

SOCIAL SECURITY: CONTINUING CRISIS OR REAL REFORM?

INTRODUCTION

Despite the rhetoric to the contrary, the Social Security Amendments of 1983 did little more than give us a brief respite from the task of redesigning Social Security so that it will meet the needs of our citizens in a way that is consistent with our financial capacity to satisfy those needs. We should not be surprised, therefore, when the Social Security issue becomes prominent again in the months ahead.

—A. Haeworth Robertson¹

The opposition of the elderly to benefit cuts and the discontent of younger workers over the prospect of declining (or even negative) returns on their Social Security taxes are bound to create an increasing amount of intergenerational conflict. A realistic appraisal of the structural problems inherent in the Social Security system is necessary if meaningful reform is to be achieved and the intergenerational conflict resolved.

Although the 1983 Social Security Amendments (P.L. 98-21) largely corrected the short-run financing problem in the Old-Age, Survivors, and Disability Insurance (OASDI) programs, the long-run health of these programs depends heavily on assumptions that may prove far too optimistic. A rekindling of inflation together with an economic downturn later in the decade could sharply upset the fragile balance between receipts and outlays for OASDI, and could generate yet another Social Security crisis.²

Other problems also plague the Social Security system: There is a conflict between the welfare and insurance components of the

¹"Have the Social Security Problems Been Resolved?" *The Mercer Bulletin* 9 (September 1983): 2.

²See Peter J. Ferrara, "Social Security: The Crisis Draws Closer," *The Political Economy in Perspective*, H. C. Wainwright & Co. Economics, May 9, 1983, p. 9.

system;³ the insurance component remains unfunded and subject to political manipulation; and the actuarial deficit in the Hospital Insurance (HI) portion of Medicare remains enormous—averaging 3.90 percent of taxable payroll over the period 1983 to 2057.⁴

The ability of Congress to immediately increase Social Security benefits for retired workers while delaying payroll-tax increases, along with its power to repeat this sequence for each generation, is an important reason why Social Security has gained widespread popularity, especially among the retired and those near retirement. Nevertheless, as the system matures and real returns decline, the true nature of the pay-as-you-go system—which has been characterized as a chain-letter scheme—will become evident. Fundamental reform, such as privatizing OASDI, may then become feasible. Indeed, since younger workers could face payroll tax rates of up to 40 percent by the middle of the next century and may not begin receiving benefits until age 67 or 70, they might well prefer a private alternative that would give them a greater and more certain return on their contributions, as well as more flexibility over the timing of retirement.⁵

In order to consider the full range of reform proposals, the Cato Institute invited many of the nation's leading experts on Social Security to a two-day conference in Washington, D.C., June 6 and 7, 1983. The edited papers from that conference, along with A. Haeworth Robertson's congressional testimony on the National Commission's recommendations for Social Security reform, constitute this issue of the *Cato Journal*. The papers cover four main areas: the political economy of the Social Security system; options for reforming the system; the economic effects of Social Security; and strategy for dealing with the implementation problems associated with denationalizing OASDI. The following conclusions are noteworthy.

1. In analyzing Social Security, it is essential to consider the effects of property rights on incentives and individual behavior. The theory of public choice helps explain why the system has grown

³See Ferrara, *Social Security: The Inherent Contradiction* (San Francisco: Cato Institute, 1980).

⁴Estimated from data contained in the 1983 Annual Report of the Board of Trustees for OASDI (pp. 100, 121). In order to eliminate the HI deficit, taxes would have to be increased, on average, by 3.90 percent of taxable payroll over the next 75 years. For a further explanation of actuarial deficits, see A. Haeworth Robertson, *The Coming Revolution in Social Security* (McLean, Va.: Security Press, 1981), chap. 7.

⁵The 40-percent payroll-tax estimate is provided by Robertson, in "Have the Social Security Problems Been Resolved?," p. 1. Robertson also states, "It is entirely reasonable for today's youth to anticipate further increases [in the retirement age] to age 70 or higher." *Ibid.*, p. 2.

and why the public has resisted a more voluntary system of retirement insurance.

2. Social Security is ultimately a manifestation of the welfare state. Real reform, therefore, may require constitutional change that effectively limits the taxing and spending powers of government.
3. Advocates of real reform suggest, as the first step, separating the welfare and insurance components of the system. The insurance component could then be privatized and placed on a fully funded basis—an impossibility under government ownership and control. The private retirement system could also be made voluntary. Such a system would place responsibility on individual decision-makers and efficiently utilize existing knowledge to generate the best use of private savings. It would also reduce the encroachment on private property rights and strengthen freedom of contract.
4. Specific criteria should be considered in reforming the Social Security system. The system should foster economic efficiency (i.e., it should not distort economic behavior); sunk costs should be explicitly recognized and not be allowed to deter meaningful reform; the system should be free of political influences; and the system should be flexible, easily understood, and consistent with the principles of a free society. Adhering to these criteria will ensure the financial soundness of the system while promoting individual freedom and responsibility.
5. The existing pay-as-you-go system interferes with individual choice and distorts economic behavior in three ways. First, the system attenuates the freedom of workers to determine the optimal mix of savings and consumption for themselves (or the time path that they desire for consumption). Workers are forced to pay Social Security taxes—to redistribute income to the elderly—with the promise of future Social Security benefits. This process tends to depress private savings and investment.⁶ Second, Social Security interferes with the freedom of workers to determine the timing of retirement. The earnings test and other features of the system induce workers to retire earlier than they would in the absence of Social Security. Third, the payroll tax artificially increases the

