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The controversy over the US Social Security Surplus. A non conventional view.

**Abstract** – This paper examines the US controversy over the Social Security 'Trust Fund' (SS-TF). It is shown that, according to neoclassical theory, the SS-TF has a substantial meaning as a safety belt in view of the alleged pending problems of *Payg*, but, according to more Keynesian principles, it does not play this function. On the opposite, the establishment of a SS-TF will have deflationary effects on the economy.

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Thus, an important question for any proposed Social Security reform ...must be: *What will the reform do to national saving?* (Aaron et al., 2001, p.17, italics in the original)

#### 1. Introduction

In 1983 the American Administration took various measures to bring the Social Security (SS) into surplus, for instance by raising the payroll taxes and postponing the legal retirement age. The surpluses are held in Treasury bonds and are accumulated in the so-called Trust Fund (TF). In 2016 the current surplus will disappear, but the SS will be able, by depleting the capitalized value of the TF, to be in balance till 2030. In the US much of the debate in more recent years has focused on the nature and possible employment of the SS surplus to meet the alleged forthcoming troubles of PAYG and allow transition to an FF scheme. The present paper examines the economic nature of the SS surplus.

Section 1 introduces the notion of SS surplus and TF in national accounting. Section 2 illustrates four positions related to the economic nature of the TF, whether purely 'notional' or 'real'. Section 3 presents an appraisal of the controversy.

## 1. The Social Security surplus in national accounts

The PAYG budget is part of the overall government budget. Let us assume, for the sake of simplicity, a closed economy in which the retirees receive their income through PAYG and consume all of it, and that pensions are the only transfer in the economy. Let us consider the national account identity:

<sup>&</sup>lt;sup>1</sup> At the inception of the U.S. SS in 1935, the TF was envisaged as a reserve fund covering all pension liabilities, but the system immediately started to use current contributions to pay benefits, that is, the SS started to act as a PAYG system and in 1939 the fund was rapidly reduced to the size of a contingent fund.

$$S - I \equiv (G - T) + (B - T^{con}),$$

 $(B-T^{con})$ 

where  $(B-T^{con})$  represents SS budget. The right hand side is the aggregate government saving,  $S^G$ . Supposing that the overall government budget is balanced, then  $S^G=0$ . As we know, this may be the result of various combinations of surplus/deficit of the two components of the consolidated public sector. The most interesting case for us is now that of a surplus of SS, that is  $T^{con} > B$ , compensated by a deficit in the other component of the government budget, that is G > T. In this case it can be said that SS, which has lent its financial surplus to the rest of the public sector, has figuratively accumulated a 'trust fund' held in public bonds.<sup>2</sup> One should not jump to the conclusion that the future solvency of PAYG is assured by the accumulation of a 'trust fund' collected in the good years of financial surplus, to be used in the bad years. Indeed, though SS owns a stock of government bonds, the public sector as a whole has not accumulated any asset with respect to the rest of the economy. The left hand has borrowed from the right hand. If in the future a PAYG goes into the red, SS can demobilise its trust fund by selling bonds to the market, but this is precisely what the government would have done anyway to finance the deficit.<sup>3</sup> Finally,

<sup>&</sup>lt;sup>2</sup> US legislation obliges the SS to manage such a trust fund in such a way that, on the basis of the official forecasts, the system will remain in balance for seventy years.

<sup>&</sup>lt;sup>3</sup> As Wray (1990-91, p.163) put it: 'Payroll taxes are currently accumulated in the form of government bonds issued as other government programs run deficits. When (and if) these are sold in the year 2030 to finance Social Security benefit payments of the retirees, the government will have to tax, or borrow from, the workers in that year, in order to retire the bonds. However, a payas-you-go system [without a trust fund] would require exactly the same action of taxing or borrowing from workers to provide benefits to the pensioners in the year 2030'. Things do not change if  $T^{con} > B$  and T = G. In this case the government can use the SS surplus to destroy part of the stock of public debt, and figuratively SS may be said to be accumulating a credit towards the government. But this is not a real reserve fund. If SS goes into the red, then the government sector must finance it by issuing new debt.

government bonds are not representative of *real* assets and, therefore, they do not constitute a real reserve fund as in a *FF* scheme.

