Investigaciones Económicas (Segunda época). Vol. X, n.º 1 (1986), págs. 3-36

THE SOCIAL SECURITY REFORM DEBATE IN THE UNITED STATES

Lawrence H. THOMSON*

United States General Accounting Office

Este artículo analiza las alternativas para la reforma del sistema de Pensiones de Jubilación de la Seguridad Social en los EE. UU. y ofrece algunas observaciones acerca de por qué los intentos de reforma han tenido tan escaso éxito. El artículo sostiene que para cualquier reforma es necesario un consenso político previo acerca de dos cuestiones básicas: primero, sobre qué es lo que está mal en la actual estructura y segundo sobre la alternativa que se considere la más adecuada. El análisis empírico se basa en el efecto que el programa de seguridad social ha tenido sobre la economía de los EE. UU. mientras que los debates se centran en las posibles reacciones políticas en el seno de las instituciones políticas estadounidenses. El programa de Seguridad Social de los EE. UU. es similar en muchos aspectos importantes a los programas de seguridad social que encontramos en Europa, Japón, etc.; pero cada sistema de seguridad social y cada sistema político tienen sus propias atribuciones. El lector tendrá que juzgar por sí mismo la medida en que, las observaciones de este artículo sobre el sistema estadounidense de seguridad social y su sistema político, son válidos para otros países.

The social security program in the United States was established by legislation enacted in August 1935; the first monthly benefits were paid in 1940. From its beginning, the program has attracted its share of reformers who are convinced of the desirability of one or another structural change and urge the Congress of the United States to adopt their reform. Over the years, however, the Congress has shown very little interest in any of these reforms. Even when faced with the need to make substantive changes to address serious financial problems in 1977 and 1983, the Congress has rejected proposals to alter significantly the basic structure created half a century ago.

This paper reviews suggestions for reform of the United States social security retirement program and offers some observations about why reform efforts have met with so little success. The paper assumes that a necessary precursor to reform is a substantial political consensus, first about precisely what is wrong with the current structure, and second about the particular alternative that would be superior. The basic thesis of the paper is that for at least four reasons no such consensus exists. First, there is more than one way to conceptualize how the costs and benefits of a public retirement income system ought to be distributed, and

* Chief Economist, United States General Accounting Office. The observations and opinions expressed here are the author's personal views and cannot be assumed to be those of any agency of the United States Government. An earlier version of this article appeared in the Journal of Economic Literature, Vol. XII (December, 1983).

different conceptualizations yield different implications for what is equitable. Second, there is little consensus about the effect of the current system on labor supply and savings, and even if there were agreement that its effects were undesirable often it is not clear that proposed alternative structures would have less serious undesirable effects. Third, public retirement systems serve more than one objetive, so that even if it could be agreed that a given reform would better serve one of the objectives, adoption of that freform may involve an unacceptable sacrifice of another objective. Finally, a public retirement system is of necessity a political institution; a structural reform that in principle would produce a more desirable distribution of costs and benefits may in practice be unsustainable because it is politically unstable.

Section I of the paper supplies the background for the reform debate. It provides a brief description of the current public retirement income system in the United States and an explanation of the competing conceptual frameworks that analysts employ in thinking about the system. Section 1 discusses the variety of reform proposals that have been offered, examines arguments about whether a particular reform actually would achieve its intended effect, and discusses some of the trade-offs involved in the different proposed reforms. Section 3 discusses the objectives that reform opponents find are served better by the present structure than by many of the proposed alternatives. Much of the opposition to reform stems from the desire to preserve the attributes that serve these objectives. Concluding observations are offered in Section 4.

The debate described in this paper concerns the particular social security program that exists in the United States of America. The empirical analyses focus on the effect that the United States program has had on the United States economy and the debates about possible future political reactions assume the United States political institutions. The United States social security program is similar in many important respects to the social security programs found elsewhere in Europe, North America and Japan but each social insurance system and each political system also has its own unique attributes. The reader will have to judge for himself the extent to which the observations in this paper about the American social insurance and political systems are valid in other nations.

1. The Public Retirement Income System

1.1. *The Current Structure in the United States*

For the purposes of this paper, the two most important pieces of the public income security system for the American aged are the Old-Age, Survivors, and Disability Insurance (OASDI) program and the Supplemental Security Income (SSI) program. The former is what is usually meant in the United States by the use of the term «Social Security», and is what that term refers to in this paper; it is also by far the larger, accounting for 95 percent of the combined benefit payments of the two programs[1].

[1] Outside the United States, the term «Social Security» is frequently used to describe all of

Old-Age Insurance (Social Security) revenues are derived virtually exclusively from a payroll tax (contributions) levied at a flat rate on annual earnings up to a specified limit called the «taxable maximun» or «earnings base»; half of the total tax-contribution is deducted from the employee's paycheck. The taxable maximun is indexed to rise in the future at the same rate as average earnings rise, and is set at a level above about 90 percent of all earnings in covered employment are subject to taxation, and only about 6 percent of the covered work force earns more than the maximun[2]

In the United States, social security is financed on a «current-cost» or «pay-as-you-go» basis, meaning that the revenues collected in any given year are used mostly to finance the benefit payments that year. The payroll tax-contributions are deposited in special Treasury accounts — the trust funds; all benefit payments and administrative costs for the program are charged to these accounts. The balances in the accounts are invested in Federal Government general fund debt obligations, but in recent years the invested balance has not amounted to more than the amount required to make several months' benefit payments.

The basic retired worker's benefit is computed by applying a progressive benefit formula to a measure of the worker's career average earnings. The earnings average is based on the worker's actual taxable earnings in each previous year indexed to reflect changes in average earnings levels in the intervening years. The initial benefit is subsequently adjusted regularly to reflect changes in prices since the individual retired.

Those first claiming benefits before (or after) the normal retirement age have their monthly benefits permanently reduced (or increased) by a factor keyed to the number of months elapsing between the month benefits were first claimed and the month the worker reaches the normal retirement age. Social security benefits are paid without regard to the worker's other resources or nonlabor income. If a beneficiary is younger than age 70, however, payment of benefits is conditioned on an earnings test. Benefits are reduced by $1 for every $2 by which the beneficiary's earnings exceed a certain level.

Supplemental Security Income is a needs-tested program that resembles closely a negative income tax for the totally disabled and those aged 65 and older; it is financed entirely from the general revenues. Those meeting the eligibility criteria are guaranteed a minimum monthly income from the Federal Government. Those residing in about half of the states are guaranteed an additional amount from their state governments.

The needs-tested payment is reduced if the recipient has other income. A nominal amount of monthly earnings is disregarded (i.e., ignored in the calculation), but the balance reduces the needs-tested benefit by $1 for each $2 in earnings. If the

the various public income security and health programs. Inside the United States, it is also frequently used to refer to the combination of the OASDI cash benefit program and the Hospital and Supplementary Medical Insurance parts of the Medicare program.

[2] Unpublished estimates from the Office of Research, Statistics, and International Policy, Social Security Administration. In 1985 the taxable maximun was $39,600.

recipient also receives social security (or any other nonlabor income), the monthly payment under the needs-tested program is reduced by $1 for each $1 of such income received after a small amount is disregarded. The practical effect is that all recipients under the needs-tested program who are also entitled to social security benefits receive the same combined payment from the two programs[3].

1.2. *Conceptual Frameworks*

In part, differences in opinion about either the need for or the desirble direction for social security reform result from differences in opinión about the conceptual framework most appropriate for analyzing the effect of a social security system. American analysts have developed three competing conceptual models. The models differ first in whether their focus is on current-year transfers or on life-cycle transfers and second in the degree to which they view certain differences in benefits actually received as evidence of redistribution or as the ex post result of an ex ante insurance arrangement.

The purpose of any retirement income system, public or private, is to transfer command over consumer goods, but the nature of the transfer depends on the perspective from which it is viewed. From the individual worker's life-cycle perspective, the transfer occurs between time periods; consumption is reduced during working-age years and increased during retirement. But from society's perspective, the transfer is from current workers to current retirees, because most of a retired worker's consumption in any given year must come from the consumer goods produced in that year. One of the conceptual frameworks focuses exclusively on current-period transfer patterns, one focuses almost entirely on individual life-cycle transfer patterns, and one adopts a life-cycle perspective for a portion of the benefit structure and a current-period perspective for the remainder.

The conceptualization that focuses exclusively on current-period transfers is the tax-transfer model of social security[4]. In this model, social security is viewed as simply one of several government tax-transfer programs. As with other tax-transfer programs, there is no reason why the benefits received by any one individual need bear any particular relationship to the tax-contributions that individual may have paid. As a consequence, the revenue and expenditure sides of a social security program should be evaluated separately. The model implies that the burden of the revenue side should be distributed on the basis of usual tax policy considerations, primarily current-period ability to pay; benefits should be distributed according to whatever value judgments society wishes to employ; and

[3] Some 70 percent of aged recipients of the needs-tested program also receive social security; of those age 65 or older, 5.4 percent of the social security retired workers and 9.0 percent of the social security widows also receive benefits under the needs-tested program. (United States Social Security Administration, 1982b, Tables 168 and 170).

[4] For example, Joseph A. Pechman, Henry J. Aaron, and Michael K. Taussig (1968) and John A. Brittain (1972b).

savings and work incentive effects should be evaluated by focusing on the current-period effect of tax and benefit provisions.

The conceptualization that relies most heavily on the life-cycle approach is the insurance model of social security[5]. In this model, the essential element of a social security program is the pooling among workers of the risk of specified reasons for earnings loss (in the United States, retirement, disability, or death). Because they are integral parts of an insurance protection package, social security contributions and benefits cannot be separately analyzed; rather the expected value of the insurance protection should be compared to the tax price of the package. Moreover, since the risks being insured are earnings related, the appropriate way of financing all or a major portion of the cost is through earnings-related contributions. In this model, the work and savings incentive effects of a social security program are properly examined in a life-cycle context and can involve consideration of the moral hazard associated with providing insurance.

The benefit structure in the United States social security program has always been thought of as representing a balance between social adequacy concerns and individual equity concerns. The balance can be seen in the progressive benefit formula. Under that formula, higher wage workers receive higher benefits, reflecting the individual equity notion that expected lifetime benefits should be linked to lifetime social security tax payments. But the benefits paid to lower wage workers provide them with a higher «replacement rate» (benefit as a percent of preretirement earnings) than is provided to higher wage workers. The higher replacement rates for low wage workers reflects the social adequacy notion that benefit amounts should reflect presumed need.

The third conceptualization is the annuity-welfare model of social security[6]. The benefit structure is decomposed into a social adequacy component and an individual equity component, and the two components are analyzed separately. The social adequacy or «welfare» component of the benefit structure is treated as if it were a separate tax-transfer program and analyzed using the same current-period approach that the tax-transfer model applies to the entire social security tax and benefit structure. However, the tax-transfer construct is seen as inappropriate for analyzing the individual equity or «annuity» component of social security benefits. Instead, this component is viewed as analogous to forced savings on nonredistributive private pension plans in which incentive effects and judgments about the equitable distribution of benefits and taxes are properly examined only in a life-cycle context.

