

SUMMARY OF THE 1988 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS

May 1988

Highlights

As shown in the 1988 Annual Report, the assets of the Old-Age and Survivors Insurance (OASI) Trust Fund increased by \$23.1 billion in calendar year 1987, reflecting the continuing growth in the economy. Although the Disability Insurance (DI) Trust Fund declined by \$1.1 billion, the growth in the combined trust funds, at \$21.9 billion, was larger than the growth estimated in the 1987 Annual Report on the basis of intermediate assumptions.

The trust funds are expected to continue growing for many years into the future. However, if experience is very adverse, the assets of the DI Trust Fund could decline to such a low level that financial problems could occur within the next 10 years.

The long-range 75-year estimates indicate that, under the intermediate assumptions, the OASDI program will experience about three decades of positive annual balances, with continuing annual deficits thereafter. The positive balances in the first part of the 75-year projection period nearly offset the later deficits, so that the program, as a whole, is in close actuarial balance. Over the long-range 75-year projection period, the OASDI program has an actuarial deficit of 0.58 percent of taxable payroll, based on the intermediate alternative II-B assumptions and calculated on a level-financing basis.

The combined trust funds are expected to accumulate to a maximum fund ratio of 531 percent of annual outgo in the year 2015, based on the alternative II-B assumptions. Thereafter, the fund ratio is estimated to decline until the funds are exhausted in 2048. Therefore, according to the alternative II-B projections, the OASDI program will have enough funds to cover expenditures for about 60 years into the future.

For OASI and DI, separately, the long-range actuarial deficits, based on the alternative II-B assumptions, are 0.45 percent and 0.13 percent of taxable payroll, respectively. The deficit for DI represents about 8.3 percent of the cost rate over the 75-year period, and the DI program is therefore not in close actuarial balance. However, the DI program could be brought into close actuarial balance by a small reallocation of the contribution rate from OASI to DI in such a way that the OASI program would still remain in close actuarial balance. Such reallocation is not being recommended by the Board of Trustees, but the DI program needs careful monitoring in both the short-range and the long-range periods.

1. Program Description

The OASDI program consists of two separate parts which pay monthly benefits to workers and their families:

- (1) Old-Age and Survivors Insurance (OASI) pays benefits after a worker retires and to survivors after a worker dies.
- (2) Disability Insurance (DI) pays benefits after a worker becomes disabled.

The Board of Trustees of the trust funds is required by law to report annually to the Congress on the financial condition of the funds and on estimated future results. The Board has five members, three of whom serve in an ex officio capacity: the Secretaries of the Treasury, Labor, and Health and Human Services. The Board also includes two members of the public, Mary Falvey Fuller and Suzanne Denbo Jaffe, who are serving 4-year terms which began on September 28, 1984.

Most OASDI revenue consists of contributions paid by employees, their employers, and the self-employed. (Additional contributions are paid into a separate trust fund for the Hospital Insurance part of Medicare. This summary focuses on OASDI and does not discuss Medicare.) The contribution rates are established by law. Contributions are paid on earnings not exceeding the earnings base—\$45,000 in 1988. The earnings base will rise in the future as average wages increase. The current and future OASDI contribution rates for employees and employers, each, are shown below (as percentages):

Year	OASI	DI	Total
1988-89	5.53	.53	6.06
1990-99	5.60	.60	6.20
2000 & later	5.49	.71	6.20

Since 1984, a portion (not more than one-half) of OASDI benefits received by higher income beneficiaries is subject to Federal income taxation. The revenues collected as a result of this provision are transferred from the general fund of the Treasury to the trust funds.

The outgo of the OASI and DI Trust Funds consists of benefit payments and administrative expenses. Trust fund assets may not be used for any other purposes.

During periods when outgo temporarily exceeds income, trust fund assets are used to meet the shortfall. In the event of recurring shortfalls, the trust funds can allow time for legislation to be enacted to restore balance to the program. The assets of the trust funds are invested in U.S. Government securities bearing rates of interest similar to those for long-term securities issued to the general public.