To sum up, in a first approximation, from the national accounting point of view a trust fund held in government bonds appears as a fiction. This conclusion has, however, been challenged by some economists. Moreover, the nature of the TF may take on more complex features once the macroeconomic effects of the policies that led to the formation of a surplus (or a deficit) of SS are taken into account. The appraisal of these effects depends on the theory adopted. We shall review the controversies about the SS-TF in the next section.

### 2. Interpretations of the Social Security Trust Fund

The controversies about the SS-TF are as old as the fund itself. Four positions can be singled out:

- (a) According to the first, the TF is not a real reserve since it is held in governments bonds (so it is a credit of the right hand with respect to the left hand). Indeed, when needed to maintain the current financial equilibrium of the SS, the latter will return the Government bonds to the Treasury which then has to sell them on the market to honour them.
- (b) Against the former argument, a number of scholars argue that the TF should be considered an economic entity that is autonomous from the government, so that the TF is not just an accountancy fiction.

Both these positions neglect the macroeconomic effects of creating a SS-TF. These effects are quite different according, respectively, to the neoclassical and Effective Demand theories:

(c) According to the neoclassical position, the generation of the surplus of the SS is synonymous with a rise in government saving, and therefore in national saving. Hence, although not directly held in private assets, the process of creation of the TF is associated with – and actually brings about – a rise in aggregate private capital stock. In other words, the SS surpluses have financed part of the government spending, so that less new public debt has been issued, or even some of it returned to the private sector, with the result of crowding in private investment. TF

generation has thus permitted the same amount of capital accumulation that would have taken place had those surpluses been directly invested in the private capital market. Depletion of the surplus, it is argued, will cause the capital stock to shrink (a crowding out). But this would have taken place anyway had the surplus been invested in private assets.<sup>4</sup> So, although much of the present debate in the U.S. is on whether the TF should invest in private assets rather than in Treasury bonds, the question is irrelevant from a macroeconomic point of view (cf. e.g. Engen & Gale, 1997, p.125). In a sense, position (c) vindicates position (b) with more sophisticated arguments.

Incidentally, let us point out a naïve mistake made by Modigliani and his associates (1999). They maintain that the SS-TF could be invested in equities and used to extend the capitalisation second pillar, alleviating the double charge on the current workers: 'we show that the US is in the lucky position of being able to provide all of the additional resources needed to fund the system, without ever raising payroll contributions. The sources of funds to bear this transition cost are ...[inter alia] the reserves accumulating in the SS Trust Fund from past surpluses [and] the further surpluses accumulating till the middle of the decade' (ibid, p.10). Strict observance of the neoclassical principles would, however, suggest that this does not lead to a rise in national saving – government saving is invested anyway - but apparently only to a reshuffling of financial portfolios.<sup>5</sup>

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<sup>&</sup>lt;sup>4</sup> Cf. Cesaratto (2002, 2003) about the nature of the capital stock as a fund of consumption goods able to recover its original nature.

<sup>&</sup>lt;sup>5</sup> This reshuffling might lead to a rise in national saving, but Modigliani *et al.* do not seem to explore this avenue. Modigliani *et al*'s position is indeed defendable if one assumes that the SS-TF invests all the dividends from equities and private bonds in new capital assets, whereas the private holders finance their consumption out of them. In this case the reshuffling of portfolios – due to the fact that SS-TF reserves (stock) are invested in private assets and that current SS surpluses (flows) are not used to reduce the public debt but to buy private assets – would lead to higher saving. This conceivable effect is, however, compensated by the higher returns on Treasury bonds that the private financial investors may demand in order to reshuffle their portfolios, higher returns that negatively affect government savings. A net positive effect on saving persists as long as the rate of return on private bonds is higher than that on Treasury bonds. Modigliani *et al.*'s case rests

Feldstein & Samwick do not commit the same mistake when they propose that it would be tempting to argue that the double charge to finance additional individual retirement accounts (MIRA) based on capitalisation 'is unnecessary since the credit given for MIRA contributions could instead be offset by reducing the existing social security trust fund. But reducing the trust fund in this way would defeat the purpose of the MIRA contributions. The reduction in the trust fund would exactly offset the increase in capital formation in the MIRAs that provides the higher return than the current unfounded system' (Feldstein & Samwick, 1998, pp.222-223).

