

# OASDI: Fiscal Basis and Long-Range Cost Projections

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*A thorough understanding of the financing structure of social security is a prerequisite to serious discussion of the financial condition of the program. In examining this structure, it becomes clear that the most important test of the program's financial soundness is whether expected future income to the funds equals expected future expenditures. Short range and long-range cost estimates indicate that this condition does not exist and that an actual deficit of 7.96 percent of taxable payroll, equivalent to \$4.3 trillion, needs to be eliminated—half of it perhaps by stabilizing benefits at current levels in relation to preretirement earnings. In addition, an unfunded accrued liability of \$3.1 trillion exists, although there is no indication that this liability needs to be funded.*

THE FINANCIAL condition of the social security program is much in the news these days. It is a healthy sign that various viewpoints are being put forth regarding the role of the social security program and the method by which it is financed. Sometimes, however, the debate tends to be confused because of the misunderstanding of various concepts and the words used to describe them. The purpose of this article is to present a few facts, figures, and explanations helpful to the reader in understanding that debate. The article is limited to the old-age, survivors, and disability insurance (OASDI) portion of the social security program, excluding Medicare.

## NATURE OF TRUST FUNDS

The Federal old-age and survivors insurance trust fund was established on January 1, 1940, as a separate account in the United States Treasury to hold the amounts accumulated under the old-age and survivors insurance (OASI) pro-

gram. All the financial operations relating to the OASI system are handled through this fund. The Social Security Amendments of 1956 provided for the creation of the Federal disability insurance trust fund—entirely separate from the OASI trust fund—through which are handled all financial operations in connection with the disability insurance (DI) system.<sup>1</sup>

These two trust funds are held by the Board of Trustees under the authority of section 201(c) of the Social Security Act. The Board is comprised of three members serving in an ex officio capacity: The Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health, Education, and Welfare. The Secretary of the Treasury is designated by law as the Managing Trustee, and the Commissioner of Social Security is Secretary of the Board.

The Board of Trustees reports to the Congress once each year, in compliance with section 201(c)(2) of the Social Security Act. These annual reports contain considerable information on the financial operation of the OASDI program, including historical information on the income and outgo of the trust funds for earlier years, a detailed statement on how the assets of the trust funds are currently invested, detailed estimates of the income and outgo during the next 5 years, and less detailed estimates of the income and outgo in the next 75 years.<sup>2</sup>

For the OASI and DI trust funds, the major sources of receipts are (1) amounts appropriated to each fund on the basis of contributions paid by workers and their employers and by individuals with self-employment income in covered employment and (2) amounts deposited in each fund representing contributions paid by worker

<sup>1</sup> A limited amount of benefits to disabled persons who are dependents of retired workers or survivors of deceased workers is payable from the OASI program.

<sup>2</sup> For more complete information on the financial operation of the OASDI program, see *1976 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds* (House Document No. 94-505, 94th Cong., 2d sess.), 1976.

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employed by State and local governments and by such employers with respect to covered employment. All employees and their employers in employment covered by the program are required to pay contributions with respect to the wages of individual workers (except for cash tips, covered as wages beginning in 1966 under the 1965 amendments, on which employees pay contributions but employers do not). All covered self-employed persons are required to pay contributions with respect to their self-employment income. In general, an individual's contributions are computed on annual wages or self-employment income, or both wages and self-employment income combined, up to a specified maximum annual amount, with the contributions determined first on the wages and then on any self-employment income necessary to make up the annual maximum amount. Contributions payable by both workers and employers are sometimes referred to here as "taxes."

The contribution rates applicable to taxable earnings in calendar years 1937 and later and the allocation of the rates to finance expenditures from each of the trust funds are shown in table 1. For 1977 and later years, the contribution rates shown are the rates scheduled in the provisions of the present law. The table also shows the

maximum amount of annual earnings taxable from 1937 to 1977. Beginning with 1975, the maximum amount of earnings taxable in each year is determined in the preceding year under the automatic increase provisions in section 230 of the Social Security Act, unless modified by intervening congressional action.

Except for amounts received by the Secretary of the Treasury under State agreements (to effectuate coverage under the program for State and local government employees) and deposited directly in the trust funds, all contributions are collected by the Internal Revenue Service and deposited in the general fund of the Treasury as internal revenue collections. Then, on an estimated basis, the contributions received are immediately and automatically appropriated to the trust funds. Periodic adjustments are subsequently made to the extent that the estimates are found to differ from the amounts of contributions actually payable on the basis of reported earnings.