⁶For a further discussion of the adverse effects of Social Security on private savings, see Carolyn L. Weaver, *The Crisis in Social Security: Economic and Political Origins* (Durham, N.C.: Duke University Press, 1982), pp. 185–87; and Roland Vaubel, “Reforming Social Security for Old Age,” in Herbert Giersch, ed., *Reassessing the Role of Government in the Mixed Economy* (Kiel, W. Germany: Institut für Weltwirtschaft an der Universität Kiel, 1982), pp. 180–82.

price of labor in relation to capital, causing a misallocation of resources.⁷

6. Social Security affects both the intragenerational and intergenerational distribution of income. The 1983 amendments continue to redistribute income from high-income to low-income earners, from single persons to married couples, and from younger workers to the elderly retired. Most significant, the 1983 law imposes losses on all Social Security participants, with the greatest burden falling on the younger generation of workers.
7. The political barriers to privatizing the insurance component of Social Security are formidable, but not insurmountable. As the experience of Britain and other countries has demonstrated, it may be possible to move toward a system in which workers could allocate part of their payroll taxes to IRA-type investment accounts. This proportion could be increased over time until the transition to a private retirement system is complete.

This issue of the *Cato Journal* should provide a useful reference for all those interested in developing an old-age insurance system that would be more equitable and financially secure than the existing system. Further research, however, needs to be conducted on the economic effects of Social Security and on the political economy of privatization. We must also address the question of whether individuals have a right to social welfare and insurance. To answer this question, it will be necessary to go beyond economics and construct a consistent theory of rights.⁸ Developing such a theory could have a significant impact on the intellectual support for Social Security and could ultimately influence policy.

J. A. Dorn
Editor

⁷An interesting discussion of the effects of Social Security on the labor-supply decision is found in Vaubel, pp. 180, 182.

⁸See Roger Pilon's interesting work on this subject, especially the articles he cites in this issue of the *Cato Journal*.

SOCIAL SECURITY SURVIVAL: A PUBLIC-CHOICE PERSPECTIVE

James M. Buchanan

I. Introduction

Economists are professionally trained to search out and to discover alleged inefficiencies in institutional arrangements, public and/or private. Further, once alleged inefficiencies are located, economists have an impulsive proclivity to propose reform. I am no different from my peers in these respects; on several occasions, I have joined the ranks of those who have advanced proposals for reform in the Social Security system.¹ As I have emphasized in earlier papers, however, the task of designing reforms that meet the test for Pareto superiority, even when considerations of practicability are totally neglected, is by no means an easy one. But, of course, unless some such reforms can be demonstrated to be possible, the existing system must be judged to be Pareto efficient. Note carefully what such a judgment would and would not imply. It would not imply that everyone could not have been made better off by a series of different decisions made over a historical sequence of periods. Clearly, we could all be in an improved position today if Americans, privately and collectively, had invested more in capital formation in the 1950s, 1960s, and 1970s. And the incurrence of "social insurance" debt, even if implicit, without the creation of offsetting assets, is the same

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The author is indebted to his colleagues Geoffrey Brennan, Loren Lomasky, Jonathan Pincus, and Gordon Tullock for helpful comments.

¹See Buchanan, "Social Insurance in a Growing Economy: A Proposal for Radical Reform," *National Tax Journal* 21 (December 1968): 386-95; "Comment on Browning's Paper," in *Financing Social Security*, ed. Colin Campbell (Washington, D.C.: American Enterprise Institute, 1979), pp. 208-12; and "Dismantling the Welfare State," paper presented at the regional meeting of the Mont Pèlerin Society, Stockholm, Sweden, September 1981.

thing as negative capital formation. But to regret the loss of what might have been if a different series of decisions had been made is not to say that there must be inefficiencies in the set of institutional arrangements that is now in existence. Nor would a judgment that the existing institutional structure is Pareto efficient imply that it satisfies criteria of equity or justice. The intergenerational transfer may be widely held to be grossly inequitable although it meets the test for Pareto efficiency.

So much for preliminaries, which I advance here for two purposes: to indicate what I shall not discuss in this paper, and to provide background for what I shall discuss. I want to resist the temptation to analyze proposals for structural reform, whether they are my own or those advanced by others. Aside from a slight departure in section X, I shall remain within predictive public-choice theory, and I shall attempt to explain public-choice aspects of the existing Social Security system that the economists-as-reformers have often found puzzling. Specifically, I want to explain the *survival* of what seems to be neither a viable intergenerational social insurance system nor an efficient welfare system. Why does what seems to be an n -person, n -period social dilemma have such staying power?

II. The Sacred and the Profane

I commence with a simple empirical observation. Elected politicians, at all levels, treat the existing system as sacrosanct. It is widely presumed that any pronounced challenge to the basic structure of the system is equivalent to political suicide. The "reforms" that have been proposed and/or implemented are widely acknowledged to be temporary patches on the rips around the edges of the structure. There is no apparent support for basic institutional change.

If these politicians, over all persuasions and in all parties, are to be credited with ordinary precepts of rational behavior, the implication seems clear. There is no widespread support for basic structural reform, among *any* membership group in the American political constituency—among the old or the young, the black, the brown, or the white, the female or the male, the rich or the poor, the Frost Belt or the Sun Belt. The absence of support for structural change among the old, the disabled, the low-wage earners, and possibly some other constituencies, requires no sophisticated explanation. For these groups, self-interest considerations are sufficient. But why is there not more opposition to the system observed among the ranks of the young? Why is the support for the system so universal?