(d) Finally, according to the Keynesian view, the creation of a TF leads, on the one hand, to the creation of a fictitious reserve – so that it agrees with the first argument -, while, on the other hand, it has deflationary effects on the economy.

#### 3. An appraisal of the controversy

In order to evaluate these various viewpoints, let us start from the conflict between positions (a) and (b). Replying in 1942 to some early criticism of the SS reserve fund, G.B.Robinson (1947) argued that the *Treasury* should be viewed as *partitioned* into two parts: one called the *Fisc*, and the other the *Insurer*. It is only by neglecting this partitioning that 'it was said that a reserve fund of government bonds was "fictitious" or "meaningless" (ibid, p.399). According to Robinson the *Insurer* acts *de facto* as any private insurer would, and so 'far nobody has said that individuals should not save money for deposits in savings banks and insurance companies, to be invested in government bonds, on the ground that the Treasury wants such moneys for expenditures' (ibid, p.401). The same author maintained elsewhere that 'the case against the view that the fund is "illusory" [does not depend] on insisting that the separate entity of the pension program be

therefore on shaky foundations, which they have not even explored. Modigliani and his associates (Ceprini & Modigliani, 1998), along with others, have proposed a transition plan for the Italian case based on the existing mandatory severance pay to which they attribute the same function of financing the transition assigned to the US SS surplus. In this case, they commit a similar mistake by not seeing that the severance pay fund is already an 'occupational saving fund' so that on the face of it the new *FF* scheme they sponsor would just substitute an existing one.

respected', that is that the 'pension program is not the Government' (Robinson, 1946, p.137). In this contribution he quotes at length another author, H.L.Lutz, who took an opposite stance:

"the theory of a reserve is illusory, in that it can only serve the true purpose of a reserve by being converted into a debt held by the public. This conversion will immediately involve budgetary provision of revenue for the payment of interest, and as well, for debt retirement if and when amortization of these bonds is to be undertaken. At that time the true character of the interest charges upon the fund will be revealed. Insofar as the reserve consists of special non-negotiable obligations, and while disbursements are less than current collections, the process of paying interest thereon is a pure bookkeeping transaction, involving no appropriation of tax receipts for the purpose. Interest accruals for the year are merely covered by a sufficient quantity of the special obligations that are added to the total principal of the fund. But when the fund assets are liquidated through the conversion into a negotiable security held by the public, then the interest accrual will become an item of real cost to be met by increased taxes. ....The illusion of a reserve, representing payments already made and therefore available for future use without burden on anyone, is one outgrowth of policy" (quoted by Robinson, 1946, p.136).

The efforts made by Robinson to deny the fictional nature of the reserve fund, which is not a 'real reserve' as in a FF scheme but it is based on a political promise by the government to honour the debt, boils down to the argument that: 'the bonds in the fund, including the special obligations, are identical with the government bonds owned by the public. It seems fortunate, therefore, that the fund is not illusory, since if it were, for the reason claimed, all private funds of government bonds would be illusory too' (Robinson, 1946, p.150). It is indeed true that the government bonds held by the *Insurer* and by the public are on the same footing: indeed in both cases their real value is based on a *political* commitment by the government to collect in the future enough taxes, or to issue new bonds, in order to redeem them. The ability of politics is thus to sell to the general public a commitment, the SS-TF, as if it were a real reserve. A State guarantee is, of course, in most cases, a credible pledge. Nonetheless, it is a political commitment based on the expectation of future buoyant economic conditions.

Recently, two non-orthodox economists, Baker & Weisbrot (1999), surprisingly echoed similar arguments in their rejection of the thesis that the TF is a mere fiction. As they put it, according to the fiction thesis, 'when the trust fund cashes in its bonds, the government will have to find money somewhere. So Social Security — or some other spending — will have to be cut.' In other words, the argument dismisses the 'fund's assets as "mere pieces of paper" or "the government owing money to itself" (ibid., 1999, p. 28). They admit that 'the government will have to borrow from other sources as the Social Security surplus shrinks', but argue that 'its need to borrow has nothing to do with the solvency of the Social Security system' (ibid.). By so reasoning, Baker & Weisbrot accept Robinson's sophism of Mr.Insurer and Dr.Fisc as two separate bodies.<sup>6</sup> Contrary to B&W's opinion, the government's need to borrow does have something to do with the future solvency of SS, since the accumulation of Treasury bonds is not an accumulation of real assets, which — let us follow the neoclassical argument — can be reconverted back from capital to consumption goods. This accumulation would have taken place, Baker & Weisbrot say, if the SS 'trust funds were invested in private stocks and bonds rather than government bonds' (ibid.). But they have not been invested in that form. So Baker & Weisbrot cannot disregard the possible macroeconomic consequences — increasing government borrowing or cuts in other items of social spending — of the depletion of the reserve fund.