2. Recent Results

During 1987, about 128 million workers made contributions to the OASDI program. At the end of September 1987, 38.1 million persons were receiving monthly benefits under the OASDI program. Administrative expenses represented about 1.1 percent of benefit payments in fiscal year 1987.

Income to the OASI and DI Trust Funds in fiscal year 1987 was \$226.9 billion, while outgo was \$207.3 billion. Thus, the assets of the combined funds increased by \$19.6 billion during the fiscal year. A summary of the OASDI financial operations in fiscal year 1987 is shown below (in billions):

Trust fund assets at end of fiscal year 1986	\$45.9
Income during year:	
Contributions	218.9
Revenue from taxation of benefits	3.3
Payments from general fund	1
Net interest	4.6
Total income	226.9
Outgo during year:	
Benefit payments	202.4
Administrative expenses	2.3
Transfer to Railroad Retirement program	2.6
Total outgo	207.3
Net increase in assets during year	19.6
<u>Trust fund assets at end of fiscal year 1987</u>	<u>65.4</u>

Note: Totals may not equal sums of components, due to rounding.

3. Actuarial Estimates

The annual report contains 75-year estimates of each fund's financial operations and status. Because precise prediction of the future is impossible, alternative sets of assumptions, representing a reasonable range of possible future experience, are used to make short- and long-range estimates. Future experience could, however, fall outside the range indicated by these assumptions.

Future OASDI income and outgo will depend on a variety of economic and demographic factors, including economic growth, inflation, unemployment, fertility, and mortality. Economic factors affect the levels of workers' earnings and OASDI benefits, while employment and demographic factors affect the numbers of people making contributions and receiving benefits.

This year's estimates were prepared using four alternative sets of assumptions. Two sets-alternatives II-A and II-B-are designated "intermediate." Both intermediate sets share the same demographic assumptions, but differ with respect to economic assumptions; somewhat more robust economic growth is assumed for alternative II-A than for alternative II-B. One set-alternative I-is designated "optimistic," and another-alternative III-is "pessimistic."

No single measure is used to assess the actuarial status of the OASDI funds. Short-range measures usually

focus on the adequacy of reserves available to pay benefits. Long-range measures usually focus on the balance between income and outgo during the projection period as well as the adequacy of the reserves.

The *contingency fund ratio* is the usual measure of the OASDI program's ability to pay benefits on time in the near future. This ratio is the amount in the trust funds at the beginning of the year, including advance tax transfers for January, divided by that year's expenditures. Thus, if the trust fund ratio is 50 percent, the amount in the fund represents about 6 months' outgo. At the beginning of 1988, the fund ratio for OASDI was about 41 percent. A ratio of 8 to 9 percent is required to pay benefits at the beginning of each month.

In analyzing the actuarial status of OASDI for the next 75 years, several different measures are commonly used. The *income rate* is the combined OASDI employee-employer contribution rate scheduled in the law, plus the income from taxation of benefits, expressed as a percentage of taxable payroll. The *cost rate* is the annual outgo expressed as a percentage of taxable payroll. Summarized income and cost rates over the 75-year projection period can be compared directly to measure the adequacy of the program's financing.

