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Why Funding is not a Solution to the "Social Security Crisis"

Friedrich Breyer

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Why Funding is not a Solution to the "Social Security Crisis"

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ABSTRACT

Why Funding is not a Solution to the "Social Security Crisis" *

It is now a commonplace that the unfunded public pension systems of many OECD countries will run into severe financing problems in the coming decades due to a dramatically increasing pensioner/worker ratio. While this diagnosis is completely undisputed, there is still a vigorous debate on the appropriate therapy. In this debate, a number of proposals have been brought forward in particular in the last five years, which mainly consist in a (partial) transition to a funded pension system. Because such a transition is not a Pareto improvement, it is necessary to ask what can be the policy target that justifies such a redistributive move? The present paper tries to examine this question by identifying seven fallacies that are commonly made by advocates of such a transition.

JEL Classification: H55

Keywords: Social security, transition to funding, Pareto improvement, policy proposals

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1. Introduction

It is now a commonplace that the unfunded public pension systems of many OECD countries will run into severe financing problems in the coming decades due to declining fertility and rising longevity and thus a dramatically increasing ratio of pensioners to workers. Most experts agree that systems as the U.S. Social Security will become “unsustainable”, which means simply that either the average benefit level (as a percentage of current wages) has to be cut or tax rates must be raised (or a combination of the two) in order to preserve the budget balance.

While this diagnosis is completely undisputed, there is still a vigorous debate on the appropriate therapy. In this debate, a number of proposals have been brought forward in particular in the last five years,[1] which - although they differ in the details, e.g. with respect to the role of the public sector - are similar in their general direction: their main ingredient is an at least partial transition to funding by gradually building up a reserve fund. In this process, the total burden on taxpayers, i.e. the sum of the contributions to the “old” and the “new” system, is somewhat increased for a transition period, whereas all future generations will benefit from forever lower tax rates.

However, it has been known for several years that such a transition from unfunded to funded pensions can never raise the utility of all (present and future) generations.[2] The economic intuition of this result is very simple: The present value of the sum of *net* contributions of the present and all future generations to the unfunded system is invariant to the financing mode: it equals the accumulated value of the net gains of all past generations from establishing the system (Sinn 2000; p.395).

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[1] The proposals are normally founded on simulation exercises in which one possible time path of contributions is calculated for a particular set of assumptions on the underlying economy (e.g. technology and preferences), including so-called “realistic parameter values”. See e.g. Feldstein/Samwick (1997), Kotlikoff et al. (1998) and Modigliani et al (2000) for the U.S., Börsch-Supan (1998) for Germany.

[2] Unfortunately, the proofs of this proposition under different sets of assumptions were published in two papers (Breyer 1989 and Fenge 1995) that were written in English, but appeared in journals that are not so easily accessible to North American readers, viz. the *Journal of Theoretical and Institutional Economics* and *Finanzarchiv*. Only a related paper (Brunner 1996) appeared in the *Journal of Public Economics.* Nevertheless, the non-Pareto-improving nature of such a transition is recognized even by Feldstein (1996), p.12.

Given this Pareto optimality result, it is necessary to ask what can be the policy target that justifies such a (intergenerationally redistributive) move? The present paper tries to examine this question by identifying seven fallacies that are commonly made by advocates of such a transition.[3]

2. Seven Fallacies in Advocating a Transition to Funded Pensions

Fallacy 1: *The higher the return to capital relative to the growth rate, the smaller is the transitional burden compared to the long-term gain for future generations*.

As every economist knows, costs and benefits that accrue at different points in time can only be compared if they are discounted to the same period (e.g. the present). If we use the market interest rate for the discounting, and if this rate equals the return to capital,[4] we see that the net present value of costs and benefits of a transition is always zero, regardless of the interest rate: discounting back to the present by a higher interest rate exactly offsets the beneficial effect of a higher interest rate on the future time path of contributions.

Fallacy 2: *The U.S. is presently in a favorable situation since current surpluses in the government budget can be used to smooth the transition by dampening the necessary increase in contributions in the early periods* (Modigliani et al. 2000, p.21).

