
Economic Policy, Intergenerational Equity, and the Social Security Trust Fund Buildup

by John C. Hambor*

For the next 75 years, the Old-Age, Survivors, and Disability Insurance (OASDI) system is projected to be close to in balance, on average. For approximately the next 40 years, under current projections, the combined OASDI Trust Fund is expected to continually have excesses of income over outgo, creating a buildup that will peak in 2030 at about \$12½ trillion (roughly 23 percent of the gross national product). Thereafter, the system is projected to be in annual deficit continually until the trust fund is exhausted in 2051.

This article focuses on two fundamental issues that must be understood if the potential economic consequences of this buildup are to be evaluated properly. The first issue deals with the fact that the nature of Federal economic policy during the buildup period will determine the ultimate economic impact of the buildup. The second issue concerns the effect of the buildup, and its disposition, on the Social Security program's treatment of one generation of workers compared with another. If a fund is actually accumulated as projected, part of the retirement benefits of the "baby-boom" generation will, in effect, be self-financed. If, however, that fund is used for other purposes—directly or indirectly—future cohorts of workers will be required to fully finance benefits promised to the baby-boom retirees.

The Old-Age, Survivors, and Disability Insurance (OASDI) system is projected to be in close actuarial balance for the next 75 years.¹ Revenues and expenditures, however, are not balanced in every year. For approximately the next 40 years, under current projections, the OASDI system is expected to receive more income annually than is required to pay benefits, creating a buildup in the combined OASDI Trust Fund that peaks (in terms of current dollars) in the year 2030 at about \$12½ trillion, which is roughly

23 percent of the gross national product (shown in charts 1 and 2 and the accompanying table). Thereafter, the system is projected to be in annual deficit continually until the combined trust funds are exhausted in 2051.

A significant amount of discussion to date has focused on the potential economic effects of such a large buildup in these trust funds.² Some observers have raised the specter of wholesale purchases of corporate equities by the Federal Government, sufficient to gain a controlling interest in a substantial

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¹ The data are drawn from Harry C. Ballantyne, **Long-Range Estimates of Social Security Trust Fund Operations in Dollars** (Actuarial Note No. 130), Office of the Actuary, Social Security Administration, April 1987, and are based on the II-B economic and demographic assumptions contained in that report.

² See, for example, Alicia H. Munnell and Lynn E. Blais, "Do We Want Large Social Security Surpluses?," **New England Economic Review**, September/October 1984; David Koitz, "Will the Social Security System Take in More Taxes Than It Needs?," **Congressional Research Service Review**, October 1984; and John C. Hambor, **The Social Security Trust Funds and The Unified Budget** (unpublished paper), Office of Research and Statistics, Office of Policy, Social Security Administration, November 1985.

portion of the private economy. Others have focused on the potential to expand the productive capacity of the economy by increasing the national saving rate. Still others have questioned whether or not Federal deficits will actually be reduced, observing that the buildup of OASDI reserves is likely to be dissipated in lower taxes (payroll or otherwise) or higher Federal spending (primary candidate—the Medicare program). This article focuses on two fundamental issues that must be understood if the potential consequences of the buildup are to be evaluated properly.

First, the nature of economic policy during the buildup period will determine the ultimate economic impact of the buildup. If Federal economic policy were designed to promote long-term economic growth by encouraging higher levels of spending for capital formation, the buildup provides a vehicle that would make the required tighter fiscal policy (smaller deficits or larger surpluses in the Federal budget at full employment) easier to maintain. If, in conjunction with a tightening of budget policy, the growth rate of the money supply could be increased without undue upward pressure on prices, the resulting lower interest rate level would increase the rate of capital formation. Alternatively, if Federal fiscal policy were designed to counteract the effects of a net inflow to the trust funds, and thus use the fund balances to finance other programs (such as Medicare) or to lower income taxes, Federal budget policy would not contribute additional impetus to long-term economic growth. The effect of fiscal policy on long-term growth would be essentially the same as if the trust fund buildup had not occurred.