That portion of each trust fund that, in the judgment of the Managing Trustee, is not required to meet current expenditures for benefits and administration is invested on a daily basis (1) in interest-bearing obligations of the US Government (including special public-debt obligations utilized only by the trust funds), (2) in

TABLE 1—Maximum taxable annual earnings and contribution rates

Calendar year	Maximum taxable amount of annual earnings	Contribution rates (percent of taxable earnings)					
		Employees and employers, each			Self-employed		
		OASDI	OASI	DI	OASDI	OASI	DI
<b>Past experience</b>							
1937-49	\$3,000	1 000	1 000	---	---	---	---
1950	3 000	1 500	1 500	---	---	---	---
1951-53	3,800	1 500	1 500	---	2 250	2 250	---
1954	3 600	2 000	2 000	---	3 000	3 000	---
1955-56	4 200	2 000	2 000	---	3 000	3 000	---
1957-58	4 200	2 250	2 000	0 250	3 375	3 000	0 375
1959	4 800	2 500	2 200	200	3 750	3 375	375
1960-61	4 800	3 000	2 750	250	4 500	4 125	375
1962	4 800	3 125	2 875	250	4 700	4 325	375
1963-65	4 800	3 625	3 375	250	5 400	5 025	375
1966	6 600	3 850	3 500	350	5 800	5 275	525
1967	6 600	3 900	3 550	350	5 900	5 375	525
1968	7 800	3 800	3 325	475	5 800	5 0875	7125
1969	7 800	4 200	3 725	475	6 300	5 5875	7125
1970	7,800	4 200	3 650	550	6 300	5 4750	8250
1971	7 800	4 600	4 050	550	6 900	6 0750	8250
1972	9 000	4 600	4 000	500	6 900	6 0750	8250
1973	10 800	4 850	4 300	550	7 000	6 2050	7950
1974	13 200	4 950	4 375	575	7 000	6 1800	8150
1975	14,100	4 950	4 375	575	7 000	6 1850	8150
1976	15,300	4 950	4 375	575	7 000	6 1850	8150
<b>Changes scheduled in present law</b>							
1977	<sup>1</sup> 16,500	4 950	4 375	575	7 000	6 1850	8150
1978-80	( <sup>2</sup> )	4 950	4 350	600	7 000	6 1500	8500
1981-85	( <sup>2</sup> )	4 950	4 300	600	7 000	6 0800	9200
1986-2010	( <sup>2</sup> )	4 950	4 200	700	7 000	6 0100	9900
2011 and later	( <sup>2</sup> )	5 950	5 100	800	7 000	6 0000	1 0000

<sup>1</sup> Determined under automatic-increase provision and promulgated Oct. 13, 1975.

<sup>2</sup> Subject to automatic increase.

obligations guaranteed as to both principal and interest by the United States, or (3) in certain federally sponsored agency obligations designated as lawful investments for fiduciary and trust funds under the control and authority of the United States or any officer of the United States. The trust funds earned interest amounting to \$2.8 billion during the fiscal year 1975, equivalent to an effective annual rate of 6.5 percent on the total assets of the trust funds.

Expenditures for benefit payments and administrative expenses under the OASDI program are paid out of the trust funds. All expenses incurred by the Department of Health, Education, and Welfare and by the Department of the Treasury in carrying out the provisions of title II of the Social Security Act and of the Internal Revenue Code relating to the collection of contributions are charged to the trust funds. The Secretary of Health, Education, and Welfare certifies benefit payments to the Managing Trustee, who makes the payment from the respective trust funds in accordance therewith. Administrative expenses for the fiscal year 1975 amounted to 1.5 percent of benefit payments from the OASI trust fund, 3.3 percent of benefit payments from the DI trust fund, and 1.8 percent from the combined trust funds.

