B. DISABILITY INSURANCE TRUST FUND

A statement of the income and disbursements of the Federal Disability Insurance Trust Fund during fiscal year 1983 and of the assets of the fund at the beginning and end of the fiscal year is presented in table 7. Comparable figures for fiscal year 1982 are also shown in the table.

TABLE 7.—STATEMENT OF OPERATIONS OF THE DI TRUST FUND DURING FISCAL YEARS 1982 AND 1983
[In thousands]

	Fiscal year 1982	Fiscal year 1983
Total assets, beginning of year	$3,392,434	$6,755,234
Receipts:		
Contributions:		
Appropriations	18,887,415	18,230,336
Deposits arising from State agreements	2,010,068	1,979,273
Payments from general fund of the Treasury representing employee-employer contributions on wage credits for military service in 1957-83	—	444,000
Gross contributions	20,897,483	20,653,608
Less transfers to OASI Trust Fund due to reallocated contribution rates	—	1,565,019
Less payment to the general fund of the Treasury for contributions subject to refund	31,027	52,800
Net contributions	20,866,456	19,035,789
Payments from general fund of the Treasury for costs of:		
Noncontributory wage credits for military service (before Pub. L. 98-21)	168,235	174,292
Noncontributory wage credits for military service before 1957 (under Pub. L. 98-21)	—	1,121,000
Total for military-service wage credits	168,235	1,295,292
Investment income and interest adjustments:		
Interest on investments	364,168	500,190
Interest on general fund payments for deemed wage credits for military service in 1957-83	—	640,000
Interest on interfund loans	—	419,034
Interest on amounts of interfund transfers due to adjustment in allocation of costs of vocational rehabilitation services	8	2
Interest on reimbursement from general fund for unnegotiated checks	—	20,000
Gross investment income and interest adjustments	364,176	1,579,226
Less interest on amounts of transfers to OASI Trust Fund due to reallocated contribution rates[1]	—	50,286
Less interest on general fund advance tax transfers	—	12,677
Less interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs	757	1,141
Net investment income and interest adjustments	363,420	1,515,123
Total receipts[2]	21,398,104	21,846,204
Disbursements:		
Benefit payments:		
Gross benefit payments	17,471,465	17,677,286
Less collected overpayments	72,060	89,200
Less reimbursement for unnegotiated checks	—	48,000
Net benefit payments	17,399,405	17,540,086
Transfer to Railroad Retirement Account	26,354	27,813
Payment for costs of vocational rehabilitation services for disabled beneficiaries:		
For current fiscal year	1,633	3,914
For prior fiscal year	35,945	—
Less transfer from OASI Trust Fund due to adjustment in allocation of costs for prior periods	432	24
Total payment for costs of vocational rehabilitation services	37,146	3,891

TABLE 7.—STATEMENT OF OPERATIONS OF THE DI TRUST FUND DURING FISCAL YEARS 1982 AND 1983 (Cont.)
[In thousands]

	Fiscal year 1982	Fiscal year 1983
Disbursements: (Cont.)		
Administrative expenses:		
Department of Health and Human Services	$550,902	$636,251
Department of the Treasury	22,336	19,582
Construction of facilities for Social Security Administration	1,709	3,240
Expenses of Department of Education for administration of vocational rehabilitation program for disabled beneficiaries	978	—
Gross administrative expenses	575,925	659,073
Less interfund transfers due to adjustment in allocation of costs of construction	3,479	179
Less receipts from sales of supplies, materials, etc.	47	28
Net administrative expenses	572,399	658,866
Total disbursements	18,035,304	18,230,656
Interfund loans to OASI Trust Fund	—	5,081,253
Net increase in assets[3]	3,362,800	-1,465,705
Total assets, end of year	6,755,234	5,289,529

[1]Public Law 98-21 provided for a reallocation of tax rates between OASI and DI, retroactive to January 1, 1983. An interest adjustment was made between the trust funds to place them in the same position in which they would have been had the new tax rates actually been in effect on January 1.

[2]Includes "gifts" amounting to -$7,000 during fiscal year 1982 (representing the recovery of a prior year gift by the estate of the donor).

