same total value. Do you really want less of something else?

If you really want more of everything, you can't have it. There's no tooth fairy.

MR. SCHULZ: I think that gets at the very heart of the matter. We continue to mix up the questions of what is most efficient in administering various types of plans with the question of whether we want to redistribute income within the society: the more basic question is how an individual wants to allocate his lifetime income. The question points to the fundamental dilemma of the low earner in a low productivity industry who does not want to redistribute his income.

Is there any justification for any kind of a compulsory pension in the society to force people to redistribute? If there is some justification, how far do you go beyond basic minimum income provision? If you get that far, what is the appropriate compulsory mechanism? In sum, do you want to force workers to redistribute lifetime income, and is there any basis for such compulsion?

MR. JACKSON: I'd like to comment on the basic premise that Gabe starts with. It seems to me that we start with an interesting premise. Pensions are good. Anybody who doesn't have a pension is lacking something good. Therefore, our private pension system has failed to deliver. That fundamental starting point is the same type of thinking that led the person to state that sugar is the stuff that made oatmeal taste bad because you didn't put enough of it on.

Pensions are like money, in effect. Money has the same characteristics. The people that need it haven't got it. The ones who have the most don't need it. We end up with some interesting analyses here of the elderly poor. We're surprised to find that the people who are old and poor don't have pensions. The people who have pensions have pensions, and that means they're not poor.

If you start out with pensions and say these are good, and that, therefore, we need a law that says everyone shall have one, why stop at pensions? I would think that you might make everyone have a personal savings account, a life insurance policy, a home, and a car.

People point to pensions and say that only 80 percent or 60 percent of workers are going to get them. I think only 40 percent of the people in the United States have jobs. I think jobs are desirable. Why not mandate a job for everybody? The whole process, it seems to me, is one of distinguishing between our appetite on the one hand and our ability to deliver things on the other. Each one of us faces certain constraints financially. Whatever one's desires are, you have to put them all in the hopper and they add up to four times what you've got, and so something has to be cut back. This doesn't happen often at the government level. Most of the discussion that takes place, for example, at the level of the President's Commission on Pension Policy focuses on the desirability of the benefit. Of course, it's desirable. There's nobody arguing about that. But the question is, when we shift as a society and force mandatory pensions, and find out that we haven't got enough money to educate young people any more or to keep hospitals staffed, what do we do? It seems to me that you get back to the basic question of priorities.

RETIREMENT POLICY AND SMALL BUSINESS

Paul Jackson and Herbert Liebenson

Small business has a particularly acute interest in any proposal to change Social Security, mandate private pensions or otherwise alter the retirement policy in the United States. Small employers and their employees, like large employers, contribute equally to the Social Security system. Social Security is the basic program through which workers in the smaller companies achieve financial security and independence in their old age. Indeed in many instances it is the only program, apart from individual savings, since many small businesses have not yet reached the point where their financial resources have permitted the adoption of a private retirement plan. In recent years, in fact, many small firms have been forced to drop their private retirement programs because of the recordkeeping and financial burdens imposed by ERISA. Many firms are discouraged from starting such programs by reason of those burdens. Clearly, the Social Security program and the benefits it provides are of prime importance to the small employer and its workers.

ERISA AND SMALL BUSINESS

In considering potential changes in retirement policy it is particularly instructive to note the remarkable impact of ERISA on the formation of small retirement plans. IRS records show that prior to the passage of the Pension Reform Act of 1974, there were approximately 32,000 net new pension plans established each year (i.e., defined benefit plan qualifications less terminations). In addition there were approximately 25,000 new profit-sharing and thrift plans being established each year. During the 3-year period from January of 1976 through the end of 1978 an annual average of 25,780 net new profit-sharing plans were begun each year. On the other hand, during that 3-year period the annual average of net new pension plans was only 803! Thus, the initial impact of ERISA was to virtually eliminate the formation of new defined benefit pension plans while leaving the formation of new profit-sharing, thrift and other defined contribution plans essentially unchanged. The country suffered a net loss of roughly 100,000 new pension plans over this 3-year period!

Large companies generally have well established pension plans and the administrative and financial resources to cope with ERISA. The effect of ERISA thus far has impacted most heavily on the start-up of new plans by small businesses or has resulted in the termination of pension plans by small businesses. The direct incremental

cost of government regulation on private companies has been studied by the Business Round Table. While the companies studied were all fairly large in size, the incremental administrative costs of ERISA for the smallest employers in the Business Round Table study were nearly 7 times as great as the average incremental cost of the 10 largest. Added costs are only part of the story because the small businessman in many instances also does not have the expertise or the time necessary to complete all of the government forms accurately, whatever the cost to do so.

CHANGES IN RETIREMENT POLICY

More than half of the nation's 14,000,000 small businesses do not now have any form of private pension supplement to Social Security. Their dependence and reliance on a soundly managed and operated Social Security program is a most important factor in considering future changes in our country's retirement policy. In addition, the workers in the small business community clearly place heavy reliance on private means of saving for retirement such as life insurance policies, savings accounts, government bonds, etc., and these have been absolutely devastated by inflation in recent years. Tax incentives to encourage retirement savings would not accomplish much if those savings are expected to lose substantial value due to rampant inflation.

The President's Commission on Pension Policy and the White House Conference on Aging are both considering alternatives in our nation's retirement policy. The alternatives include the expansion of Social Security, mandatory private pensions, and tax incentives for retirement savings. In the case of the President's Commission, these alternatives are being considered in the light of a proposed normal standard of 100% of pre-retirement disposable income to be continued as disposable income into retirement years. There are serious questions as to whether our nation can afford the resulting costs. This paper focuses on the proposed changes and the resulting costs from the standpoint of small business.

SMALL BUSINESS - SPECIAL CHARACTERISTICS

Small businesses by definition employ only a few workers. In addition, they are characterized by a high rate of business formation and extremely high business mortality. Finally, high employment turnover is characteristic of many of the sectors of the economy where small business is most prevalent.

A small business generally has limited administrative resources. During the first 5 to 10 years following their formation, most small businesses have limited capital available to them and limited credit lines. It is a rare small business that is able to support the entire range of employee benefits that are provided by larger or older enterprises. Typically the first employee benefit plans to be installed are those covering current expenses and providing current support to the employees. Thus the most common order of adoption of these plans would be medical expense benefits first, then group life insurance and disability income benefits, and finally retirement benefits last. Thus, any requirement to adopt pension benefits immediately may well be at the expense of other benefits such as disability income benefits or life insurance and this would work to the detriment of the individual who would otherwise have received benefits under such programs. Also any requirement to adopt pension benefits immediately will impact more adversely on younger firms than on their older established competitors.

Another characteristic of small businesses is that lower corporate income tax rates generally apply. The graduated corporate tax provided by P.L.95-600 are 17% of the first $25,000

of taxable corporate income, 20% of taxable income between $25,000 and $50,000, 30% of taxable income between $50,000 and $75,000, 40% of taxable income between $75,000 and $100,000 and 46% of taxable income in excess of $100,000. Most large businesses therefore are in the 46% marginal tax bracket--i.e., each $1 allocated to retirement income on a tax deductible basis consists of 46¢ in reduction in corporate income tax payments and 54¢ reduction in net after tax resources. For small businesses earning less than $100,000 the marginal tax rate would range from 17% to 40%. For the firm earning less than $25,000 for example, each $1 of retirement income expense that is tax deductible would consist of only 17¢ savings in corporate income tax and 83¢ reduction in net resources available to the organization. Subchapter S elections could serve to reduce the marginal tax rate even further. The principle is fairly straight forward--the lower the corporate tax rate, the less important the tax advantage of offering retirement income benefits on a tax deferred basis.

THE COST FOR SMALL BUSINESS

Generally the retirement plans adopted by small business involve substantially higher expenses than in the case of larger organizations. As noted, individual employees tend to rely more heavily on individual savings accounts and the government imposes limits on the amount of interest that can be credited to savings accounts. The small pension fund that wishes to invest in certificates of deposit would be affected by the rate ceilings imposed by the Federal government on "small-saver" certificates (certificates issued in denominations of less than $100,000 with maturities of 2½ years or more). Such limitations do not apply to certificates issued in larger denominations. Many small pension plans are financed through the issuance of individual life insurance policies. The commissions payable to agents selling such insurance policies range from a low of perhaps 10% of the premium to a high approaching 90%. For retirement income policies or ordinary life insurance policies the effective commission on a small pension plan might range typically from 30% to 40% of the contribution made in each year. By way of contrast, larger companies generally adopt trust fund retirement plans involving expenses that are less than 5% of total contributions. The small business, however, which wishes to adopt a trust fund plan will find that the fees involved (legal, actuarial, accounting, investment management, etc.) are not proportional to the number of participants in the plan but rather to the work involved in drafting the plan document, in valuing the benefits and determining contributions, in auditing the assets and in selecting appropriate securities. The smaller the plan the greater the percentage of plan contributions these expenses eat up. The 1980 Profit Sharing Survey published by the Profit Sharing Council of America, for example, shows an average cost of $1.56 per $100 of plan market value for outside investment management and related accounting services, but the cost for plans with less than $200,000 in assets was $6.48 and the cost for those with more than $10,000,000 in assets was $1.32. Indeed, the total of these fees and other expenses will usually exceed the commission cost on insurance products if there are fewer than 10 participants. Therefore if employers are forced to adopt retirement benefits at the founding of their business, they will be forced to take on programs involving substantially higher expenses and substantially smaller equity for their employees than is typical of the programs operated by larger organizations. Furthermore, the new small business will be forced to choose an investment medium that may not be appropriate for a larger organization and that may be difficult to get out of if the business grows substantially. To the extent that this is wasteful of the resources of small business it should most certainly be avoided.

TABLE 1

ESTIMATED PENSION COVERAGE IN PRIVATE

NON-AGRICULTURAL ESTABLISHMENTS - 1980

Size of Establishment (# of employees)	Number of Establishments	Number of Employees	Percent With Retirement Plans	Number of Employees Covered Retirement Plans
1 - 9	3,500,000	10,900,000	27	2,900,000
10 - 49	900,000	18,900,000	46	8,700,000
50 - 99	125,000	8,800,000	65	5,700,000
100 - 499	86,000	17,300,000	78	13,500,000
500 - 999	8,200	6,100,000	90	5,500,000
1000 & Over	4,600	11,100,000	96	10,600,000
Total	4,623,800	73,100,000	(65)	46,900,000

TABLE 2

ESTIMATED NEW PLANS NEEDED AND ADDED COST TO EFFECTUATE

MANDATORY PRIVATE DEFINED CONTRIBUTION PLAN (APPROACH 2)

Size	Number of New Plans Needed	% of Total	Number of Employees Newly Covered	Assumed Average Weekly Pay	Additional Cost to Employers	% of Total Cost
1-9	2,775,000	79	8,000,000	190	2,371,000,000	26
10-49	650,000	19	10,200,000	210	3,342,000,000	37
50-99	50,000	1	3,100,000	240	1,161,000,000	13
100-499	25,000	1	3,800,000	270	1,601,000,000	18
500-999	1,000	-	600,000	310	290,000,000	3
1000 & Over	400	-	500,000	350	273,000,000	3
Total	3,501,400	100	26,200,000	(221)	9,038,000,000	100

INVESTMENT CONSIDERATIONS

The assets of large pension programs are generally invested by banks, insurance companies or investment management funds. The large funds generally do not invest in small businesses for two very practical reasons--liquidity and ownership. With regard to liquidity, a large fund must invest a good portion of the assets in each security it buys or it will own so many securities that it cannot determine the future prospects for each security and thus cannot effectively decide whether to buy more, hold or sell. On the other hand if the minimum practical investment is made in the stock of a small business, the fund is likely to find that it will end up owning so large a block of the stock that it will be unable to sell without affecting the market for the security. Thus, when liquidity considerations are imposed on the investment of the pension fund assets, the larger funds find it necessary to invest in highly capitalized, widely traded securities, such as the stocks traded on the New York and American Stock Exchanges. With regard to ownership, the large pension fund investing some reasonable portion of its fund in the stock of a small business would frequently find itself with a controlling interest in such a business. Since the position of the pension fund is one of investment rather than ownership and management this is generally felt to be unsatisfactory and accordingly this also tends to restrict the investment of the large funds in small business enterprises. These are valid reasons why large pension funds are rarely invested in small business.