## FINANCING BASIS

Throughout its history the OASDI program has been self-supporting. Since the 1950's, it has been operated on what may be termed a current-cost financing basis. It is self-supporting in that the only source of funds to pay benefits and administrative expenses is the social security tax collected from workers covered under the program and their employers (and the interest earned on the invested balances of the trust funds).<sup>3</sup>

Under the current-cost method of financing, the amount of taxes collected each year is intended to be approximately equal to the benefits and administrative expenses paid during the year plus a small additional amount to maintain the trust

<sup>3</sup> In addition the trust funds receive annual reimbursements from the general funds of the Treasury for certain costs not financed by payroll taxes. In fiscal year 1975 such reimbursements amounted to \$499 million, or about 1/4 of 1 percent of the \$66.7 billion in total income to the OASI and DI funds.

funds at an appropriate contingency reserve level. The purpose of the trust fund under current-cost financing is to reflect all financial transactions and to absorb temporary differences between income and expenditures. Thus, whatever normal ratio of trust fund assets to expenditures is established, it can be expected that the fund will vary somewhat from that level from time to time as it absorbs those fluctuations.

The tabulation below illustrates for selected

Calendar year	OASDI trust fund assets at beginning of year	
	Dollar amount (in millions)	As percent of expenditures during year
1960	\$21,966	186
1965	21,172	110
1970	34,182	103
1971	38,068	99
1972	40,434	93
1973	42,775	80
1974	44,414	73
1975	45,886	66
1976	44,342	157

<sup>1</sup> Estimated

years the size of the combined OASDI trust funds in dollars and as a percentage of expenditures during the following year. Since the inception of the OASDI program, past payroll taxes together with interest on the trust funds have been adequate to provide all past benefits and administrative expenses. More specifically, from 1937 through 1975, cumulative income to the trust funds amounted to \$586 billion and cumulative disbursements amounted to \$542 billion. The balance of \$44 billion was in the trust funds at the end of the calendar year 1975.

It is estimated on the basis of current projections that, during calendar years 1976-81, income to the trust funds will total \$581 billion and disbursements will be \$616 billion.<sup>4</sup> These amounts represent a projected decrease in the trust funds of \$35 billion during the period that would reduce

<sup>4</sup> In the 1976 annual reports of the Board of Trustees of the social security trust funds, cost estimates were prepared on the basis of three alternative sets of economic and demographic assumptions. Alternative I could be characterized as an optimistic set of assumptions, alternative III as a pessimistic set of assumptions, and alternative II as an intermediate set of assumptions that produces expenditures (measured as a percentage of taxable payroll) approximately midway between those produced by the alternative I and III assumptions. In this article, all quoted projections are based upon the alternative II set of assumptions.

the trust funds to about \$9 billion by the end of 1981. For purposes of illustration, the preceding figures are for the OASI and DI trust funds combined, although these are independent trust funds and must be considered separately. The figures show that under current financing procedures the assets of the trust funds play a relatively minor role, it is the ongoing collection of social security taxes that is the most important factor in providing benefits under the program.

### **ACTUARIAL DEFICIT OR ACTUARIAL SURPLUS**

Congress, in setting future tax rates for the OASDI program, has normally followed the principle that estimated future income to the trust funds (including interest earnings on invested assets) should be equal to estimated future disbursements, taking into account both present and future participants in the program. When estimated future disbursements and estimated future income over the 75-year valuation period (used since 1965) are not in balance, an "actuarial deficit" or an "actuarial surplus" exists—depending on whether disbursements are greater than income, or vice versa.

The OASDI program has been in close actuarial balance throughout most of its existence. When there was an imbalance—that is, an actuarial deficit or actuarial surplus—Congress has acted in due course to revise taxes or benefits or both in order to bring the program into close actuarial balance over the 75-year valuation period. It is therefore essential to the sound financial operation of the OASDI program that periodic estimates be made of the future income and outgo to ensure that they are still in balance and, if they are not, to provide information to enable appropriate action to be taken to restore the balance.

Actual future income from social security taxes and actual future expenditures for benefit payments and administrative expenses will depend on a large number of factors, including the following:

(1) Size and composition of the active working population, which depend in turn on fertility rates, mortality rates, migration rates, labor force participation and unemployment rates, disability rates, retirement-age patterns, etc.

(2) size and composition of the population receiving benefits, the level of benefits, and the level of earnings of the active working population, which depend in turn on the previously mentioned factors, as well as on wage patterns, the consumer price index, marriage rates, etc.

It is obviously impossible to know what the future holds with respect to these demographic and economic factors, which will determine the actual income and expenditures under the OASDI program during the next 75-year period. The best that can be done is to make assumptions as to the future behavior of these factors and to make long-range estimates based on such assumptions that will indicate the trend and general range in future income and outgo. Such estimates and their underlying assumptions, if revised periodically in the light of developing trends, provide information essential for making informed policy decisions.