Why do young and even prospective employees support the system when plausible computations of the expected rates of return to "investment" within the system suggest that these rates may be significantly lower than rates of return on comparable investment in individually purchased, privately marketed retirement-disability schemes? Must we finally explain the absence of even so much as nascent opposition among the ranks of the young by resorting to the naive belief that the Ponzi scheme is never-ending? Must we blame failures of information and communication, illusions, altruistic impulses, and rational ignorance? Or are there rationally derived reasons for the near-universal support² for the system—reasons that have somehow been overlooked by most economist-critics?³

III. Comparison of Relevant Alternatives

To begin to answer these questions, it is best to begin with a skeletal summary of the existing system. It is an unfunded transfer scheme that imposes payroll taxes on currently employed persons and utilizes the revenues from such taxes to finance payments to qualified nonemployed recipients (retirees, dependents, survivors, and the disabled). The system is not, however, a simple interclass transfer mechanism operated on in-period differentiation between qualified taxpayers and qualified recipients. Eligibility claims for benefit payments are established by an employment record, applicable over all classes and wage levels of covered employees, rather than by direct means-test criteria. Through their own payroll records, employees accumulate claims against the system—claims that must be met in accordance with designated criteria for eligibility.

Financially, the system as a whole is best understood as an unfunded liability of the national government, an implicit, indexed national

²By "rationally derived," I mean in line with the demonstrated self-interest of participants, strictly in keeping with public-choice orthodoxy. I shall, in this paper, ignore the whole set of problems introduced by the absence of individual *responsibility* for political decisions in democracy, and the effects of this absence on precepts for individual rationality in the specific acts of expressing political "choices." On these problems, see Geoffrey Brennan and James Buchanan, "The Logic of the Levers: The Pure Theory of Electoral Preference," mimeographed (Center for Study of Public Choice, Blacksburg, Va., January 1983); and Geoffrey Brennan and Loren Lomasky, "Large Numbers, Small Costs: The Uneasy Foundations of Democratic Rule," mimeographed (Center for Study of Public Choice, Blacksburg, Va., March 1983).

³It may, of course, be argued that the prevalent political attitudes toward the existing institutional structure will soon undergo very substantial change as the financial plight of the system comes to be more widely recognized. For such an argument, see Carolyn Weaver, "The Long-Term Outlook for Social Security—Continued Political Turmoil," mimeographed (National Commission on Social Security Reform, October 1982).

debt—a debt that exceeds by several times the nonindexed public debt that is nominally measured. The implicit debt of the existing (early 1980s) Social Security system is estimated to be roughly \$8 trillion, by comparison with a nominally measured debt of something over \$1 trillion.

It would be redundant to extend the discussion of these features of the system. The skeletal summary is useful, however, in any discussion of structural reform—discussion that becomes meaningful only when it involves comparing *relevant* alternatives. Critics and reformers of the existing structure have often faltered at precisely this point. In particular, the proposal for reform that would allow individuals to voluntarily opt out of the system has been treated as a relevant alternative when it is not. Such treatment reflects a crude fallacy of composition.

It is, of course, easy to show that many potential and actual participants in the existing system could substantially improve their positions if they were allowed to withdraw and invest voluntarily in their own preferred, privately marketed insurance plans. If a young employee, say at age 25, were allowed to withdraw voluntarily from the system, to relieve himself of all payroll-tax obligations (levied both against his wage directly and against his employer) and at the same time were to renounce all claims to future benefits from the system, he would be able to secure a rate of return under privately purchased insurance that would yield either the same level of expected benefits at substantially lower costs or substantially higher benefits at the same costs. Acknowledging this apparent comparative advantage of privately purchased insurance leads naturally to the inference that such a person, on grounds of economic self-interest, would cease to support the existing structure politically—hence, there should be a potential for organizing a political constituency to support the opting-out alternative.⁴

My central argument in this paper is that no such inference can be drawn. The disparity between individualized rates of return on “investment” within the system and outside it does not in itself

⁴In some extreme models, the paradox of support analyzed here does not arise, because there is no basic difference between debt and tax finance. The young person, by opting out, may secure a higher rate of return on private investment, but because future tax liabilities are reduced, he will expect lower bequests than would be expected in the system. Hence, the apparent advantages of opting out are not clear, except insofar as changes in the distribution of net burden can be accomplished. See Robert J. Barro, “Are Government Bonds Net Wealth?” *Journal of Political Economy* 82 (November 1974): 1095–1117.

My explanation of system survival does not in any way invoke a Barro-like model of intergenerational interdependence.

provide a basis for political opposition to the existing structure. It does not do so because individualized opting out, or voluntary withdrawal, is not a relevant alternative and participants in the system do not treat it as such.

IV. Debt, Demos, and Default

People recognize that any structural reform that introduces the alternative of opting out would necessarily lead to the abandonment and breakdown of the intergenerational transfer scheme that exists. Therefore, when they face the question of supporting or opposing the proposal to opt out, individuals must model or estimate the alternative system that would replace the present one. The relevant alternative is the institutional structure that would emerge in lieu of the existing intergenerational transfer scheme. The relevant alternative is *not* the existing transfer scheme only with the individual having been removed from all tax obligations and all claims.

What alternative institution would emerge? To answer this question, the individual must try to predict how the democratic process will operate. If one predicts that the existing structure will be abandoned without any governmental-political-institutional replacement, then the attractiveness of the opting-out alternative to young and prospective employees might remain. But it is at this point that the summary description of the existing system in terms of the implicit national debt becomes helpful. Will individuals seriously consider default on the Social Security debt obligation to be an alternative?⁵ Will government dishonor all of the claims to benefits from the system? Or will some means be found to finance at least some considerable share of the claims that individuals hold against the structure?