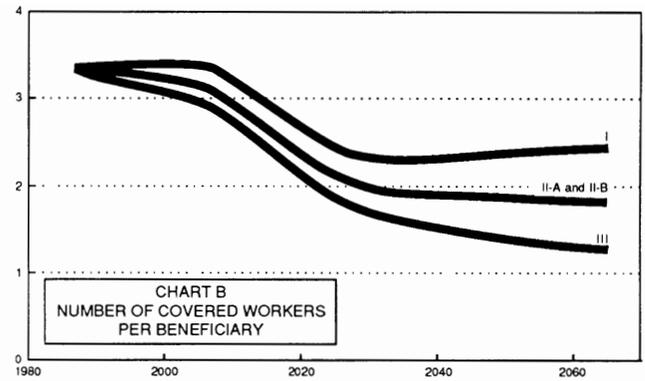
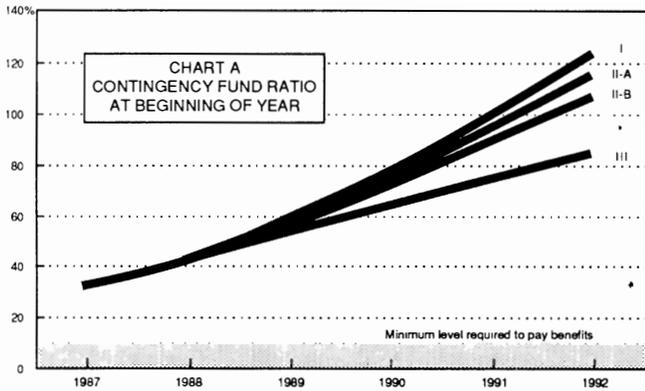
For the 75-year long-range projection period, the *actuarial balance* is the difference between the summarized estimated income rate and the summarized estimated cost rate. If this actuarial balance is negative, the program is said to have an actuarial deficit. Such a deficit is a warning that future changes may be needed in the program's financing or benefit provisions, although it does not present a complete picture without the other measures of financing discussed here.

4. Short-Range Financing (1988-92)

Estimates for the next 5 years are used to assess the adequacy of OASDI financing in the short range. In this period, the numbers of persons receiving OASDI benefits can be estimated fairly accurately. Changes in the national economy, however, which are difficult to predict, can have major effects on income and outgo.

The actuarial estimates shown in the 1988 report indicate that the combined assets of the OASI and DI Trust Funds will be sufficient to pay OASDI benefits on time throughout the 5-year period and for many years thereafter, based on all four sets of assumptions. In addition, the estimates based on alternatives I, II-A, and II-B indicate that the OASI and DI programs, separately, can operate satisfactorily for many years. During the next 10 years, however, if experience is very adverse, the assets of the DI Trust Fund could decline to such a low level that financial problems would occur.

Chart A shows the OASDI contingency fund ratio for 1988, 41 percent, and the projected OASDI ratios for 1989-93, on the basis of all four sets of assumptions. The fund ratios are generally estimated to increase each year.



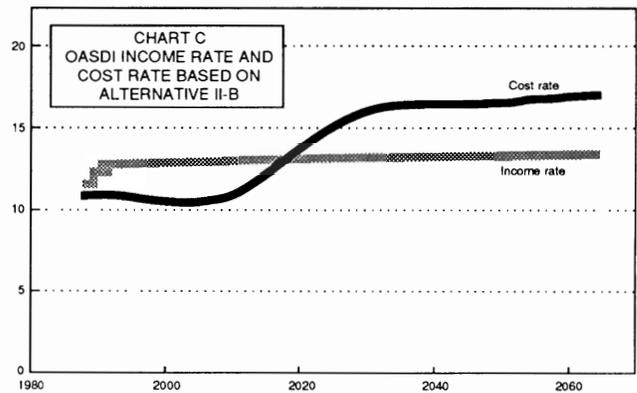
5. Long-Range Financing (1988-2062)

Long-range 75-year estimates for OASDI, although sensitive to variations in the assumptions, indicate the trend and general range of the program's future financial status. During this long-range period, income and outgo are greatly affected by demographic, as well as economic, conditions. Most of the beneficiaries during the next 75 years have already been born, so that their numbers are projected mainly from the present population. The numbers of workers involved in these projections, however, depend on future birth rates, which are subject to more variability.

Several important demographic trends are anticipated to raise the proportion of the aged in the population during the next 75 years. First, because of the large number of persons born in the two decades after World War II, rapid growth is expected in the aged population after the turn of the century. Second, assumed declines in death rates also would increase the numbers of aged persons. At the same time, birth rates, which began to decline in the 1960s and are assumed to remain relatively low in the future, would hold down the numbers of young people.