In reviewing long-range estimates based on demographic and economic conditions postulated to exist in the middle of the next century, it is well to keep in mind the following caution: Although the underlying assumptions for these long-range estimates may appear reasonable, based upon current understanding, in some cases they produce results so different from the current situation that attention should be directed toward their overall implications—not just toward their effect on the single issue of financing the OASDI program. Since the selection of particular demographic assumptions, for example, implies a certain future composition of the U.S. population, it is important to recognize that, if the population composition should change in accordance with these assumptions, substantial changes in many of the Nation's social and economic arrangements may result. Although such analysis is beyond the scope of this article, it would be desirable to extend to the year 2050 an analysis of possible effects of the postulated changes throughout the society, in order to view the long-range financing questions from a broader perspective.

### **LONG-RANGE COST ESTIMATES UNDER PRESENT LAW**

To facilitate the presentation of long-range cost estimates, expenditures are expressed here as a percentage of taxable payroll. The expendi-

tures consist of outgo from the trust funds and include benefit payments, administrative expenses, interchanges between the old-age, survivors, and disability insurance trust funds and the railroad retirement trust fund (including the reflection of net income from that fund), and payments for vocational rehabilitation services for disability beneficiaries. The payroll consists of the total earnings subject to social security taxes, after adjustment to reflect the lower contribution rates on self-employment income, tips, and multiple-employer "excess wages." This adjustment is made to facilitate both the calculation of contributions (which is thereby the product of the tax rate and the payroll) and the comparison of expenditure percentages with tax rates.

Table 2 displays the projected expenditures under the OASDI program, together with the scheduled taxes and the resulting excess of expenditures over tax income during the next 75 years. These figures were derived from the 1976 Annual Report of the Board of Trustees of the OASI and DI trust funds.<sup>5</sup>

As table 2 indicates, the expenditures are expected to rise slowly during the remainder of this century. After the turn of the century, they are expected to rise more rapidly until reaching a level of almost 29 percent of taxable payroll in 2050. The excess of projected expenditures over tax income is relatively low during the remainder of this century but rises quickly thereafter. The average excess of expenditures over taxes for the 75-year period is 7.96 percent of taxable payroll—the figure usually quoted as the actuarial deficit. This large deficit is not something that has already occurred, rather it is something that is expected to materialize in the future.

Why did the 1976 Trustees Report forecast an actuarial deficit of 7.96 percent of taxable payroll when just 4 years earlier in 1972 no actuarial deficit was anticipated? The relatively small deficit that began in 1975 and is expected to continue during each of the next 25 years is primarily a result of these factors:

(1) Unprecedented and unanticipated inflation in recent years and approximately corresponding increases in benefits (11 percent in 1974, 8 percent in

<sup>5</sup> See the Report (*op cit*) for details of the projected future expenditures under OASDI (pages 48-55) and the assumptions and methodology (pages 61-69).

TABLE 2—Estimated expenditures for old-age, survivors, and disability insurance program as a percent of taxable payroll, selected years, 1976-2050

[Based on intermediate set of assumptions in the 1976 Trustees Report]

Calendar year	Expenditures	Tax rate in law	Excess expenditures over taxes	Portion of excess expenditures attributable to increase in replacement ratios <sup>1</sup>
1976---	10 78	9 90	0 88	
1985---	11 16	9 90	1 26	0 04
1990---	12 06	9 90	2 16	21
1995---	12 89	9 90	2 99	45
2000---	13 41	9 90	3 51	85
2005---	14 33	9 90	4 43	1 49
2010---	15 99	9 90	6 09	2 30
2015---	18 40	11 90	6 50	3 31
2020---	21 29	11 90	9 39	4 45
2025---	24 09	11 90	12 19	5 62
2030---	26 03	11 90	14 13	6 64
2035---	27 04	11 90	15 14	7 45
2040---	27 45	11 90	15 55	8 10
2045---	27 92	11 90	16 02	8 72
2050---	28 59	11 90	16 69	9 34
25-year average				
1976-2000	11 81	9 90	1 91	23
2001-2025	17 95	11 10	6 85	3 04
2026-2050	27 04	11 90	15 14	7 74
75-year average				
1976-2050	18 93	10 97	7 96	3 68

<sup>1</sup> See text, page 23, for an explanation of the data.