Smaller pension funds, may, on the one hand, be affected by the limits on "small-saver" certificates and the other inefficiencies in the market place, but on the other hand are not affected by the liquidity or ownership problems. Such funds can invest in small business but rarely do. Small pension funds tend to avoid investment in small businesses because of ERISA. First, there is the matter of prohibite transactions because the most obvious investment for the pension fund of a given small business would be in that business itself and this would usually be a prohibited transaction under ERISA. It would take a substantial research team to find other likely investments among small businesses and this sort of investment expertise and research is simply not available to the small pension fund. Second, the "prudent man" rule requires that the investor of a small pension fund must do what a prudent man operating a similar fund would do. Since large funds invest primarily in the blue chip securities, the small funds must either invest only in such securities or run the risk of doing something that other "prudent men" are not doing.

The net result of these investment considerations is that the funds that are drawn from small businesses to be put into their pension funds are likely to end up being invested in government securities, the bonds of large corporations and the S&P 500 stocks. Clearly, this depletes the capital resources available to small businesses. Accordingly, one of the major advantages attributed to mandatory private pensions, that of developing the capital stock of the country, is simply not a positive factor for small business, but rather a negative one. A mandatory private pension program would probably have the effect of drawing capital away from small business and investing it instead in major firms.

ESTIMATED PENSION PLAN COVERAGE

Despite the filing of mountains of statistical data with the federal government, there is as yet no official set of numbers indicating the prevalence of pension plans by size of employer. It is thus necessary to base estimates on projections of data from the past and data that has been disaggregated by categories other than those

desired. While considerable judgment is required in this process, such estimates are necessary in order to form some idea as to present pension coverage. Table 1 shown below sets forth the authors' rough estimate of the number of establishments by size category and the number of employees covered by retirement plans in 1980. This table was based on 1977 data published by the U.S. Bureau of Census (County Business Patterns 1977 Table 1B), unpublished data from the Bureau of Labor Statistics analyzed by ICF for a draft report prepared for the U.S. Department of Labor and a 1975 estimate of the number of plans and plan participants by size of plan based on an analysis of EBS-1 data. These "facts" were then carried forward to 1980 on the basis of the DRI estimate of employment in private non-farm industries in the April 1979 report on "The Structure of the Private Pension Forecasting Model" submitted to the Department of Labor (Contract J-9-1-6-0161).

As the above Table 1 indicates, more than 90% of the larger firms in the United States now provide retirement plans for their employees. On the other hand, it is estimated that only about one-fourth of the establishments with 1 to 9 employees now have private pension plans. While this may seem unreasonably low, it should be recognized that in each of the last few years there have been approximately 500,000 new incorporations of businesses in the United States. With a total number of establishments of approximately four and one-half million this means that something like half of the total establishments must have been incorporated within the last 5 years. As noted earlier, the adoption of a pension program is most unlikely during the early years of an incorporated firm by reason of capital needs. Despite the fact that these figures are only estimates, they are probably close enough to the actual facts to serve as the basis for some fairly general conclusions.

ESTIMATED EFFECT OF MANDATORY PRIVATE PENSIONS

The effect of requiring that all employers provide a private pension plan clearly falls upon those employers who do not have plans and does not fall upon those who do. On the basis of approach #2 now being considered by the President's Pension Commission and the estimates in Table 1, estimates can be made as to the number of new plans that would have to be installed as well as the additional cost to employers on an annual basis if every employer were required to have a mandatory private defined contribution plan with an employer contribution of 3% of pay. These are shown in Table 2.

The figures set forth in Tables 1 and 2 involve considered judgment and clearly there is a substantial margin for error. Even so, the general conclusions that can be derived from Table 2 are simply unassailable. The vast majority of new plans that would have to be established to comply with a mandatory requirement would cover fewer than 10 participants and would probably cover an average of 2 to 4 participants. On the other hand very few new plans would be required for firms employing more than 50 persons. Furthermore, most of the dollar cost imposed on employers would probably be borne by the employers of fewer than 50 people. Only a very small part of the cost would be borne by the employers of 500 or more.

THE DRAIN ON SMALL BUSINESS CAPITAL RESOURCES

If one were to make the assumption that businesses employing fewer than 100 people would not have securities that would be purchased by pension funds, then the figures in Table 2 suggest that perhaps 3/4 of the total additional contribution or something on the order of magnitude of 7 billion dollars each year would be collected from smaller firms and would be invested in the securities of larger firms or in govern-

ment bonds. Thus the small business community would find itself with 7 billion dollars less each year in the aggregate for capital needs, expansion, research and development and the addition of productivity-increasing equipment. Over the decade of the 1980's, assuming continuing inflation, the aggregate loss would approximate $100,000,000,000, on the other hand, these amounts would end up capitalizing larger companies and, in some cases, competitors who are already economically powerful.

If the 7 billion dollars of annual added expense resulting from the mandating of private pension benefits cannot be added to product cost then perhaps it will be taken from the employees in the form of lower fringe benefits or lower pay. Otherwise it will reduce the return on the capital invested in these small businesses making them less attractive to investors and making it less likely that they will be established in the first place. This will serve to divert further capital resources away from small business and toward alternative investment opportunities. Since new small businesses are a prime source of jobs, this is not desirable from the workers' standpoint either.

THE ALTERNATIVES

The current debate appears to be focusing on whether retirement objectives should be achieved by requiring mandatory private pensions, by increasing social security, or by increasing tax incentives.

Viewed from the standpoint of small business, mandatory private pensions would be the worst of these alternatives because it impacts not only the weak firm and the new firm but also all of those small businesses which have some resources availabe but which have deliberately deferred the adoption of a pension program because of the current need for capital. Then too, mandatory private pensions withdraw relatively more capital from the small company than the large by reason of the differential in marginal corporate income tax rates. Another factor that should be considered for the lowest paid workers (e.g., minimum wage employees) is how few dollars the 3% employer contribution would really add to retirement income and how many years would be required before such a program would contribute significantly to retirement income objectives.

By way of contrast, an increase in the social security program affects all organizations, large and small, and adds specific dollar expense to all of them. The administrative expenses for Social Security are less than 1% and a lower current cost is needed to produce a given current increase in benefits for those currently retiring. Unfortunately, any increase in required expense affects the weak organization to a far greater extent than the strong one. In fact, some organizations could even be pushed into bankruptcy by reason of a modest increase in added expense.

The mandatory private pension or increased Social Security solutions both serve to increase the cost of labor. Thus both serve to put labor intensive industries in a worse position vis-a-vis the capital intensive industries. An increase in the cost of labor also has the effect of encouraging the substitution of capital for labor and of weakening the position of entire industries faced with significant foreign competition. If such costs could be passed on to the customer, the result would be an increase in the cost of their product and additional inflationary cost increases. To the extent that the cost could not be passed onto the consumer, business would be faced with the prospects of lower returns and would find it more difficult to obtain credit or sufficient equity capital to support it.

The proposal to encourage additional retirement income savings by income tax incentives would appear to be preferable from the standpoint of small business because it does preserve the free choice as to the timing of the adoption of a retirement plan. Furthermore, to the extent that the small business is in a lower corporate tax bracket than large business, an income tax incentive would tend to encourage the adoption of pension plans only after new businesses have reached the point where their marginal corporate income tax rate was 46%. On the other hand, it is somewhat ironic that we should be considering tax incentives to encourage saving at a time when it is not clear that investment earnings will exceed the prospective loss in purchasing power. If $1,000 is invested in a retirement savings bond yielding 7% interest for a 10-year period in which inflation averages 13%, the final value of $1,967 would have a purchasing power of only $489. This is a case where a dollar saved is fifty cents lost! The incentive needed for saving is not a tax incentive but a dollar that truly serves as a store of economic value. Promising bigger dollar retirement benefits and setting higher minimum standards for retirement income may merely be part of the cause of future inflation rather than a solution for the problems caused by the inflation of the past.

The alternative not considered is that of controlling inflation. A 1% or 2% increase in the Consumer Price Index is probably the lowest we can achieve since that much may be due to the continuous increase in the quality of goods included in the Index. Inflation ran at this level throughout the 1950's. Surely this must be a goal achievable in the long run. If inflation cannot be controlled it makes no sense to promise pensions in dollar terms. Instead, we should base our pension promises on quarts of milk, pounds of hamburger, three room apartments and medical services. And small business can probably operate better on a barter economy than can big business. The real question may be whether western civilization can survive.

Forum Discussion

DR. TURE: I'd like to preface my comment by telling you a little true anecdote. It goes back many years to when I was in basic training in the Army. I remember we were out on the firing range for target practice. The chap next to me had worse vision than I did, and he had the wrong target. He was firing at my target. I wound up getting a marksman's cross.

The moral of the story is that the outcome was splendid, and the objective was good, but you want to be careful that you're shooting at the right target.

I think it would be very bad business indeed to misperceive what the real problems of mandatory pension plans would be. Neither mandatory pension plan costs nor voluntary pension plan costs involve incursions of the returns to capital. They involve changes in the cost of labor services employed by the firm. I think if you're shooting at mandatory pension plans because they're going to raise the capital costs of small firms, you've got the wrong target. If you succeed nonetheless in getting your marksman's cross, I'll applaud your effort.

MR. CURTIS: Paul, do you want to take a shot at that?

MR. JACKSON: Yeah, I'll take a shot at that. I agree that this doesn't add to the cost of capital in the case of one firm. It adds to the cost of labor. It means instead of hiring a hundred employees, you hire 97 for the same amount of money.

While I believe mandatory pensions would affect small business more than large, it would affect business in general in the U.S. as opposed to foreign competitors.

The proponents speak in terms of the need to raise private capital. One of the areas where private capital is needed is the small business area. It's hard to get. Proponents of mandatory pensions argue that such a system would create capital. I'll stand on my statement that if $9 billion comes from these small companies and goes into pension funds it is not likely to be invested back into the small company area.

ERISA came along and said that the people investing these funds shall invest as prudent men do. The prudent man rule says you look around at other prudent men. Look around at the insurance companies, the banks, the pension funds. It's no accident that they're all going into the same set of blue

chip common stocks and government and corporate bonds. Practically none of the money gets into other sectors. So one point of this is that if somebody is really anxious to raise capital for small businesses, there just has to be a better way of raising it than mandatory pensions.

I think there are more practical ways of raising capital than forcing private pensions on small companies.

MR. BASSETT: I'm not going to say whether the President's Commission is going to recommend mandatory pensions or not. We haven't made up our minds. But, in order to get some more discussion going, I'm going to take the position that I'm in favor of them. The reasoning goes like this.

A growing proportion of our population is elderly. Many of them have only Social Security as a form of income during retirement. As a result there's going to be more and more pressure to improve benefits during retirement years. Retired groups acting together are going to be pushing for greater benefits for the retired population. Therefore, the question comes down to whether you provide them through Social Security or through private pension plans. If you do it through Social Security, you will be improving benefits for everybody in the United States. If you do it through the mandatory private system, you'll hit those people who'll have inadequate benefits or prospectively will have inadequate benefits.

MR. JACKSON: Yes, I disagree with what Pres stated as a matter of fact. Social Security does not cover everybody in the United States. In the first place, it doesn't even cover everybody who works, but it certainly doesn't cover people who don't work.

A new issue arises when we start talking about benefits from the standpoint of need. Social Security doesn't cover the people who were unemployed throughout their lifetime, it doesn't cover housewives, and it doesn't cover lots of other people. If you look at the total population over age 65, and the total number of people receiving Social Security, it is not a fact that if we do it through Social Security, everybody will get it. If we do it through Social Security some percentage will get it. But, in fact, the people who need it the most are the ones who don't have Social Security.

This goes back to the characteristic of money: Those who need it haven't got it and that's why they need it.

MR. BASSETT: Let's just stick to the workers who retire with only Social Security. They are going to be a vocal group. They need more benefits. At least, they feel they do. They're going to put pressure on. Isn't it better to do it through the private sector rather than expanding Social Security benefits for everybody.

MR. WOODRUFF: I think when the Commission was beginning to explore the question of mandatory or universal private pensions, we had little idea that we would find small business representatives arguing against funded pension plans and for expanding Social Security. Neither one of those outcomes was really expected.

I find the paper has some inconsistencies in it. I find in several cases you're arguing both sides of the fence, and both situations can't always be true.

For example, in the opening and closing remarks you stated that $9 billion was an additional cost that would be borne by small business. You argued that small business frequently couldn't pay for what they were doing now, and, therefore, it might run them out of business or make them less likely to hire workers. Then, Paul stated that frequently there would be a trade-off in the compensation package of workers.

Instead of putting in health plans or other benefits, employers would first put in a pension. If that were the case the cost to the firm wouldn't necessarily be higher than it would have been in the absence of the pension. You would be altering the compensation package of the workers. In that case I don't think you can argue that this is a burden on small businesses. You might argue that it's a burden on the workers.

There's probably a place in between where all the costs for all workers could not be transferred to the workers. In this case there might be increased costs to the firm.