In making predictions here, each person must, willy-nilly, become his own public-choice economist. Moreover, in the calculus of politics, each individual must consider the following factors. First, the individual must recognize that his own normative position on the legitimacy or illegitimacy of claims against the existing system is not directly relevant, although some generalized prediction about normative attitudes over the whole citizenry must be made. That is, an

⁵The Social Security debt is singular in that the claims (the "bonds") are universally held by all past and present employees. Default on such widely held and uniformly distributed debt becomes much more difficult politically than default on nominal debt instruments. The latter, even if held internally, would tend to exhibit concentrated ownership, and, if held externally, would not have direct internal political representation. The potential effects of ownership patterns on prospects for debt default have not, to my knowledge, been carefully analyzed.

individual may personally dismiss all claims on Social Security as being morally irrelevant. However, unless this personal attitude is generalized to others, some estimate must be made about how citizens in general feel about the moral status of existing claims.

Moral legitimacy aside, the individual must also recognize that members of several constituencies in the political community will support payment of Social Security claims, in full or in large part, on the basis of straightforward self-interest calculations. Those who would not find it advantageous to opt out of the existing system voluntarily, even if they could do so in isolation, will have self-interested reasons to support some other scheme of meeting the obligations of the system in the event that the system collapses. These individuals will never support default on the implicit national debt that the claims represent. These groups will of course include all those who are currently receiving benefits, as well as those who expect to collect benefits in the near future. Roughly speaking, the self-interested supporters of some replacement scheme that will meet the outstanding debt obligations will tend to include all participants over some critical middle-age limits (about age 40).⁶

Quite apart from both the moral legitimacy of existing claims and the *self-interested motivations* of individuals for receiving transfers, there is also the direct welfare obligation that would emerge in the absence of the existing system. Even if few people adhere to the notion that claims against the system are morally legitimate in some quasi-legal sense of entitlements, some individuals will recognize that the aged poor and disabled, now within and supported by the system, must be kept alive. And while a strictly administered, means-tested welfare structure may require substantially less revenue than the generalized benefit system now in existence does, little support could be predicted for total disregard for those who would be unable to find minimal subsistence without the Social Security umbrella as it is currently administered.⁷

Finally, the participant must include some estimate for increased support payments that might be necessary for the members of his own family who may be current recipients of Social Security benefits, but whose funds might be reduced under an alternative arrangement.

⁶Browning has analyzed the age-profile breakdown in support of continued increases in levels of benefit payments. Much the same sort of analysis could be used here to predict what groups would support meeting the system's debt claims, even in the event that the system collapses. See Edgar K. Browning, "Why the Social Insurance Budget is Too Large in a Democracy," *Economic Inquiry* 13 (September 1975): 373-88.

⁷The revenue requirement of the welfare obligation is mentioned as an offset in a somewhat different context by Gordon Tullock, in *The Economics of Income Redistribution* (Boston: Kluwer-Nijhoff, 1982), p. 114.

Moral attitudes concerning the legitimacy of claims, self-interest, welfare, and own-family obligations (along with other considerations relating to citizens' potentially supporting or opposing any financing of a welfare scheme as a replacement for the one that exists) must be somehow estimated and then interjected into a model of how the politics of American representative democracy actually work. What constituency's pressures would be likely to be more influential? Elementary public-choice theory suggests that the more concentrated interests of potential beneficiaries are likely to carry somewhat more weight than the diffused interests of taxpayers, particularly if the beneficiaries' interest is accompanied by moral argument, whether on the grounds of default on debt or on the grounds of commitment to welfare.

It is difficult to imagine any rational calculus that would predict the total absence of political response to a breakdown and collapse of the existing social insurance system. It can be predicted that under almost any set of circumstances, major financing requirements will continue to exist regardless of the fate of the existing structure. The government is not likely to default on the implicit real debt that the mistakes of past generations have created.⁸ The effective and relevant alternative to the existing system is a tax-transfer scheme that may not be substantially different, in essence, from the one that exists.

V. From the Aggregate to the Individual

In order for an individual to calculate whether he will be better off by switching to a replacement system, he must translate the public-choice predictions about the alternative tax-transfer scheme into individually identifiable tax obligations. The participant must estimate the present value of his future tax obligations under the existing structure, along with the present value of the benefits he can expect to receive under the alternative structure. The in-system estimates will not, of course, be easy to make, since here too some political modeling will be required. How will tax rates and benefit levels be adjusted as the political system responds to recurring short-term crises? Will the base for payroll taxation continue to be increased? Will elements of progressive taxation be increased or decreased?

⁸Because the implicit debt of the system is indexed, default via inflation is not possible, as is the case with nominal public debt. Furthermore, the measure of nominal debt may include a significant component for expected default, whereas no such component is included in real debt. Hence, the real debt overhang of the social insurance system may be considerably more than eight times as burdensome as the nominally measured debt, as is indicated by the ratio of \$8 trillion to \$1 trillion.

Will the retirement age be changed? Will benefits be subjected to income taxes? Will benefits be overindexed, underindexed, or ideally adjusted? These questions will tend to be answered differently by different people, and even if there should be some similarity of political predictions, the age, income, and family status of an individual will make his estimates unique.

Assume now that a particular participant does go through the required estimation procedures and that the present values for taxes and benefits are predicted. These estimated present values then will provide the benchmark for comparing the existing system to the relevant alternative, the tax-transfer scheme that some predict will emerge.