1975, and 6.4 percent in 1976) and an expectation that inflation will continue at higher levels than formerly anticipated,

(2) unexpectedly high rates of unemployment, beginning in 1974 and resulting in less than anticipated tax income, and

(3) higher than expected disability insurance expenditures in recent years and an expectation that future disability costs will be higher than formerly anticipated.

The deficit expected after the turn of the century is primarily a matter of holding a different view of the future than the one held a few years ago. Beginning with the projections made in 1974, the expectation about the fertility rate in the future changed. This rate is now expected to be lower in the future than was formerly assumed. The eventual result will be a much larger number of OASDI beneficiaries in relation to the active tax-paying population. The number of beneficiaries per 100 active workers is now expected to increase by about 65 percent by the year 2035. Since the social security program is financed on a current-cost basis, collecting only enough in taxes to pay benefits currently due, it follows that expenditures will rise by about 65 percent solely as a result of the population changes now anticipated.

This demographic area is not the only one in

which the outlook has changed. Beginning with the projections made in 1975, higher rates of inflation and wage changes have been assumed. Because of the complex and arbitrary way in which future benefits are related to future changes in wages and in the consumer price index, under the particular assumptions made regarding such changes the benefits projected to materialize under present law reach unreasonably high levels (when the initial benefit is considered in relation to the wages being replaced) for persons who first become entitled to benefits in the next century. The estimated future costs that result from a projection of these high benefit levels may be somewhat unrealistic and should be interpreted with caution and in light of the virtual certainty that legislative changes will be made to prevent these projected levels from materializing.

The last column in table 2 has been included to illustrate the degree to which these apparently unintended increases in future benefits contribute to the actuarial deficit. That column indicates the portion of the actuarial deficit shown in the preceding column that is attributable to an increase (above the levels prevailing at the beginning of 1978) in the replacement ratio—that is, the ratio of the initial benefit payable at retirement to the individual's preretirement earnings. Approximately one-half of the 75-year average actuarial deficit is attributable to rising replacement ratios. The resolution of this problem is one of the most important tasks that must be faced by those concerned with the social security program.

#### **TRILLION DOLLAR 'ACTUARIAL DEFICITS' AND 'ACCRUED LIABILITIES'**

The Board of Trustees, in their 1976 annual report on the financial status of the OASDI program, reported that the average annual amount by which expenditures were expected to exceed tax income over the next 75-year period was 7.96 percent of taxable payroll. This figure represents a sizable actuarial deficit since the average amount of taxes expected to be collected each year during the next 75 years according to current law is 10.97 percent of taxable payroll. As noted previously, this actuarial deficit should be interpreted with caution, since it is attributable in part to projected benefit levels that will not

materialize if appropriate legislation is enacted.

Another way to express the actuarial deficit is as a single-sum amount—\$4.3 trillion as of mid-1976—determined by computing the excess of expenditures over income in each of the next 75 years and discounting these amounts at interest to the present time. This computation and those that follow were determined as of mid-1976 on the basis of the intermediate set of assumptions set forth in the 1976 OASDI Trustees Report and on an annual interest rate of 6.6 percent.<sup>6</sup>

The following examples may be of value as further illustration of the meaning of the actuarial deficit. If the actuarial deficit determined in 1976 is to be eliminated by the payment of additional taxes it could be achieved, at least in theory, in one of two ways. A single-sum amount of \$4.3 trillion could be placed in the trust fund immediately, and the resulting trust fund together with interest thereon, supplemented by the currently scheduled social security taxes, would be sufficient to pay all benefits falling due in the next 75 years. At the end of that period, the trust fund would have returned to a relatively low level as at present.

As an alternative to this obviously impossible solution, additional taxes could be collected over the next 75 years. The average additional taxes would have to be the equivalent of 7.96 percent of taxable payroll (compared with the average scheduled taxes of 10.97 percent). If it is desirable that the trust fund be maintained at a relatively low level to serve as a contingency fund—as in recent years—the additional taxes would not be constant throughout the next 75 years but would increase as benefit payments increase. In this event, the average additional taxes (over and above the taxes already scheduled) would be about 1.9 percent of taxable payroll until the turn of the century, 6.9 percent during the first quarter of the next century, and 15.1 percent thereafter.