In that situation, I don't think it's completely fair or accurate to use the analogy of ERISA.

With mandatory pensions all employers would witness some increased costs, because of assumptions about vesting and portability. Smaller employers would all face somewhat similar costs even though they might differ slightly from firm to firm. For example, in the analysis of portability, you should take into account the fact that this would be a common cost borne by all employers and that there might be trade-offs in the compensation package.

Your assumption about the savings is novel and interesting. I'm not sure whether I agree with it. You express a fear of draining capital away from small businesses. Of course, this is a concern. It's a concern with regard to all pension funds.

MR. LIEBENSON: I think we all recognize the transfer of funds from plans to institutional investors. A great proportion of the investments on the New York Stock Exchange come from institutional investors. Most are in blue chip firms that use capital to expand. They, in a sense, force many small firms out of business. Therefore, we're saying that until we can get some of that capital back into small businesses so they can create more jobs, we've got a big problem. Current investment practice draws capital away from the small business community. It draws capital away from high technology companies that are expanding in terms of new products and new ideas and create whole new industries.

MR. WOODRUFF: Obviously that's a concern. The question I raised, however, is what if we show that, rather than disemployment, there is a large shift in the compensation package away from current consumption to savings, particularly among low and moderate wage workers in small business. We effectively would be setting up a forced savings program for those individuals. How can you argue that savings which would not have been made in that firm otherwise is a drain on small businesses. I would think the probabilities are the other way if capital markets are at all efficient, even marginally efficient. I would think that new individual savings would have some probability of filtering back into small company investments. Much more likely than it would be if the individuals used it for health benefits, holiday benefits or whatever.

MR. JACKSON: In the first place, Tom, I agree with your first point that in the paper, we did discuss the additional cost to small business as three percent additional cost. We also talked about the shift of benefits. It's true that both don't happen at one and the same time. The additional cost to small business, I assume, would apply almost 100 percent across the board in the first year out of the box. Small business isn't going to make immediate adjustment right off the bat. The shift in benefit type takes place among new firms that don't have benefits. What you actually have starting out is an added cost to existing businesses. Later on, you in some cases have a shift of benefits, in others an added cost. The total adds up to only 100

percent, but both groups can be damaged. The employee can be damaged, the company can be damaged.

Assess the shift consequence if the employees don't have a medical plan due to the pension plan. The individual goes to the hospital, and is there for a week and gets stuck with a bill of $1,500. That gets drawn out of the individual's savings account, or the individual goes bankrupt.

The real drain on the capital side, it seems to me, is that in many of these businesses there is one individual who is sparking the business. However many employees that individual has when you put on a requirement of X percent of pay, the cost must be paid somewhere. It is the founder and owner of the business, the sparkplug, who pays it. He is the one who would have bought the next piece of machinery, and he now doesn't have it.

It seems to me to be very direct. You've taken it right out of the pocket of the individual who would have made the next investment. To say that it has no effect, I think, is just to ignore the obvious.

DR. TURE: Remember, when we talk of forced savings, we're talking about a situation in which the 100 employees of our prototypical small business could get together and approach the employer or his personal representative and say that we would like to have some part of our compensation paid to us in the form of tax sheltered contributions to a pension plan. That is to say, we would like to have some part of our compensation not paid to us currently, but saved on our behalf, in a more efficient way than we can individually do it. Now, the only occasion for even thinking about a mandated pension plan is because somebody looks out and sees employees are not voluntarily doing that. Well, if they don't voluntarily save, it must be because they don't think it's a good trade-off. Now what will happen if they don't perceive that to be a good trade-off and you require them to take some part of their compensation in the form of a contribution to a pension plan? Well, I would suspect that what principally will happen is they will reduce their voluntary savings by essentially an equivalent amount. The net effect on aggregate savings under these circumstances should approximate zero.

Now this is in sharp contrast to the situation which has characterized the spontaneous development of a private pension system in the United States. In that system you must perceive most of the participants as being willing and happy to enjoy the benefits of tax shelters that are provided with respect to that part of their earnings which goes into funding pension plans.

Now, I want to turn back to the observations about either mandatory private pension systems or extending or increasing Social Security benefits. The reason we get to that point is ostensibly because representatives of the poor workers come in and say we need more benefits. The appropriate response should be that there is no free lunch.

How do you expect to pay for these increased benefits? Do you really want to pay for them through additional payroll tax, or do you expect that a future generation of workers, of whom there will be a relatively much smaller number on the basis of current demographic forecasts, will be happy to do it for you, i.e., what free lunch is it that you want?

Perhaps with a little touch of reality this whole problem could be put into a somewhat more realistic and viable context. The point is that expanding Social Security benefits or mandating private retirement plans does not by any means exhaust the alternatives.

DR. BLAYDON: It seems that the assumption of mandatory advocates is that

somehow the mix of things that make up labor costs, the health benefits, the pension benefits, the direct wage, is not the cheapest mix and that the particular component that might be out of line is the pension component. If that were true, fixing this inefficiency could create benefits for all.

If the correct assumption, however, is that employers and employees have figured out the right mix, then imposing a mandatory requirement is going to impose costs on some and create benefits for others. I think someone said earlier that the cost will be in the form of disemployment and the benefits will be increased compensation for those who are left behind.

MR. SCHULZ: If businesses are not able to afford mandatory coverage, then one must ask how the employees can afford voluntary saving.

As Mr. Jackson pointed out, the fundamental problem is the have-nots don't have. That raises the issue of whether that's the right state of things. We're allowed in a market economy to look at ways of manipulating the distribution of income.

In the pension area, which is just one of many areas in which we carry out policy that has an impact on distribution, we all know that Social Security has a redistributive element in it in favor of low earners. It's controversial as to whether it should be there, but it is there at present. And, given the federal tax laws with regard to private pensions, some people have pointed out, I think most forcefully, Dr. Munnell, that there is a redistributive element in private pensions going in the other direction.

My point would be that it's a legitimate question to ask whether the flows in one direction or the net distribution is the appropriate one for the society. I would take issue with Mr. Bassett where he seems to assume that the only way you can adjust Social Security is through across the board benefit increases. Targeting the benefits is the way to affect the redistribution of benefits.

So, although it's currently political insanity to talk about liberalizing Social Security through targeted benefits, economically it still seems to me that that is a real possibility. It seems to me that the mandatory coverage proposal is implicitly making a decision very much away from redistributing income towards the low earners in the population. This gets me back to my original question: Can those low earners afford to provide for themselves, and if they can't, is that just within this society?

MR. ROMIG: I would have to concur with the comments of Mr. Jackson that the initial losers in a mandatory pension system will primarily come from the small business sector. What has caused me some degree of displeasure is the seeming statement that total labor costs equal total wages, and I don't think that's a truism. Not every employee is going to take advantage of every employee benefit that employers offer. I would just remind people that when we talk about the employee's perception of benefits, they go to work for Xerox because of the good benefits that Xerox has and because of the wages. They go to work for the Shell gasoline station on the corner because of the good wages and not necessarily the good benefits and so on, and it isn't a totally free choice of the people involved here.

DR. TURE: I have a brief statement of clarification. I don't think you should construe any of the remarks that I've heard as saying that aggregate labor costs equal aggregate wage payments. Nothing is further from the truth. Aggregate labor costs, from the point of view of the employer, are all the costs which are incurred with respect to the use of labor services.

By virtue of the tax structure, if nothing else, there is a huge wedge that is imposed between the cost as perceived by the employer and the returns to those who provide the labor services.

MR. JACKSON: Professor Schulz mentioned that if you reached the conclusion that the poor people in society don't have enough you would be led from a mandatory private pension approach towards targeted Social Security increases as the means for redistributing income.

It seems to me that there is one further area that hasn't been mentioned. That is means-tested welfare or some program that is not based on prior earnings and work history.

In the 1930's a gentleman named Townsend, for example, proposed a program under which everybody in the United States upon reaching the age of 65, given proof of age, was going to be entitled to $200 a month. Very simple with no records to keep. Where the money came from was the problem. But it seems to me that Social Security isn't necessarily the ideal mechanism. While we downgrade means-tested approaches, unless we have enough money to cover all welfare needs, going to a broader program that spreads it out further seems not to be the wisest approach.

MR. SALKIND: The comment was made that the wage package in smaller businesses is the same as in large businesses. And, therefore, if you require additional pension contributions you aren't creating different impacts.

I don't think that's necessarily true. I think people may accept the total lower wage package in a smaller company for several reasons. One, they may have an equity interest in the company, and they're looking for a return that way. Two, even if they don't, they may look to the rapid expansion of the company and the rapid advances within it as a trade-off for the immediately lower package, or, three, it may be the best job available to them at the moment.

I think one other thing that hasn't been mentioned about small business and the effects of increased costs on them is technological innovation. Their contribution in terms of job creation has been mentioned, but the vast bulk of technological innovation also comes from small business. If we impose additional costs, we're going to lose that.

An alternative route which has been mentioned, but not emphasized, is deductible employee contributions.

MR. LEVY: The presumption has been floating around here that there's a higher percentage of the elderly population below the poverty line than the non-elderly, non-retired population.

I've seen statistics that indicate that that is not true. The process of becoming elderly does not increase the probability of being in poverty. If you're no more likely to be in poverty when elderly than when younger, then I don't see how anything that's work related can solve the problem. Anything that attempts to is really saying that we ought to put resources towards solving the poverty problem for the elderly before going about solving it for the working age population.

MR. RUDNEY: There appears to be substantial evidence that people who are non-covered by private plans actually have little voluntary savings. The IRA experience, for instance, indicates that lower income employees have very little savings. I think the evidence shows that lower income persons tend to have savings in the form of their homes, and that's essentially something they would find difficult to reduce in terms of a redistribution of savings under a forced savings approach.

I would agree, however, that it would affect them. They would probably have to reduce their consumption or dis-saving.

Paul Jackson displayed evidence that the cost of a mandatory system would be $9 billion. I'm not disputing it. The average cost per employee is $221 a week for the total cost of $9 billion. For a 40-hour week that comes to an assumed hourly wage of $5.53. With the three percent add-on that's an increase in cost of 16½¢ per employee per hour. I suggest small employers have increased their employees' hourly rates by more than that amount, and perhaps substantially more. They absorb these increases as a production cost which they can transfer to prices.

With the assistance of an actuary at the Treasury Department, I had the three percent contribution converted into an annuity. I assumed that a person began this at age 25 and worked to age 65. The funds were accumulated based upon a constant $221 per week, for an annual contribution of about $344.76. The interest assumption is eight percent. This provides an annual annuity of $10,434.00 if he lives 15 years after 65.

Because there is not a paper on our agenda which discusses implications for the employee I find myself presenting a little on the employee's side of the picture. There is a sizable annuity that can be provided with a three percent contribution over a career. I see some actuaries' heads shaking, and perhaps they can comment on that, but those are the points I wanted to make.

MR. WOODRUFF: I thought Mr. Jackson very persuasively demonstrated why we are not likely to see a dramatic increase in voluntary pension coverage among small businesses under our current system of incentives and disincentives.

Further, you presented reasons which I found persuasive that small businesses will not now set up a plan. If you argue that new tax incentives would create an environment in which they create a plan, it means that there would be a reduction in revenues available to the federal government. So, in a sense, you've already taken away some solutions such as general revenue financing for Social Security.

If, in order to get voluntary coverage in the private small business community we need to increase dramatically tax incentives, where are those revenue losses going to be borne, and can we afford to bear that in the federal budget.

MR. KEITH: As one who has been in the Congress, I have borne the heat of a lot of these efforts to get increased Social Security.

Look at a city like New Bedford with marginal industries, mom and pop stores part-time workers, working wives and older people working part-time with an average wage for the new employee of about $3.15 an hour. These people would much rather have their jobs in marginal industries than a mandated pension plan. Don't take away their jobs and give them to some foreign competitor.

MR. BASSETT: Dr. Ture indicated that there were a lot of ways to solve the income adequacy problem besides mandatory pensions or increasing Social Security. I hope he will forward those to the Commission.

MR. LIEBENSON: One very short comment. I'd like to be present when the small employer goes to his 25-year-old worker who's got his eye on a new car and tells him that he's got to be in the mandatory pension program.

DR. TURE: I'd like to note my very great pleasure that attention has been given both implicitly and explicitly today to welfare and utility considerations. By and large, those considera-

tions are more generally ignored than taken into account. But, it surely should be clear from the discussion this afternoon that they really are at the very heart of the issues that this conference is supposed to be about.

EXPANDING RETIREMENT INCOME: Implications For the Economy

Norman B. Ture, Ph.D.