The second fundamental issue relates to the effect of the buildup, and its disposition, on intergenerational equity—that is, the treatment by the Social Security program of one generation of workers compared with its treatment of another generation. More specifically, of current concern is the question: Who will actually bear the financial burden of the retirement of the “baby-boom” generation? The projected buildup of the OASDI Trust Funds can be viewed as providing “partial funding” for the retirement benefits to be paid to the baby-boom generation, whose cohorts will comprise a large fraction of the work force from now until about 2020. From this perspective, the buildup provides a way for the members of that generation to transfer to themselves, through time, a part of the resources needed to pay for their retirement benefits. If the buildup does not take place, or if it is offset by general account policy, this part of their retirement burden is shifted to future taxpayers unless substantial benefit cuts, lowering payments to the baby-boom cohorts at retirement, are enacted.

Economic issues are discussed in the following

section. Two stylized fiscal policy scenarios are described. In the second section, these scenarios are used to evaluate the effects of the buildup on the economy and on intergenerational equity.

Economic Issues

The basic macroeconomic concern surrounding the buildup is whether or not it will increase the amount of national saving. Increased saving means increased purchases of capital goods, an increase in productive capacity, and, ultimately, an increase in total national output. If the Federal Government runs a larger than planned surplus (or a smaller than previously planned deficit) while the economy is operating at or near full employment, national saving will increase unless private individuals respond to the Government’s policy by reducing their own saving by an equal amount.

If saving is increased, it is transferred from the Government sector to the business sector through the capital market—a complex system of financial intermediaries effecting the transfer of funds from savers

Table 1.—Trustees’ intermediate (Alternative II-B) projections of the combined Old-Age, Survivors, and Disability Insurance (OASDI) Trust Fund, gross national product (GNP), and ratio of the Trust Fund to GNP, 1987-2051

[Amounts in trillions]

Year	OASDI Trust Funds ¹	GNP	OASDI Trust Funds as percent of GNP
1987.....	\$0.07	\$4.43	1.51
1988.....	.10	4.73	2.19
1989.....	.15	5.04	2.88
1990.....	.20	5.41	3.69
1991.....	.26	5.81	4.48
1992.....	.33	6.21	5.32
1993.....	.41	6.60	6.19
1994.....	.50	7.02	7.05
1995.....	.59	7.47	7.92
1996.....	.68	7.94	8.55
2000.....	1.29	10.16	12.68
2005.....	2.55	13.74	18.53
2010.....	4.49	18.33	24.49
2015.....	6.91	24.18	28.57
2020.....	9.39	31.64	29.69
2025.....	11.39	41.37	27.54
2030.....	12.41	54.47	22.79
2035.....	12.21	72.11	16.94
2040.....	10.68	95.42	11.19
2045.....	7.32	126.10	5.81
2050.....	.78	166.58	.47
2051.....	0	...	0

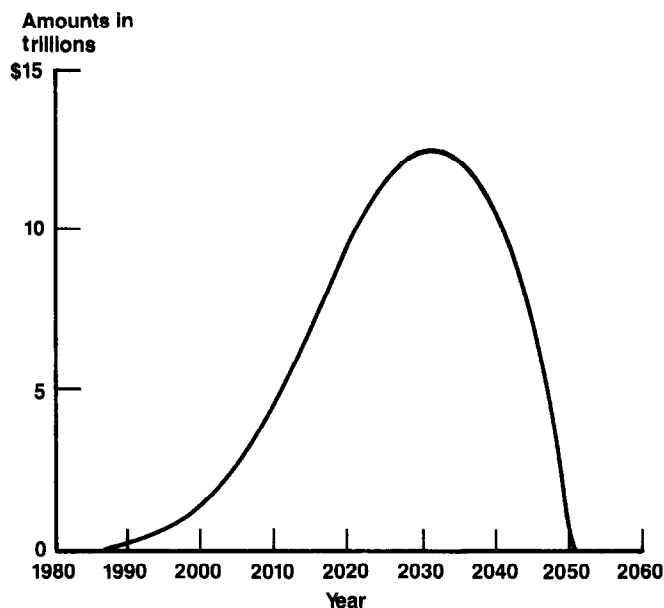
¹ At end of year.

Source: **Long-Range Estimates of Social Security Trust Fund Operations in Dollars** (Actuarial Note No. 130), Office of the Actuary, Social Security Administration, April 1987.

to investors and other borrowers. The increase in Government saving shows up in the capital market as an increase in the supply of investment funds, either directly through increased Federal debt retirement in the case of higher budget surpluses or indirectly through reduced Federal borrowing in the case of lower deficits. The additional funds available in the capital market lower the level of interest rates and provide the necessary funding for increased interest-sensitive expenditures, such as business fixed investment and/or residential housing. The resulting increase in national wealth (more technically—the capital stock) increases productive capacity, raising the rate of economic growth.