Later they insist that 'the fact that the Social Security system has loaned its surplus to the federal government rather than having invested it in private stocks or bonds should not be used to make Social Security beneficiaries pay, in the form of reduced benefits, for any fiscal tightening that may be applied to the rest of the budget' (ibid., p. 29). Unfortunately, this argument, which depicts retired people under PAYG as victims of government greed, is dangerously close to the

<sup>&</sup>lt;sup>6</sup> As Eisner put it: 'The trust funds are merely accounting entities. Our payroll taxes or "contributions" go directly to the United States Treasury. Our benefit checks come from the Treasury – and those receiving them can verify on those checks that the payer is the Treasury of the United States, and not any trust fund' (1998, pp.80-1).

neoclassical idea of PAYG's original sin consisting of the fact that, at its inception, the US Social Security plan paid out 'benefits to retirees who had paid little or nothing into the system', using funds that could have been invested otherwise, as a cause of a '*major* reduction in the capital stock' (Kotlikoff, 1979, pp. 237, 248). But the neoclassical position on the trust fund is even more complex.

Arguing along the position (c) envisaged above, Schultze (1990, p. 18) has suggested that any current budget surplus, *for instance* a SS surplus, by crowding in private investment *now* and increasing aggregate per capita capital and income, will ease the pensions burden *later*, in the unfortunate event of a depletion of the trust fund. This depletion will cause a fall in per capita capital and income, but it will do so by eating up, in a literal sense, precisely what it helped to create. Summarising this position, Thompson points out that

the Treasury, as Social Security banker, receives a net cash inflow when Social Security runs a surplus and experiences a net cash outflow when it runs a deficit. If not offset by a deficit in other Treasury operations, Social Security surpluses produce a positive overall net cash flow for the Federal government, allow the Treasury to reduce the value of Federal debt in the hands of the public, and increase national saving. ... Note that it is an overall budget surplus that counts, not whether the surplus is in the Social Security program or elsewhere. ... [A] higher national saving rate today could help to offset the increase in future Social Security costs, leaving tomorrow's workers no worse off ...than if the demographic shift had not occurred. In other words, we can 'advance fund' the burden of the demographic shift by assuring that the scheduled Social Security surpluses translate into increased capital formation. (1990, p. 44) <sup>8</sup>

<sup>&</sup>lt;sup>7</sup> Quite involuntarily, Baker & Weisbrot end up accepting the argument that PAYG is an unsound pension system, but has to be defended as 'something of an accident of history', as Blinder puts it, something that retains 'a deep kind of hysteresis ..., for if you start a pay-as-you-go system, switching to a funded system is extremely difficult' (1988, p. 25).

<sup>&</sup>lt;sup>8</sup> White (2000) maintains that since the Treasury records as outlays and SS as receipts, the interest paid on the Government bonds held by the fund thus has a nil effect on the general budget. This is

Several objections to this argument have been raised, also by its proponents, — for instance that 'future generations' will not remember that their higher income was due to the 'sacrifices' of previous generations which led to the trust fund formation; or that the SS surplus might be used to finance a larger extra-pension deficit. Perhaps as a result of these objections, most of the current debate in the US is about the proposal to employ the current Social Security surplus *directly* to buy private assets so that the 'trust fund' which, as we have seen, is currently held in government bonds, would become a real 'reserve fund', as in a private old-age insurance (saving) plan (cf., for example, Feldstein, 1998; Aaron & Shoven, 1999; Diamond, 1999, Feldstein & Liebman, 2001, 7.1.4). The issue at stake is whether the surplus should be managed by SS directly, or transferred to privately managed accounts.