In the United States, the insurance model is the oldest of the conceptualizations. Its earlier critics offered the tax-transfer model as an alternative. These critics argued that the differences between social security and private individual and

[5] For example, Robert M. Ball (1978); Myers (1981); J. Douglas Brown (1972); W. Kip Viscusi (1979); Peter A. Diamond (1977); and Diamond and J. A. Mirrlees (1978).
[6] For example, Michael J. Boskin (1977); Richard V. Burkhauser and Jennifer L. Warlick (1981); Burkhauser and Holden (1982); Boskin, Marcy Avrin, and Kenneth Cone (1980); Peter J. Ferrara (1982); Martin Feldstein (1977); and Martha N. Ozawa (1982).

group insurance are sufficiently great to render the insurance model inapplicable[7]. In particular, they argued that under the United States social security program the connection between benefits and contributions is loose, there are no contractual rights to benefits, contributions are compulsory, and there are no substantial financial reserves. Defenders of the insurance model argue that reserve financing is only a means to an end[8]. In the private sector, reserves are accumulated to assure that benefit commitments can be met, whereas in the public plan that assurance stems from the government's willingness and ability to levy future taxes. Moreover, in a national social insurance plan , the size of reserves bears no relationship to the security of benefit commitments, because large reserves held in Treasury securities are also backed only by government willingness and ability to levy future taxes. The defenders also argue that benefits are not linked very closely to employer contributions in many defined-benefit pension plans and that United States social security benefits are a statutory right if not a contractual right.

Advocates of the annuity-welfare model are less likely to cite the size of reserve balances, the compulsory nature of contributions, or lack of contractual benefit rights as features that render the insurance model inappropriate. In fact, the annuity-welfare model accepts the insurance conceptualization insofar as it is applied to variations in lifetime benefit receipt produced by variations in individual life spans after the normal retirement age has been reached. The basic difference between the two models is found in their treatment of all other causes of variations in individual lifetime benefit-tax ratios. In the annuity-welfare model, these other variations are viewed as redistributive, welfare elements that are analytically separable from retirement annuities, whereas in the insurance model, some or all of these differences are viewed as the normal consequence of having provided insurance protection to all workers even though only a portion experience the insured event. Thus, in the annuity-welfare model the higher benefit-tax ratio afforded low-wage workers is viewed as redistribution. In contrast, in the insurance model, this feature can be viewed as a form of life-cycle insurance offered to all workers entering the labor force. This insurance protects each against the risk of having such low lifetime earnings that it is difficult to set aside a portion for retirement savings[9].

The differences among the models explain a good part of the debate over social security reform. The models often yield conflicting insights about the fairness of a particular distribution of benefits and costs or the desirability of a particular behavioral incentive structure. Thus, subscribing to one or another of the models

[7] For example, Pechman, Aaron, and Taussig (1968); Brittain (1972); Colin D. Campbell (1969); and Milton Friedman (1972).

[8] For example, Myers (1981) and Ball (1978).

[9] The life-cycle insurance argument can be found in United States Advisory Council on Social Security (1980). The difference is in how one analyzes the benefit structure, not whether one finds it to be appropriate. Indeed, application of the different models is as likely to lead to differences in opinion about how the system ought to be financed as it is to lead to differences about the proper structure of benefits.

conditions one particular analyst to see a serious problem where another analyst sees a perfectly reasonable and rational arrangement.

2. Percived Shortcomings and Proposed Remedies

Many analysts have identified reforms they believe will improve the retirement income system. Some would change the way social security is financed; some would change the structure of the social security benefit formula; some would change the structure of the needs tested program; and some would phase out social security entirely. Moreover, some reformers suggest a package of changes, no element of which should be enacted alone; others support a package and believe that any one of the changes could be implemented independently; and still others are not specific about the desirability of separating the elements of their package.

There is no entirely satisfactory way of summarizing the diverse menu of proposals. The discussion that follows is organized according to the shortcoming that the reformer has identified and the proposals made to address each type of shortcoming.

2.1. *Phasing Out Social Security*

Most analysts are persuaded that interfering with the free market is justified by the efficiency gains from correcting certain market failures and the equity gains from some form of mandatory, public sector provision for retirement. Others find the case for government intervention unconvincing, however, and would either phase out the current United States social security program or convert it into a program selling retirement bonds.

Opponents of the current system accept government responsibility for assuring a minimum adequate income to the aged and disabled, and would retain some needs-tested program such as the Supplemental Security Income program. They also assume the government must honor its commitments to all who have accrued future benefit entitlements. Three economists, Milton Friedman (1972), James M. Buchanan (1968), and Edgar K. Browning (1973), would have accomplished this by issuing current workers and retirees government bons equal to the discounted present value of future benefit commitments. Friedman would have ended with this step. In his plan, workers would have been free to provide or not provide for their own retirement; those who made insufficient private provision would have been supported by the needs-tested program.

Buchanan accepted a government role in mandating some provision for retirement but not in mandating participation in social security. He would have given workers the option of using a fixed percentage of their earnings each year either to buy retirement bonds from the government or to contribute to a private pension plan or individual retirement savings account. Any shortfall between the revenue from new retirement bond sales and the cost of retirement bond redemptions would be made up from general revenues.

Browning criticized the Buchanan plan for failing to assure that the revenue from the sale of new bonds would be sufficient to redeem maturing bonds. Thus, in his analysis, workers would not support Buchanan's plan because they might have to pay higher taxes to finance the redemption of maturing bonds while simultaneously setting aside funds for their own retirement. (Browning seemed to rule out general government borrowing to cover any shortfall). Browning's solution was to mandate the purchase of transferable government retirement bonds in an amount set to assure that the proceeds from new bond sales would cover the cost of retiring maturing bonds. But since Browning did not believe that mandating individual provisión for retirement was desirable, he allowed a secondary market in the retirement bonds, thereby giving individual workers full freedom to adjust their individual retirement income portfolios.

More recently, Peter Ferrara (1982) has advocated a phaseout plan that would be implemented far more gradually. Workers could deduct their contributions to individual retirement accounts from their (and their employer's) social security payroll tax liability and in return have their social security benefits reduced in an amount proportional to the reduction in their expected lifetime social security tax payments. Initially, only 20 percent of a worker's payroll tax liability could be offset in this manner, but over time the fraction would be increased until, beginning in 2014, the entire cash benefit and hospital insurance liability could be offset. Resulting financial shortfalls in the social security program would be made up from general revenue payments. Ferrara's major objective was to increase saving by converting the retirement income system from one based in part on an unfunded public program to one based entirely on funded private programs. He also advocated changing the personal and corporate income tax to assure that individual retirement savings accounts earned returns equal to the pretax rate of return realized by business, arguing that workers would then realize a higher return on their retirement saving under his system than they would realize on their payroll tax payments under the current United States social security system.

On the other side of the debate are those who find sufficient justification for government intervention in the retirement income system through some form of mandatory social security system. Among the gains they have cited are those from: (1) reducing uncertainty, (2) reducing transaction costs, (3) redistributing lifetime income, (4) protecting the prudent, and (5) compensating for myopia. Still others have explored how pay-as-you-so social security might help address economic problems not directly related to the retirement income system.

The uncertainties inherent in projecting individual lifetime circumstances make individual planning for retirement very difficult. A system that relied exclusively on individual provisión would require each new labor force entrant to project and take account of his own lifetime earnings profile; prospects for marrying and having children; future health, length of working career, and length of life; future inflation; and the behavior over the next four to five decades of each of the alternative investments available to him. Moreover, in contrast to most other consumer decisions, mistakes made in planning for retirement may not be apparent until their consequences are irremediable. Pechman, Aaron, Taussing (1968) and Viscusi (1979) argued that private markets cannot offer insurance against most of these risks, while Diamond (1977) argued that a social security program provided the natural, social way for dealing with uncertainty about length of one's working life.

Agreement is fairly wide that either social security or some other government institution provides the most effective protection against unanticipated inflation. It is relatively simple for a pay-as-you-go social security system to protect purchasing power: Inflation tends to increase revenues at roughly the same rate as it increases indexed benefits. It may be possible in theory for the private sector to offer similar protection[10]. However, many of the advocates of minimizing the public sector role in the retirement income system either advocate or are willing to accept a government role in providing inflation insurance, perhaps through the issuance of indexed bonds[11].

A second justification for a mandatory social security system is the increase in information costs associated with substantially greater reliance on individual private savings and investments, especially on the part of those now less sophisticated financially[12]. Also, it may not be possible for the private sector to offer individual annuities on actuarially fair terms because of the danger of adverse selectión, so that group plans such as social security can be more efficient insurers against the uncertainty of a long life[13].

A third argument focuses on the ability of a social security program to redistribute within a cohort on the basis of lifetime earnings[14]. Other tax-transfer programs redistribute on the basis of current-period income, whereas social security is the only program that can redistribute on a basis more closely related to the permanent income concept.

Fourth, if society will support all aged and disabled members whose current-period income are inadequate, the imprudent need not save because they will be taken care of regardless of their lifetime earnings level. Social security allows society to force the imprudent to shoulder their fair share of the burden of providing for the aged and disabled[15]. Indeed, with support guaranteed by a needs-tested program, the savings disincentive associated with not having a social

[10] Myers (1979) argued that private pension benefits can be indexed to the interest rate if their financing is based on the expected real interest rate and all excess earnings from higher nominal interest rates are used to increase nominal benefits. Zvi Bodie (1981) has shown that a portfolio of private sector financial instruments can be constructed so that it behaves as if it were indexed, though it may not continue to do so in the future and it may not be a practical approach for large-scale use. Interestingly, the real rate of return on his portfolio was roughly zero.

[11] For example, A. Haeworth Robertson (1981), Buchanan (1968) and Ferrara (1982).

[12] For example, Feldstein (1977b) and Pechman, Aaron, and Taussig (1968).

[13] For example, Feldstein (1977b) and Viscusi (1979).

[14] For example, Richard A. Musgrave (1968) and Diamond (1977).

[15] For example, Musgrave (1968).

security program may be greater than the savings disincentives produced by the social security programs currently found in Europe and North America[16].

Fifth, if workers are myopic, in the absence of compulsion they will undersave for retirement; a compulsory system can increase welfare by correcting for individual myopia[17].

At least three authors have looked at economic arguments for a pay-as-you-go social security system in a broader context. Robert C. Merton (1981) has argued that the nontradability of human capital leads to a market imperfection that can be addressed by creating two kinds of tax-transfer programs, one of which closely resembles current social security programs. Merton argues that montradability forces the young to hold asset portfolios in which there is too much human capital and the aged to hold portfolios in which there is too little human capital. Unless human and physical capital returns are perfectly and positively correlated, the portfolio of each is inefficiently diversified. In effect, by taxing the wages of younger workers to pay benefits to older workers, a pay-as-you-go social security program shifts a portion of the human capital away from the portfolios of the young to the portfolios of the old. (Merton suggested as a companion program a consumption tax with proceeds spent on the young.) Merton's analysis in theoretical; it remains to be seen whether reasonable parameter values would suggest anything like the scope of current social security programs.