Obviously the actuarial deficit must be eliminated. The financing goal for the social security program has always been and should continue to be that, on the basis of the best information available, anticipated future expenditures will

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<sup>6</sup>For the purpose of these calculations, a 6.6-percent interest rate has been assumed. This is a "real rate of interest" of 2.5 percent, compounded with an assumed 4.0-percent annual increase in the consumer price index.

equal anticipated future income. As indicated earlier, the appropriate revision of the automatic adjustment provisions, which result in erratic and unpredictable replacement ratios, is an important step in eliminating about half of this deficit. The actuarial deficit would, for example, be reduced from \$4.3 trillion to \$2.2 trillion if replacement ratios are stabilized at current levels. In terms of a percentage of taxable payroll the actuarial deficit would be reduced from 7.96 percent to 4.28 percent. As soon as they can be devised, steps should be taken to eliminate completely the projected actuarial deficit over the entire 75-year period.

Once this has been achieved and the program is back in actuarial balance, with anticipated future income being equal to anticipated future expenditures, there is still the question of the "unfunded accrued liability." This is a completely separate issue from the "actuarial deficit." The existence of, and the amount of, the "unfunded accrued liability" has no relationship whatsoever to the "actuarial deficit."

The "accrued liability" can be defined as the present value of benefits that have been earned or accrued as of a given date but that will not actually be paid until a later date. In mid-1976, for example, there were 32.5 million persons receiving social security benefits of about \$75 billion a year. All conditions have been met for these benefits to be payable in the future and these benefits may be considered to have been fully earned or accrued. The present value of these future benefits is about \$700 billion—that is, a fund of \$700 billion invested at interest would be just enough to pay all the future benefits to these persons and the fund would be exhausted at the time the last benefit payment fell due. Accordingly, the "accrued liability" for benefits payable to these 32.5 million persons may be said to be \$700 billion.

It is more difficult to define the accrued liability for the more than 100 million persons who have participated in the social security program at some time in the past and who are potential recipients of benefits at some time in the future. Because of their earlier participation, these persons may be considered to have earned or accrued a certain portion of the benefits that will be paid to them at some time in the future, although it should be emphasized that these benefits are not

vested from a legal point of view. A variety of methods can be used to calculate the amount of benefits and the value thereof that should be assigned to this earlier service. Such calculations have not been performed with respect to the social security program in recent years. If they were, however, it is likely that they would indicate an accrued liability of about \$2,400 billion.<sup>7</sup>

When that amount is added to the accrued liability of \$700 billion for those persons already receiving benefits, the result would be a total accrued liability of some \$3,100 billion. Since the trust fund had assets of about \$45 billion in mid-1976, the "unfunded accrued liability" could be considered to be about \$3,055 billion, or \$3.1 trillion. It should be emphasized here that it is only a coincidence that this "unfunded accrued liability" is of the same magnitude as the "actuarial deficit" of \$4.3 trillion. If the actuarial deficit were zero, the unfunded accrued liability would still be \$3.1 trillion. The unfunded accrued liability may be viewed as the amount by which benefits, paid or promised with respect to earlier years of participation in the system, have exceeded the amount of taxes paid during such years by employees and their employers.

If the social security program were a private system, under normal circumstances it would be considered desirable to begin to collect more income than is necessary for current benefit payments and to accumulate a substantial fund and begin to transform this *unfunded* accrued liability into a *funded* accrued liability. Reasons for doing this would include the following:

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<sup>7</sup>A convenient method of estimating this accrued liability is to compare the present value of (a) future benefits and administrative expenses for persons aged 21 and over under present law and (b) future taxes for these persons, based on a tax schedule under which there would be no 75-year actuarial deficit (that is, under which future tax income, including present trust fund assets, would be equal to future benefits and administrative expenses). The excess of (a) over (b)—the amount by which future outlays for persons aged 21 and over exceed future taxes paid by such persons—can reasonably be used as one measure of the accrued liability. The accrued liability under present law computed in this manner is \$3,700 billion (including the accrued liability of \$700 billion for persons already receiving benefits). If this computation were based not on present law but a revised law under which replacement ratios would not rise but remain approximately constant, the total accrued liability would be \$3,100 billion. This figure is considered by the author to be more appropriate to illustrate the magnitude of the accrued liability, and it is used here in the text.