Irrespective of who manages the SS surplus, it should be clear from the above that, per se, it is not the fact that the surplus is directly invested in private assets that would boost national saving and investment (some positions in support of positive effects of the reshuffling of the SS-TF portfolio have been critically discussed in Cesaratto, 2003). According to neoclassical principles, given the 'natural' level of income, if the public sector goes into surplus, this would *crowd in* private investment anyway. To get this result it is not necessary for the surplus to be invested *directly* in private assets. The government just has to return part of its stock of debt to the private sector, which will employ the additional liquidity to demand additional private assets; in the

correct. However, from a neoclassical perspective the public sector is saving on its current interest payments - the payments it would have had to make if the bonds were held by the general public - and the 'money not borrowed now may instead be used for investment that may create a larger economy in the future' that 'may make paying Social Security benefits marginally easier' (ibid., p. 8). This investment will be eaten up once, the principal having been eroded, the portion of the trust fund that consists of the notional accumulation of interest also starts to be depleted. So Blinder is wrong when he asserts that 'the trust fund's interest earnings, which are simply paid from one government account to another ... have nothing at all to do with the overall fiscal deficit and therefore nothing at all to do with the balance of saving and investment in the economy' (1990, p. 138).

meantime, interest rates will fall, boosting private investment. If the government uses the surplus to buy private assets, or transfers the surplus to privately managed pension funds, it is only doing what the private sector would have done anyway by itself. The main result is that either way national saving is raised by the amount of the SS surplus, irrespective of how this is channelled into the saving-investment market (cf. Cutler, 1999, pp. 127–128). Recently, Aaron et al. (2001) endorsed the neoclassical argument in their criticism of a report of President Bush's Social Security commission. They argued that: 'These reserves have contributed to national saving, because they have reduced the government's borrowing from the public and now are enabling the government to reduce the public debt substantially. Such 'saving through the Trust Fund' benefits the economy in the same manner that saving through 401 (k) plans or other private vehicles does' (ibid., p.15).

The Keynesian position (d) above rejects the neoclassical causation link between the variations in national saving and capital accumulation. As early as 1938 Alvin Hansen (1947) pointed out the deflationary nature of the old-age reserve accounts. In a Keynesian perspective any surplus in one portion of the government budget, if not compensated by equal deficits in other sections, has depressive effects on employment (cf. also Pechman, 1989, pp173-174). <sup>10</sup> So, *ceteris* 

<sup>9</sup> Aaron et al. reject President Bush's commission's proposal to transfer the SS surpluses to private individual accounts, arguing, on the one hand, that the expectation of a higher return on these accounts would probably induce workers to reduce other forms of saving, thus reducing national saving (ibid, p.18). On the other hand, they deem these expectations to be over-optimistic, given the instability of the rate of return on private assets and the high managerial costs of the individual accounts (ibid, 25-26).

An example may help. Suppose a closed economy in which the marginal propensity to consume is c = 0.8, gross investment is I = 380, 'on-budget' public spending is G = 100, pension transfers are TR = 100, the contribution rate is  $\alpha = 0.05$ , and the income tax rate is t = 0.5. The resulting income level is 2,000 units of account. Both the 'on' and the 'off' budgets are balanced, so the private saving supply is precisely 380, equal to I. Suppose that in order to constitute a SS-TF, the government decides to increase  $\alpha$  to 0.1. The new income level is 1,750 units. The on-budget has a shortfall of 12.5 units, while the off-budget a surplus of 75 units. The overall budget has

*paribus*, the formation of a SS surplus, far from being a safety belt for PAYG in the future – it clearly is not in the light of position (a) - would undermine its very economic foundations in the present (Palley, 2002, p.112).<sup>11</sup>

A position worth mentioning on a SS 'fund' was taken by Keynes himself in the debate that preceded the Beveridge report. First of all Keynes clearly stated that the fund 'is, admittedly, to some extent a "fiction"! Certainly it is not a fund in any actuarial sense' (Keynes, 1942, p.224). The 'actuarial sense' refers to the absence of real (capital) reserves behind the SS fund. He gave, however, two reasons why the fund could have a sense. In the first place Keynes argues that the extension of the State activities required that each nationalised branch has its own budget: 'The more socialised we become, the more important it is to associate as closely as possible the cost of particular services with the sources out of which they are provided, even when a grant-in-aid is also required from general taxes. This is the only way by which to preserve sound accounting, to measure efficiency, to maintain economy and to keep the public properly aware of what things cost' (ibid, pp.224-225). Note that Keynes is far from supporting the idea that Mr.Insurer and Dr.Fisc are two separate institutions. It is the efficient management of the widening State activities that requires the creation of Mr.Insurer, Ms.Health Services etc., all members of the same Dr.Fisc. family. Secondly, although Keynes stressed his approval of 'an extra-budgetary social security fund', he