[3]Equals total receipts, less total disbursements, less interfund loans to the OASI Trust Fund.

Note: Totals do not necessarily equal the sum of rounded components.

The total assets of the DI Trust Fund amounted to $6,755 million on September 30, 1982. During fiscal year 1983, total receipts amounted to $21,846 million, and total disbursements were $18,231 million. In addition, interfund loans totaling $5,081 million were made from the DI Trust Fund to the OASI Trust Fund. The assets of the trust fund thus decreased by $1,466 million during the year, to a total of $5,290 million on September 30, 1983.

Included in total receipts were $18,230 million representing contributions appropriated to the fund, $1,979 million representing amounts received by the Secretary of the Treasury in accordance with State coverage agreements and deposited in the fund, and $444 million in payments from the general fund of the Treasury representing the contributions that would have been paid on deemed wage credits for military service in 1957-83, if such credits had been considered to be covered wages, less past reimbursements for the cost of DI benefits attributable to such credits, as described in the preceding subsection. As offsets, $1,565 million representing contributions was transferred from the DI Trust Fund to the OASI Trust Fund because of a retroactive reallocation of the OASDI tax rate between the two funds (see previous section), and $53 million was transferred from the trust fund to the Treasury for the estimated amount of refunds to employees who worked for more than one employer during a year and paid contributions on wages in excess of the maximum earnings base.

Net contributions amounted to $19,036 million, a decrease of 8.8 percent from the amount for the preceding fiscal year. This decrease is primarily attributable to the reallocation of tax rates between OASI and

DI that became effective beginning with calendar year 1983, as a result of Public Law 98-21. This reallocation was designed to place the two trust funds in a more similar financial condition and resulted in a reduction in the tax rate allocated to DI in 1983 relative to 1982. The change in the level of contributions also reflects the same factors, insofar as they apply to the DI program, that accounted for the change in contributions to the OASI Trust Fund (described in the preceding section).

In addition, the trust fund received $174 million in December 1982 and $1,121 million in May 1983 from the general fund of the Treasury for the costs of deemed wage credits for military service. Of the December amount, $126 million was reimbursed in accordance with section 217(g) and $48 million was reimbursed in accordance with section 229(b), as in effect prior to the enactment of Public Law 98-21. The additional amount in May was transferred under section 217(g), as modified by Public Law 98-21 (see preceding subsection).

The remaining $1,515 million of receipts consisted of interest on the investments of the fund, plus net interest on amounts of interfund and general fund transfers (see preceding subsection).

Of the $18,231 million in total disbursements, $17,540 million was for net benefit payments, excluding collected overpayments of $89 million and the reimbursement of $48 million (subject to adjustment) for unnegotiated benefit checks, as required by the 1983 amendments. This represents an increase of 0.8 percent over the corresponding amount for benefit payments in fiscal year 1982. This increase reflects somewhat the same factors that resulted in the net increase in benefit payments from the OASI Trust Fund (as described in the preceding subsection). This increase also reflects the offsetting effects of (1) a continuing decline in the number of persons receiving benefits from the DI Trust Fund and (2) reductions in outlays resulting from the Social Security Amendments of 1977 (Public Law 95-216) and the Social Security Disability Amendments of 1980 (Public Law 96-265).

Provisions governing the financial interchanges between the Railroad Retirement Account and the DI Trust Fund are similar to those described in the preceding subsection relating to the OASI Trust Fund. The determination made as of September 30, 1982, required that a transfer of $25,800,000 be made from the DI Trust Fund to the Railroad Retirement Account. A total amount of $27,813,000 was transferred to the Railroad Retirement Account in June 1983, including interest to the date of transfer amounting to $2,013,000.

The remaining disbursements amounted to $659 million for net administrative expenses and $4 million for the costs of vocational rehabilitation services furnished to disabled-worker beneficiaries and to those children of disabled workers who were receiving benefits on the basis of disabilities that began before age 22.