My overall purpose is to explain why individuals who could be expected to find structural change advantageous nevertheless continue to support the existing system. Hence, I shall focus on the calculus of the young participant who under the structural change would renounce all claims to future benefits and who at the same time would be relieved of all payroll-tax obligations, present and future (whether levied on employee or on the employer). Such a person would normally expect to be required to pay taxes to finance some share in the replacement tax-transfer scheme that emerges. The critical relationship is that between the present value of this young participant's anticipated tax share and the present value of payroll taxes and benefits anticipated under the existing system.⁹

To the extent that payroll-tax obligations are reduced and are *not* offset by increased taxes under the replacement scheme, the individual in question will have additional funds to invest in private insurance. Critics and would-be reformers of the existing system have often overlooked the tax cost of any replacement scheme—a cost that the participant must always consider in any realistic comparison.

The calculation of an individual's tax obligation under the replacement institution will depend, of course, on the expected total cost of the new system. This cost is normally thought to be somewhat less than the projected cost of the existing system. Beyond such aggregate estimates, however, the individual must determine his own share of the cost. This estimate will depend first on a prediction of the tax or tax array that will be used to finance the replacement scheme (value-added tax, increased income-tax rates, broad-based consumption tax, and so on). Second, the estimate will depend on the individual's theory of incidence for the particular tax set predicted. Finally, the

⁹For simplicity, I shall assume that the individual making the calculations does not expect to receive any welfare benefits under the alternative system.

estimate will depend on some predictions about the individual's own position in the possibly relevant age, income, family status, consumption pattern, and other profiles that determine tax liabilities.

VI. The Individual's Simple Algebra of Institutional Comparison

No claim is made here that the individual estimates of the present values for tax obligations and benefit claims will be simple. Any such estimates necessarily involve possibilities for major miscalculations. Nonetheless, it is essential to reduce the analysis of individual institutional choice to such specific detail if we are to understand the apparent near-universal support for the existing structure. This section, which is in many respects the core of the paper, develops the simple algebra of the comparison that the individual participant must make.

Initially, I shall define some terms, all of which are assumed to be dated as of the time that the individual participant confronts the institutional choice.

- T_s^i Individual i 's estimate of the present value of the tax obligations faced under the existing institutional arrangements, as these arrangements may be non-structurally modified in future periods.
- T_A^i Individual i 's estimate of the present value of the tax (and personal) obligations faced under the alternative tax-transfer arrangements that will be predicted to emerge as a structural replacement for the existing system if it is abandoned or repealed.
- $\frac{T_A^i}{T_s^i} = t^i$ The share (of his present-value tax obligations under the present system) that the individual anticipates will be drained away by taxes and personal outlays under the replacement system.
- $(1 - t^i)$ The share of each dollar's worth of present-value tax obligations under the existing system that individual i anticipates to be made available for private investment if the existing system is dropped.
- r The market-determined real rate of return on private investment.

Note that $(1 - t^i)$ also defines the present value of a dollar's worth of present-value tax obligations that is withdrawn for private invest-

ment. Since $(1 - t^i)$ is available for investment at a rate of r per period, this stream of returns (discounted at r) is simply $(1 - t^i)$.

B_s^i Individual i 's estimate of the present value of the benefit payments expected to be received under the existing system, as these arrangements may be nonstructurally modified over future periods.

$\frac{B_s^i}{T_s^i} = c^i$ The share of each dollar's worth of present-value tax obligation that individual i estimates to be offset by present-valued benefits.

For individual i to be indifferent toward the two institutional alternatives, the following condition must hold:

$$(1 - t^i) = c^i \quad (1)$$

Several familiar relationships may be derived from (1). First, if $B_s^i = T_s^i$, or $c^i = 1$, *any* positive tax or personal outlay expected under a replacement institution is sufficient to cause the individual to prefer the existing structure. Second, if $B_s^i < T_s^i$, then $c^i < 1$. In this case, the individual may prefer the existing system if $t^i > 0$. The critical relationship is the one between t^i and c^i . If $t^i > c^i$, the individual will prefer the existing system; if $t^i < c^i$, the individual will support abandoning the existing system in favor of the alternative.

It may be helpful to redefine c^i in (1) as the ratio between the annualized stream of returns in perpetuity g , equal to the expected benefits of the system, and the market-determined rate of return (or the rate of discount) r . This yields:

$$(1 - t^i) = g/r \quad (2)$$

The situation that is of particular interest is the one present when $t^i > c^i$ in (1), or when $g^i < r$ in (2), and when $t^i > 0$. Suppose $t^i = .6$, or $(1 - t^i) = .4$; the individual anticipates that his dollar's tax obligation under the existing system, computed in present-value terms, will be reduced to \$.60 by a shift to the alternative tax-transfer scheme. From (1) it is clear that c^i only needs to be greater than \$.40 in order to ensure that the individual in question will support continuation of the existing structure. That is to say, the present value of the expected benefits can be as low as four-tenths the present value of expected tax payments without causing loss of support for continuation of the present system. In terms of (2), the annualized return of expected benefits (g) need only be four-tenths the rate of discount (r) in this setting. If, for example, given the value for $(1 - t^i)$ of .4, with

a rate of discount $r = .06$, any value for g above $.024$ will ensure support for the existing structure.¹⁰

The simple algebra of institutional comparison suggests that support for the existing system may persist even if individuals recognize that their "investments" of tax payments in the system are much less advantageous than their opportunities for investment in the market.¹¹ The algebra incorporates the recognition on the part of the individual that he is locked into a socioeconomic-political structure in which the exit option is effectively closed. The overhang of the implicit public debt that decisions of decades have created cannot be neglected. The simple algebra is helpful, however, in suggesting that support for the existing structure has limits. If, for any reason, the ratios defined in (1) and (2) reach critical levels for many people, popular support for the existing structure may rapidly erode. The near-universality of support now observed suggests only that the ratios have not yet attained such "subversive" levels.