consequently a surplus of 62.5. National saving is now 317.5, lower than investment (which by hypothesis is still 380). The difference consists of the 62.5 units of public debt redeemed by the government (so that the private sector can finance the same amount of gross investment in spite of the fall of private saving). The government credits SS 75 units, of which 62.5 have been used to redeem a correspondent amount of debt and 12.5 to cover the on-budget deficit. But this is clearly a fictional accumulation of assets by the SS. Note also that, likely, the fall of effective demand will negatively affect gross investment.

<sup>&</sup>lt;sup>11</sup> In addition, according to Palley (ibid), in the recent American experience, the regressive SS payroll taxes and financial surpluses 'have been used to finance an increasing share of government spending and tax cuts for the rich'. On the SS-TF see also Wray (2002).

also endorsed James Meade's proposal of varying the contributions paid by the employers and the employees to contrast the economic cycle: 'So far as employees are concerned, reductions in contributions are more likely to lead to increased expenditure as compared with saving than a reduction in income tax would, and are free from the objection to a reduction of income tax that the wealthier classes would benefit disproportionately. At the same time, the reduction to employers, operating as a mitigation of the costs of production, will come in particularly helpfully in bad times' (ibid, p.218). He argued that the SS budget had to be considered as part of the 'capital or long-term Budget' and that it is 'the capital Budget which should fluctuate with the demand for employment' (ibid, p.225). In these passages Keynes seems little worried about a balanced SS budget (if not for political reasons) and more about using it against the cycle. The Treasury was, however, concerned. So that Meade's proposal did not appear in the final report since 'it appears that the Treasury was worried by the financial implications of the Beveridge proposals' and as 'a result, Meade was warned that his revised scheme for varying social insurance contributions had best be kept separate from Beveridge' (Keynes, 1942, editor's note, p.218).

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<sup>&</sup>lt;sup>12</sup> Confirming his great flexibility of mind and intellectual honesty, Keynes approved Meade's proposal after having initially rejected it (cf. Keynes, 1942, pp.207-208).

<sup>&</sup>lt;sup>13</sup> Meade suggested to lower the contributions in case of a fall of the unemployment rate below the long-term target norm. He suggested, however, not to raise them in case of a better performance. Keynes replied that 'it would be a great mistake to start the unemployment fund on the basis on which it was avowedly insolvent from the start, when the rest of the scheme would be already putting such heavy burdens on the Budget' (ibid, p.210). Indeed, Keynes (or Meade) did nor regard the long run balance of SS as the result of the compensation of deficits and surpluses. (Keynes refers here specifically to the contributions to the 'unemployment fund', but the discussion referred more in general to the 'social insurance contributions').

### **Concluding remarks**

In this paper we examined the economic nature of the SS-TF. We have seen that according to the conventional theory, the SS-TF is not a 'fiction', since it is the result of government sector saving that, in the past, has crowded in private capital accumulation. The SS-TF would therefore help the economy to match the future demographic shocks. The radical Keynesian position refuses the causation link from national saving to capital accumulation. Accordingly, a surplus of SS, if not offset by corresponding deficits in other sections, has a depressive effect on output and investment. In the first case, the regressive nature of payroll contributions reveals that the SS surplus can just be a method of financing other expenditures, or even tax cuts for the upper classes, by taxing the working class. Ironically this is the only result, since the surplus is only fictional and does not constitute a real safety belt for PAYG in the future. The same would be true if the surplus is not compensated by a corresponding on-budget deficit, in which case not only a safety belt is not created, but, *ceteris paribus*, unemployment increased and the current wage-bill basis of Payg weakened.

#### References

Aaron H.J., Blinder A.S., Munnel A.H., Orszag P.R. (2001), Perspectives on the Draft Interim Report of the President's Commission to Strengthen Social Security, Center on Budget and Policy Priorities and The Century Foundation, July.