1 *Security of benefits* The existence of a large fund would give the employees some assurance that in case the system should terminate and no future income to the system were available, the benefits accrued to date could in fact be paid, at least to the extent the accumulated fund was adequate (The Employee Retirement Income Security Act of 1974 requires that most private pension plans accumulate a fund in order to give employees this added security that their benefits will ultimately be paid)

2 *Reduction of future contributions* If a fund is accumulated the amount of investment earnings on the trust fund can be used to pay a portion of the future benefits, and a reduction in the amount of future contributions otherwise required to finance the benefits is thus possible

3 *Allocation of costs to period during which they are incurred* Even though benefits may not be paid until some future date, the cost of these benefits can be considered as having been incurred gradually over an employee's working lifetime as he earns the benefits

Although these are valid reasons for funding the accrued liability associated with a private pension system, they are less valid for national compulsory social insurance—such as the social security program—covering substantially the entire population. With respect to assurance of benefits, it is usually assumed that the social security program will continue indefinitely into the future and that the taxing power of the Government is adequate assurance that the benefits will be provided.

With respect to reduction of future contributions, it could be argued that since social security trust funds are invested in Government securities (the interest on which is paid from general revenues), the accumulation of a fund will result in lower future social security taxes but higher general taxes. In other words the total future cost will be about the same but will be distributed differently among the population.

With respect to the appropriate allocation of costs to the period during which they are incurred, an argument can be made (under a national social insurance system as well as under a private pension system) for recognizing that a liability is accruing during a person's active working lifetime, even though the benefits and the costs thereof may not be paid until a later date. The recognition of this liability may or may not take the form of accumulating a fund that is related to a somewhat arbitrarily determined "accrued liability."

An argument is being made in some quarters these days for funding the accrued liability

under the social security program for a reason that does not apply to an individual private pension system. It goes something like this: Since a large part of a person's retirement needs are met by the social security program, his private saving for retirement needs is reduced, the result is that the Nation's capital accumulation needs are partially unmet, to offset this reduced saving by the individual, the social security program should collect higher taxes and fund part or all of its accrued liability, the assets of the trust fund would be invested in Government securities, thus the amount of Government securities held privately would be reduced and more private saving would be freed for use in developing the economy.

The elaboration of this argument, including a statement of its pros and cons, will not be discussed here. It should be noted, however, that this argument for funding is a controversial one, and it is difficult for various experts to reach agreement on the extent, if any, to which the social security program has resulted in a reduction in private saving.

The most important test of financial soundness for the social security program is whether the future income (taxes and interest on the trust funds) can reasonably be expected to equal future benefits and administrative expenses. This condition does not exist for the present social security (OASDI) program, and there is a substantial "actuarial deficit" of 7.96 percent of taxable payroll, equivalent to \$43 trillion, that must be eliminated. About one-half of this actuarial deficit can be eliminated by the stabilization of benefits at their current levels in relation to preretirement earnings. This matter is entirely separate, however, from the question of the "unfunded accrued liability" of some \$31 trillion and whether or not valid reasons exist for changing it into a "funded accrued liability" by collecting more in social security taxes now and less in social security taxes (and more in general revenues) later.

## CONCLUSION

Much more can be said about the financial aspects of the social security program, but the

(Continued on page 48)



TABLE M-7 —Hospital insurance trust fund Status, 1966-76

[In thousands]