SUMMARY

Demographic trends in place in the United States will cause retirement income to expand inexorably. The consequences of that expansion for the economy as a whole will depend in large part on whether that expansion occurs principally through growth of private arrangements for providing retirement income or through the continued, accelerating expansion of Social Security. In turn, which of these developments occurs will depend very largely on political decisions. For the most part, public policy in this area has not focused on the major economic issues involved and has lacked a consistent, long-term orientation. Continued attention to details and to problems of narrow scope will extend and accentuate the basic difficulties which occasion public policy concern; greater attention to the broader aspects of public and private retirement systems in terms of their economic consequences is urgently called for.

In summary terms, those broad economic issues may be thought of as falling into two principal categories: the effects of the institutional arrangement on the total well being or utility of participants and the effects on such major economic magnitudes as employment, the stock of capital, total output, and total real income.

The Social Security system, as presently structured, grossly impedes utility maximization and seriously retards the expansion of total output and income through time. Public policy constraints on private saving, in general, and on private retirement systems, in particular, limit their effectiveness in both respects.

The efficiency or welfare losses arising from the operation of the Social Security system arise from the fact that it is a compulsory system. As such, it could result, even were it a true "insurance" system, in patterns of consumption and wealth accumulation over time which, seldom if ever, would conform with the preferences of the covered individuals. Moreover, even disregarding its compulsory character, additional utility losses derive from the fact that an employee's "premium"--the payroll tax paid by and for him--would only by rarest happenstance equal the reciprocal of the marginal product of capital, hence only by remotest chance equal the real cost to him of acquiring a future income stream. In other words, for no given individual are the amounts of premium payments and of benefits likely to be anywhere near related by the market measure of the marginal productivity of capital.

In view of the fact that social security retirement is not a true insurance

system, but an intergenerational tax-transfer system, its utility consequences are the same as those of other tax financed government transfer programs, viz., it entails the same kind of utility losses as are associated with involuntary giving to any "charity."

The Social Security system must result in reduction in the supply and employment of labor, except on the most implausible assumption that currently employed persons persistently fail to perceive the tax-transfer character of the system. Unless they believe that their payroll tax payments are the purchases of their annuities rather than of the annuities of the contemporaneously retired, they must see the tax as reducing the net rewards for their labor services, hence as raising the cost of work relative to non-market uses of their time and resources. The effect must be to reduce the amount of labor services supplied at any given pretax wage rate.

Insofar as currently employed persons are confident that they will themselves eventually receive social security annuities, their private saving will be displaced in varying degree. As a consequence, the stock of capital is less than it would otherwise be. As a result of the reduced capital:labor ratio, labor's productivity and real wage rates are lower than otherwise, curtailing the supply and employment of labor services. Together, these adverse effects on employment and capital result in losses in output and real income.

Private retirement income arrangements very often involve the same kinds of adverse utility effects as may be identified in connection with Social Security. The magnitude of these effects, however, is considerably smaller. Moreover, many of the private institutional arrangements for retirement income afford substantial efficiency gains by way of economies in information and transaction costs, as well as by being less penalized by the tax system.

As well as mitigating the utility loss from misallocation of income between consumption and saving, resulting from the existing tax biases against saving, private retirement saving plans contribute to increasing the volume of saving and capital formation. The consequences for the capital:labor ratio, labor's productivity, real wage rates, and employment, total output and income, are opposite in direction from Social Security's.

A collateral benefit from expanding private retirement saving would be reduced urgency for ever-increasing payroll tax rates to fund Social Security's retirement benefits. Private saving and expansion and the associated expansion of the stock of capital result in greater employment and labor compensation. Clearly the greater the aggregate amount of wages paid to those currently employed, the lower the payroll tax rate needed to finance any given amount of benefits for the current social security annuitants. Moreover, the higher rate of private saving, the greater will be the future flow of returns on such saving and the less dependent on social security will be those who undertook the saving (directly or indirectly). In short, the more vigorous the expansion of private saving, the less need be the reliance on social security and the greater will be the opportunities to reduce its adverse economic consequences.

The key to more constructive public policies regarding retirement income is likely to be found in shifting focus from details and problems of narrow scope to the broader aspects of the alternative institutions. This calls for a basic reappraisal of social security and the entire intergenerational, tax-transfer approach in the light of its economic consequences, rather than the kind of band-aid

efforts to rescue the system which have characterized public policy for many years past.

A basic reappraisal of social security, in light of the relevant welfare and economic criteria, urges that the system should be aimed at performing at most the function for which it was originally designed--affording a supplement to private provisions for retirement income. In turn, this urges that public policy should seek to promote private-sector provisions far more vigorously than it has in the past. This reorientation of policy would permit a conscious and deliberate slowing of the expansion of social security benefits for future generations of retirees, hence a slowing of the expansion of tax burdens on future generations of workers. It should be designed, obviously, without impairment of annuities of those now retired. It is a strategy which calls for phasing down the expansion of social security along with the expansion of private arrangements.

Rather than set some target for the "right" amount of private provision for retirement income, or considering mandatory private pensions, public policy should aim principally at eliminating, or at least materially reducing, the existing institutional biases, particularly those in the tax structure, against private saving. A program for reducing those biases might well begin with substantial, across-the-board reductions in the individual income tax marginal rate structure. This objective would also be well served by any of a large number of so-called "targeted" pro-saving tax devices which, one way or another, reduce the relative cost of saving.

In addition, major improvements can be made in the institutional environment for private pension plans and other private retirement income plans. For example, the present restrictions on IRAs and Keogh plans should be rigorously reappraised in the light of the basic objectives such plans are intended to serve. Such plans should be made as flexible as possible. Similarly, the wide array of "safeguards" of employees and of the Treasury Department which now surround private pension plans should be reassessed in terms of the severity of the problems to which these safeguards were addressed, the adequacy of these safeguards for their identified purposes, and their consequence for the efficient operation of pension plans, given the fundamental purposes of those plans.

Public policy needs a new perspective on private pension plans and other private retirement income provisions. This perspective should be derived from a dispassionate analysis of the objectives common to the entire spectrum of arrangements for providing retirement income and of the welfare and economic consequences of alternative ways of pursuing those objectives. This discussion argues that this new perspective would result in a major shift in policy toward greater future reliance on private sector arrangements with constructive results for participants' well-being and for the economy's growth.

INTRODUCTION

One of the most persistent sets of public policy problems the United States faces concerns the arrangements, public and private, for retirement income. The public at large is aware of the fact that the principal public retirement system, the social security old-age and survivors "insurance" program, is in serious difficulty; if they're not so aware, they'll have a painful reminder very shortly. Far less well perceived are the problems confronting private retirement plans, problems which derive in large part from well-intentioned but inept public policies.

In very large part, the persistence of these problems is attributable to the

fact that efforts to solve them have always been ad hoc. We have consistently addressed the questions of retirement income as if they could be dealt with in isolation, unrelated to all of the economic processes with which providing for retirement income is necessarily associated. The consequence is that our solutions turn out to be at best fleeting palliatives and at worst the cause of intensification of the difficulties. Sooner or later we will have to face the basic issues cast up by our present institutional arrangements. The sooner we do so, the greater will be our prospects for success.

The fact that these problems and issues are important public policy concerns is, in itself, a matter of concern. Retirement income provision is not, in the natural order of things, a matter for which public policy should be responsible. Indeed, for most of our national history, public policy was little if any involved. Until the early 1940s, most Americans relied on their own saving, on their offspring and close relatives, and/or on private charities for their income and support when their working days were over. Today, all but a handful of the working population is covered by the Federal Social Security system or state and local government retirement programs, and approximately 63 percent of all prime age full time employees in the private, nonagricultural sector participate in private plans for retirement income. And of the population aged 65 and over, about three of every four persons receive a part--often a substantial part--of their retirement income in the form of primary retirement benefits under social security, while perhaps a third of the retired population receives benefits from private pension plans.

A wide range of factors are responsible for this revolutionary transformation from private individual to public institutional provisions for retirement income. These factors include changes in the structure of the American economy, principally the shift from small-scale rural enterprises to larger-scale urban activities, the consequent shifts in population location, the increasing mobility of the population and the consequences thereof for family relationships and for family responsibility for retired persons, etc.[1] None of these factors dictated that responsibility for providing for retirement income necessarily had to shift from the private to the public sector. Bear in mind that the institution of social security in the mid-1930s was supposed to provide a supplement to private retirement income. Today, in contrast, social security is the basic retirement income for a large fraction of annuitants, with private-source retirement income serving as the supplement.

Perhaps it should have been predictable that the social provision of retirement income would grow rapidly and, in relatively short order, displace private provision as the primary source. To repeat, this displacement has not occurred as a result of the operation of natural law. It reflects, rather, the fact that a public program with a clientele of the magnitude embraced by social security is an irresistable instrument for obtaining and holding political advantage.

One may reasonably conclude that unless some means are found for depoliticizing the social security system, the growth in its benefits will continue to reflect in significant degree its perceived usefulness as a means of getting and holding a major voting bloc, not merely

[1] These and other influences are discussed in The Future of Private Pension Plans, by Norman B. Ture with Barbara A. Fields, The American Enterprise Institute for Public Policy Research, Washington, D.C. (1976), pp. 23-58.

economic considerations pertaining to retirement income.

There are very substantial differences, apart from susceptibility to politically inspired changes, between public and private retirement income systems. These differences are to be found in the differing effects on major economic aggregates, about which much has been said and written, and in the effects on the total utility or well being of system participants, about which relatively little has been said or written. The consequences for the economy of the expansion of retirement income, therefore, cannot be generalized. Since the more rapidly social security grows, the less rapid is the likely expansion of private retirement systems. These consequences, instead, will depend very largely on whether the vehicle for retirement income growth is the public or the private sector's system. In turn, that is a matter which depends very largely on political decisions. Those decisions have not always been well-informed; hopefully in the future they will be based on better understanding and analysis. To further that better understanding, this discussion and analysis is immodestly addressed.

If retirement income policy is to be better informed, the first requirement is to identify appropriate objectives and criteria. It is not enough merely to seek to enhance the income and wealth of the current annuitants; the sources of any such enhancement must also be considered and the consequences for the well-being of all the population, currently and into the future, must therefore be taken into account. With this broad constraint in mind, the basic objectives of better policy, in summary terms, should be to

- maximize the welfare--the utility or sense of well-being--of those currently covered by retirement programs, both as workers and annuitants; this entails facilitating the most efficient allocation of one's income and wealth between satisfying current consumption demands and providing for future income; and
- allow the market mechanism to work as efficiently as possible in determining the rate at which income and wealth expand through time.

Neither of these objectives is effectively pursued by existing public policies. The social security system grossly violates the efficiency criterion and seriously retards the expansion of output and wealth through time. Public policy constraints on private retirement systems make them less effective devices than they otherwise might be in both respects.

This discussion first examines the social security system's effects on welfare and economic growth. It then examines private retirement systems against the same criteria. Finally, some suggestions for reducing the deficiencies of both types of system are offered.

Social Security

As stated, the present social security system grossly violates the efficiency or welfare maximizing criterion and also impedes the growth of the economy. Assessing social security against the efficiency criterion involves the central question of whether this system enhances or diminishes total utility, with respect both to those persons currently at work and those currently retired. Otherwise put, the question is whether the system reduces, creates, or increases impediments to individuals' arranging for patterns of consumption and wealth accumulation during their adult life-times which maximize their total satisfaction, given the objective constraints to which they are subject.

To understand the meaning of the efficiency criterion, it will be useful to sketch out how people might be expected to behave under ideal circumstances and then to examine best possible arrangements in a world that falls short of ideal.

Efficient Retirement Provision Under Perfect Competition: No Risk

To begin with, consider a perfectly competitive market economy. Since, by assumption, everybody in this economy is perfectly informed about all relevant aspects of his own present and future income and wealth opportunities and constraints, there is no need for an insurance industry and none exists. Each person in this economy continuously makes choices between present and future uses of his income and wealth. At any moment in time, given his permanent income at that time, he allocates some portion of his wealth to current consumption and some to increasing his future income and wealth. He may, of course, use that future income and wealth to satisfy his own consumption demands or to provide for others. If he wishes to augment his future wealth, he reduces his current consumption and purchases assets or claims thereto which will generate income over an extended time period. The limit on the extent to which he can so augment future wealth clearly depends on (1) his present wealth, i.e., his current "budget" constraint, and (2) the marginal productivity of capital, i.e., how much the additional amount of capital he acquires and adds to the total stock in the economy will add to total income.

Assuming no other constraints, e.g., no governmental intervention in one form or another, each person's choices at any point in time clearly reflect his efforts to provide for himself the optimum time path of consumption and accumulation. At any moment in time, therefore, the total amounts consumed and the total saved represent the most efficient state of affairs for the economy as a whole; most efficient because no other allocation would afford a greater total volume of satisfaction for everybody.