Although the process described above operates whenever the Government changes its financial posture with respect to the capital market, it is important to remember that this analysis of the Government's effect on the long-term rate of economic growth assumes that the economy is operated at (or near) full employment. If the economy is not operating at close to full employment, Government policy would more likely be concentrated on achieving full employment with stable prices, by whatever means are available. Increased Federal surpluses or reduced Federal deficits, in the short run, create shortfalls in aggregate demand making the achievement of full employment more difficult. A Federal economic policy that encourages capital formation, although not totally inconsistent with achieving full employment, is better thought of as an attempt to influence the societal choice between the amount of fully employed labor and capital to be used to produce output for current consumption and the amount to be used to create industrial capacity for the production of goods and services in the future.

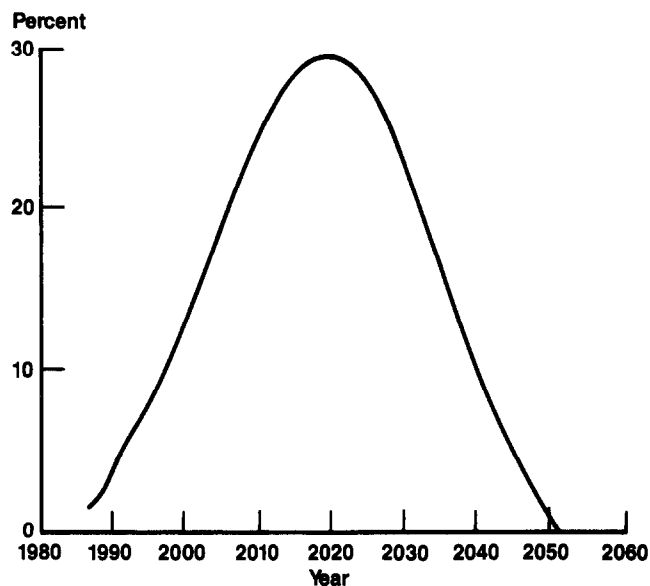
Chart 1. — OASDI Trust Funds



Attempts by the Government to increase saving by tightening fiscal policy will be less than fully successful if the private sector responds by lowering business or personal saving to any extent. The amount by which private saving is lowered depends mainly on how responsive it is to interest rate changes. If, as interest rates fall, individuals reduce the amount they save, some offset to the Government's attempt to increase national saving will occur because interest rates fall when the Government provides relatively more funds to the capital market. The view of most economists is that the response is probably not large enough to fully offset Government action. There is, however, some offset effect and, therefore, the projected OASDI Trust Fund accumulations are not likely to generate dollar-for-dollar increases in saving under a full pro-saving fiscal policy.³

With these qualifications in mind, the analysis of the potential consequences of the buildup will be developed using two specific (extreme) versions of future fiscal policy. Both assume the economy can be maintained on a full employment growth path by adjusting monetary policy to complement the fiscal policy assumptions. Under one policy, the OASDI Trust Fund surpluses⁴ will be fully validated by general account (non-OASDI Federal accounts) transactions, and under the other, they will be fully offset by general ac-

Chart 2. — OASDI Trust Funds as a percent of gross national product (GNP)



³ See Robert J. Barro, "Are Government Bonds Net Wealth?," *Journal of Political Economy*, November/December 1974, for an argument that suggests that individuals respond to changes in the Federal deficit by acting to fully offset the effect of those changes on future generations.

⁴ The OASDI program is treated as a separate budget account, and surplus is used in the accounting sense—that is, an excess of income over outgo in the annual OASDI account.

count actions.⁵ These two extremes define a range between the realization of full potential additional saving and no additional saving.

For simplicity, assume the economy is at full employment and the unified budget (including the OASDI accounts) is balanced. To implement the offset policy, given the projected trust fund surpluses, the general account must run annual deficits equal to the annual amount of the trust fund surpluses, resulting in a balanced unified budget in each year during the buildup. To implement the validation policy, the general account must be balanced annually, resulting in annual unified budget surpluses equal to the trust fund surpluses for each year of the buildup. The Federal Government is a net supplier of funds to the capital market in the validation case and neither supplies nor demands funds in the offset case.