VII. Parameter Shifts

The parameters that enter into the individual's comparison may be (1) exogenous to the system and exogenous to the individual's own calculus, (2) exogenous to the individual participant but endogenous to the system, or (3) endogenous to the participant.

Consider, first, the market rate of return (or rate of discount). How will an increase in this rate affect the representative individual's institutional comparison? Assume, first, that r (the real rate of return on capital) increases exogenously because of a technological change.

The time profile of taxes expected under the two institutions will differ in that the future taxes will tend to be "bunched" under the replacement tax-transfer scheme during the period in which the out-

¹⁰Note that g is *not* the internal rate of return to "investment" in the existing system. So long as a participant anticipates any positive return of benefits, then $g^i > 0$. And, of course, expected benefits may well be positive even if internal rates of return on system "investment" are negative. With any given value for g^i , there may be many internal rates of return, depending on the time profile of expected benefits.

¹¹I have assumed throughout the analysis that the individual can secure the real rate of return, r , in the market. During periods of expected inflation, this assumption may not be warranted—especially if there exist legal restrictions on the private issue of indexed bonds. If any private investment must embody an inflation-risk premium, the individual may have an additional reason, over and above those discussed, for supporting the fully indexed pension scheme, regardless of its annualized rate of yield in relation to the riskless real rate of return.

standing claims against the system are met. The numerator of the ratio T_A^i / T_S^i will tend to fall by less than the denominator as r increases. On the other side, the expected value of any fixed stream of benefits, B_S^i , will carry a lowered present value as r increases, and this value will fall by more than that of T_S^i . Hence, t^i will increase and c^i will decrease as r increases. The effects work in offsetting directions, although it seems plausible to suggest that c^i will fall more than t^i rises, hence making support for the existing system fall. This effect may be countered, however, if expected benefits increase as the real return on investment increases.

To the extent that the whole system, through time, acts to reduce the rate of capital formation, r will tend to increase endogenously to the system, and will ultimately reflect a reduction rather than an increase in the income base upon which taxes must be levied. In this case, expected benefits may fall. This effect, plus the differential capitalization effects of the separate time streams, would allow us to predict that support for the structure will fall.

The remaining parameters are all endogenous to the system, even though they may be exogenous to the participant. Consider a shift upward in the retirement age (say from 65 to 68) that is not offset by any other change in the system. If this change is made effective only after some time lag, the effect is unambiguously to reduce the value of c^i , without any noticeable effect on t^i . Hence, the existing institutional structure necessarily becomes less attractive to young participants.

Consider now a straightforward increase in the rate of tax on payrolls, with no change in the upper limit for the tax. The denominator in both of the relevant ratios, T_S^i , will increase, reducing the values for both t^i and c^i . The alternative replacement scheme would necessarily become relatively more attractive for all people who face tax obligations under the existing system. An increase in the upper limit for levying the payroll tax without increasing the basic rate will exert a similar effect, but only on those who will thereby face higher expected tax obligations.

Treating Social Security benefits as part of taxable income, wholly or partly, with revenues returned to the system, will make the system less attractive to those who expect to have above-average incomes. If the alternative tax base for the replacement tax-transfer scheme is a broad-based consumption tax or value-added tax instead of an income tax, the group that is directly affected would become more interested in abandoning the present Social Security system.

Internal changes in the benefit/payout ratios made to increase the internal progressivity of the overall system will have effects similar

to those caused by making benefits taxable. The support of upper-income participants for the system may be eroded as internal progressivity is increased.¹²

Shifts in the parameters endogenous to the individual's own estimation process are more difficult to discuss analytically. The estimates for expected benefits and expected taxes within the system, and for expected taxes under the replacement system, are necessarily subjective. These estimates depend on the individual's modeling of politics as well as on his judgment about underlying demographic trends.

VIII. Strategy for Support

Having established the individual's algebra of institutional comparisons, we can now trace the familiar strategies of support for continuation of the existing structure. Those who are differentially advantaged by such continuation—the administering bureaucracy along with those who are net beneficiaries, present and future—will seek to influence (in specific directions) the estimates that present and prospective participants make. Clearly, it will be useful to try to get individuals to place a high value on both t^i and c^i , since a high value for both ratios lends support to the existing system.

A strategy that will act on both parameters is one that stresses the contractual basis for the claims of the existing structure. If it is convincing, *this strategy will assure all prospective beneficiaries that the present values of expected benefits are indeed positive and high.* At the same time, however, this strategy suggests that because the claims are contractual obligations, there will be a large carryover tax burden under any replacement scheme that might be politically viable.

It is also important to influence the values that are subjectively estimated for taxes expected under the system. From the earliest years of the system, the false argument that employees do not really bear the incidence of the employers' portion of the payroll tax has been used to make participants think they get more than any proper economic calculation would suggest. It is clearly in the interests of all supporters of the existing system to foster this fallacy.