Jerry R. Green (1977) and Alasdair Smith (1982) focused on the effect of 10-20 year cycles in the birth rate. If variations in the size of the birth cohorts lead to subsequent variations in capital-labor ratios, during prime working years larger cohorts could experience lower lifetime real earnings levels than smaller cohorts. But as the different-sized cohorts moved through their life cycles, the larger cohorts would experience higher worker-beneficiary ratios than the smaller cohorts. Thus, cohort-tocohort variations in the tax rate required under a pay-as-you-go social security system would offset cohort-to-cohort variations in pretax real wage levels. Green concludes, however, that with reasonable parameter values the offsetting movements in required payroll tax rates are not sufficient to argue that this phenomenon alone could justify creating a pay-as-you-go social security system.

The rationales that involve correcting for myopia and protecting society from the imprudent imply a compulsory program, but not necessarily a publicly operated program. Similarly, some of those who want to phase out social security are willing to substitute fot it some other form of mandatory provision for retirement. In effect, Ferrara and Buchanan found that a compulsory program was justified, whereas Friedman and Browning did not. It appears that by a simple count of those who have addressed this issue in the social security literature, the vast majority believe that the gains from mandating some form of provisión for retirement justify the concomitant sacrifice of free choice. But in the end, the relative importance of free choice is a value judgment.

But if one is willing to accept mandatory provision, what is the point of phasing

16 For example, Feldstein (1977b).

17 For example, Pechman, Aaron, and Taussig (1968).

out social security? There seem to be at least two major motivations. First, Ferrara sought to increase saving, a concern that is the topic of the next section. Second, both Ferrara and Buchanan rejected the notion that the social security program should redistribute within a cohort and envisioned instead a system in which each individual's retirement benefits were related directly to previous contributions. As will be discussed in a subsequent section, others share this view, but would change the structure of the current program rather than phase it out.

2.2. *The Effect on Saving and Capital Formation*

Economic theory does not provide an unambiguous prediction of the effect of a system such as the current one on the level of saving. It would be expected to decrease saving to the extent that workers behave as if social security benefits are a substitute for funded personal saving or private pensions, when in fact social security is current-cost financed and accumulates no substantial reserves. It would have no effect on saving to the extent that, instead of substituting for private savings, social security benefits are merely substituting for other forms of public sector or intrafamily transfers to the aged, or to the extent that the older generation responds by increasing bequests to the younger generation[18]. Because social security benefits only partially replace lost wages for most workers, the program could increase saving to the extent that it induces people to retire earlier and to the extent that earlier retirees accumulate retirement savings to supplement their social security benefits.

Martin S. Feldstein estimated the effect of the United States system on saving and found it to be negative and substantial, because, he theorized, the first of the effects discussed previously was the most important[19]. Citing his results, Feldstein (1975, 1976, 1977a) advocated a substantial increase in the payroll tax rate with the express purpose of accumulating a large social security reserve fund to increase aggregate capital formation. He also advocated (1977a) that the average benefit awarded to future cohorts not grow quite as rapidly as average wage levels in the economy, in part because a slowing of the growth in social security benefits would encourage greater reliance on private savings. Ferrara (1982) and Carolyn L. Weaver (1981) cited the reduction in saving as one of several reasons for phasing out the United States social security program and in part for the same reason, the United States President's Commissión on Pension Policy (1981) advocated filling remaining gaps in the retirement income system through a mandatory, funded pension program rather than through increases in social security benefits.

The debate over social security and saving involves at least three different issues:

[18] Similarly, although saving and capital formation as measured in the national accounts would be affected, the total capital stock (physical plus human) would be unaffected to the extent that social security allowed the middle aged to finance their children's education with resources they would otherwise have had to save for their own retirement.

[19] Martin S. Feldstein (1974) but see also Dean R. Leimer and Selig D. Lesnoy (1982) which raise serious questions about the validity of Feldstein's calculations.

(1) What has been the actual effect on saving? (2) If the effect has been adverse, is an increase in the saving rate desirable? and (3) If an increase is desirable, are changes in social security a desirable or effective way to achieve the result?

Despite the attention gained by Feldstein's initial estimates of the effect of social security on saving, other empirical studies have been, at best, inconclusive. In recent surveys of the literature, Aaron (1982b, p. 51) contends that there is no consensus about the effect of social security on saving and that the empirical work to date has largely served to produce: «...a series of studies that can be selectively cited by the true believers of conflicting hunches...», while Sheldon Danziger, Robert Haveman, and Robert Plotnick (1981, p. 1006) conclude that, taken together, all income transfer programs in the United States (but chiefly social security) «...have depressed annual private savings by 0-20 percent relative to their value without these programs, with the most likely estimate lying near the lower end of this range.»

Even if the evidence suggested conclusively that the creation of a pay-as-you-go social security system had reduced past saving and capital formation, it does not necessarily follow that altering the retirement income sysem to increase the savings rate is a desirable policy today[20]. Our current retirement income system can be shifted away from pay-as-you-go financing and toward reserve financing only if the current generation of workers effectively pays twice for retirement, once to finance benefits for those already retired and once to finance reserve accumulation. if the reserves thereby accumulated actually increase aggregate saving, and if this turn actually increases the capital-output ratio, real wage levels will be higher in future years than they would otherwise have been. But the generation that gains from the higher real wages is the generation that follows the current working generation.

The intergenerational differences in policy preferences were illustrated in results obtained by Leimer and Peter A. Petri (1981) when they modeled the long-run effect on aggregate economic activity of alternative policies for dealing with a projected increase in the average age of the United States population. Projections made in the early 1980s showed United States social security costs rising sharply between 2015 and 2030 as the unusually large cohorts born in the 1950s and early 1960s reached retirement age. Leimer and Petri simulated the effect on each birth cohort's total welfare of closing the then projected long-range deficit through: (1) raising taxes earlier than necessary in order to accumulate substantial social security reserves, (2) raising taxes in the 21st Century, and (3) announcing today that benefits would be reduced effective for those retiring in the 21st Century. Their simulation assumes that one-half of any change a cohort perceives in the present value of its future taxes and benefits will be reflected in offsetting changes in their saving, and that accumulations of social security reserves will increase

[20] Clearly, additional saving will have a positive effect on economic activity only in conjunction with adequate investment incentives and opportunities. Although participants in the social security and savings debate may also differ in their judgment about the relative importance of savings as opposed to investment incentives, discussion of that issue is beyond the scope of this paper.

aggregate saving directly. They found under these assumptions that a future benefit reduction provided the highest lifetime welfare for those born before 1944 (who would have retired before the benefit reduction went into effect) and those to be born after 1985 (who would enjoy higher real earnings levels as a result of the higher capital-labor ratio). A future tax increase was the option preferred by those born between 1944 and 1952, and reserve accumulation was the option preferred by cohorts born between 1953 and 1984.

Mordecai Kurz and Avrin (1979) argue that social security reserve policy cannot be considered as an issue of economic efficiency. Even if the introduction of a pay-as-you-go social security system reduced the capital-output ratio below an optimal level, the current ratio is efficient because it is not possible to increase the ratio without making someone worse off. Changes in reserve policy are largely a question of intergenerational redistribution. Similarly, as a practical political matter, Browning (1973 and 1979) saw little likelihood that the United States social security system would be either terminated or fully funded. The cohorts that would be major gainers from either improbable policy are the generations that has not been born or at least have not reached voting age. The cohorst that have reached working (and voting) age are the most likely losers.

But in a larger sense it makes little difference whether the creation of a pay-as-you-go social security system caused a problem of inadequate saving. Leaving aside the intercohort redistribution issue, if a nation is saving too little and it wants to save more, it should be examining all the various possible policy changes to see which are likely to be most effective and desirable. It may be that the creation of a social security program caused the problem, but that the most promising solution lies outside of the retirement income system; it also may be that the creation of the social security program had nothing to do with the problem, but that adjustments in that program are a promising avenue for addressing it.

One difficulty with using social security reserve accumulations as a device for increasing the saving rate is that the economic effect of accumulating the reserves depends on the adjustments that the political process makes in the rest of the budget while the reserves are being accumulated. Since in the United States social security trust funds are invested in Federal general fund debt, the accumulation of social security reserves involves simply financing a portion of the general fund deficit through the sale of bonds to the trust funds. If an increase in social security reserves is nor accompanied by a change in other government tax and expenditure policies, the surplus in the trust funds reduces the amount the government must borrow from the public. But if the increase in social security reserves is accompanied by reductions in other government revenues or increases in other government expenditures, the non social security deficit will be larger. If the increase in the non social security deficit is of roughly the same magnitude as the increase in the social security surplus, net government borrowing from the public is unaffected by social security reserve accumulation.

In short, an accumulation of social security reserves will increase aggregate saving only if the accumulation translates directly into reductions in the amount which the national government must borrow from the private sector, and, by the same token, any other method of reducing national government borrowing from the public will have the same effect on saving as the accumulation of social security reserves. Thus, while he proposed a major increase in payroll tax rates in order to accumulate substancial reserves in the United States social security program, Feldstein (1976) admitted that the key economic variable in his proposal was the production of a surplus in the national government's total budget and that there was no economic reason for using the social security accounts to achieve this. Rather, he argued that the social security agency was the natural place in the government structure in which to locate a public savings or pension fund.

Opponents of Feldstein's proposal raise three objections. First, if budget surpluses were desired, Alicia H. Munnel (1977) and Pechman (1977) preferred increasing income taxes rather than increasing payroll taxes because they felt the income tax was a fairer general purpose tax. Second, Lesnoy and John C. Hambor (1975) suspected that the size of the national governments total budget deficit is determined primarily by short-range fiscal policy considerations so that larger social security surpluses are likely to lead to larger nonsocial security deficits and have little effect on aggrregate saving. The third criticism focuses on possible undesirable side effects from creating such a large fund of money in what is essentially a political institution. Munnell feared it might lead to undesirable liberalizations in future social security benefits, while A. Lawrence Chickering and Jean-Jacques Rosa (1982) observed that in Japan and Sweden, two of the three industrial countries where substantial social security reserves have been accumulated, the reserves have been invested in projects that yielded relatively low returns[21].

In summary, economic theory cannot predict the effect of a social security program on saving and the empirical work to date provides little firm support for the contention that the effect has been substantial. Regardlees of its effect, the question of whether we should increase our saving rate is in large part an issue of intercohort redistribution, not economic efficiency.

Knowing only that social security is or is not accumulating reserves does not necessarily tell one anything about the impact of social security's financing operations on saving flows. Presumably, reserve accumulation unaccompanied by other changes in social security benefit or investment policies could not have a negative impact on saving. However, it is quite possible that the existence of a large social security reserve fund may itself change political behavior, leading to changes in social security benefit policies or to changes in public investment policies. In the absence of the fund, these changes might not have been considered desirable, and they could more than offset any gain to aggregate saving.

Over the years, the United States Congress also has been concerned about the

[21] They are drawing on the summaries of current social security problems and policy in Sweden and Japan prepared by Ingemar Stahl (1982) and Noriyuki Takayama (1982) respectively. One other industrial country that has attempted to accumulate substancial social security reserves is Canada, where surpluses have been loaned to the provincial governments.

effect of social security on saving, but traditionally the Congress has focused on program attibutes that economists have not explored as part of the savings debate. While economists have looked for empirical evidence on the net effect of social security on the saving behavior of all participants, for most of the program's life, many members of Congress have assumed that the effect varied by income level. Congressional discussions treat social security benefits as a potential substitute for private sector retirement income instruments only among average or above-average earners; among low earners, they assume that social security substitutes primarily for needs-tested benefits or intrafamily transfers.