When the trust fund assets are sold to raise cash to finance the projected OASDI deficits, beginning in 2030, the two policy scenarios have symmetric (with respect to the buildup) effects. Continuation of the offset scenario would require that the general account run surpluses equal in size to the OASDI deficits, maintaining a balanced unified budget. Continuation of the validation scenario requires a balanced general account budget and thus a unified deficit equal to the OASDI deficits that would occur during the selloff period. In the latter case, the Federal Government would become a net demander of funds, generating upward pressure on interest rates in the capital market. As during the buildup phase, the Government neither demands nor supplies funds during the reduction phase of the offset case.

Economic and Intergenerational Effects of the Buildup

From the perspective of the OASDI Trust Funds, either scenario (if current law with respect to OASDI is maintained) results in a trust fund that builds to roughly the same peak amount near the year 2030 and then declines to zero during the following 20 years or so. Even though the amount of the buildup is, in essence, the same in either scenario, the economic and intergenerational consequences are potentially quite different. As far as the OASDI program is concerned, however, it is partially funded in either case, and earns the market rate of interest as long as the trust fund assets are invested.

Validation Scenario

The validation scenario represents a specific policy of promoting aggregate saving at full employment. A balanced general account in each period allows the net inflows to the OASDI account occurring during the buildup period to be channeled into the capital market to provide funding for private sector investment spending. In concert with an assumed easier monetary policy, the Federal sector becomes a net supplier of funds, lowering interest rates to increase investment spending at full employment. In this case, the trust fund buildup represents additional productive capacity, which, at full employment, is fully utilized to produce additional goods and services. When the trust fund assets are sold to finance benefits in the future, the economic effects are reversed. Interest rates rise, slowing new investment spending and the economic growth rate, until the economy is back on essentially the same growth path it departed from during the buildup. The positive economic effects of lower interest rates, a higher capital stock, and a higher level of national output are temporary, lasting only until the fund is exhausted.

This scenario represents the situation normally thought of as a "funded" retirement plan. Individuals save for their own retirement (directly or through a company pension plan), invest during working years, receive a market return on their investment, and then "dissave" to finance their retirement years. The retirement saving generated by this process is funneled into the capital market, providing funding for private capital formation.

In these terms, the validation scenario can be thought of as a mechanism by which the current working generation partially provides for its own retirement. The funds necessary to pay a part of future benefits are, in effect, held in the form of the additional capital stock that was financed by the validation of the OASDI buildup. When trust fund assets are sold to finance the Federal deficits that are required to continue the validation policy after the buildup has ended, the funds are used to pay benefits instead of maintaining and expanding the existing capital stock. Thus, if a validation policy is maintained until the fund is exhausted, selling the trust fund assets to finance benefits has the effect of reducing the capital stock to roughly the same amount that would have been in place (when the fund reaches exhaustion) had the buildup not been validated. The cohorts of workers that created the buildup have successfully transferred, through time, enough resources, embodied in the newly created capital stock, to finance a part of their expected Social Security benefits. For those cohorts, the OASDI program truly is partly funded, and future generations of workers will not have to provide full financing (from cur-

⁵ The term general account refers to those accounts in the Federal budget that are more formally referred to as "On-Budget" accounts. The OASDI account is more formally known as the "Off-Budget" account.

rent income) for baby-boom OASDI retirement benefits, as they would under a pay-as-you-go system.

Although the economic effects of such a scenario are well-known and easy to establish in a theoretical sense, the actual process, at least in the extreme version outlined here, would lead to major changes in traditional Federal investment policy. The surpluses first would be used to retire existing Federal debt held by the public. But, because the projected size of the buildup is significantly larger than the current debt held outside the Government, full implementation of the validation policy would result in the Federal Government holding a substantial amount of the trust fund assets in non-Federal financial instruments. Aside from the fundamental question of the role of the Federal Government as an owner of part of the private industrial sector, the impact of large, direct Government transactions in the private capital market, and their relatively rapid dissolution, could prove disruptive.

Offset Scenario

If the offset policy is followed, the activity in the general account is specifically designed to counteract the OASDI surpluses that will occur during the buildup period and the deficits that will occur during the selloff period. In effect, the general account is spending the OASDI surpluses to finance general account deficits during the buildup and funding the OASDI fund deficits with general account surpluses during the selloff. In this case, the economy will be maintained on the full employment growth path that has been assumed to be achieved at the beginning of the buildup period and, thus, aggregate economic outcomes such as interest rates, saving, and the economy's growth rate at full employment will be unaffected by the behavior of the trust funds. The economic effects are the same as if the fund had not been built up.