Supporters of the system will tend to oppose increases in the retirement age (because such increases unambiguously make the system less attractive to all nonretirees) and also to oppose straight-forward increases in the payroll tax. Faced with short-run emergency

¹²See Tullock, pp. 130–35, for a somewhat different direction in discussion of the effects of shifts in parameters on support for the system.

adjustments, supporters will tend to favor increasing the upper limit for applying the tax, as well as including the benefits in the income tax, provided the system secures the return of revenues. Supporters will not desire to push the internal progressivity of the system so far that it loses the support of large numbers of high-income payroll-tax payers.

IX. Strategy for Opposition

For those who seek to undermine the existing structure and who recognize that the simple algebra of participants must be influenced to do so, the primary argument must be one that opposes the contractual basis for claims against the system. To the extent that people can be led to think that they personally have no legitimate claim against the system on retirement, the expected value of benefits is necessarily reduced. At the same time, the erosion of the notion of legitimacy of claims reduces the tax overhang that would be anticipated under some replacement tax-transfer scheme. Both effects tend to make abandonment of the system look more attractive.

When short-run "reforms" are needed, those who seek to undermine the support of the system (over the longer term) would do well to propose increases in the retirement age and increases in payroll taxes. These groups also should support proposals aimed at increasing the internal progressivity of the system. To the extent that participants come to perceive the system as a complex transfer scheme between current income classes instead of strictly between generations, the "insurance contract" image will become tarnished.

X. System Survival and Pareto Efficiency

The observed behavior of politicians suggests that there is no serious threat to the survival of the existing institutional structure of Social Security in the United States (in 1983), despite the sometimes anguished howls of the system's critics. The analysis in this paper explains the apparent paradox. To say that the system survives, however, is not the same thing as to say that it is Pareto efficient. An inefficient institution may survive until and unless ways can be found to secure political support for reform.

As the analysis has shown, the existing system may enjoy the support of participants who may expect significantly lower returns inside the system (compared to what they might earn outside the system) because such participants fear the tax burdens that are associated with the overhang of national debt that the system embodies. In order to generate political support for a replacement system from

those who expect relatively lower in-system returns on "investment," it would be necessary to reduce (perhaps dramatically) the anticipated tax costs of the alternative tax-transfer scheme that is predicted to emerge.

At this point, it is useful to recall that there would be a specific time profile of the outlays required to pay off many or all of the existing claims that have accumulated within the existing structure. If the Social Security system should collapse in 1984, with no further collection of payroll taxes and no further accumulation of benefit claims, a commitment to meet its existing claims would require massive outlays over a two-to-three decade period, with substantial reductions beyond that time. It is this massive and time-bunched revenue requirement that creates the high values for t^i among many participants.

In order to reduce t^i , it would be necessary to assure participants that the burden of bailing out would not be allowed to fall disproportionately on the particular generation that would pay taxes immediately after the institutional reform takes place. To this purpose, I suggested elsewhere¹³ that accumulated claims be met by issuing new debt intended specifically to insure that *all* future generations, along with the present one, share equally in the costs imposed by the mistakes of almost half a century. I shall not discuss my own proposal here. Suffice it to say only that unless proponents promise some stretching out of the revenue requirements for bailing out, the calculus of participants will presumably remain such that despite its apparent inefficiencies, the existing structure will continue to survive.

As I have already suggested, however, and as the simple algebra indicates, there are limits beyond which the existing Social Security system is unlikely to survive, even in the presence of the continually growing debt overhang. If the patchwork pattern of "reforms" is such that major support constituencies are lost, the system that has seemed politically sacrosanct may quickly become subject to intense inter-group distributive struggle. In that case, winners will win and losers will lose, with no guarantee that a replacement system will be any more efficient or equitable than the one that disappears.¹⁴

¹³Sec Buchanan, "Comment on Browning's Paper."

¹⁴As noted earlier, some observers predict that we are already in the beginning stages of such political turmoil. See Weaver, "The Long-Term Outlook for Social Security."

“SOCIAL SECURITY SURVIVAL”: A COMMENT

Mancur Olson

Introduction

Once again, Jim Buchanan, the founder and dean of the important Virginia School of Economics, has given us a most interesting and useful paper. It seems to me that he is right in saying that we need to analyze the Social Security system from a public-choice perspective, which I sometimes like to call a political-economy perspective. I also completely agree that we should not conclude from the fact that the Social Security system is politically very popular that it is therefore anything approaching a perfect system.

Now, I would not, however, go as far as Professor Buchanan does in describing our present Social Security system as a type of Ponzi scheme—a chain-letter scheme wherein each round makes contributions that profit those in earlier rounds but nothing is produced, so the scheme is fundamentally fraudulent and those in some later round or generation end up losing. It is true, of course, that our Social Security system is not funded. The government, as we all know, does not take the money from Social Security taxes, invest it, and then ultimately meet the claims of these taxpayers (when they retire) with this money and the interest it has earned. In essence, the present scheme is one whereby the working generation subsidizes the retired generation, and the expectation that sustains the system is that this process will continue through many successive generations.

There are certainly some important disadvantages, as Buchanan has pointed out, in an unfunded scheme of the kind that we have. It seems quite clear that the special circumstances that existed in the 1930s, when the Social Security system took shape, explain why we have an unfunded scheme. And even though it would have been

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very nice if the scheme had gotten started in a different way, it is, I think, going too far to suggest that an unfunded scheme is totally and fundamentally wrong—so wrong as to be almost analogous to a Ponzi scheme.