In the traditional American political view, the progressive benefit formula is a device to skew benefits toward those who would not have saved for retirement in the absence of social security and away from those who would have. A change in the formula that increased benefits for higher earners and reduced benefits for low earners would be seen as discouraging saving by substituting social security for private savings at the upper end of the wage distribution while simply substituting general revenue-financed, needs-tested benefits for payroll tax-financed social security benefits at the lower end of the wage distribution. The structure of the benefit formula may help explain why so many empirical estimates of the effect of the United States social security program on savings fail to find a substantial effect.

Finally, note that the effect on aggregate saving of the various phaseout plans described earlier depends on the source of the general revenues used to pay off all the bonds issued (under Friedman's plan) or the shortfall between new sales and redemptions (under Bachanan's) or between payroll tax receipts and benefit obligations (under Ferrara's). If the government decides to raise the required general fund revenues by borrowing, there would appear to be no net effect on saving, since the government would presumably be borrowing the funds that are simultaneously being sed aside by workers in the new private retirement savings institutions being created to substitute for social security. The retirement income system would remain essentially current-cost financed in that the government would be borrowing from one generation of workers and then borrowing from the next generation of workers to pay off the loans from the first generation. However, over time the entire operation would gradually become merged with the rolling over of the rest of the national debt.

Alternatively, the government can raise general fund taxes to supply the necessary funds, but the economic effect of such tax increases is largely unrelated to any phase out of social security. From a macroeconomic perspective, the effect of increasing taxes to finance promised social security benefits should be no different than the effect of increasing taxes to pay off any other part of the national debt.

2.3. *The Effect on Labor Supply*

The reform debate focuses on two types of labor supply effects: (1) the effect of the tax on the labor supply of those not old enough to retire, and (2) the effect of the relationship between amount received and work effort for those old enough to receive benefits. In each case, the debate turns on how workers perceive an therefore adjust their behavior to the relevant provisions of the program.

Views about the effect on the working age population's labor supply depend on the conceptual framework that either the analyst employs or that the analyst thinks most workers employ. Analysts who favor the current-period approach of the tax-transfer model look at the effects of social security tax in the same way that they would approach the personal income tax; whether it discourages, encourages, or has no effect on labor supply depends basically on the slope of labor supply curves. Analysts who favor the life-cycle approach of the annuity-welfare or insurance models are more likely to believe that in determining the labor they will supply, workers look at the net effect of additional work on both current tax payments and expected future benefits (Burkhauser and John A. Turner, 1985). Thus, labor supply effects depend both on the slope of the labor supply curve and on the net of the tax and benefit changes produced by additional earnings. Indeed, if workers' time horizons are long enough and the program parameters serve to encourage retirement at older ages, labor supply during working years may be increased as a result of the interaction of a lifetime optimization of the labor-leisure choice with the knowledge that leisure will be subsidized later in life (Burkhauser and Turner, 1978).

Several economists have argued that the structure of the benefit formula affects worker perceptions and hence worker behavior[22]. In their view, as the United States social security program is currently structured, the connection between current tax payments and future benefit receipt is so loose that workers treat the program as a tax-transfer program. However, if the connection were tightened — in particular, if benefits were scaled directly to the present value of past contributions— workers would perceive that additional tax payments will always produce equal increases in lifetime benefits, and the tax will have no effect on labor supply.

The argument for reforming the benefit structure to remove adverse labor supply effects among the working age population involves several implicit assumptions. First, if there is a problem that this type of reform will address, labor supply among the working age population must have been affected by the tax. This implies that labor supply is not perfectly inelastic, which means, in turn, that workers most likely do not bear the entire burden of the payroll tax. Second, even if workers understood fully how the benefit formula is structured, making workers believe that tax payments at the margin always produce equal future benefit increments implies that an alternative computation procedure exists in which the present value of the marginal benefit as perceived by workers is equal both to the marginal tax payment and to the Treasury's cost of providing the benefit[23]. For

[22] For example, Feldstein (1977a), Munnell (1977), and Arthur B. Laffer and R. David Ranson (1977).

[23] One could also question how many workers currently have a reasonable idea of the size of their prospective social security entitlement. As part of a reform proposal motivated largely by other concerns, Boskin, Laurence J. Kotlikoff, and Shoven (1982) advocate

example, any amount by which the worker's rate-of-time preference exceeds the interest rate used explicitly or implicitly in social security benefit calculations must be offset by a preference among workers for risk aversion. Finally, the analyses tend to assume that all behavioral changes caused by social security reduce economic efficiency, an assumption that seems to be inconsistent with some of the economic justifications cited earlier for creating a social security system.

The differences in conceptual models are also important when looking at workers approaching retirement age. Viewed from the current-period perspective of the tax-transfer model, the availability of retirement benefits conditioned on full or partial labor force withdrawal creates a significant substitution effect, discouraging work as soon as the worker reaches the age at which he first become eligible for benefits. Viewed from the life-cycle perspective of the annuity-welfare model, however, the substitution effect would virtually disappear if adjustments are made in the monthly benefits of those who retire either early or late, and if those adjustments are of a size that serves roughly to equalize the asset value of the future benefit stream regardless of when benefits are first drawn. Thus, whether an analyst believes that an earnings test is likely to reduce work effort will depend both on the actual effect that additional work has on lifetime benefit streams and on the analyst's views about whether the tax-transfer or annuity-welfare approach provides the better insight into worker behavior[24].

Diamond and Mirrless (1978) used the third conceptualization, the insurance model, and reached a different conclusion about the optimal benefit adjustments for workers who have reached the minimum age for benefit eligibility. They view retirement as in part (or for some) a voluntary decision and in part (or for others) an involuntary decision. The involuntary element is an unforeseen deterioration in the worker's health; the voluntary element introduces de moral hazard, problem common to many forms of insurance. To offset the moral hazard, they conclude that a social security program should offer increasing rewards for delayed retirement. Based on this, Diamond proposed making the fraction of a worker's benefit that was subjected to the earnings test decline as the worker grows older (See Gardner Ackley et al., 1980).

A final concern that has received only limited attention is whether one can consider the labor supply patterns existing in the absence of a social security

annual statements informing workers of the current value of their accrued future benefit rights. In principle, such statements could be instituted under the current system or under any the alternatives proposed by reformers. They would seem to be particularly appropriate for a reform of the type discussed here since the desired behavioral response depends on workers being aware of the increase in future benefit entitlement associated with additional work.

24 Determining the net effect of all of the ways that an additional year's work will affect expected lifetime benefits can be a major analytical undertaking. Alan S. Blinder, Roger H. Gordon, and Donald E. Wise (1980) found that the net effect of all the adjustments made in response to additional work under the United States social security program may actually amount to a wage subsidy, expecially for those under age 65. According to their calculations, continued work increases the asset value of the future benefit stream. Burkhauser and Turner (1981) argue that Blinder, Gordon, and Wise have overstated the size of the effect, but do not dispute their basic approach.

program to be optimal. If not, changes caused by the introduction of a social security program may not be undersirable. John B. Hagengs (1980) notes that one justification for creating a social security program is that worker myopia will lead to undersaving for retirement in the absence of social security. Hagens argues that to the extent that social security corrects for this myopia, it will increase the wealth of the aged and (assuming leisure is a normal good) encourage retirement. In this way it may be desirable for social security to introduce an incentive to retire at the age of initial eligibility; moreover, a system of mandated individual retirement savings accounts would presumably have the same effect.

In summary, analysts disagree about how workers are likely to respond to certain features of many social security programs and about whether certain modifications of worker behavior should be considered improvements in economic efficiency. The current empirical literature on the effects of the effects of the United States social security program on labor supply offers little additional guidance about either the importance of this issue or the most promising avenues for reform. The literature contains estimates that conflict in both direction and magnitude, suggesting either that the effects are fairly modest or that we have yet to model successfully the complex behavioral interactions. After reviewing the literature, Aaron (1982b, p. 60) concluded that, «About all that can be said is that the preponderance of a series of studies, whose evidentiary value is quite low, suggests that social security as a whole diminishes the labor supply of the elderly by some amount». Olivia S. Mitchell and Gary S. Fields (1982, p. 147) argue that, «Clearly, no empirical conclusión can be drawn about the effects of Social Security on retirement». And Danziger, Haveman, and Plotnick (1981, pp. 996-997) cite as an upper bound that the Old-Age and Survivovrs Insurance program may have been responsible for one-half the decline since 1950 in the labor force participation of older men, which would translate into a reduction in total work hours in the economy of 1.2 percent.

2.4. *Restructuring the Social Adequacy and Individual Equity Components*

Recall that under the annuity-welfare conceptual model, the basic approach is to analyze separately the annuity (or individual equity) and welfare (or social adequacy) elements of the current benefit package. Among those who subscribe to this model, such separate analysis invariably leads to proposals in which the two components are divided into two different programs or at least into two separate and identifiable components of the same program. Typically, the payroll tax is retained to finance the annuity (or individual equity) component while the general revenues are used to finance a separately computed welfare (or social adqequacy) component. Among proposals of this type, the major differences arise with regard to the structure of the welfare component. Some would reduce the current welfare element by making it subject to a needs testing in order to make it more «target efficient»; others would enlarge it by converting it into a demogrant that covered the entire aged and disabled population. Either approach is consistent with the annuity — welfare conceptualization, but they move the structure of the retirement income system in quite different directions.

In the United States (and in most European Countries) social security benefits are paid without an explicit test of need, so that there is no guarantee that all of the adequacy-oriented benefit payments under the social security program are actually going to the aged with the lowest current-period incomes. Several reformers favor shifting the responsibility for the adequacy objective away from the social security program; all variations in expected lifetime benefits not related to variations in expected lifetime tax-contribution payments would be dropped. To the extent that worker households did not receive sufficient income from the reformed social security program (and other sources), their income would be supplemented under a needs-tested program.

Advocates see several advantages in this reform. First, they argue that as a matter of equity, responsibility for financing strictly earnings-related benefits properly belongs with payroll taxes (or mandatory contributions), but the financing of transfers designed to guarantee a minimum adequate income to the low-income aged is properly assigned to the general revenues, where tax payments reflect ability to pay[25]. Second, this reform would allow the government to evaluate the aggregate magnitude of transfers to the aged for minimum income support in isolation from the aggregate earnings-related payments being made under social security; the debates over the size and structure of the retirement income system would be more rational, and public sector resources would be allocated more efficiently[26].

Finally, the change would be expected to improve preretirement work incentives by linking additional payroll tax payments and additional social security benefits more closely[27].

Others agree with the basic premise underlying this approach, but do not agree with the particular solution. Instead, they favor introducing in the United States an approach already employed in Canada —the payment to all aged of a general-revenue financed demogrant—. They would favor a demogrant set at a level that assures for everyone the accepted minimum adequate income so that it would substitute both for the progressive nature of the current United States benefit formula and for certain benefits to dependents of retired workers under the current United States system. The payroll tax-financed benefit would be proportional to earnings and be added to the demogrant. Advocates of the demogrant-based two-tier approach see in it many of the same advantages claimed for the needs-tested aproach: It separates the adequacy and equity elements and allows the government to adjust each independently; it strengthens the linkage between payroll tax payments and payroll tax-financed benefits; and it assigns the responsibility for benefit payments motivated by an adequacy objective to the general revenues[28].