Again most economists would probably agree that it is not the monetary *outlay* that measures the burden placed on the transition generation but the opportunity costs. Using the budget surplus to accumulate funds in the Social Security Trust Fund precludes alternative uses such as paying off government debt, increasing government expenditures (e.g. on education or infrastructure) or cutting taxes. No matter which of these alternative uses is foregone by putting the money in the Trust Fund, somebody has to bear an additional burden here, as well.

[3] Some of the points discussed in this paper were already made by Sinn (2000).

[4] The mistake of using a discount rate smaller than the return to capital seems to underlie the calculations of net gain made by Feldstein (1996, p.12). On this see Fallacy 4, below.

Fallacy 3: *By abolishing the unfunded social security system, we can get rid of the labor supply distortion created by the payroll tax through which the system is financed* (see, e.g. Feldstein 1996, pp 2ff.).

That this claim is false, follows immediately from the refutation of Fallacy 1: The tax wedge arises from the difference between the present values of contributions and benefits and therefore from the *net* payments into the system. As it was shown that the present value of all future net payments is already determined, there is no way of changing the total tax wedge. The only thing that can be influenced (within limits) is total excess burden: if the excess burden on any particular tax payer is a progressive function of the effective tax rate, as is usually assumed, then the appropriate instrument for minimizing the total burden is tax rate smoothing. In contrast, abolishing the PAYGO system within a limited time means concentrating the total tax wedge on a limited number of cohorts of tax payers, which is certainly the surest way to maximize rather than minimize total excess burden.

Fallacy 4: *The true economic gain from a shift to funded pensions is just the gain from increasing capital accumulation* (Feldstein 1996, p.12).

A very nice way of characterizing the error implicit in this statement is due to Homburg (1996, p.237): “Saying that it would be profitable to *have* more wealth is different from saying that it would be profitable to *form* more wealth.” Assuming a closed economy, the additional capital accumulation has to come from increased savings and therefore implies foregoing present consumption. If individuals refrain from making these changes it is either because their intertemporal rate of substitution is equal to the marginal return of capital (and therefore their behavior is optimal) or because their behavior is distorted by taxes on capital returns. But then the blame is to be put on the taxes and not on the presence of a PAYGO system.

Fallacy 5: *If we want to change the distribution of consumption possibilities in favor of future generations, we need to downsize the unfunded public pension system (or, for that matter, reduce government debt).*

To show that this proposition is false, we can invoke a normative equivalent of Ricardian equivalence: if any person living today wants to change the distribution in favor of members of the next generation, she can simply increase her savings and leave a higher bequest than otherwise.

It is a separate issue whether the “if”-clause in Fallacy 5 is justified. With respect to whether and how the consumption possibilities should be redistributed, there are certainly conflicting interests within the present (older) generation: There is

(A) the group of people without any altruism vis-à-vis the young generation, e.g. people without children or other younger close relatives,

(B) the group of people with altruism, e.g. those with own children.

But even within group B, preferences may differ between members of the following subgroups:

(B1) couples with one child, for whom private saving is an efficient way of undoing the intergenerational transfer effected through social security,

(B2) couples with several children, for whom the leverage effect is larger when the Social Security system is scaled down because for the same loss to them the gain to each child is bigger than when they privately save.

Presumably, it is *only* the group B2 whose members will be in favor of reforming Social Security because this system implicitly redistributes not only from the young to the old but also from the growing to the shrinking dynasties (see on this Breyer and Schulenburg 1987, 1990). So there will never be a consensus in society on whether and, even if so, how to redistribute towards future generations.

But instead of arguing on the basis of a consensus among the population, advocates of a transition could also cite alternative justifications. One of these would be a clear implication of a commonly accepted equity norm, the other one the expectation that maintaining the present system will become politically unsustainable. We shall examine these justification in turn.

Fallacy 6: *Widely accepted welfare criteria imply that future generations should be made better off by partial funding.*

Considering the multitude of different principles of equity, it is unlikely that there is one that most people agree upon and that makes clear-cut statements on the necessity of a transition to funded pensions.

For example, if the Rawlsian maximin principle is applied to a sequence of generations, it is very doubtful that future generations should be made better off as

long as productivity is growing because in this case those that live later are better off in the absence of intergenerational transfers. Thus some degree of redistribution towards the older generations may even be required by the maximin principle.