The total amount of funds that may be made available in a fiscal year for paying the costs of vocational rehabilitation services may not exceed a specified percentage of the benefits certified for payment in the preceding fiscal year from the OASI and DI Trust Funds to disabled persons receiving benefits because of their disabilities. This statutory

limitation was 1½ percent in fiscal years 1974 and later. Beginning with payments for fiscal year 1977, such funds were further curtailed by limitations in the Budget of the United States for each year. In addition, the Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) included a provision which limits reimbursement from the trust funds for the costs of such services to those cases where the services contributed to the successful rehabilitation of the beneficiary. The data presented below show the relationship between the total amount of such payments for fiscal years 1979-82 and the amount of benefits paid to disabled beneficiaries:

Fiscal year to which costs of rehabilitation services are charged	Amount of payments for costs of rehabilitation services[1] (in thousands)	Estimated amount of benefit payments in preceding fiscal year to disabled beneficiaries (in thousands)	Payments for costs of rehabilitation services as a percentage of preceding year's benefit payments
1979	$97,766	$10,967,760	0.89
1980	40,879	12,089,653	.34
1981	42,011	13,502,784	.31
1982	1,837	15,406,235	.01

[1]The amounts shown represent the expenditures incurred for a fiscal year and differ from amounts actually expended in a fiscal year as shown in accounting statements of the trust funds on a cash basis. The amounts shown are subject to revision.

At the end of fiscal year 1983, about 3.8 million persons were receiving monthly benefits from the DI Trust Fund. The distribution of benefit payments in fiscal years 1982 and 1983, by type of beneficiary, is shown in table 8.

TABLE 8.—ESTIMATED DISTRIBUTION OF BENEFIT PAYMENTS FROM THE DI TRUST FUND, BY TYPE OF BENEFICIARY, FISCAL YEARS 1982 AND 1983
[Amounts in millions]

	Fiscal year 1982		Fiscal year 1983	
	Amount	Percentage of total	Amount	Percentage of total
Total	$17,399	100	$17,588	100
Disabled workers	14,764	85	15,206	86
Wives and husbands	666	4	634	4
Children	1,969	11	1,748	10

Note: Totals do not necessarily equal the sum of rounded components.

The assets of the DI Trust Fund at the end of fiscal year 1983 totaled $5,290 million, consisting of $5,287 million in U.S. Government obligations and an undisbursed balance of $2 million. Table 9 shows the total assets of the fund and their distribution at the end of each fiscal year 1982 and 1983.

TABLE 9.—ASSETS OF THE DI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1982 AND 1983