The debate between advocates of the two approaches centers first on the

[25] For example, Boskin (1977) and Munnell (1977).
[26] Boskin (1977).
[27] Munnell (1977) and Feldstein (1977a).
[28] For example, Eveline M. Burns (1970); Aaron et al (1980) and Ozawa (1981).

relationship between economic efficiency and target efficiency and second on the desirability of minimizing stigma in transfer programs for the aged. If the basic objective of an income transfer program is to guarantee a minimum level of income support to a specific population, a needs-tested approach is more target efficient. With needs-testing, a higher fraction of total benefits paid will go to those whose pretransfer income is below the minimum acceptable level; thus, a given level of income support can be provided to the target population at a lower level of total program outlays. But needs-tested programs are target efficient only because they impose hign marginal tax rates on all other income received by their beneficiaries; the higher the tax rates, the more target efficient the program. As noted earlier, in the curent United States needs-tested program, all nonlabor income, including social security, is taxed at a 100 percent marginal rate. Thus, for those whose social security benefits (and other retirement income) are likely to be lees than the minimum income guarantee, there is no incentive to save for retirement, the additional social security tax payment triggered when a younger worker works an additional hour yields no return in retirement, and the incentives to continue working after reaching the age of first eligibility that have been built into social security through the various adjustments to reflect age of first benefit receipt are virtually completely negated.

The needs-tested two-tier model is an approach, not a concrete proposal. Its pattern of work and savings incentives can be altered by altering the key parameters controlling the structure of each of the tiers. But once one introduces the effect of a supplemental needs-tested program into the analysis, the approach appears to involve a fundamental conflict between incentives for higher earners and incentives for lower earners. As noted, it has been argued that tying social security benefits more closely to payroll taxes will remove any distortions in the labor supply decisions of the working age population and that equalizing the asset value of future benefits, regardless of the age at which they commence, will neutralize any work disincentives among those eligible for benefits. If one accepts those arguments, then a more target efficient, needs-tested approach to reform appears to remove distortions for high earners at the price of a substancial diminution in work and saving incentives among lower earners[29].

Another argument used against needs testing involves the possible welfare loss to recipients in they believe that participating in a needs-tested program is stigmatizing (Aaron, 1982a, and Warlick, Berry and Garfinkel, 1982). Some have argued that many economists fail to understand that the welfare of the aged is affected both by the amount that is transferred to them and by the process through which

[29] Opponents of greater reliance on needs testing also argue that the greater administrative costs associated with needs testing represent a resource cost that must be weighed against any gains from target efficiency of transfers (Aaron, 1982a, and Warlick, David E. Berry, and Irwin Garfinkel, 1982). At least as they have been operated in the United States, needs-tested programs are inherently more difficult and expensive to administer because calculating each individual's benefit payment requires detailed knowledge of current circumstances, and eligibility and benefit amounts must be redetermined periodically. For example, in fiscal year 1981, SSI program administrative costs to the Social Security Administration averaged $175 per beneficiary, or 8.8 percent of SSI benefit payments. By contrast, OASDI administrative costs averaged $47 per beneficiary, or 1.2 percent of benefit payments.

it is transferred (Viscusi, 1979). And the evidence suggests that American society prefers to avoid extensive reliance on needs-tested programs to supply income support to the aged and disabled[30].

Precisely because the demogrant goes to all aged and is not target efficient, the payment of the demogrant has the advantage of introducing no substitution effects against work or savings (though it could introduce an income effect against either), having lower administrative costs, and, in theory, having no stigma. If aggregate expenditures under the demogrant approach were the same as aggregate expenditures under the needs-tested approach, the demogrant could easily be more economically efficient even though it would be less target efficient. The difficulty is that it is not possible to design a demogrant-based two-tier model that yields an adequate minimum income to those with no other income sources without increasing substantially the aggregate size of the public retirement income system. And this expansion would place a higher total tax burden on the economically active population, which would presumably introduce new economic inefficiencies.

At present we simply do not know whether greater or lesser reliance on income-tested benefits would increase or decrease economic efficiency. The result depends in part on all of the particular parameters selected for each possible approach and in part on the interaction of each of the parameters with the whole structure of labor supply and savings elasticities among workers at different earnings levels and at different stages of the life cycle[31].

2.5. *More Progressive Financing*

In the United States, social security tax payments are proportional to earned income up to the level of the taxable maximun and then for those with earnings above the maximun, represent a declining fraction of earned income. Earned income represents a smaller portion of total pretax household income at the lowest income levels. Because of this, with respect to current household income, the payroll tax is generally viewed as progressive at lower levels, proportional at middle income levels, and regressive at upper income levels[32]. Economists generally believe that worker's labor supply is very inelastic and, therefore, that both the employee's and employer's share of the tax is actually born by the employee in the form of lower real wages[33]. The view is not universal, however[34].

[30] All three broadly representative advisory groups set up to review the United States Social Security system in the last five years have unanimously rejected the needs-tested version of a two-tier model for social security because of the distastefulness of extensive needs testing. See United States Advisory Council on Social Security (1980), National Commission on Social Security (1981), and National Commission on Social Security Reform (1983).

[31] See Warlick, Berry, and Garfinkel (1982).

[32] For example, Pechman and Benjamin A. Okner (1974) and Mary P. Johnson and Bernard Wixon (1978).

[33] For example, John A. Brittain (1971). Recall that economists who are concerned about labor supply effects implicity assume some elasticity to worker's labor supply. The greater the elasticity, the greater is the potential for undersirable labor supply effects, but the less clear it is who actually bears the burden of the payroll tax.

[34] Brittain's conclusion was criticized by Feldstein (1972) in a subsequent exchange with

Most participants in the reform debate in the United States assume that the current-period incidence of the payroll tax is more regressive than is that of the income tax in particular or the Federal general revenues in total, but they disagree as to whether this is a serious problem. their views tend to be a function of the conceptual framework they favor and the importance they attach to other objectives of the retirement income system.

The current-period incidence of the payroll tax is a serious problem to those who adopt the tax-transfer conceptualization. Brittain (1972b) favored shifting eventually to the use of general revenue taxes to finance social security because he found that the payroll tax was more regressive and that payroll tax increases had more unfavorable macroeconomic effects than did income tax increases. The only advantage he saw in the payroll tax was that it was more favorable to saving because it taxed more tightly the incomes of those with higher saving propensities. Pechman, Aaron, and Taussing (1968) advocated use of an earmarked portion of the income tax for social security financing; the use of the income tax would make the financing reflect ability to pay more accurately while the earmarking would retain the perception that workers are paying for their benefits through earmarked contributions. Others have suggested reforms of the payroll tax short of completely phasing it out that would make it more accurately reflect ability to pay introducing exemptions and deductions[35].

Many of those who subscribe to the insurance or the annuity-welfare conceptualizations find the current period incidence of the payroll tax to be largely irrelevant. In their view the payroll tax is properly analyzed in a life-cycle context, where (at least in the United States) because of the progresive benefit formula, its regressivity disappears. Moreover, as will be noted in a subsequent section, many believe that payroll tax finance serves another valuable objective in contributing to longer-run stability for the system. Some who believe that the incidence of the payroll tax is a minor problem also believe that longer-ranger stability is sufficiently important so that no change in the Current financing arrangement is desirable[36].

A third school of thought favors use of the payroll tax because of its influence on longer-run stability, accepts the life-cycle view of the tax, and believes, therefore, that the incidence problems are not as serious as the tax-transfer conceptualization implies. They would monetheless like to see the revenue structure made more progressive. The federation of American labor unions, AFL-CIO, among others, has advocated gradually introducing general revenues to support all facets of the current program until the general revenues cover one-third of the cost. The remaining two-thirds would continue to be financed by payroll taxes[37].

Brittain (1972a). If labor supply is elastic, other factors may bear a part of the burden, at least for an extended short run (Jerry A. Hausman, 1981); counterintuitive results are also possible (Richard Zeckhauser, 1977).

[35] Some examples include George F. Break and Pechman (1975); Break (1977); and Musgrave (1981).

[36] For example, Myers (1979) and Chen (1970).

[37] See Bert Seidman (1977); Larry Smedley (1981); Ball (1978); and Melvin A. Glasser, Velma M. Hill, and Seidman (1980).

2.6. *More Equitable Intergenerational Transfers*

The current-period incidence of the payroll tax is a major concern in the tax-transfer model, but not a major issue in the annuity-welfare model. In contrast, variations among workers in the life-cycle relationship between payroll tax payments and social security benefits received, generally expressed as the rate of return workers realize on their payroll tax payments, are a major concern in the annuity-welfare model, but are not a major issue in the tax-transfer model. As has already been noted, the desire to equalize returns on payroll taxes within a cohort has led some to propose one or another form of two-tier model for the United States social security program. The other major source of variation in rates of return arises between cohorts: Members of one cohort may experience, on average, substantially higher rates of return on their payroll tax payments than do members of another.

The early cohorts retiring under a social security program pay payroll taxes for only a few years and often pay only the tax rate required under current-cost financing, which is quite low in the early years. Thus, when compared to previous payroll tax payments, social security benefits for cohorts retiring in the first two or three decades after a program is started represent a very favorable rate of return; the rate of return was less favorable for those retiring in the next couple of decades, and is even lower for those starting work after the program is 40 to 50 years old[38].

Some American analysts have argued that as the United States social security program continues to mature, political support for the program as a whole, or at least for the benefit formula as it traditionally has been structured, will erode. Because of the high average return to cohorts retiring in the past, provision of social adequacy (or welfare) benefits has been possible without even the highest-paid worker receiving a return below the annuity value of the sum of his employer's contributions (Burkhauser and Warlick, 1981). However, as succesive cohorts reach retirement age and the average return for the cohort as a whole declines, the returns to the highets earners must eventually fall to a level where they no longer represent a fair return on the sum of the worker plus the employer portions of the payroll tax. Some argue that the benefits for high-wage workers under the United States system will have to be linked more closely to their contributions in order either to avoid the creation of a major work disincentive among the higher paid or to preserve the perception of fairness and hence broad

[38] Calculations of implicit rates of return under a social security program sometimes involve comparisons of the present value of expected benefits to the present value of expected tax payments. The results of such comparisons must be viewed with some caution. Because for any individual cohort the payment of taxes always precedes in time the receipt of benefits, these results depend critically on the discount rate employed. It is generally accepted that in a steady state, a mature, pay-as-you-go social security system offers each cohort a rate of return on previous payroll tax payments equal to the natural growth rate —the sum of the population and wage growth rates (Paul A. Samuelson, 1958, and Aaron, 1966)—. Thus, if one assumes that the proper discount rate for comparing tax and benefit present values exceeds the natural growth rate and projects steady-state future growth, the present value of benefits must eventually fall below the present value of taxes.

political support for the program[39]. Alternatively, returns on high earners' payroll tax payments could be maintained at acceptable levels even with the current structure if general revenues are used to finance a portion of the program[40].