The intergenerational consequences of the offset scenario are significantly different from the validation scenario. Unlike the validation case, the offset case does not create additional capital and thus does not provide a vehicle to transfer resources through time. In essence, the general account deficits during the buildup period represent reduced (nonpayroll) taxes or increased Federal services that primarily benefit the cohorts that are providing the funding for the trust fund buildup. The trust fund, rather than accumulating real capital to finance future benefit payments, is financing current general account deficits that provide Government services or increased after-tax income to (mostly) current workers. Their retirement costs will be borne by future taxpayers, in effect, maintaining the pay-as-you-go nature of the system. In this situa-

tion, the trust fund more accurately represents a stack of IOUs to be presented to future generations for payment, rather than a buildup of resources to fund future benefits. In this case, the cost of the baby-boom's retirement is borne fully by future workers; in the validation case, part of the cost is borne by the baby-boom generation itself.

Without a real buildup, the need for the Government to purchase private capital disappears. A continually balanced unified budget (including the OASDI funds) means that the amount of outstanding publicly held Federal debt will not change. The Federal Government is not retiring debt, as in the validation case, and thus never has excess funds for investment in private markets.

Also, in the offset case, some current general account spending is financed by payroll taxes rather than income taxes, changing the nature of the relative tax burden on the current work force. Indirectly, the regressive payroll tax, rather than the progressive income tax, is being used to finance some general account expenditures. The reverse occurs during the selloff period, when some general revenues are, in effect, being used to finance a part of total Social Security benefit payments. This situation would represent a significant change from the current equity implications of the taxpayer burden associated with the financing of OASDI and other Federal spending.

Concluding Comments

The fiscal policy scenarios outlined above can be achieved by manipulating either the general account or the OASDI account. The aggregate economic effects of the two cases are essentially the same, regardless of which Federal account is adjusted to implement the desired budget policy. For example, the effects of the offset scenario could be achieved by lowering payroll taxes in the near term to eliminate the OASDI buildup, and then raising payroll taxes or lowering future benefits to eliminate the OASDI fund deficits—that is, returning to a pay-as-you-go system. Likewise, Federal surpluses that arise from general account policy can increase national saving.

The choice of a mechanism to implement a given policy, however, can have very different equity implications. For example, if, as in the preceding example, current payroll tax cuts are financed by lowering future benefits, current workers, in effect, accept lower retirement benefits in exchange for reduced payroll taxes during part of their working life. Future generations of workers would thus provide a lower level of retirement support for current workers than under present law, resulting in the same type of intergenera-

tional consequences that were presented in the validation case. If the payroll tax cuts were financed by future payroll (or general account) tax increases, the cost would be shifted forward to future workers, with the same type of intergenerational implications as in the offset case. Differences in the equity implications of various options, both within and across generations, should be understood clearly before implementing a particular policy.

Of course, a combination of validation and offset policies could be undertaken with differing economic and distributional consequences. One possibility would be to validate the surpluses but institute an offset policy once the projected OASDI fund deficits begin to occur. In this case, future taxpayers would finance the OASDI fund deficits through higher general account taxes or lower general account spending, even though national saving and wealth had been increased. The accumulated fund would not have to be sold, and a permanent, partially funded OASDI system would be created. The capital stock and the level of national output would be higher than in

either the validation case or the offset case as long as the fund was maintained. In essence, the baby boom funds part of its own retirement benefits, just as in the pure validation case but, now, future generations of workers can partially fund their own retirement benefits by maintaining the fund.

These examples illustrate the range of economic and intergenerational effects that can occur as a result of a trust fund buildup. In practice, it is unlikely that it will be known ex post which scenario was closer to reality because one can only speculate what general account fiscal policy would have been in the absence of the trust fund buildup. Certainly, neither the pure offset nor the pure validation case will be followed religiously. The point to be emphasized is that the projected OASDI Trust Fund buildup presents an opportunity for the Federal Government to run a tighter fiscal policy more easily if monetary policy can be accommodative. If that goal, and its intergenerational consequences, is both politically and economically feasible, national saving will be higher, at least during the buildup period, than if it is not.