	September 30, 1982		September 30, 1983	
	Par value	Book value[1]	Par value	Book value[1]
Investments in public-debt obligations:				
Public issues:				
Treasury bonds:				
3½-percent, 1990	$10,500,000	$10,297,105.79	$10,500,000	$10,324,773.35
3½-percent, 1998	5,000,000	4,832,620.55	5,000,000	4,843,027.55
4¼-percent, 1989-94	68,400,000	68,015,194.27	68,400,000	68,047,501.11
4¼-percent, 1975-85	20,795,000	20,791,192.46	20,795,000	20,792,665.94
4¼-percent, 1987-92	80,800,000	80,843,633.88	80,800,000	80,834,606.40
6⅛-percent, 1984	15,000,000	15,010,398.04	15,000,000	15,004,972.72
7¼-percent, 1988-93	26,500,000	26,060,125.04	26,500,000	26,119,495.16
7⅞-percent, 2002-07	10,000,000	9,995,197.46	10,000,000	9,995,394.22
8-percent, 1998-2001	26,000,000	25,979,042.02	26,000,000	25,980,154.78
8¼-percent, 2000-05	3,750,000	3,734,459.57	3,750,000	3,735,145.13
11¾-percent,2010	30,250,000	30,047,150.38	30,250,000	30,054,571.46
Total investments in public issues	296,995,000	295,626,119.46	296,995,000	295,732,307.82
Obligations sold only to the trust funds (special issues):				
Certificates of indebtedness:				
11⅞-percent, 1984	—	—	665,422,000	665,422,000.00
12¼-percent, 1983	1,551,812,000	1,551,812,000.00	—	—
13¼-percent, 1983	1,844,251,000	1,844,251,000.00	—	—
13⅛-percent, 1983	1,674,067,000	1,674,067,000.00	—	—
Bonds:				
8½-percent, 1993	162,136,000	162,136,000.00	—	—
8¾-percent, 1993	97,887,000	97,887,000.00	47,479,000	47,479,000.00
8¾-percent, 1994	339,277,000	339,277,000.00	339,277,000	339,277,000.00
9¼-percent, 1993	142,337,000	142,337,000.00	142,337,000	142,337,000.00
9¼-percent, 1994	142,336,000	142,336,000.00	142,336,000	142,336,000.00
9¾-percent, 1995	481,613,000	481,613,000.00	481,613,000	481,613,000.00
10¼-percent, 1985	—	—	195,340,000	195,340,000.00
10¼-percent, 1986	—	—	287,956,000	287,956,000.00
10¼-percent, 1987	—	—	287,956,000	287,956,000.00
10¼-percent, 1988	—	—	287,956,000	287,956,000.00
10¼-percent, 1989	—	—	287,956,000	287,956,000.00
10¼-percent, 1990	—	—	287,956,000	287,956,000.00
10¼-percent, 1991	—	—	287,956,000	287,956,000.00
10¼-percent, 1992	—	—	287,956,000	287,956,000.00
10¼-percent, 1993	—	—	98,140,000	98,140,000.00
10¼-percent, 1996	—	—	287,955,000	287,955,000.00
10¼-percent, 1997	—	—	287,955,000	287,955,000.00
10¼-percent, 1998	—	—	287,955,000	287,955,000.00
13¼-percent, 1983	19,947,000	19,947,000.00	—	—
Total obligations sold only to the trust funds (special issues)	6,455,663,000	6,455,663,000.00	4,991,501,000	4,991,501,000.00
Total investments in public-debt obligations	6,752,658,000	6,751,289,119.46	5,288,496,000	5,287,233,307.82
Undisbursed balances	—	3,944,459.84	—	2,295,570.68
Total assets	—	6,755,233,579.30	—	5,289,528,878.50

[1]Par value, plus unamortized premium or less discount outstanding.

The net decrease in the par value of the investments owned by the trust fund during the fiscal year amounted to $1,464 million. New securities with a total par value of $27,464 million were acquired during the fiscal year through the investment of receipts and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the year was $28,928 million. Included in these amounts are $23,599 million in certificates of indebtedness that

were acquired, and $28,003 million in certificates of indebtedness that were redeemed, during the fiscal year.

The effective annual rate of interest earned by the assets of the DI Trust Fund during the 12 months ending on June 30, 1983, was 11.6 percent. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1983 was 10.75 percent, payable semiannually.

The investment policies and practices described in the preceding subsection concerning the OASI Trust Fund apply as well to the investment of the assets of the DI Trust Fund.

VI. ACTUARIAL COST PROJECTIONS

Section 201(c) of the Social Security Act requires that the Board of Trustees report annually to the Congress on the operations and status of the OASI and DI Trust Funds during the preceding fiscal year and on the expected operations and status of those trust funds during the ensuing 5 fiscal years. Such information for the fiscal year that ended September 30, 1983, is presented in the preceding section of this report. Estimates of the operations and status of the trust funds during fiscal years 1984-88 are presented in this section. Similar estimates for calendar years 1984-88 are also presented.

Section 201(c) also requires that the report include "a statement of the actuarial status of the trust funds." Such statements have customarily been made for the medium-range period (25 years) and the long-range period (75 years), each period commencing with the calendar year of issuance of the report. The statement of the long-range actuarial status has customarily included the actuarial status during the second and third 25-year subperiods of the long-range projection period. Statements of the current actuarial status are presented in this section. The methods used to estimate the actuarial status are described in Appendix A.