Even after a social security program matures fully, the rate of return any cohort receives on its payroll tax payments will depend in part on the pattern of demographic shifts occurring during the different phases of the cohort's life cycle. Other things being equal, relatively large cohorts that both follow and precede relatively small cohorts through the system will experience a higher ratio of workers to beneficiaries during their working years than will their successors during their retirement years. Parsons and Munro (1977) argued that the rates of return among cohorts could be evened out through partial reserve financing. The large cohort can be required to pay taxes at a rate greater than that needed to finance the fenefits payable to their predecessors, and the reserves accumulated thereby could be drawn down to allow their successors to pay at a rate lower than would be required under a strict current-cost financial arrangement[41]. James N. Morgan (1977) would have equalized the returns among cohorts by first, determining the future level and structure of benefits that was believed to be desirable, second, setting a structure of tax rates that would produce expected real returns on payroll tax payments for each cohort equal to 3 percent per year, and third, using the general revenues to make up all shortfalls between payroll tax receipts and benefit obligations. The size of the general revenue payment would vary in part as the size of the various cohorts going through the system varied.

Evaluating these different proposals requires one to address several basic issues including: (1) In forming their political judgments, on what do workers base their perceptions of the amount they have contributed to the system? (2) What is the real economic burden that each generation has borne and how does it compare to the results of a social security tax-benefit comparison? and (3) What is the proper pattern of intergenerational burdens, especially over the years during which the system is maturing?

Arguments that address the political support future workers will give the system depend entirely on how workers form the perceptions upon which political reactions are based. Assuming that political support depends on worker calculations of their own return, do workers base these calculations on the return they receive on only the employee share of the payroll tax, on the sum of the employee

[39] For example, Viscusi (1979) and John L. Palmer (1977).
[40] For example, Palmer (1977) and Ball (1978).
[41] But recall that Green (1977) and Smith (1982) argued that the larger cohort may experience lower relative wages during their working lives because of a lower capital-labor ratio; if true, the lower wages partially offset the lower social security taxes the larger cohort would be paying under a current-cost approach. Also, as noted in the earlier discussion of social security and savings, the accumulation of assets in the trust fund need not necessarily imply greater saving. Even if it does increase saving, some analysts question whether the burden that the larger retirement cohort imposes on the smaller working cohort can be altered substantially. (Nicholas A. Barr, 1979, Sherwin Rosen, 1984, and Bruno Stein, 1981). With more savings, there may be more capital and per capita income may be higher, but the consumption of the retirees must still come from current-period production of the workers.

and employer shares, or on the sum of the two shares of the payroll tax plus any general revenue taxes that the workers have paid over their lifetimes to support the retirement income system? At present no one knows the answers. But the implicit asumption underlying the arguments outlined previously seems to be that the second of these three possibilities is the most probable, because under the other two possibilities either the existence of a problem is unlikely or the solutions offered are unlikely to address the problem that exists.

If workers make comparisons to only the employee share, the problem hypothesized may not materialize, at least in the United States. projections suggest that for even the highest paid, never-married, male worker now entering the labor force, expected benefits will represent about a 2.5 percent real return on the employee share of taxes; this return is hardly low enough to cause a major political upheaval[42]. On the other hand, if workers include any general revenue tax payments they made to support the retirement income system in ther rate-of-return calculations, and if the incidence of the general revenues is more progressive, it is not clear how returns for high earners can be increased by shifting a part of the burden for financing the retirement system from the payroll tax to the general fund, whether the shift occurs as a result of direct general revenue financing of social security or through shifting a larger part of the social adequacy function to a general revenue-financed program.

The relationship between the rates of return that different cohorts appear to receive on their social security taxes and the intergenerational pattern of real economic burdens would seem to depend on the effect of social security on saving. If social security appears basically to be a substitute for private saving, inter-cohort variations in rates of return on payroll taxes may provide a reasonable proxy for the intergenerational pattern of real burdens. But if social security has had little effect on saving —either because its benefits merely substituted for alternative forms of public and private sector transfers to the aged that would otherwhise have occurred or because the aged have offset the effect of social security benefit payments through larger intrafamily transfers to the nonaged— the higher returns to the early cohorts are an illusion. These early cohorts were not significantly better off than they would have been without social security; social security merely changed either the way in which transfers to the aged were financed or the direction of net private sector transfers. Because economists have not found convincing evidence that the United States social security system has had a significant effect on saving, the possibility cannot be ignored that the rate-of-return calculations have no real economic meaning.

Even if one accepts the relevance of the payroll tax rate-of-return calculations, whether one believes that the higher returns to the earlier retirement cohorts are inequitable depends on the intergenerational equity standard one adopts. Two private sector analogies exist: defined-benefit pension plans and defined-contribution pension plans. In the former, benefits are determined in relation to years of service, almost always including service prior to the plan's inception and

[42] United States Advisory Council on Social Security (1980, Table 2).

(depending on the plan) a measure of average preretirement earnings; retirement benefits are not affected by the amount of prior contributions made by or on behalf of the worker. In the latter, benefits are determined soley on the basis of prior contributions and investment earnings; they bear no fixed relationship to preretirement earnings levels or years of service.

As currently structured, the social security programs in Europe and North America are defined-benefit plans. The intergenerational pattern of returns observable as these social security programs mature is essentially the same as the pattern found in almost any other maturing private sector defined-benefit plan, even a fully funded plan (Myers, 1971). Most advocates of the insurance model would argue that this pattern is simply the pattern to be expected when a pension plan is inaugurated, and does not represent evidence of any intergenerational inequity. Those who seek to reform social security to eliminate what they view to be an inequitable pattern of intergenerational transfers have adopted as their standard of equity the pattern associated with defined-contribution pension plans. And as a result of adopting the different standard, they have reached a different conclusion about what pattern is equitable.

3. Preserving Individual Dignity and Long-Range Stability

Some of the opponents of a given reform proposal may be reformers themselves who disagree with the direction in which that particular proposal would move the retirement income system. Other opponents may agree that the proposal might improve the way the system serves one objective, but also believe that the proposal's adoption involves an unacceptable sacrifice of another objective. Two objectives that many reform opponents are unwilling to sacrifice are first, the preservation of the dignity of beneficiaries, and second, preservation of the longer-term stability of the system.

The economic gains from a retirement income system require that participants be able to rely on the long-run promises the system makes; thus, these gains can be secured only through an institution that itself is relatively stable and predictable over the long run. But social security is not just an economic institution; it is also a major social and political institution. Once a social security program has matured, most of the nation's aged are going to rely on it as the source of a substantial portion of their income. Moreover, most recipients are at a stage in their life cycle where they have virtually no alternative primary source of income. the assurance their social security benefits will continue without interruption and the effect on recipients' feelings of self worth of the manner in which this income is received have an obvious, substantial impact on total welfare in any society. But because social security is also a political institution, the pattern of future benefit promises, policies with respect to current benefit payments, and decisions about how to finance the system are all products of the political process.

In the absence of special institutional arrangements, many participants in the American political process (and many observers of it) do not trust that process to deal responsibly on a long-term basis with a program like social security. They fear that the political process will succumb to the short-range temptation to promise more in benefits than is desirable (perhaps in the form of future rather than current entitlements) and that, either independently or as a result of such overpromising, at some future date the process will renege on promises made previously.

In the traditional political view, at least in the United States, the key institutional arrangement that preserves both the dignity of the recipients and the stability of the system is contributory (payroll tax) finance. Contributory finance provides the institutional check against the political temptation to overpromise by introducing «fiscal discipline». Any benefit liberalization must be linked directly to increases in a highly visible tax.

It this view contributory finance also allows benefit recipients to believe that they have paid for their benefits through their own prior contributions, thereby preserving their self-esteem. The argument is that in a society such as that found in the United States —where self-reliance and self-provision are highly valued— the acceptance of «welfare» is a sign of personal failure. But because of the contributory nature of the United States social security program, its recipients can view the receipt of social security as a sign of their past contribution to the economic system, not as a sign of their failure to provide for their own retirement (Ball, 1947). Contributory finance thus provides the political and social underpinning for the principle that benefits are to be paid as an earned right. And as long as the perception of earned benefits is widely held, a future government will find it extremely difficult to disavow the promises of a previous government. No government can bind the hands of its successors, so there can be no absolute legal guarantee of promised future benefits. Instead, contributory finance is used to increase greatly the political cost of not delivering on past promises (United States Congress, 1939).

In the traditional American political view, the basic economic function of the social security trust funds has nothing to do with capital formation or intergenerational transfers. Rather, the trust funds are an integral part of the mechanism through with the objective of long-range stability is pursued. The trust fund financing rules stipulate that no benefits can be paid unless current payroll tax revenues plus accumulated past surpluses are sufficient to cover their cost. This is how the fiscal discipline of the payroll tax is enforced. were there no separate trust fund or were there authority to pay benefits from an account other than the trust fund, benefits could be liberalized without simultaneously increasing payroll taxes. Similarly, the trust fund accounting rules help assure the payment of promised benefits. The social security payroll taxes collected can be used for no other purpose; surpluses in one year accumulate credits that can be drawn against in future years; and, as long as the balance in the fund is positive, current benefit payments are permanently and automatically appropiated.

For most participants in political debates over social security in the United States, the long-run stability of the program and the dignity of the benefit payment process are the two dominant objectives. Business groups traditionally have supported reliance on payroll taxes as the sole means of supporting the program because they fear that to depart from this policy is to undermine the fiscal discipline imparted by the current arrangement (Business Roundtable, 1981). Similarly, the labor unions fear that if a majority of the revenues supporting any portion of the program came from nonpayroll tax sources, the earned right principle would be undermined and, sooner or later, the benefit would be subjected to a needs test. The labor federation will actively oppose a reform that makes the program's financing more progressive if, in their view, such a reform raises any serious question about the long-run stability of the program[43]. It is the fear of eventual means testing of the demogrant that has made the demogrant variant of the two-tier model unacceptable to many who otherwise support the use of the general revenues in the social security program[44].

There is no objective way to evaluate the importance of payroll tax finance and the earned right principle in securing long-range stability and promoting individual dignity or to assess the value of attaining either objective at the price of some short-range improvement in program structure. Most analysts simply do not address these issues, and those who do can convey only their hunches[45]. but those analysts who do not accept these two objectives as their point of departure will never understand the reform debate as it is carried on it the political arena.

Robinson Hollister (1974) reviewed the conflict in the United States between what he refered to as the «priests of Social Security» who defend the current structure and who, by and large, comprise the insurance school of social security and the «Johnny-come-lately reformers» who attach the current structure and who by and large, comprise the tax-transfer or annuity-welfare schools. He believed that the insurance conceptualization and the concepts of contributory finance and earned right benefits are basically social mythology that prevent changes he viewed as desirable. But he concluded that the basic issue in the debate is not the relative attractiveness of any short-range rationalization in the distribution of costs and benefits. Rather it is the relative importance of social myth in securing a stable program structure in the longer range. He asked (p. 39) «What is the cement which holds together a social system?»