Aaron H.J. and Shoven J.B. (1999), *Should the United States Privatize Social Security?* (Cambridge, MA, MIT Press).

Baker D. & Weisbrot M. (1999), *Social Security: the phoney crisis*, Chicago, University of Chicago Press.

Blinder A.S. (1990), What is the role of Social Security?, in: H.J. Aaron (Ed.) *Social Security and the Budget*, Lanham, The National Academy of Social Insurance & University Press of America.

Ceprini M. & Modigliani, F. (1998), Social Security: una proposta per l'Italia, *Economia Italiana*, n.2, pp.275-305.

Cesaratto S. (2002), The economics of pensions: a non conventional approach, *Review of Political Economy*, 14, 2002, pp,149-177.

Cesaratto S. (2003), Three obstacles to the transition from unfunded to funded pension schemes, Quaderni del Dipartimento di Economia Politica, n.382,

Cutler D.M. (1999), Comment, in: H. J. Aaron & J. B. Shoven (Eds) *Should the United States Privatize Social Security?*, Cambridge, MA, MIT Press.

Diamond P. (Ed.) (1999), *Issues in Privatizing Social Security*, Cambridge, MA, MIT Press.

Eisner R. (1998), Save Social Security from its Saviours, *Journal of Post Keynesian Economics*, 21, pp. 77–92.

Engen E.M. & W.G.Gale (1997), Effects of Social Security Reform on Private and national saving, in S.A.Sass & R.K.Triest, *Social Security Reform*, Federal Reserve Bank of Boston, Conference Series no.41.

Feldstein M. (Ed.) (1998) *Privatizing Social Security*, Chicago, University of Chicago Press.

Feldstein M. and Samwick A. (1998), The transition path in privatising Social Security, in: M. Feldstein (Ed.) *Privatizing Social Security*, Chicago, University of Chicago Press.

Feldstein M.& J.Liebman (2001), Social Security, NBER WP n. 8451.

A.H.Hansen (1947), The Deflationary Character of Old-Age Insurance Reserves, , in H.G.Groves (ed.), *Viewpoints on Public Finance*, Henry Holt and c., New York (repr. from ID, Full Recovery or Stagnation?, Norton & C, New York, 1938).

Keynes J.M. (1942), The Beveridge Report, in: *The Collected Writings of John Maynard Keynes*, Vol. XXVII, D. Moggridge, Ed., London, Macmillan.

Kotlikoff L.J. (1979), Social Security and equilibrium capital intensity, *Quarterly Journal of Economics*, 93, pp. 233–253.

- Modigliani F., Ceprini M.L., Muralidhar A.S. (1999), A solution to the Social Security crisis, *Sloan Working Paper*, n. 4951.
- Palley T.I., 2002, Social Security: Prefunding is not the Answer!, *Challenge*, vol.45, pp.97-118.
- Pechman J. A. (1989) *Tax Reform, the Rich and the Poor*, second edition, New York, Harvester Wheatsheaf.
- Robinson G.B. (1946), The Old-Age Reserve Fund is not "Illusory", *Quarterly Journal of Economics*, 60, pp.136-153.
- Robinson G.B. (1947), Old-Age Insurance reserves, in H.G.Groves (ed.), *Viewpoints on Public Finance*, Henry Holt and c., New York (orig, Journal of Accountancy, vol. 73, pp.7-24), 1942).
- Schultze C.L. (1990), Setting long-run deficit reduction targets: the economics and politics of budget design, in: H. J. Aaron (Ed.) *Social Security and the Budget*, Lanham, The National Academy of Social Insurance & University Press of America.
- Thompson L. H. (1990), Discussion, in: H. J. Aaron (Ed.) *Social Security and the Budget*, Lanham, The National Academy of Social Insurance & University Press of America.
- White J. (2000), Budgeting for Social Security or: when are savings really savings?, *Public Budgeting & Finance*, 20, pp. 1–23.
- Wray L. R. (1990–91), Can the Social Security trust fund contribute to savings?, *Journal of Post Keynesian Economics*, 13, pp. 155–170.
- Wray L. R. (2002), Social Security: Truth or Convenient Fictions, Center for Full Employment and Price Stability, Policy Note 02/04.