Basic to the discussion of the medium-range or long-range actuarial status of either trust fund are the concepts of "cost rate" and "total income rate," each of which is expressed as a percentage of taxable payroll. The taxable payroll consists of the total earnings which are subject to Social Security taxes, adjusted to include deemed wages based on military service and to reflect the lower effective tax rates (in comparison with the combined employee-employer rate) which apply to tips, and multiple-employer "excess wages," and which did apply to net earnings from self-employment before 1984. The cost rate is the ratio of the cost (or outgo or disbursements) of the program to the taxable payroll. The outgo includes benefit payments, administrative expenses, net transfers under the financial interchange between the OASI and DI Trust Funds and the Railroad Retirement Account, and payments for vocational rehabilitation services for disabled beneficiaries. Because the taxable payroll includes the adjustments described above, the total income rate (or more simply, the income rate) can be defined to be the sum of the combined OASDI employee-employer tax rate (or the payroll tax rate) scheduled in the law and the rate of income from taxation of benefits (which is in turn expressed as a percentage of taxable payroll).

For any year, the income rate minus the cost rate (referred to as the "balance" for the year) is a measure of the amount by which the payroll tax rate would need to be increased or decreased in order to cover the cost for that year.

Over the medium-range and long-range periods, the actuarial status of the trust funds is often summarized by the actuarial balance, which is the difference between the appropriate estimated average income rate and the estimated average cost rate (or, equivalently, the average of the annual balances for the years included in the appropriate projection period). If the actuarial balance is positive, the system is said to have an actuarial surplus, and if negative, an actuarial deficit. Such a deficit, if it exists, is a warning that, unless the projected trends turn out to be too

pessimistic, changes in the system or in its financing will be needed in the future.

The concept of actuarial balance must be used with caution. The use of a single measure to describe the system over a period of many years may mask adverse patterns within that period or problems which emerge soon thereafter. The addition or deletion of a few years to the time period could change a surplus into a deficit or vice versa. In addition, while early deficits followed by later surpluses could result in a positive actuarial balance, the trust fund could be depleted before the annual surpluses occur. Conversely, while early surpluses followed by later deficits could result in a positive actuarial balance, the trust fund that would be built up in the early years could eventually be depleted at some point beyond the end of the 75-year projection period, leaving the program in the situation of being unable to pay benefits at that time. Thus, it is also important to note the year-by-year patterns of income and outgo.

Related to the concept of actuarial balance is that of "close actuarial balance." The system is said to be in close actuarial balance over the long-range period if the estimated average income rate is between 95 percent and 105 percent of the estimated average cost rate.

The OASDI system has generally operated over the years on a "current cost" financing basis, under which total income in each year is intended to be approximately equal to total outgo plus an additional amount needed to maintain the trust funds at appropriate contingency-reserve levels. Under this financing method, the assets of the trust funds should not become too large (through continued annual surpluses), nor too small (through continued annual deficits). Although there is no general agreement regarding the appropriate size of the trust funds, the level of each fund should be large enough to allow time for legislative action to prevent its exhaustion during periods of continued annual deficits. When either trust fund is not large enough to serve this purpose, the future financing of that fund—to be considered adequate—must provide for rebuilding the fund to the needed level within a reasonable period of time without significant declines in the interim.

The adequacy of the trust fund level is often measured by the "trust fund ratio." This ratio is defined, in this context, as the assets at the beginning of the year, including advance tax transfers and borrowed amounts, expressed as a percentage of the outgo during the year. As a minimum test of the financial viability of the trust funds in the near term, the projected trust fund ratios should not fall below 12-14 percent, even based on pessimistic assumptions. This is because a level of 8-9 percent is necessary to pay the monthly benefits, which are normally paid on the third day of the month, and some additional contingency reserve is necessary. Substantially higher levels are desirable.

Projections of income, outgo, cost rates, actuarial balances, and trust fund ratios are presented later in this section.

A. ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS

The future income and outgo of the OASDI program depend on many economic and demographic factors, including fertility, mortality, net immigration, marriage, divorce, labor force participation, unemployment, productivity, inflation, retirement patterns, and disability incidence and termination. The income will depend on how these factors affect the size and composition of the working population and the general level of earnings. Similarly, the outgo will depend on how these factors affect the size and composition of the beneficiary population and the general level of benefits. Because precise forecasting of these various factors is impossible, projections are shown in this report on the basis of four sets of assumptions, designated as alternatives I, II-A, II-B, and III.