Period	Receipts				Expenditures			Assets at end of period		
	Net contribution income <sup>1</sup>	Transfers from rail road retirement account <sup>2</sup>	Reimbursements from general revenues <sup>3</sup>	Net interest <sup>4</sup>	Net hospital and related service benefits <sup>5</sup>	Administrative expenses <sup>6</sup>	Invested in U.S. Government securities <sup>7</sup>	Cash balances <sup>8</sup>	Total assets	
Jan 1966-Aug 1976	\$70 148 615	\$716,971	\$5,561 889	\$2,061 986	\$66 519 393	\$31 871,740	\$10,693 333	\$4 996	\$10 698,329	
<b>Fiscal year</b>										
1966	908,797	-	-	5 970	-	63 854	785,758	65,446	851,204	
1967	2,688 684	16 200	337,850	45,403	2,507,773	88 848	1,298 168	45,053	1 343,221	
1968	3,514 049	43 613	283 631	61 091	3 736,322	78 647	1 370,276	60,360	1 430,636	
1969	4,423 236	53 776	770,968	96 063	4,653,976	104 142	2 001,444	15 078	2 016,521	
1970	4 784 789	61 307	828 262	139 423	4,804 242	148,660	2 653 322	24 079	2 677,401	
1971	4,897 979	63 255	773 849	183 027	5 442 971	149 434	3 029 856	73 250	3 103,106	
1972	5,225 891	63 782	551 351	190 105	6,109,139	166 370	2 883 958	-25 233	2 858 725	
1973	7,663 119	61,222	423 418	197 844	6,648 819	192 839	4 222,365	146 301	4 368 666	
1974	10,606,551	96,163	498 780	408 273	7 806 687	258 048	7,864 355	49 344	7,913 699	
1975	11,296 773	128 749	529,353	614 989	10 355,390	266 134	9 760 893	109 156	9 870 039	
1976	12,039,194	130 904	668,430	715,744	12 270 382	308 215	10 942 180	-106,465	10 835 714	
<b>1975</b>										
August	935,190	-	-	1 404	890 454	17 993	9 647 265	95 633	9 742,898	
September	1,163,338	130 904	-	8 187	968,704	24 088	10,025,679	26 855	10 052,534	
October	707,283	-	-	3 078	1,031,621	24 094	9 751,953	-44 685	9,707,270	
November	807,418	-	-	5 577	922,283	25 700	9,489 254	113 028	9 572,282	
December	978,273	-	668,430	327 038	995,864	23 010	10,499,871	17,279	10,517,150	
<b>1976</b>										
January	912,691	-	-	2 525	977,270	22 263	10,397,867	34 965	10 432,832	
February	1,033,373	-	-	1,617	981,252	24 947	10,447,892	13 731	10,461,623	
March	1,148,985	-	-	1,693	1,161 540	23,879	10,574,791	-147 910	10,426,881	
April	1,190 404	-	-	1 695	1,150 885	31 887	10 602 065	-165,857	10,438,208	
May	1,150 324	-	-	1 922	1 036 104	25 071	10 479,161	48 119	10 527 280	
June	1,177,343	-	-	368 840	1,196,510	31 244	10 942,180	-106 465	10 835,714	
July	977 613	-	-	2,317	1 075 907	26 002	10,706,040	7 606	10,713,646	
August	1 121 941	-	-	1,237	1,107 895	30,799	10,693 333	4 996	10,698,329	

<sup>1</sup> Represents amounts appropriated (estimated tax collections with suitable subsequent adjustments), after deductions for refund of estimated amount of employee tax overpayment and, beginning July 1973, premiums for coverage of uninsured individuals aged 65 and over

<sup>2</sup> Transfers (principal only) from the railroad retirement account with respect to contributions for hospital insurance coverage of railroad workers

<sup>3</sup> Represents Federal Government transfers from general funds appropriations to meet costs of benefits for persons not insured for cash benefits under OASDI or railroad retirement and for costs of benefits arising from military wage credits

<sup>4</sup> Interest and profit on investments after transfers of interest on reimbursed administrative expenses (see footnote 6) and interest on amounts transferred from railroad retirement account (see footnote 3)

<sup>5</sup> Represents (1) payment vouchers on letters of credit issued to fiscal

intermediaries under sec 1816 and (2) direct payments to providers of services under sec 1815 of the Social Security Act

<sup>6</sup> Subject to subsequent adjustment among all 4 social security trust funds for allocated cost of each operation

<sup>7</sup> Book value Includes net unamortized premium and discount and, when applicable accrued interest purchased and repayments on account of interest accrued on bonds at time of purchase

<sup>8</sup> Minus figures, if any, represent overdrafts that are covered by redemption of securities on first working day of following month

<sup>9</sup> Includes "tool up" period from date of enactment of Social Security Amendments of 1965 (July 30)

Source Unpublished Treasury monthly reports keyed to *Final Statement of Receipts and Expenditures of U.S. Government*

## OASDI TRUST FUNDS

(Continued from page 27)

space available does not permit further elaboration of the subject. No attempt is made here to resolve any questions but merely to offer some explanations in order to facilitate future discussions about certain financial aspects of the social security program.

The program is so large and well-established

and such an important and integral part of our national socioeconomic structure, that its momentum will not be halted. The only question is in what direction and by how much it will grow. Will it grow in an uncontrolled and irrational manner, or in a logical way so that it will best match the economic needs of the beneficiaries and the financial ability of the taxpayers? The answer to this question will depend in large part upon the extent of the dialogue among an informed citizenry.