Of course, each person's utility system is likely to change over time, so that the growth path of consumption and income which is determined today and is optimum today may not be optimum tomorrow. Hence, the growth path is continuously altered.

In making his choice at any point in time, each person takes into account his remaining lifetime earning pattern. One of the influences on his choice, thus, is his anticipation that at some future time the amount of his permanent income attributable to his providing "labor" services will begin to diminish. His choice, accordingly, reflects the provision he wishes to make for his "retirement income."

In addition, his choice reflects his anticipation of when he will shuffle off this mortal coil. If he chooses to make no provision for others, his time path of wealth accumulation and of consumption will be such that at the moment he expires, his last unit of wealth will be consumed. (Remember, we've assumed full information.) If he wishes, on the other hand, to leave an estate, his choice must clearly be dictated by his own preference about the status of his heirs, since their utility systems are unknown to him and can't enter into his decisions.[2]

[2] He might conceivably select time paths which leave him destitute before his death. With the assumed perfect foresight, such behavior would be exotic if it were anything other than an expression of his preference for foreshortening his life. He might become the recipient of another person's charity, since nothing in this scheme of things precludes any individual's choices from including charitable acts.

Efficient Retirement Provision in a Risky World

Consider next a less perfect world in which risk exists. Each person may still carve out his own paths of consumption and accumulation, but no one's choices are, by assumption, perfectly informed. Instead, all such choices are based on each person's perception of the probability distributions of the relevant phenomena, e.g., continuity and duration of employment, illness and other events affecting his productivity, his longevity, the productivity of the capital he acquires, etc. Because there is risk, an insurance industry exists. Insurance does not alter the total losses which occur, but assuming total premiums paid equal the losses actually incurred, a redistribution of losses is effected: those who sustain losses less than the mean expected value are the transferors to those who sustain losses greater than the mean.

In his choice of the time paths of consumption and accumulation in this risky world, the individual may include in his portfolio of assets and claims an insurance policy which provides him an annuity at the time he chooses or is forced to retire. Similarly, he may be able to include in his policy a provision for income during periods of unemployment prior to the time he would otherwise choose to retire. His policy may also include survivors' benefits, if he chooses to accumulate an estate for others.

Clearly, the amount of the retirement and income assurance benefits he can provide himself at any time is limited, as in the perfect-world case, by his permanent income at that time and by the marginal productivity of capital. The maximum of such benefits is less than in the former case because the real costs of the insurance feature per se must be covered by the premiums.

To repeat, the amount of benefits to be provided, irrespective of whether people self-insure or buy insurance, depends essentially on the marginal productivity of capital. As noted, there are some transfers among insured persons, the extent of these transfers depending on the shape of the distributions of the insured events. But the average amount of such transfers included in the benefits of all the insured must be zero, since if it were other than zero for any length of time, appropriate revisions in the actuarial calculations and premiums would be made.[3] Aggregate benefits for retirement then are a function only of the marginal productivity of capital.

If we take a snapshot of this system at any moment, we will see retirees are receiving annuities and other insurance proceeds or returns on their own assets which they acquired over their working lives and are paying nothing into retirement funds, while workers are receiving no retirement benefits but are contributing to such funds. But this does not mean that the present generation of workers is transfering income in the amount of the retirement benefits paid to an earlier, now retired, working generation. By hypothesis, all of the provisions for retirement are voluntary, and to repeat, the amount of each retirees' benefits depends on how much he had earlier saved and on the marginal productivity of the capital in which he had acquired claims. In no literal sense are the

[3] Opportunities for realizing economies of scale in insurance may result in group contracts to cover some of the insurable phenomena. Group insurance should tend to reduce the transfer element included in insurance benefits, provided the groupings are based on variables relevant to the shape of the probability distribution of these phenomena. Some transfer element, of course, remains in the benefits received by some of the insured, but as before, taking all the insured together, transfers should wash out entirely.

present workers financing the retirement of former workers. Indeed, by virtue of the decision by past workers to save and accumulate capital, the present generation of workers have more capital to work with and therefore more production, hence enjoy a higher real wage rate.

As in the riskless world, the total amounts consumed and saved at any given time represent the most efficient state of affairs, given the costs involved in the institutional arrangements for risk averting. Unlike the prior case, however, some individuals will wind up with less than their optimum wealth accumulations and others with more, simply because without perfect foresight their forecasts of the relevant phenomena were not perfectly realized. Some, then, having been more anxious about the future than they need have been, will find that they have consumed less and saved more over their working lives than they would have had they had perfect foresight. They will approach and reach retirement with larger accumulations than they had earlier aspired to, and if their utility systems had not changed, they might attempt a one-shot adjustment in their total assets by increasing their consumption; on the whole, however, they are likely to retire with some "excess" endowment.

Others will have accumulated "too little," having been excessively confident during their accumulation years. Some of these may be destitute and either sustained by charity or not sustained at all.

In this "near-perfect" world--perfect other than for lack of perfect foresight--these errors in forecast should cancel out. If, for some reason, there were a systematic bias in people's forecasts against the actual distributions of events around their mean values, insurance premiums would be higher or lower, as the case may be, than would be required by the actual distributions. Unless the price elasticity of demand for insurance were zero, the amount of insurance acquired would be different from the amount which would be optimum for the actual distributions. The difference in the amount of insurance proceeds actually paid would be offest to some degree--possibly more than 100 percent--by the differences in the amount of premiums paid. Whether the offset would be perfect would depend on the price elasticity of demand for insurance, but the efficiency loss even if the offset were not perfect would be of a relatively low order of magnitude.

The poverty or destitution of those who made inadequate provision for retirement would certainly be distressing to those who observed it. Charity might relieve it. Lectures on the virtues of frugality and putting something aside for a rainy day would be a standard part of educating and raising the young. But objectively viewed, there would be no substantial a priori basis for assuming that less than a social optimum existed.

Efficiency Losses Under Social Security

From this almost perfect world, we turn to one which is clearly more recognizable as the world of today. In contrast with the retirement income system and results sketched above, the social security system of the real world is involuntary. Moreover, the source of retirees' benefits is not the capital they had accumulated but the compensation of the current generation of workers. Both entail important efficiency losses.

Suppose that the sight of the poor forecasters impelled society to seek a systematic, collective preventative or palliative for under-accumulation for retirement. It might do so by requiring everyone to increase his accumulation rate, in which event, by the very hypothesis delineated above, accumulation would be excessive and the time path of consumption would be too low.

It might do so by requiring only certain persons, deemed to be less than adequate accumulators, to increase their saving; in this case, the utility lost by the selected group is not compensated for by anyone else since presumably everyone was at a preferred saving rate, given his own budget constraint and the real productivity of capital. Or society might simply organize charity, levying taxes on those deemed to be relatively affluent to finance transfer payments to the poor or destitute. Those paying the taxes sustain losses in utility; in addition, depending on the specific taxes employed, the economy as a whole sustains an efficiency loss because of changes in the composition of real output or in the mix of production inputs or both. The recipients of transfer payments, of course, realize utility gains. Some gains in utility may also be realized by the taxpayers: the poor and destitute may be less numerous or less poor, less obvious, and hence, less a source of psychic distress to those who behold them; the amounts laid out in private charity may be reduced; the unpleasant impact of poverty on the physical surroundings may be abated; and the inefficiently rationed demands of the poor for publicly provided services may be lessened. On the whole, however, there is no _a priori_ case to be made that the sum of these gains exceeds the losses.

It may be argued that the net efficiency loss from some form of compulsory retirement system disappears and is replaced by a net gain if one takes account of the many imperfections of the real world. The standard argument to this effect would hold that it is not merely lack of perfect foresight which prevents the individual from realizing an optimum time path of consumption and accumulation; more significant to him are objective events over which he has no control and with respect to which he cannot obtain sufficient information, except at extraordinary costs for estimating their probabilities, as elements of the forecasts upon which he would base his consumption-saving decisions. If he believes that the information costs exceed the benefits to be derived from such information by way of better decisions about consumption and investment, and if these information costs depend on events external to his behavior, then there may conceivably be an efficiency gain in relieving him of the decision-making responsibility. This argument obviously contains the principal elements of the externality argument for public action in lieu of private.

While this externality argument may be plausible for some part of the working population, it can hardly apply to the preponderant part, who are nonetheless involuntary participants in the social security system. Moreover, the argument does not support a _compulsory_ retirement system. Even for the most poorly informed, it argues for making available to them some kind of retirement insurance in which premiums and benefits are based upon information which such an individual cannot economically acquire by his own efforts and for advising such an individual of the pertinent costs and benefits to him.

An additional reservation about the weight of the argument that compulsory retirement systems involve an efficiency loss derives simply from the fact that the argument, like so many of the propositions in welfare economics, implicitly presupposes best world conditions or inconsequential market imperfections. In fact, these imperfections are often substantial, and policy actions which would clearly involve efficiency loss in a perfect-market world may offset excess burdens resulting from market imperfections or even yield net efficiency gains. There are, for example, a host of features in our present institutional environment which bias relative prices in favor of current consumption and against saving, and which might be offset in some

degree by any involuntary saving which some other institutional feature requires. The question, however, is whether an institution such as social security results in any increase in aggregate saving. In truth, it may be plausibly argued that it is counterproductive in this respect.

In any event, this argument points more in the direction of changing institutional arrangements in order to reduce biases against saving than toward requiring coverage by a retirement plan.

A major efficiency loss produced by social security, then, derives from the fact that it is compulsory and well-nigh universal. Participation implies nothing about any covered individual's preferences and perceptions regarding an optimum time path of consumption and accumulation. While the required participation may conform closely with the preferences of some of the covered individuals, it defies credulity that it does so for most of them: to assume the contrary requires one to assume an extraordinarily close clustering of participants' preferences around the mean values with respect to the principal elements in the system.

Even if one were to disregard the efficiency loss attributable to its compulsory character, the social security system still would have to be faulted for other elements which involve efficency loss. In the first place, since the amount of "premiums" paid by any covered employee depends only on the amount of his wages or salary (given the statutory rate and base provisions), there is no reason to assume that his premium payment at any time conforms with his preferred allocation of his income between consumption and accumulation, nor that the path of consumption and accumulation implied by his premium payments is anywhere near congruent with his preferred path. In the more nearly ideal world, the person need not save at all and when he does the amount, timing, form, etc., of his saving depends on his income and on the cost to him of obtaining future income, measured in terms of how much current consumption he must forego. That cost depends on the marginal productivity of capital. Under Social Security, his "premium" payments do not accumulate a market-determined annuity for him, but an annuity that is based principally on his years of coverage and on his taxable earnings in covered employment. The premium, therefore, is a false price. Thus, irrespective of whether the Social Security Trust Fund is on an "actuarially" sound basis in the sense that its total receipts are adequate to fund the total benefits paid, no present-day contributor is likely to receive benefits determined by a market rate of accumulation on his "premiums" and no present-day beneficiary's benefits are likely to be equal to the annuity which would have been accumulated at market-determined rates by the premiums he actually paid.

There have been numerous arithmetic exercises directed to this point, some attempting to show that if past trends in contributions and benefits continue, today's contributors on the average will get a bargain, just as today's beneficiaries are currently receiving one. Other exercises attempt to demonstrate the contrary. But either exercise is really irrelevant to the main point, i.e., for no given individual are the amounts of premium payment and of benefits likely to be anywhere near related by the market measure of the marginal productivity of capital.

As in the case of private insurance, some covered employees will eventually wind up as transferors and some as transferees in this social "insurance" system. In contrast with private insurance, however, the income transfers are not solely or most importantly the result of differences between an individual's actual experience and the mean value of the probability distributions

of the relevant events which determine how much has actually been accumulated by him and how much he is contractually obligated to receive. In the case of private annuities, to repeat, the transferors are those who die before they reach the actuarial mean life expectancy which determined the amount of premium required per dollar of annuity, while the transferees are those who live longer (ignoring survivors' benefits). In the case of social security, on the other hand, the transferors and the transferees are distributed with respect to a much larger number of variables: in the absence of social security, how much they would have saved at any given time, into what kind of capital would they have channeled their savings, when would they have chosen to begin to receive annuity benefits, how much survivors' benefits would they have opted for, etc., as well as their longevity.

Far larger and more consequential are social security's systematic transfers of income from the present to a former generation of workers. In contrast with private insurance, in which benefits to retirees consist of the returns of and on their earlier accumulated capital claims, social security benefits are obtained solely from the current flow of compensation of currently employed persons. Whether the current worker chooses to identify the payroll tax levied on his compensation as his purchase of <u>his</u> future annuity, in truth his payroll tax purchases the annuity for a currently retired person or persons. In this sense, the social security retirement system differs not at all from any other government transfer payment program financed by general tax revenues.