The two intermediate sets—alternatives II-A and II-B—share the same demographic assumptions but differ in their economic assumptions. More robust economic growth is assumed for alternative II-A than for alternative II-B. This type of presentation illustrates the beneficial effect on the financial status of the trust funds of higher real-wage growth, higher employment, and lower inflation, for any given set of demographic assumptions. In terms of the net effect on the status of the trust funds, alternative II-A is more optimistic than is alternative II-B. Of all four alternatives, alternative I is the most optimistic, and alternative III is the most pessimistic.

Although these sets of economic and demographic assumptions have been developed using the best available information, the resulting cost projections should be interpreted with care. In particular, they are not intended to be exact predictions of the future status of the OASDI program, but rather, they are intended to be indicators of the trend and range of future income and outgo.

Economic assumptions

The principal economic assumptions for the four alternatives are summarized in table 10.

TABLE 10.—SELECTED ECONOMIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1960-2060

Calendar year	Average annual percentage increase in— Real GNP[1]	Average wages in covered employment	Consumer price index	Real-wage differential[2] (percent)	Average annual interest rate[3] (percent)	Average annual unemployment rate[4] (percent)
Past experience:						
1960-64	4.0	3.4	1.3	2.1	3.7	5.7
1965-69	4.4	5.4	3.4	2.0	5.2	3.8
1970	-.2	4.9	5.9	-1.0	7.3	4.9
1971	3.4	4.9	4.3	.6	6.0	5.9
1972	5.7	7.3	3.3	4.0	5.9	5.6
1973	5.8	6.9	6.2	.7	6.6	4.9
1974	-.6	7.4	11.0	-3.6	7.5	5.6
1975	-1.2	6.6	9.1	-2.5	7.4	8.5
1976	5.4	8.5	5.7	2.8	7.1	7.7
1977	5.5	6.8	6.5	.3	7.1	7.1
1978	5.0	8.2	7.6	.6	8.2	6.1
1979	2.8	[5]9.1	11.4	[5]-2.3	9.1	5.8
1980	-.3	[5]9.0	13.5	[5]-4.5	11.0	7.1
1981	2.6	[5]10.1	10.2	[5]-.1	13.3	7.6
1982	-1.9	[5]5.8	6.0	[5]-.2	12.8	9.7
1983	3.3	[5]4.2	3.0	[5]1.2	11.0	9.6

TABLE 10.—SELECTED ECONOMIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1960-2060 (Cont.)