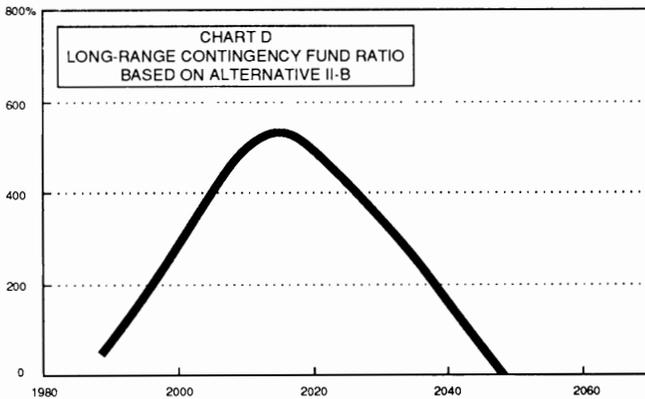
Chart B shows the long-range trend in the number of covered workers per OASDI beneficiary. ("Beneficiaries" includes not only retired workers, but also disabled workers, spouses, children, and survivor beneficiaries.) This ratio declined from 5.1 in 1960 to 3.4 in 1987. It is estimated to reach about 2 by about 2030, based on the intermediate assumptions, as the number of beneficiaries increases more rapidly than the number of covered workers.

Chart C shows the estimated OASDI income and cost rates for the long-range projection period, based on the intermediate II-B assumptions. During the first three decades of this period, the estimates indicate that the income rate will generally exceed the cost rate, resulting in substantial positive balances each year. Beginning about 2020, the reverse is true, with the cost rate exceeding the income rate, thus resulting in substantial deficits. These positive balances and deficits do not reflect interest earnings, which result in trust fund growth continuing for about 10 to 15 years after the first actuarial deficits occur. The cost rate is estimated to increase rapidly after the first half of the 75-year projection period, primarily because the number of beneficiaries is projected to increase more rapidly than the number of covered workers.



For this report, long-range actuarial balances are calculated using "level-financing" methodology, a methodology that was used prior to 1973. The methodology discounts future surpluses and deficits using the real rate of interest. It is the most appropriate for summarizing the financial status of the OASDI system over the 75-year period, a period when the trust funds build up during the early years when income exceeds outgo and are subsequently depleted during the final years when expenditures are expected to exceed income.

Chart D shows the projected OASDI contingency fund ratios for the 75-year period, based on the intermediate alternative II-B assumptions. The ratio rises steadily and peaks at 531 percent in 2015. After 2015, the ratio declines until the combined funds are exhausted in 2048. The importance of the trust fund accumulating reserves is emphasized by Chart D. As the chart shows, the build-up in the reserves will be needed to pay benefits later on to the increasing numbers of retired persons who were born in the high birth-rate years from the mid-1940s to the mid-1960s.



The table below presents a comparison of the level-financing income and cost rates for the 75-year long-range projection period, based on the four sets of assumptions. The figures are expressed as percentages of taxable payroll.

Assumptions	Income rate	Cost rate	Actuarial balance
Optimistic	12.83	10.97	1.86
Intermediate II-A	12.91	12.83	.08
Intermediate II-B	12.94	13.52	-.58
Pessimistic	13.07	16.49	-3.42

Note: Income rate, cost rate, and actuarial balance are defined in the text.

The long-range OASDI actuarial deficit of 0.58 percent of taxable payroll, based on the intermediate II-B assumptions, results from a level-financing income rate of 12.94 percent of taxable payroll over the 75-year period and a level-financing cost rate of 13.52 percent over the period. The level-financing rates reflect the full effects of the assumed interest earnings of the trust funds. In the absence of other changes, the long-range actuarial balance will tend to decline slowly in future annual reports, as the valuation period moves forward and additional distant years of deficit are included in the valuation. The actuarial deficits in the later years of the 75-year projection period are caused primarily by the demographic trends described above.