How current workers perceive the nature of the payroll tax payments they make is critical to the assessment of the effects of the social security system on the supply of labor and on the amount of total saving and capital formation. The discussion turns next to these effects. But even if every person perceived every dime of payroll tax as the purchase of his future annuity, it would nonetheless be true that by no stretch of the imagination could the pertinent aspects of this "saving" be deemed to conform with the saving preferences of the "savers." The system unequivocally entails welfare losses of substantial magnitude for the society as a whole, even if it were thought to have no adverse effects on aggregate output and income.

<u>Effects of Social Security on Total Output and Income</u>

Whether the operation of the social security system affects total output and income depends on whether it changes individuals' willingness to work and to save, hence the rate at which the real stock of capital grows. These effects are briefly examined in the following discussion.

<u>Supply of Labor</u>. The effect of the system on the supply of labor services depends at the outset on how workers identify the payroll tax. If, on the one hand, they perceive the tax as involuntary contributions to an insurance system for the purchase of a future income stream on their behalf, then they do not perceive it as reducing their net compensation for their labor services. The fact that the amount, form, timing, etc., of the "saving" and of the future income it purchases do not conform with their preferences does not imply any change in their perceived current net earnings; that is, the payroll tax is not seen as a tax. It does not, on this assumption, affect the relative price of effort and leisure, hence has no effect on willingness to work at any given market wage rate.

On the other hand, if the current generation of workers perceive the payroll tax for what it is in fact, viz., a levy imposed to fund benefits

for the contemporaneously retired population, then workers must identify the tax as reducing their net rewards for their labor services--at least up to the top of the payroll tax wage base; by making work more costly relative to leisure, the effect must be to reduce the amount of labor services supplied at any given pretax wage.

In this case, the result must be less labor services employed than otherwise. Moreover, with any reasonably realistic estimates of the marginal productivity of labor and of the technical conditions of production, the reduction in labor services employed means a reduction in total compensation for labor services, even though the pretax price per unit of such service will be higher at the lower volume of employment.

It is difficult to believe that workers generally would continue over extended periods to misidentify the tax-transfer character of the social security system. On the assumption that at least some fair proportion of individuals recognize the system for what it is, the necessary conclusion is that fewer persons are employed at less total compensation than would otherwise be the case.

For the retired social security annuitant, the tax-transfer characteristic of the system must be unambiguously clear. Had he earlier had any illusion that his payroll tax payments were purchases of an annuity he would be entitled to claim upon his retirement at the eligible age, he would certainly be disillusioned if he sought to augment that annuity by continuing to work. Moreover, he'd find the real marginal tax rate on any earnings from employment enormously increased by virtue of the fact that he'd forfeit $1 of benefits for each $2 of earnings above the very modest stipulated maximum. It is certainly clear that the system severely reduces employment by persons over 65 years of age (but less than 72).

Saving and Capital Formation. The highly plausible assumption that workers generally identify the social security system correctly, i.e., as a tax-transfer system under which those currently employed pay taxes to finance the annuities of those contemporaneously retired, does not mean that they believe they will not themselves obtain benefits from the system upon their retirement. Just as they view themselves as financing the retirement of a former generation, they more or less confidently anticipate that future generations of workers will finance their retirement. Their confidence on this score is likely to depend to a considerable extent on the level of the tax rates to which they are themselves now subject, on the basis of which they are likely to project, however imprecisely, the level of rates to be imposed when they are retired. The higher that future rate, the greater is likely to be the resistance to paying payroll taxes by the future generations of workers, hence the less the confidence of current workers that the benefits they are now scheduled to receive will in fact be realized. But unless current developments persuade them of the collapse of the system before they reach retirement, they expect to receive some annuity upon becoming eligible.

This expectation tends to displace workers' private provisions for retirement income, whether in the form of their own arrangements or in private pension plans. This displacement doesn't result because people set fixed targets for their retirement income. It results, rather, from the fact that the publicly-provided retirement income raises the implicit cost of providing privately for future income. The larger the amount of the future income, the less is the gain in utility to be obtained from acquiring any given additional amount. The expectation of some given amount of social security retirement benefits reduces the marginal utility of any given amount of privately provided annuity. Unless its cost--the

amount of current consumption which must be foregone to acquire any given amount of future income--is also reduced, the amount of such private provisions--current private saving, whether individual or through institutional arrangement--is likely to be reduced as well. Since social security doesn't reduce the cost of private saving, it must displace it, the more so the greater the expected future benefits under the system. The more rapid the growth in social security benefits, the more seriously adverse its consequences for private saving. And the greater the reduction in private saving, the smaller the stock of capital, hence the flow of capital services in production, relative to the amount that would otherwise be forthcoming. The foregone capital not only results directly in less output and real income, it also results in a lower capital:labor ratio, hence lower productivity of labor, and lower real wages, and therefore a smaller supply of labor services. This effect compounds the direct adverse impact of payroll taxes on labor supply and employment. Together, these effects of employment and capital formation result in substantial losses of output and real income.

Private Retirement Systems

While private, institutional provisions for retirement income are far from perfect, they are far less deficient with respect to both the criteria of efficiency and aggregate economic effects than the social security system.

Efficiency Aspects of Private Pension Plans

Superficially, the typical private pension plan may very well appear to suffer from the same defects with regard to participating employees' utility maximization as noted earlier in this discussion with respect to social security. Many private pension plans are involuntary; the employee doesn't have the option of foregoing coverage and obtaining additional current wages or salary payments equivalent to the foregone pension contribution by his employer to the pension plan. The amount of the contribution, including both his and his employer's on his behalf, generally is not a matter of his choice. The way in which the contribution is invested and the condition for obtaining retirement benefits are, in the main, matters in which the employee has no voice. And the amount of benefits he ultimately obtains are likely to be determined by formulae containing elements which differ significantly from a market-oriented actuarial arithmetic.

These observations are subject to notable and expanding exceptions. Many employers allow at least some of their employees considerable latitude in the choice between current wage and salary or pension plan participation, with regard to the amount of contribution to the plan, with respect to types of instruments in which the contributions are to be invested, and concerning the benefit package itself. Early, substantial, if not full vesting is frequently found. And the rate of accumulation of private pension funds is determined, to a substantial degree, by profit-maximizing decision-making in the market place.

Moreover, a significant proportion of private pension plans are the products of collective bargaining between labor and management. While the labor union suffers the disabilities of large bureaucraticized, non-profit organizations and is often sheltered from the consequences of its mistakes, it nevertheless is not totally unresponsive forever to the preferences of its members. Should a union persist overlong in securing for its membership an excessive portion of pay increases in the form of pension benefits, that membership can be counted on in time to express its displeasure and to assert its preferences. Thus, while pension provisions in compensation packages

must very often involve efficiency losses for the employees, these losses are likely to be of smaller magnitude than in the case of involuntary social insurance programs.

However private pension plans come out on these scores, they afford very substantial efficiency gains with respect to the information and transaction costs associated with personal saving and investing and as a result of the less punitive tax treatment of such saving and investment.[4] Similar efficiency gains are provided by such individual retirement saving arrangements as Keogh plans and IRAs. In the light of the enormous bias against private saving imposed by the existing tax system, these efficiency gains associated with tax-favored retirement saving arrangements are particularly important in offsetting the distortions in the allocation of current income between consumption and saving. Their consequences, accordingly, for improving the overall level of welfare are almost certainly far greater in magnitude than any adverse effects on utility such plans may produce as a result of their features noted above.

Collateral to the effect of private retirement saving plans in mitigating the utility loss from misallocation of income between saving and investment are their effects in increasing the aggregate volume of saving and capital formation. These plans result in a lower cost for private saving than would otherwise prevail. Unless one assumes persistent and widespread irrationality on the part of affected individuals, this lower cost of saving means that more saving will be undertaken at any given level of total income than would otherwise occur. And in contrast with social security's exactions from the current income flow, saving undertaken in private retirement income plans is channeled through the capital market into additions to the stock of productive facilities. While social security not only doesn't involve any net addition to saving and the real capital formation--indeed, acts to depress these uses of income and existing production capacity, private retirement saving plans do serve to augment aggregate saving and capital formation.

The larger the fraction of current income which is saved, hence used to accumulate net capital, the more rapidly will labor's productivity and real wage rates advance. And the more rapid the increase in real wage rates, the greater will be the total number of employed persons and the larger will be aggregate labor income.

To advert to the proposition advanced at the beginning of this discussion, the implications for the economy of the expansion of retirement income depends on whether the vehicle for that expansion is social security or private systems. Social security expansion, as shown, results in constriction of the economy's growth, in terms of employment, real wage rates, the stock of capital, and real GNP, compared to the levels otherwise attained. The expansion of private retirement systems, in contrast, implies a larger volume of private saving and capital formation, hence greater and more productive employment and a larger amount of output and real income than otherwise.

An interesting collateral benefit to be obtained from expansion of private retirement saving is the reduced urgency for ever-increasing payroll tax rates to fund the social security system's retirement benefits. As shown, private saving expansion and the associated expansion of the stock of

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[4] These efficiency gains are discussed at length in Ture and Fields, op.cit., pp. 42 ff.

capital results in greater employment and labor compensation. Clearly, the greater the aggregate amount of wages paid to those currently employed, the lower the payroll tax rate needed to finance any given amount of benefits for the current social security annuitants. Moreover, the higher the rate of private saving, the greater will be the future flow of returns on such saving (directly or indirectly). In short, the more vigorous the expansion of private saving, the less will be the reliance on social security and the greater will be the opportunities to reduce its adverse economic consequences.

To recapitulate, the epansion of retirement income certainly will have important consequences for the economy. If that expansion occurs principally through the existing social security system, the welfare or efficiency losses the system generates will be accentuated; furthermore, the resulting displacement of private saving and capital formation will slow the expansion of total employment, output, and real income, making the tax-transfers of social security even more burdensome. On the other hand, if the expansion of retirement income is effectuated to a substantial extent through private pension plans and other private saving arrangements, a far different set of developments is in prospect. While these various private arrangements are far from ideal with respect to utility maximization, their deficiencies in this respect are far less than those associated with social security. And in sharp contrast, private retirement income provisions tend to enhance, rather than constrain aggregate saving and capital formation. As a consequence, they contribute to economic expansion, reflected in higher levels of employment, real wage rates, aggregate labor income, and total output and income, as well as a larger stock of capital than otherwise would exist. As important collateral benefit is that the more rapid the expansion of private retirement income provisions, the less burdensome would be the prospective expansion of social security, both because less reliance would be placed on the system and because any given level of benefits could be financed by lower rates of payroll taxes.

Improving the Institutional Environment for Retirement Income

Unlike Topsy, the alternative retirement income systems don't just grow. In very large part, as suggested in the early part of this discussion, whether retirement income expansion will occur principally through accelerating growth of social security or through private pension plans and similar private arrangements will depend very largely on political decisions. The key to more constructive public policies regarding retirement income is likely to be found in shifting focus from details and problems of narrow scope to the broader aspects of the alternative institutions.

This calls for, among other things, a basic reappraisal of social security and the entire intergenerational, tax-transfer approach in the light of its economic consequences, rather than the kind of band-aid efforts to rescue the system which have characterized public policy for many years past. The eventual solution to the problems confronting the system is not to be found in such devices as extending the annuity eligibility age, nor in splitting off pieces of the system to be financed by devices other than the payroll taxes. Such actions in no way ameliorate the real deficiencies of the system; the utility losses inherent in an involuntary system are not reduced by such actions, nor are the adverse effects on employment, capital formation, total output, and aggregate real income likely to be significantly changed. To be sure, somewhat less distorting revenue sources could be found to finance any given level of benefits within the present framework

of tax-transfers, but the fundamental deficiency would remain. And, certainly, merely reducing--or foregoing increases--in payroll tax rates while shifting the same aggregate tax level onto the individual and corporate income taxes affords not even a palliative, let alone a real cure.

What is urged by a basic reappraisal of social security, in the light of the welfare and economic criteria discussed above, is that the system should be aimed at performing at most the function for which it was originally designed--affording a supplement to private provisions for retirement income. In turn, this urges that public policy should seek to promote far more vigorously than it has in the past private-sector provisions. This reorientation of policy would permit a conscious and deliberate slowing of the expansion of social security benefits for future generations of retirees, hence a slowing of the expansion of tax burdens on future generations of workers. It should be designed, obviously, without impairment of annuities of those now retired. It is a strategy which calls for phasing down the expansion of social security along with the expansion of private arrangements.