43 For example, Smedley (1981) and Glasser, Hill, and Seidman (1980).

44 Ball (1978) and United States Advisory Council on Social Security (1980).

45 Hsiao et al (1976) and Chen (1969) acceptd the notion that fiscal discipline is necessary for long-run stability and opposed any significant use of general revenues in the financing of the program. Viscusi (1979) also opposed the use of general revenues because he feared it could change the public perception that the benefits have been earned, to the great detriment of the social welfare of the aged.
On the other hand, Pechman, Aaron, and Taussing (1968 argued that the use of an earmarked portion of the individual income tax could achieve the same stabilizing objectives as are attributed to the payroll tax, and the 1979 Advisory Council on Social Security made the same argument in recommending that the Hospital Insurance program be financed from earmarked income taxes. Also, Aaron et al. (1980) argued that the universality of a demogrant is a sufficiente guarantee against future means-testing of the benefit, while Carl V. Patton (1977) and Pechman (1980) have argued that earmarking the payroll tax for social security has facilitated, rather than retarded, program growth.

4. Conclusion

To date, the social security reform debate in the United States has consisted largely of a set of analyses with conflicting implications that have led to proposals to advance one of a number of possibly conflicting objetives. The predictable result has been a great deal of debate and very little actual change.

Several factors appear to explain the potpourri of reform analyses and proposals. First, social security is both an economic and an political institution. Just as particular structural changes can alter economic behavior, so can they also alter political behavior, and the second-round economic effects of a change in political behavior may negate any first-round gains from the initial structural reform. Analysts occasionally reach different conclusions about the probable economic effect of a particular change because they make different assumptions about the political effects of the change.

Second, analysts disagree both about the actual effect the program has had on savings and labor supply and about whether a particular labor supply effect should be viewed as undesirable.

All analysts seem to agree with the premise that retirement benefits need to be distributed in a manner that strikes a balance between the concern over social adequacy and the concern over individual equity. But exactly what the proper balance is, what particular role should be played by each component in the system in achieving that balance, and how the costs of the resulting benefit structure ought to be allocated are all matters of considerable debate. A major reason for this debate, and a third explanation for the variety of viewpoints about the direction reform should take, is that analysts examine the retirement income system using at least three different conceptual frameworks. Each yields certain insights about how costs and benefits to be distributed, but each also leaves important question unanswered, and the implications flowing from one conception often conflict with those flowing from another.

A conceptualization that focuses on the life-cycle quid pro quo of payroll tax payments and payroll tax-financed benefits suggests that the incidence of the payroll tax is nor a particularly significant problem. By contrast, a conceptualization that focuses on current-period taxes and transfers finds a regressive tax structure in need of reform. Similarly, a conceptualization that assumes that the expected value of payroll tax-financed benefits should be equal to the value of lifetime payroll tax payments finds that redistributions in the payroll tax-financed portion of the present program are inappropriate. On the other hand, a conceptualization that regards social security as providing life-cycle insurance against a variety of risks, including the risk of low earnings, finds intracohort differences in benefit-tax ratios perfectly appropriate. In the insurance framework, removing the intracohort variation in benefit-tax ratios might create an equity problem where none now exists. Finally, none of the conceptualizations helps decide what relative weight should be assigned to the social adequacy and individual equity objectives.

A fourth reason for chronic disagreement is the inherent complexity of the retirement income system itself. In their attempts to devise concrete prescriptions for reform, analysts are tempted to take one or two of the many objectives and one element in the institutional structure and ask how that particular element can best be designed to serve the selected goal. By selecting different pieces to analyze and different objectives to pursue, analysts can produce a wide variety of conflicting policy prescriptions. Moreover, partial analyses always run the risk of producing proposals that appear to achieve the intended result with respect to one element of the system, but may well not do so when the system is considered as a whole.

A final factor underlying the debate is a difference of opinion about the relative importance of the various objectives the retirement income systems can have. This paper has focused on several objectives discussed frequently in the reform literature: avoiding adverse effects on saving and on labor supply, distributing fairly the costs and the benefits of the system, and fostering individual dignity and long-term stability of the system itself. Reforms may be found that allow certain objectives to be pursued more effectively without sacrificing other desirable aims. One should expect, however, that most improvements along one dimension must entail some sacrifice along other dimensions.

When one examines the current retirement income system in the United States, one finds that it appears to be structured first and foremost to produce a system that is financially viable and predictable in the long run despite being controlled in the short run by political considerations. Second, it is structured to provide income support for the aged in a manner that preserves their dignity and self-respect.

Because of the complexity inherent in analyzing any retirement income system, it is difficult to know the extent to which other objectives have been sacrificed in order to pursue these. It may be that the resulting distribution of the cost of the retirement income system is less equitable than is desirable, that the life-cycle labor supply effects are larger than is desirable, that saving has been reduced below desirable levels, or that the sacrifice of free choice is greather than desirable.

Additional analyses can help us to understand these possibly undesirable side effects better, and they may even be able to help us better understand the trade-offs inherent when reform servers one objective to the detriment of another. But no amount of analyses can make the basic decisions about which of the various objectives should be sacrificed in order to pursue others more effectively. Those choices involve social value judgments that can only be resolved in the political arena.

References

Aaron, Henry J.: (1966) «The Social Insurance Paradox». *Can. J. Econ. Polit. Science*, *32* (3), pp. 371-374, Aug.

Aaron, Henry J.: (1982a) «Discussion» of Alicia Munnell and Laura E. Stiglin, «Women and a Two-Tier Social Security System», in Burkhauser and Holden, pp. 124-130.

Aaron, Henry J.: (1982b) *Economic effects of Social Security*. Brookings Institution, Washington, DC.
Aaron, Henry J. et al: (1980) «Supplementary Statement on the Double-Decker Plan» in U.S. Advisory Council on Social Security, pp. 216-220.
Ackley, Gardner, et al.: (1980) «Supplementary Statement on Liberalizing the Earnings Test», in U.S. Advisory Council on Social Security, p. 231.
Ball, Robert M.: (1947) «Social Insurance and the Right to Assistance». *Social Services Rev.*, *21* (3) pp. 331-344, Sept.
Ball, Robert M.: (1978) *Social Security today and tomorrow.* Columbia U. Press, New York, NY.
Barr, Nicholas A.: (1979) «Myths My Grandpa Taught Me». *Three Banks Rev.*, *124*, pp. 27-55, Dec.
Blinder, Alan S.; Gordon, Roger H. and Wise, Donald E.: (1980) «Reconsidering the Work Disincentive Effects of Social Security». *Nat. Tax. J.*, *33* (4), pp. 431-442, Dec.
Blinder, Alan S.; Gordon, Roger H. and Wise, Donald E.: (1981) «Rhetoric and Reality in Social Security Analysis —A Rejoinder—». *Nat. Tax. J.*, *34* (4), pp. 473-478, Dec.
Bodie, Zvi: (1981) «Investment Strategy in an Inflationary Environment». National Bureau of economic Research, Cambridge, MA, Working Paper N.º 701.
Boskin, Michael J., ed.: (1977) *The crisis in Social Security: Problems and prospects.* Institute for Contemporary Studies, San Francisco, CA.
Boskin, Michael J., ed.: (1977) «Social Security: The Alternatives before Us», in Boskin (ed.), pp. 173-186.
Boskin, Michael J.; Arvin, Marcy and Cone, Kenneth: (1980) «Modeling Alternative Solutions to the Long-Run Social Security Funding Problem». National Bureau of Economic Research, Cambridge, MA, Working Paper N.º 583.
Boskin, Michael, J.; Kotlikoff, Laurence J. and Shoven, John B.: (1982) «Summary of Personal Security Accounts: A Proposal for Fundamental Social Security Reform». Statement before the National Commission on Social Security Reform.
Break, George F.: (1977) «Social Security as a Tax», in Boskin, pp. 107-123.
Break, George F. and Pechman, Joseph A.: (1975) *Federal tax reform: The impossible dream?* Brookings Institution, Washington, DC.
Brittain, John A.: (1971) «The incidence of Social Security Payroll Tasex». *Amer. Econ. Rev.*, *61* (1), pp. 110-125, Mar.
Brittain, John A.: (1972a) «The Incidence of the Social Security Payroll Tax». *Amer. Econ. Rev.*, *62* (4), pp. 739-742, Sept.
Brittain, John A.: (1972b) *The payroll tax for Social Security.* Brookings Institution, Washington, DC.
Brown, J. Douglas: (1972) *An American philosophy of Social Security.* Princeton U. Press, Princeton, NJ.
Browning, Edgar K.: (1973) «Social Insurance and Intergenerational Transfer». *J. Law Econ.*, *16* (2), pp. 215-237, Oct.
Browning, Edgar K.: (1979) «The Politics of Social Security Reform» in Campbell, pp. 187-207.
Buchanan, James M.: (1968) «Social Insurance in a Growing Economy: A Proposal for Radical Reform». *Nat. Tax. J.*, *21* (4), pag. 386-395, Dec.
Burkhauser, Richard V. and Holden, Karen C., eds.: (1982) *A challenge to Social Security: The changing roles of women and men in American society.* Academic Press, New York, NY.
Burkhauser, Richard V. and Holden, Karen C.: (1982) «Introduction», in Burkhauser and Holden (eds.), pp. 1-20.
Burkhauser, Richard V. and Turner, John A.: (1978) «A Time-Series Analysis on Social Security and Its Effect on the Market Work of Men at Younger Ages». *J. Polit, Econ.*, *86* (4), pp. 701-715, Aug.
Burkhauser, Richard V.: (1985) «Is the Social Security Payroll Tax a Tax?». *Pub. Fin. Quarterly*, *13* (3), pp. 253-267, July.
Burkhauser, Richard V.: (1981) «Can Twenty-Five Million Americans Be Wrong? —A Response to blinder, Gordon and Wise—». *Nat. Tax. J.*, *34* (4), pp. 467-472, Dec.
Burkhauser, Richard V. and Warlick, Jennifer L.: (1981) «Disentangling the Annuity from

the Redistributive Aspects of Social Security in the United States». *Rev. Income Wealth, 27* (4), pp. 401-421, Dec.

Burns, Eveline M.: (1970) «The American System of Social Security; Agenda for the 1970/s.» *Social economics for the 1970/s: Programs for Social Security, health and manpower.* pp. 67-82, Ed. C. Rohrlich, New York, NY, Dunellen.

Business Roundtable: (1981) «Business Roundtable Social Security Policy Positions», in Salisbury, pp. 194-198.

Campbell, Colin D.: (1969) «Social Insurance in the United States: A Program in Search of an Explanation». *J. Law Econ, 12,* (2), pp. 249-265, Oct.

Campbell, Colin D., ed.: (1979) *Financing Social Security.* American Enterprise Institute, Washington DC.

Chen, Yung-Ping: (1970) «General Revenue Financing for Social Security: A Negative View». *Proceedings of the 62nd Annual Conference on Taxation, 1969,* pp. 329-344, ed. Stanley J. Bowers, National Tax Assoc., Columbus, OH.

Chickering, A. Lawrence and Rosa, Jean-Jaques: (1982) «A Political Dilemma», in Rosa (ed.), pp. 207-220.

Danziger, Sheldon; Haveman, Robert and Plotnick, Robert: (1981) «How Income Transfers Affect Work, Savings and the Income Distribution». *J. Econ. Lit., 19* (3), pp. 975-1028, Sept.