A Folk Tale

My reasoning can perhaps best be illustrated by an old French folk tale about a peasant family in which a husband and his wife and children were taking care of the aged father of the husband in the family. The aged father was infirm and something of a burden, and the peasant's wife complained about having to have her father-in-law in the house. So much did she nag her husband about keeping his aged father there that finally one day the husband weakly said, "Yes, my father must go." So he told his son, "Go to the barn and get the best horse blanket we have for your grandfather." So the son went to get the blanket. But he came back with only half of the horse blanket, having torn it in two. At this point, the man of the house shouted at the son, "Do you expect to send your grandfather out on this cold day with only half the horse blanket?" At which point the son responded, "But father, I am saving the other half for you!" The father thereupon resolved that his father should indeed be allowed to remain in the house.

I suggest that this folk tale, which has its parallels in many other societies, reflects a fundamental characteristic of most traditional societies. Namely, it points to the traditional duty that adult working people have to support not only their children, but also their parents and other living ancestors. It also calls our attention to the likelihood that this folk tale and the similar folk wisdom in other cultures came to exist because of the true needs and conditions of traditional society.

Traditional Society and Provision for Old Age

In traditional society, by and large, it was often not possible for individuals to make provision for their old age through the capital market. Transportation and communication were so poor and transactions costs were so high that it was usually impossible for typical individuals to have diversified portfolios. At best, they could only invest in their own localities. But beyond that, traditional society was often politically unstable. So even if people invested in land in their home community, they could not be certain they would retain title over the long run, as military and political conditions changed. How then could people in traditional society provide for their old age?

They could do it by having a large family, bringing up the children to respect their elders and to feel an obligation to provide for them when they become too old to work. Indeed, that is one of the reasons why large families were traditionally desired. When traditional and preindustrial societies began to modernize, however, the ethic that you should have lots of children, who would be brought up to take care of you in your old age, became less suitable. The change in attitudes, of course, did not happen overnight; it occurred slowly, as children became less useful as workers and as other ways of providing for retirement became available. We know from the theory of demographic transition that in every society that has become industrialized there has been a period of a generation or two when the birth rate has remained at traditionally high levels, even though the death rate has fallen and large families are no longer essential to provide for old age. There is a population explosion because it takes time to adjust the decisions about family size and retirement needs to the circumstances of modern society. At this very time in some underdeveloped countries, the problem of overpopulation is probably due in part to the fact that there has not yet been an adequate development of mechanisms for providing for retirement and old age, other than relying on children; nor has there been a complete adjustment to any new possibilities that may have emerged for providing for old age.

The Dilemma in Modern Society

Suppose we ask: Could we in modern society rely on the same mechanisms that traditional society relied on to provide for those who are too old to work? The extended family—or even the nuclear family, with all of its members in one place—is not something we can take for granted in modern society. The poignant modern dilemma of the husband and wife who have jobs in different cities reminds us of how it is quite impossible for all of the American people to be in a situation in which their families all reside in the same community. The extended family that could provide fairly well for retirement is inconsistent with modern methods of production, transportation, and communication. Consequently, modern families from industrialized nations are spread out and the extended family no longer exists. The grandparents are likely to be living thousands of miles from the grandchildren, which reduces the probability that the grandchildren will know them well and could in fact be persuaded to support them. So, as others have argued before, modern society needs some alternative to the traditional extended family to provide for old age.

One possible mechanism for providing for old age is for individuals to utilize the private capital markets to accumulate wealth during their working years. But a glance at the average math-test performance of high school seniors reveals that a significant percentage of the population could not even perform the basic computations necessary to calculate an optimal level of retirement income. It may also be the case that the United States has been a modern industrialized society for too short a time to expect that *everyone* would have adapted in such a way that they would use the capital markets to provide for their retirement.

Thus it seems to me there is a case for a Social Security system that is not totally different from the one we have. Moreover, there is a case for treating the Social Security system, which subsidizes the older generations from the earnings of worker generations, as a more or less rational adaptation to the circumstances we are in. I therefore would argue for somewhat less sweeping changes in Social Security than Professor Buchanan.

Conclusion

Although I would not support abolition of the Social Security system, I would still support quite a large list of reforms. What I have said so far notwithstanding, I would on balance prefer a fully funded retirement system to a pay-as-you-go system of the sort we have, because a funded scheme would probably increase the rate of capital accumulation. However, it is probably best here to focus on one reform that calls to mind the spirit that I believe should guide our thinking in reforming Social Security. One of the least desirable features of the Social Security system is a feature that was put in during the 1930s, partly to make the system more like private insurance. This feature is the idea that the total amount paid in Social Security taxes and the size of the Social Security retirement income should rise, at least within a range, as the wage level rises; the proportion of working income that Social Security replaces should be roughly constant over a fairly broad range of incomes. This seems to me an ill-conceived idea.

We need, I believe, a Social Security system to make sure that everyone, however limited his earning abilities or his skills at actuarial arithmetic, will be able to survive old age without privation. But it seems to me we do not need and should not have a Social Security system that guarantees the improvident high-income person enough retirement income to maintain his relative position in the consumption hierarchy. If some high-income people who had lived

affluently during their working years became less well off in old age, that would be no catastrophe. Indeed, experiences of that kind would teach people the value of being prudent and encourage them to plan for the future. On the other hand, letting people suffer real privation in old age seems to me not only needlessly harsh but in conflict with the time-honored ethic that children who can work ought to help support their parents in old age. *This ethic is almost as natural and appropriate as the one that says that parents ought to provide sustenance for their children.*

Both for the political reasons that Professor Buchanan put forth and for other reasons, I conclude that the way to improve Social Security is to begin where we are now and to make the improvements, if need be, one at a time. There is no place we can start except where we are now; and while this starting point is most imperfect, it is certainly not so utterly absurd that we must necessarily start all over again.