This latter expansion will not automatically occur in sufficient magnitude to replace the diminished social security benefits merely as a result of slowing the growth in social security benefits and taxes. Rather than set some target for the "right" amount of private provision for retirement income, however, public policy should aim principally at eliminating, or at least materially reducing, the existing institutional biases against private saving. Chief among these biases are those generated by the present tax structure, which have been detailed elsewhere.[5] A program for reducing those biases might well begin with substantial, across-the-board reductions in the individual income tax marginal rate structure. This objective would be well served by any of a large number of so-called "targeted" pro-saving tax devices which, one way or another, reduce the marginal rates of tax applicable to returns on saving, or equivalently, to amounts saved out of current income.[6]

In addition, major improvements can be made in the institutional environment for private pension plans and other private retirement income plans. For example, the present restrictions on IRAs and Keogh plans should be rigorously reappraised in the light of the basic objectives such plans are intended to serve. Such plans should be made as flexible as possible in order to accommodate to the greatest possible extent the enormous diversity of interests, capabilities, and objectives of those who might avail themselves of such plans. Similarly, the wide array of "safeguards" of employees and of the Treasury Department which now surround private pension plans should be reassessed in terms of the severity of the problems to which these safeguards were addressed, the adequacy of these safeguards for their identified purposes, and their consequence for the efficient operation of pension plans,

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[5] See, for example, Norman B. Ture and B. Kenneth Sanden, The Effects of Tax Policy on Capital Formation, Financial Executives Research Foundation (New York City), 1977.

[6] A useful discussion of a number of such alternatives is to be found in Ture and Sanden, op.cit., and in the Project Team Report for the Department of the Treasury, The Heritage Foundation (Washington, D.C.), 1980, Chapter III.

given the fundamental purposes of those plans.[7]

Public policy needs a new perspective on private pension plans and other private retirement income provisions. This perspective should be derived from a dispassionate analysis of the objectives common to the entire spectrum of arrangements for providing retirement income and of the welfare and economic consequences of alternative ways of pursuing those objectives. This discussion argues that this new perspective would result in a major shift in policy toward greater future reliance on private sector arrangements with constructive results for participants' well-being and for the economy's growth.

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[7] An examination of these existing statutory and regulatory provisions for conveying "Safeguards" of the sort suggested here is to be found in Ture and Fields, op.cit., pp. 84 ff.

Forum Discussion

MR. SMEDLEY: You made a lot of very strong statements here, pretty much as revealed truth, which are somewhat controversial. I gather you were wise enough not to devise any economic models which people could check and perhaps find some errors in.

DR. TURE: That's what keeps this an interesting business.

MR. SMEDLEY: You say that Social Security impedes utility maximization and seriously retards expansion, total output and income through time. This is because of the efficiency of welfare losses, because Social Security is compulsory. Then you advocate a greater expansion of the private pension system. This generally is compulsory for the employee, if not for the employer, so logically that has the same loss of efficiency as the Social Security. Now you say that's offset somewhat by the tax features.

DR. TURE: No, I say it's much more than offset.

MR. SMEDLEY: The point I'm making is that whether there is a capital shortage or not is a debatable issue, a controversy. The impact of Social Security on savings is another controversial issue on which economists, reputable economists, differ from you. It's not a truism. It's not that accepted. Assuming that it were the case, just to accept your assumption, it seems to me there are many ways to deal with it in terms of tax policy and economic policy. You could increase savings without having to tax the Social Security system, or reduce it, or do the other things that you want to do with it.

The other point I wish to comment on is the one that Mr. Bassett brought up. And, you know, I usually disagree with Pres. Now society is going to make progress. I have faith in our free enterprise system, even if some of the conservatives have less. Now we may make progress in a different economic way than your theory projects. You always maintain that we would have done better if we had done it your way, but we'll make progress, and sooner or later in the practical real world, society is going to have to come to grips with this large group of people who are treated unjustly in the sense of their pension rights and their retirement. They will give it priority. What is priority is decided as part of the political process.

You talk about voluntary approaches and private pensions. Now, it seems to me that there are some very obvious problems. I'd like a little more speci-

fics. You talk about marginal tax rates. But the very group of people that we're aiming at, that people are concerned about and are trying to help, really don't pay much in the way of taxes. What we do with the tax schedule doesn't help them much. You help the people who are already well off, have private pensions and so on and so forth, so you don't really target it on that group that really needs help in my opinion. IRAs and so forth are not going to help this group of people.

What are you going to do with a private pension system with inflation? What are you going to do about vesting? Nobody spends 40 years on a job. It's almost non-existent. I think the average time in the labor force for a woman is 2 years and for a man 4 years. So they get vesting during their ten years here or there, or they have voluntary savings. Those savings are greatly eroded by inflation. We're always going to have reasonably high inflation, even though not the same as the present time. It's going to be eroded by inflation. They're going to be wiped out by inflation after retirement. I'm saying there's a tremendous problem. Cost of living protection in a private pension isn't feasible.

I think small business has a legitimate complaint with mandated private pensions. I think it would create tremendous problems for them.

The only way you can provide adequate retirement income adjusted for inflation is through a Social Security system. I have no illusions about it being done any time soon. If we use general revenue to some extent, that takes the burden off of small business in some respect.

I'm saying I would like more specifics. I'm making an assumption that you may object to, but I think it's reasonable. Sooner or later society is going to have to deal with these problems. I'd like specifics on how you are going to deal with this group. I think voluntary programs dependent on marginal tax rates (IRAs and Keoghs) are not going to do the job. You're talking about a voluntary approach. I'd like a little more than that. If that's all you've got, I don't think it's very much. What I'd like is just a little more than that.

DR. TURE: Let me offer some general observations about your general observations. I would begin by noting something that I think all of us have done at one time or another, because it's a very convenient ploy. Have you ever noticed that when we don't like the direction a theory points us in, we disparage theory. On the other hand, when we do like those directions, we endorse and welcome it.

So let us not disparage economic theorizing.

MR. SMEDLEY: Not woo well in the last few years.

MR. TURE: What our problems primarily stem from is the application of a very large amount of very bad theory or very little theory at all. With respect to the observations about where we can go if you don't go to Social Security, by virtue of all of the perfectly appropriate problems that you've identified. Inflation is a serious problem. Let me assure you that extending the Social Security system has nothing whatever to do by way of eliminating or confining the inflation problem. At the very least, it must accentuate it.

The kind of prescription that says, when we look at all the severe difficulties that we face, that we must come up with a system that will provide adequate retirement benefits, and, therefore, what we should do is to increase provision in the Social Security system, is like saying the medicine we have been taking has been poisoning us. Let us, therefore, go forth and take more. To be sure, there

are a lot of economists who have disparate views of how things work. We march to different drummers, but I find it fascinating that marching to these different drummers, we come up with a conclusion which perhaps not in its quantitative specifics, but in its general direction, is almost always the same. The operation of the system does impede private sector saving, and it does impede employment, and those cannot be social goods.

In effect, what you were talking about with the Social Security system is an intergenerational tax transfer system. How you justify that kind of system in terms of any socially desirable objective bewilders me.

Now, to be sure you can then perfectly appropriately say, okay, the ball's in your court, fellow, come up with some decent private sector voluntary solutions. I don't think you need any one particular solution. There are a whole raft of them. You can, for one thing, take many of the restrictions that apply to the private pension system off. They serve very little useful purpose. They keep lawyers and actuaries and accountants happily and profitably engaged. They have not materially improved things. In fact, they have increased the cost of the private pension system, and that all ought to be very seriously re-thought. Even more important than that, we ought to take a very hard look at all the institutional arrangements which distort the relative costs of individual saving and consumption activity. What useful purpose do we serve by encouraging people to use a larger fraction of their current income flow for consumption than they would in a system that was neutral?

Now, on the assumption that we could move effectively on that, I think a large part of our saving for retirement problem would vanish. I would urge that that is a most constructive direction.

MR. SMEDLEY: Yeah, these institutional arrangements didn't exist. We depended a great extent in the twenties on the voluntary type of approach, and look what happened with the Great Depression.

DR. TURE: We don't have to have Great Depressions.

MR. SMEDLEY: But nobody provided for retirement. Nobody did all these wonderful things on a voluntary basis.

DR. TURE: What did we do for hundreds of years before the mid-1930's?

MR. SMEDLEY: People suffered. Families had to bear the burden, and so forth.

DR. TURE: Everybody died upon retirement.

MR. SMEDLEY: What your rhetoric comes down to is that you don't have any specific solution. This is so typical of what the conservative approach is. It is to throw roadblocks to confuse the issue so something won't be done.

DR. TURE: Rather than continue a private debate, I'd point out that you are the one that's resorting to rhetoric and using labels in the process. Let us assiduously avoid doing that.

If there were nothing else that I would say in response to your last observation, it would be this. Perhaps we cannot come up with effective solutions that would satisfy you in the private sector, but, at the very least, we do not have to accentuate our problems by additional reliance on inefficient public sector solutions.

MR. SMEDLEY: Well, I don't think it's necessarily accentuating it. It's solving the problem. Let's face it, no solution is perfect. Usuually a satisfactory solution is one where the problems you create are less serious than the problems you solve. I'm not saying you're going to create a perfect

world with a perfect solution. You'd never be able to accomplish anything if you did.

DR. MUNNELL: I'd like to state a fact. I know for 100 percent certain that we have no idea about the impact of Social Security on savings. There is no evidence of it going one way or the other. It's theoretically indeterminant, and we don't have the answer. As far as private pensions and savings, it's highly likely that private pensions, on balance, do not add to capital accumulation. We do not have strong evidence on that. There are only two or three studies. The savings issue is not an issue on which to choose between one program and another, because, at least at this stage, we don't have the information.

I agree with Larry Smedley. It's very disconcerting to have everyone say let's shift all our emphasis to private pensions at this stage. We don't even know that much about private pensions. Until recently, we didn't know how many private plans there were. We only recently have found out who is covered and who is not covered. We have no idea what it does for labor mobility. We have no idea how to handle the inflation issue. It just seems it's a little premature, because we have finally recognized the problems of Social Security to turn around and say, okay, let's go all the way with private plans. I think we should just be calm.

DR. McCLUNG: I would have spoken up earlier, but I couldn't figure out what was wrong with the argument. The issue here is one that was raised by Dr. Tepper earlier. I want to say that I agree completely with the conclusion that the pension plan is not going to affect corporate savings. Now corporate saving is an important part of saving, maybe more important than household saving. While I agree with the conclusion, I disagree with the analysis.

There are basically three alternatives. First, you have deductability of the pension contribution. That is the employer deducts the pension contribution and advance funds to the plan. Second, he borrows the cost of the plan in which case he's got a deduction for interest on the borrowing. Third, he can reserve funds and neither make contributions nor borrow.

Now in the first case where he deducts the contributions, he pays the contribution into the pension plan, and that's the cost of doing business. Presumably he shifts it forward. If he had gross receipts of 100, he would have gross receipts of 101 if the pension contribution were one. If his costs of doing business were 90, his profits would be ten before and after. The government would take $4 of the $10 in tax. He could then distribute the rest in dividends or interest as he saw fit.

Now, in the second case, instead of having a cost that is a pension contribution, he has the cost of interest. Well, that's the deductible expense. Presumably, he would shift it. His gross receipts go to 101. Costs would go to 91. He would still have a profit of $10, and the government would take $4.

In the third case, nothing changes. There's nothing to shift. His gross receipts are 100 before, and they're 100 after. His costs are 90 before and 90 after, and profits are the same. But in this case, his shareholders will bear the cost. There will be a downward adjustment in the value of the shares to reflect the liability that is accumulating on the books of the company. You may ask why any company would elect option three. Well, if they've exhausted their monopoly power they are not able to shift so it is only the shareholders that can bear it. If they're in a competitve industry, it will shift. There's no reason to impose this burden on the shareholders.

In time, of course, you had three companies. If each of them elected one of the three options, everything would work itself out. Eventually the one that took option three would have the deductible benefit payments which would be considered the cost of doing business. The company would attempt to shift them and it would be in the same financial situation as the other two companies.

That's my contribution to this.

MR. CURTIS: Paul, you had a comment?

MR. VAN DE WATER: Yes, I think that Larry Smedley may have failed to press sufficiently hard on a point which I think is correct--the basic similarity between Social Security and private pensions along this presumed compulsory-voluntary spectrum.

Dr. Ture essentially asserts that somehow private pensions have more of the attribute of a voluntary operation than Social Security does. I'd like to pursue that a bit more, because I think it's basically incorrect in two senses.