A much less demanding (and maybe even slightly controversial) target would be to smooth the sequence of net losses accruing to future generations due to their participation in the PAYGO system. As Kifmann and Schindler (2001) have shown, this aim may justify building up a moderate-sized reserve fund in times of rapid demographic change. While the importance of this result shall not be downplayed, the policy proposed in that paper is hardly what Feldstein, Modigliani and others have in mind when they plea for a transition to “funding”.

Fallacy 7: *The government must protect present workers from suffering sudden and unanticipated cuts in future benefits, which are likely to be enacted by future generations of voters/taxpayers. It can do so by gradually phasing down unfunded social security over a long time span.*

This is a sophisticated argument that certainly deserves further thought, but it is nevertheless flawed. The error is the common neglect of the politico-economic principle that in a democracy the government can not be more far-sighted than the representative citizen. The government can thus not impose a policy of prudence unless the majority of voters hold the belief that future benefits will be smaller than promised by the presently valid law. But if this is the case, it is the voters themselves who can build up supplementary savings. In practice, voters’ expectations will differ among each other, and in view of the underlying real uncertainty of the future, no person living today can be absolutely sure whether and by what amount future benefits will be cut.

Therefore, there is no justification to use coercion to make people build up supplementary pension claims. Rather, it is the appropriate policy in a free society to let every person form her own expectations as to what will be the future level of benefits and find the right strategy to cope with the expected development. As savings have no discernible public-good characteristic, there is no a-priori presumption that we are all better off if we let the majority decide on the necessary level of savings. In this context, it is particularly surprising that many of the

proponents of a government-mandated increase in retirement savings are otherwise staunch advocates of the free market.[5]

3. What is the "Social Security Crisis", and why is Funding not a solution to it?

What follows from the discussion of the seven fallacies for the claim made in the title of this paper?

When past governments introduced unfunded social security systems, they made a gift to the generation of people who were retired at that time. Like the explicit government debt, this implicit debt has to be repaid by all later generations taken together. The term "social security crisis" refers to the fact that future generations will be less numerous than one might have assumed a few decades ago. That means that the *average* repayment per member of all future generations is larger than expected. This is a fact, and in this sense the "crisis" can not be "solved" except by a massive increase in fertility or immigration, provided the immigrants are comparable to the natives in their productive capacity. Furthermore, this solution has nothing to do with the way in which pensions are financed from now on.[6]

However, society can react to the crisis by choosing a particular *distribution* of the burden among future generations, and here the system of financing old age security comes into play. In the most extreme case, the burden can be concentrated on one generation by cutting their benefits completely. But this implies that the next generation will again have two options for financing their retirement consumption: funding their pensions or introducing a new PAYGO system. Thus we see that "funding" not only does not "solve" the social security crisis - it is not even necessarily the strategy of the future *if* the present PAYGO system is abolished in the shortest possible time.

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[5] On the welfare effects of compulsory savings see the recent paper by Homburg (2000).

[6] Unless fertility is a function of the pension financing system. This case is analyzed by Kolmar (1997).

4. Concluding Remarks

To prevent a possible misunderstanding: the present paper does not argue that a particular pension reform *should not* be introduced. Quite to the contrary, it says that there are no compelling economic reasons that it *should* be introduced. A compelling reason would be a Pareto improvement because in that case no member or group of society, once properly informed, would have grounds to reject the change.

Whenever Pareto improvements are not envisaged, I believe that economists in their role as policy-advisers should be careful in making specific proposals, unless they make clear what groups of society would be affected positively or negatively if the proposals were followed. It has become somewhat out of fashion to be so open about possible losers – a practice which is only justified if there are no losers, that is, in the case of Pareto improvements.

Moreover, proposing policy changes that involve income redistribution from some groups to others is not even the comparative advantage of economists. It is rather the typical behavior of lobbyists of the respective groups or party politicians. It can even be argued that the proper role for economists is not to make any specific proposals but rather to inform the public about the location of the societal budget constraint and therefore about the tradeoffs involved in certain decisions. In this sense it is very strange that so many outstanding economists devote so much of their time and effort to advocating a policy reform that will basically bring about nothing but a change in the intergenerational distribution. But granted that economists have the right to do so, they should at least be honest and say so.

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