Diamond, Peter A.: (1977) «A Framework for Social Security Analysis». *J. Public Econ., 8* (3), pp. 275-298, Dec.

Diamond, Peter A. and Mirrlees, J. A.: (1978) «A Model of Social Insurance with Variable Retirement». *J. Public Econ., 10* (3), pp. 295-336. Dec.

Feldstein, Martin S.: (1972) «The Incidence of the Social Security Payroll Tax: Comment». *Amer. Econ. Rev., 62* (4), pp. 735-738, Sept.

Feldstein, Martin S.: (1974) «Social Security, Induced Retirement and Aggregate Capital Accumulation». *J. Polit. Econ., 82* (5), pp. 905-926, Sept./Oct.

Feldstein, Martin S.: (1975) «Toward a Reform of Social Security». *Public Interest, 40,* pp. 75-95, Summer.

Feldstein, Martin S.: (1976) «The Social Security Fund and National Capital Accumulation». *Funding pensions: Issues and implications for financial markets.* pp. 32-64, Proceedings of a conference sponsored by the Federal Reserve Bank of Boston.

Feldstein, Martin S.: (1977a) «Facing the Social Security Crisis». *Public Interest, 47,* pp. 88-100, Spring.

Feldstein, Martin S.: (1977b) «Social Insurance». *Income Redistribution,* pp. 71-97, ed. Colin D. Campbell, American Enterprise Institute, Washington, DC.

Ferrara, Peter J.: (1982) *Social Security reform: The family plan.* Heritage Foundation, Washington, DC.

Friedman, Milton: (1972) «Second Lecture». *Social Security: Universal or selective?* by Wilbur J. Cohen and Milton Friedman, pág. 21-49, American Enterprise Institute, Washington, DC.

Glasser, Melvin; Hill, Velma M. and Seidman, Bert: (1980) «Supplementary Statement on the Use of General Revenues», in U.S. Advisory Council on Social Security, pp. 199-201.

Green, Jerry R.: (1977) «Mitigating Demographic Risk through Social Insurance». National Bureau of Economic Research, Cambridge, MA: Working Paper N.° 215.

Hagens, John B.: (1980) «Social Security and Retirement». U.S. Social Security Administration, Office of Research and Statistics, Washington, DC: Working Paper N.° 17.

Hausman, Jerry, A: (1981) «Labor Supply». *How taxes affect economic behavior.* Eds.: Henry J. Aaron and Joseph A. Pechman. pp. 27-72, Brookings Institution, Washington, DC.

Hollister, Robinson: (1974) «Social Mythology and Reform: Income Maintenance for the Aged». *Political consequences of aging,* Ann. Amer. Acad. Polit. Soc. Sci., 415, pp. 19-40, ed.: Frederick Eisele, Sept.

Hsiao, William C. et al. «See U.S. Congress, *Report of the Consultant Panel.*

Johnston, Mary P. and Wixon, Bernard: (1978) «Payroll Tax Liability and Its Relation to Family Unit Income: 1971, 1973 and 1974». *Studies in income distribution.* N.° 8. U.S. Social Security Administration, Office of research and Statistics, Washington, DC: U.S. GPO.

Kurz, Mordecai and Avrin, Marcy.: (1979) «Technical Paper: The Funding Issue and Modern Growth Theory». U.S. President/s Comission on Pension Policy, Working Paper, Washington, DC: U.S. GPO.

Laffer, Arthur B. and Ranson, R. David: (1977) «A Proposal for Reforming the Social Security System», in Tolley and Burkhauser, pp. 133-150.

Leimer, Dean R. and Lesnoy, Selig D.: (1982) «Social Security and Private Saving: New Time-Series Evidence». *J. Polit. Econ.*, *90* (3) pp. 606-629, June.

Leimer, Dean R. and Petri, Peter A.: (1981) «Cohort-Specific Effects of Social Security Policy». *Nat. Tax J.*, *34* (1), pp. 9-28, Mar.

Lesnoy, Selig D. and Hambor, John C.: (1975) «Social Security, Saving, and Capital Formation», *Soc. Sec. Bull.*, *38* (7), pp. 3-15, July.

Merton, Robert C.: (1981) «On the Role of Social Security As a Means for Efficient Risk-bearing in an Economy Where Human Capital Is Not Tradeable». National Bureau of Economic Research, Cambridge, MA: Working Paper No. 743.

Mitchell, Olivia S. and Fields, Gary S.: (1982) «The Effects of Pensions and Earnings on Retirement: A Review Essay, «*Research in Labor Economics*. Vol. 5, pp. 115-155. Ed.: Ronald G. Ehrenberg, JAI Press, Greenwich, CT.

Morgan, James N.: (1977) «An Economic Theory of the Social Security System and Its Relation to Fiscal Policy», in Tolley and Burkhauser, pp. 107-126.

Munnell, Alicia H.: (1977) *The future of Social Security*. Brookings Institution, Washington, DC.

Musgrave, Richard A.: (1968) «The Role of Social Insurance in an Overall Program for Social Welfare». *The American system of social insurance*. Eds.: William G. Bowen et al., pp. 23-40, McGraw Hill, New York, NY.

Musgrave, Richard A.: (1981) «A Reappraisal of Social Security Financing». *Social Security financing*. Ed.: Felicity Skidmore, pp. 89-127. MIT Press, Cambridge, MA.

Myers, Robert J.: (1971) «Does the Young Worker Get His Money/s Worth under Social Security?». *Pensions and Welfare News*, *7* (4), pp. 29-31, 34-37, Apr.

Myers, Robert J.: (1979) «Commentary» on William C. Hsiao, «An Optimal Indexing Method for Social Security» and Lawrence H. Thompson, «Indexing Social Security: the Options», in Campbell, pp. 78-81.

Myers, Robert J.: (1981) *Social Security*. 2nd ed. Homewood, IL, Richard D. Irwin.

National Commission on Social Security. (1981) Social Security in America/s Future: Final report, Washington, DC: U.S. GPO.

National Commission on Social Security Reform. (1983) *Report of the National Commission on Social Security Reform*. Washington, DC: U.S. GPO.

Ozawa, Martha N.: (1982) «Social Security: Toward a More Equitable and Rational System». Center for the Study of American Business, Publication N.° 52., Washington U., St. Louis, MO.

Palmer, John L.: (1977) «The Future Role of Social Security», in Tolley and Burkhauser (eds.), pp. 157-176.

Parsons, Donald O. and Munro, Douglas R.: (1977) «Intergenerational Transfers in Social Security», in Boskin, pp. 65-86.

Patton, Carl V.: (1977) «The Politics of Social Security», in Boskin (ed.), pp. 147-171.

Pechman, Joseph A.: (1977) «The Social Security System: An Overview», in Boskin (ed.), pp. 31-39.

Pechman, Joseph A.: (1980) Comment on U.S. Advisory Council on Social Security, pp. 29*n* and 32*n*.

Pechman, Joseph A.; Aaron, Henry J. and Taussig, Michael K.: (1968) *Social Security: Perspectives for Reform*. Brookings Institution, Washington, DC.

Pechman, Joseph A. and Okner, Benjamin A.: (1974) *Who bears the tax burden?* Brookings Institution, Washington, DC.

Robertson, A. Haeworth: (1981) *The coming revolution in Social Security*. Security Press, McLean, VA.

Rosa Jean-Jaques, ed.: (1982) *The World crisis in Social Security*. Fondation nationale d'Economie Politique and the Institute for Contemporary Studies, San Francisco.

Rosen, Sherwin: (1984) «Some Arithmetic of Social Security». *Controlling the Cost of Social Security*. Ed.: Colin D. Campbell, pp. 233-255, Lexington Books, Lexington, MA.

Salisbury, Dallas, ed.: (1981) *Retirement income and the economy: Policy directions for the 80s.* Employee Benefits Research Institute, Washington, DC.

Samuelson, Paul A.: (1958) «An Exact Consumption-Loan Model of Interest with or without the Social Contrivance of Money». *J. Polit Econ.*, *66* (6), pp. 467-482, Dec.

Seidman, Bert: (1977) «Concepts of Balance between Social Security (OASDI) and Private Pension Benefits» *Social Security and private pension plans: Competitive or Complementary?* Ed.: Dan M. McGill, Richard D. Irwin, Homewood, IL.

Smedley, Larry.: (1981) «AFL-CIO Statement on Maintaining the Balance in Social Security», in Salisbury (ed.), pp. 168-179.

Smith, Alasdair: (1982) «Intergenerational Transfers as Social Insurance». *J. Public Econ.*, *19* (1), pp. 97-106, Oct.

Stahl, Ingemar: (1982) «Sweden», in Rosa (ed.), pp. 93-120.

Stein, Bruno: (1981) «Changing the American Retirement System», in Salisbury (ed.), pp. 11-39.

Takayama, Noriyuki: (1982) «Japan», in Rosa, pp. 71-91.

Tolley, G. S. and Burkhauser, Richard V., eds.: (1977) *Income support policies for the aged.* Ballinger, Cambridge, MA.

U.S. Advisory Council on Social Security, 1979: (1980) *Social Security financing and benefits.* Washington, DC: U.S. GPO.

U.S. Congress. House. Committee on Ways and Means: (1939) *Social Security Act amendments of 1939.* H. Rept. 728 to accompany H. R. 6635, 76th Cong., 1st sess., June.

U.S. Congress. House. Committee on Ways and Means and Senate. (1976) Committee on Finance. *Report of the consultant panel on Social Security to the Congressional Research Service.* Joint C. P., 94th Cong., 2nd sess., Aug.

U.S. President's Commission on Pension Policy. (1981) *Coming of age: Toward a national retirement income policy.* Washington, DC: U.S. GPO.

Viscusi, W. Kip: (1979) *Welfare of the elderly: An economic analysis and policy prescription.* John Wiley and Sons, New York, NY.

Warlick, Jennifer L.; Berry, David E. and Garfinkel, Irwin: (1982) «The Double-Decker Alternative for Eliminating Dependency under Social Security», in Burkhauser and Holden, pp. 131-160.

Weaver, Carolyn L.: (1981) *Understanding the sources and dimensions of crises in Social Security: A first step toward meaningful reform.* Fiscal Policy Council, Arlington, VA.

Zeckhauser, Richard: (1977) «Taxes in Fantasy, or Most any Tax on Labor Can Turn Out to Help the Laborers». *J. Public Econ.*, *8* (2), pp. 133-150, Oct.

Abstract

This paper reviews suggestions for reform of the United States social security retirement program and offers some observations about why reform efforts have met wit so little success. The paper assumes that a necessary precursor to reform is a substantial political consensus, first about precisely what is wrong the current structure, and second about the particular alternative that would be superior. The empirical analysies focus on the effect that the United States program has had on the United States economy and the debate about possible future political reactions assume the United States political institutions. The United States social security program is similar in many important respects to the social security programs found elsewhere in Europe, North America and Japan but each social insurance system and each political system also has its own unique attibutes. The reader will have to judge for himself the extent to which the observations in this paper about the American social insurance and political systems are valid in other in other nations.

Recepción del original, septiembre de 1985.