First, most employees who are in firms with private pension plans appear from what I can tell to have very little influence on the characteristic of that plan. By and large the plan exists when they join the firm, and they continue in its employ having had very little influence on its characteristics.

Second, people act as if Social Security is somehow a system which is imposed on society from the outside by men from Mars or whatever. I think in a very real sense that Social Security, like the hypothetical private pension plan, represents the voluntary banding together of people. The characteristics of Social Security as it now stands are not replicable in the private market, and, therefore, I think it may be entirely reasonable that people would say we want a system that looks like our Social Security system.

I detect an implicit assumption in Dr. Ture's paper that I think is a very important one: that the standard being used to measure appropriate levels of retirement income is an absolute standard rather than a relative one. He talks at one point about "the lower the payroll tax rate needed to finance any given amount of benefits." That seems to be talking about something given in real terms. He talks later on about "the expansion of Social Security, both since its inception and in the future." Given that the current levels of wage replacement in Social Security are roughly those that were contemplated back in '35 to '39, there's no way to interpret Social Security as having expanded, or as expanding on into the future, unless you're talking about an increase in the real benefits rather than in the relative benefits.

Now, if one rejects the notion that adequacy should be measured in absolute terms, and I think most people do, the alternative is to have the retirement standard of living bear a relationship to preretirement standards. Then, I think the objective of increasing the level of real income through saving and capital formation, while still perhaps appropriate, seems to pay off less than it would if you're looking at things from the absolute point of view.

If people save more, there's more investment and real income goes up. But if you're trying to maintain a given relative standard of living for people in retirement, you haven't affected anything. Granted the people are richer, but the relative burden of providing for retirees is exactly the same. I think that one can very well agree or disagree with Dr. Ture's conclusion about the need for additional saving and investment. I conclude that it's not necessarily related to what one does about Social Security and private pensions.

MR. SALISBURY: First, I find your notion absolutely fascinating. If

Congress mandates a program, it, therefore, must be the will of the people. Because it is the will of the people, it is, therefore, voluntary, even though it is mandated and is a matter of compulsion. Second, the growth to which Dr. Ture possibly refers in Social Security is the dramatic increase in cost and payroll tax rates. When looking at the availability of capital, this is the relevant increase.

MR. VAN DE WATER: I think you're grossly exaggerating what I said. There is an element of compulsion. I think there's also an element of free choice. We have the Social Security program. To a certain extent the people want that just as much, or as little, as they want private pensions. That's all that I was trying to say.

MR. SALISBURY: I fundamentally disagree with your theory. We are talking about whether the government mandates it, or not. The government mandates Social Security. It does not mandate private pensions.

MS. ANDREWS: I thought I'd enter the economic fray a bit too. Paul Samuelson wrote an article a while ago suggesting that a pay-as-you-go system like Social Security could make everyone better off, except perhaps for the last generation. I, for one, have never worried too much about that last generation.

MR. HUTCHISON: I don't know whether it's premature, but I'd like to offer an alternative solution. As I've listened to this deliberation, it appears that, one, the fact that we need to have more coverage with the private pension system is pretty clearly established. Second, it appears that the place where the lack of coverage exists is the small employer. Third, I know from first hand experience that plan creation depends upon capital availability. Capital is a matter of survival for small employers. They go through a period where they don't know whether they're going to survive or not.

Further, to relieve the pressure on the welfare phase of Social Security, which is to equalize everybody regardless of whether they contributed or not, we will have to have more benefits.

I'd like to suggest that we remedy the tax equity problem of the small employer by giving tax credits. If it's a socially desirable welfare program, then it ought to be supported by tax credits that would equalize the small employer with the larger employer.

Second, the employee is going to have to get into the act to fulfill expectations. That was the original concept of Social Security. Therefore, employee contributions ought to be deductible within reason. We know from experience with small employers in salary reduction plans, that the insurance industry promoted before they were outlawed, that the employer will go out and get the enrollment in these programs, if it's tax deductible for the employee and he gets a tax credit. Now, it does not mean that it will produce magnificent benefits, necessarily, but it will increase coverage and participation.

I'd like to tell an anecdote about coverage and the size of the program. I was a finance officer during World War II. We equalized the troops when we put them aboard ship by giving them all $10 in pay. When we landed at the other side, two came off with all the money in their duffle bags and the rest came without their shirts. There is no way you're ever going to equalize. Mandatory pensions may be $300 today. It'll be $1000 tomorrow. It'll be $3000 the next year.

I think we can address ourselves to the coverage problem and get the people in the act if we follow the suggestion of incentives for small employers and their employees.

MR. GIVENS: Yes, I'd just like to say that it's very easy to overstate this compulsory aspect of private plans.

It's quite true that when an employee comes into a company with a private plan, he has no say on the provisions of that plan. That's where the comparison stops. Whether the employer has a plan, the provisions, and his costs, are voluntarily decided by the employer and by the union he may be bargaining with. That's the critical voluntary aspect that introduces the opportunity for economic efficiencies.

MR. BRANNON: I think that a good deal of Norman's argument has come in elsewhere today. It has been directed at the point of the utility of individual choices with regard to allocation of income between lifetime and retirement. While I have a lot of sympathy with Norman's position there, I think there are some things that he ought to face up to and address a little more specifically.

For one thing, this is the kind of decision that none of us has ever made before. We haven't been retired, and we don't know what our resources or demands will be at that time. It's very hard for the retiree to take corrective action if he has made a mistake. Certainly the heavy experience of other countries has been that in this particular decision, private choice has some effect. I would interpret as a conclusion the fact that almost all countries have Social Security systems.

Now it might very well be that despite this, people have made the wrong choices in these foreign systems and so forth. There is a great deal of utility to private choice. But I don't think it's that obvious that private choice for retirement income allocation is right. The question is: what is the best way to influence social judgment? In private systems, we lean on individuals to go along with the company plan. This may be a good idea, that there's not so much free choice there.

I don't know what the right answer to this is, but I think you ought to treat it a little more seriously than saying the private choice automatically is right.

DR. TURE: In my paper I present the argument as clearly as possible with a set of propositions that would be appropriate in a best world. I go from there to a world that's far from this, a world with risks, information gaps, uncertainty, and, therefore mistakes.

Individuals, of course, make mistakes. But the relevant question is not whether or not individuals are infallible in these decisions, but whether or not the substitution for their individual decision-making of the organized social system represents any kind of improvement at all in their overall utility.

I would offer you simply one observation about your argument. The empirical argument that other countries have done it. They've done an awful lot of things that we don't ever want to emulate.

MR. LEVINS: I'd like to pick up on the point that Mr. Hutchison made, and also to refer to a comment made previously both in this discussion and the prior one that left me with the impression that the group was coming to a conclusion that any form of inducements for voluntary savings would probably not turn out to be very meaningful, and the analogy was drawn to compare the current situation with the situation with IRAs.

I would submit to you that there was substantial testimony provided to the President's Commission that showed that in the private industry today, there are programs where there is quite a bit of utilization through voluntary contributions and that utilization spreads across all income levels.

Currently, employees can contribute to their retirement plans, but they do not

receive a tax deduction for these contributions. Various bills--sometimes called LERA legislation--have been introduced that would allow participants in qualified plans to take a deduction (up to a specified amount - frequently $1,000 or $1,500) for contributions to their employer's plans or IRAs. Passage of such legislation would also have a positive economic impact by promoting capital formation and decreasing some of the existing pressure on Social Security.

In addition, if employees were given deductions for contributions to qualified plans, this would serve as a stimulus to increase plan formation among small employers. Many small employers cannot afford a pension plan in which the employer pays all contributions. Employees do not want to contribute to a plan if the contribution represents taxable income. If, however, the employees could receive deductions for their contributions, they would be willing to contribute to the plan; thus, the small employers could provide a pension plan with employees sharing costs.

Some have contended that if legslation was passed allowing employees to take such deductions they would merely take deductions for their existing contributions. However, in a public opinion survey conducted earlier this year by Cambridge Reports--a major national survey research firm--those who were currently making annual contributions to a private pension plan were asked whether they would be likely to contribute more money if there was a tax deduction. The results of the survey showed that almost half (49%) of those interviewed responded that such legislation would make them "very likely" or "somewhat likely" to contribute more money on an annual basis.

When we examined the data further, we were interested to find out that deductions for employee contributions to plans would not solely benefit high income households. Of those responding to the question, 43% of the persons in households earning between $15,000 and $25,000 would be very or somewhat likely to contribute more money to the plan if they could take a tax deduction. Although there is the expected correlation between higher income and greater likelihood of increased contributions to plans, it is clear that a large proportion of moderate income households would take advantage of this kind of incentive to increase their contributions. This survey was of interest not only because it emphasized the role that tax incentives would play in encouraging additional employee contributions, but it also made us seriously question whether rather low historical IRA participation rates would be indicative of what would happen if tax incentives were available for employee contributions to qualified plans. When we analyzed data from a sample of our clients' plans, we found that a large proportion of low and moderate income employees do in fact make voluntary contributions to their plans. We believe that a tax incentive would encourage them to do even more. We think the experience with employer sponsored vehicles is different because of greater simplicity and ease of access for the employee.

Because of our Nation's need to increase savings for retirement and to encourage formation of new plans, I would hope that policymakers would consider this simple and yet effective mechanism of giving employees deductions for contributions to qualified plans or to IRAs. We think it will work.

MR. ROSS: As I listen to this debate, I find it interesting, but think the thrust on all sides is a little bit too strong. You're dealing with very big systems here when you talk about Social Security and private pensions. They generate strong feelings on the part of a lot of people on both sides.

Any kind of change that you're going to have in any of these systems is very much going to be at the margin. If you look at it that way, what changes at the margin should we be thinking about? The debate doesn't need to be as strenuous as it is.

Social Security is, to my mind, over expanded at the moment because it does not have a financing mechanism that matches the benefit structure. Therefore, unless we find a better way to finance Social Security, we have to figure out how to slow its growth. At least until we find a better way to finance it.

Second, it seems to me that at the margin we should all be less concerned with retirement than we should be with keeping people in the work force. We should be making the incentives change to keep people working longer. Until we find out how to solve inflation, there's no way that any of these retirement systems can be made very reliable. Therefore, characteristics of programs that encourage retirement, whatever the rationale was when they went in, need to be blunted.

Finally, with private pensions, it strikes me that again the question is how at the margin do you change things to get them expanded and to make them better for those people who can utilize private savings? If you think that retirement income must grow, you must assume that it is either an expansion of Social Security or a compulsory expansion of the private system. I think that is the way you have to debate it. Then it becomes a question of not ends but means. Which is the better way to get more adequacy?

My final point relates to the question of adequacy of retirement income and the fact that it really has not been dealt with responsibly by the political system. As I count it up we spend huge amounts on retirement income, but we don't know whether it's as much as the society should be spending, too much, or too little. How much transfer can a free market society really maintain? I think at some point, some responsible politicians are going to have to stake themselves out and say: this is the end of transfer growth. If people want more they have to voluntarily save. Or, they're going to have to say that they believe we're going to provide more and restructure the tax system to make it financially solvent. I think a big problem at the moment is that the public has absolutely no idea what their expectations are to be on retirement. My guess is that due to the overselling by constituency groups, telling members that they are going to provide more for their people, the public probably has an over-optimistic viewpoint about what money they are going to get in retirement.

Unless the political process begins to deliver the very hard news to most of the public that you can't have that much more in transfers, we're not going to get the changes at the margin which we even need to make the pieces of this system more viable.

MR RYAN: I'd like to put in a practical context some of the things that I've heard here today. My mother is a 75-year-old widow who lives over in the hills of West Virginia. Her sole income is as a survivor under the Railroad Retirement Act, and by all the analyses or measurements that we would have here, she's poor. We have been told today that a way to solve her problem of being poor is to require a mandatory retirement program at the service station where my 17-year-old son works in order to earn spending money to go to college. Now with regard to my mother, I'd like to say that she doesn't perceive that she's poor. More than that, I'd like to say to you that her total income is indexed. If you think about it, there may not be even ten of us in this group whose income is on that same basis. Those are some of the things that I've heard here this afternoon. Thank you.

DR. BLAYDON: I wanted to comment about two things, one thing Mr. Ross said about the changes on the margin, and one that Dr. Munnell said about just beginning to understand what's going on.

Our analysis indicates that numbers that are now available are making some of the characteristics of the current system more and more understandable. One fact that should not escape us is that there are going to be a lot more people drawing private retirement benefits under the system we currently have. We're just beginning to understand how large that group will become.

The other thing that we are just beginning to understand is what the private system misses. The people who have particular work and industry characteristics, and will probably require some very specific incentives and solutions on the margin, rather than a mandatory blanket that affects everyone else as well.

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