Calendar year	Average annual percentage increase in— Real GNP[1]	Average wages in covered employment	Consumer price index	Real-wage differential[2] (percent)	Average annual interest rate[3] (percent)	Average annual unemployment rate[4] (percent)
Alternative I:						
1984	6.1	6.1	3.9	2.2	10.9	7.7
1985	4.8	5.5	3.8	1.7	9.6	7.0
1986	4.2	5.5	3.7	1.7	9.2	6.4
1987	4.0	5.5	3.6	1.9	8.6	6.0
1988	4.0	5.5	3.3	2.2	7.8	5.6
1989	4.0	5.3	2.9	2.3	7.0	5.2
1990	3.2	4.8	2.6	2.2	6.1	5.0
1991	3.2	4.5	2.1	2.3	5.1	5.0
1992	3.3	4.5	2.0	2.5	4.8	5.0
1993	3.4	4.5	2.0	2.5	4.9	5.0
1994	3.7	4.6	2.0	2.6	5.0	5.0
1995	3.6	4.6	2.0	2.6	5.1	5.0
2000	3.7	4.6	2.0	2.6	5.1	5.0
2010 & later	[5]3.0	4.5	2.0	2.5	5.1	5.0
Alternative II-A:						
1984	5.4	6.0	4.4	1.6	11.0	7.8
1985	4.0	5.8	4.6	1.2	9.9	7.3
1986	3.5	5.8	4.5	1.3	9.9	7.0
1987	3.5	5.7	4.2	1.5	9.2	6.7
1988	3.5	5.7	3.9	1.8	8.4	6.3
1989	3.5	5.6	3.6	2.0	7.6	6.0
1990	3.5	5.4	3.3	2.1	6.1	5.6
1991	3.1	5.0	3.0	2.0	6.2	5.5
1992	3.0	5.1	3.0	2.1	5.8	5.5
1993	3.0	5.1	3.0	2.1	5.6	5.5
1994	3.0	5.1	3.0	2.1	5.6	5.5
1995	3.1	5.1	3.0	2.1	5.6	5.5
2000	3.1	5.1	3.0	2.1	5.6	5.5
2010 & later	[5]2.4	5.0	3.0	2.0	5.6	5.5
Alternative II-B:						
1984	4.9	5.9	4.7	1.2	11.1	7.9
1985	3.6	6.1	5.3	.8	10.3	7.5
1986	3.0	6.4	5.5	.9	10.6	7.2
1987	3.0	6.3	5.2	1.1	10.2	7.0
1988	3.0	6.1	4.7	1.4	9.4	6.7
1989	3.0	5.8	4.3	1.5	8.4	6.4
1990	3.0	5.6	4.0	1.6	7.5	6.2
1991	2.7	5.5	4.0	1.5	6.7	6.0
1992	2.4	5.6	4.0	1.6	6.4	6.0
1993	2.4	5.6	4.0	1.6	6.2	6.0
1994	2.5	5.6	4.0	1.6	6.2	6.0
1995	2.5	5.6	4.0	1.6	6.1	6.0
2000	2.6	5.6	4.0	1.6	6.1	6.0
2010 & later	[5]2.0	5.5	4.0	1.5	6.1	6.0
Alternative III:						
1984	3.4	5.2	5.2	-.1	11.1	8.2
1985	.4	5.0	5.7	-.7	10.5	9.0
1986	2.7	6.4	6.0	.4	11.0	8.8
1987	2.7	5.9	5.5	.4	10.5	8.4
1988	2.7	6.0	5.1	.9	9.8	8.1
1989	2.7	6.1	5.0	1.1	8.9	7.7
1990	2.7	6.3	5.0	1.3	8.2	7.3
1991	2.3	6.3	5.0	1.3	7.6	7.0
1992	1.8	6.2	5.0	1.2	7.2	7.0
1993	1.8	6.1	5.0	1.1	7.0	7.0
1994	1.8	6.1	5.0	1.1	6.7	7.0
1995	2.0	6.1	5.0	1.1	6.6	7.0
2000	2.0	6.1	5.0	1.1	6.6	7.0
2010 & later	[5]1.4	6.0	5.0	1.0	6.6	7.0

[1]The real GNP (Gross National Product) is the total output of goods and services, expressed in 1972 dollars.

[2]The real-wage differential is defined as the difference between the percentage increase in average annual wages in covered employment and the percentage increase in the average annual CPI.

[3]The average annual interest rate is the average of the interest rates in each of the 12 months of the year for special public-debt obligations issuable to the trust funds.

[4]Through 1995, the rates shown are crude civilian unemployment rates. For 2000 and later, the rates are total rates (including military personnel), adjusted by age and sex based on the total labor force on July 1, 1982.

[5]Preliminary.

[6]This value is for the year 2010. The annual percentage increase in real GNP is assumed to continue to change after 2010 for each alternative to reflect the dependence of labor force growth on the size and age-sex distribution of the population. The percentage increases for 2060 are 3.2, 2.3, 1.9, and 0.7 for alternatives I, II-A, II-B, and III, respectively.

For alternatives I, II-A, and II-B, the economic recovery that started in the first quarter of 1983 is assumed to continue through 1984. The strength of the recovery, however, is assumed to be stronger for alternative II-A than for alternative II-B, and even stronger for alternative I. For alternative III, the recovery is assumed to fade during the first half of 1984 and yield to a recession during the latter half of the year and the first quarter of 1985.

After the first half of 1985, and continuing through the end of the decade, a steady rate of growth in real GNP is assumed, with a resulting gradual decline in the unemployment rate toward the applicable ultimate level, for each of the four alternative sets of assumptions. Starting in the early 1990's, the rates of real growth in GNP reflect the combined rates of increase assumed for the number of persons employed, average hours worked, and productivity.

For alternative II-A, the average annual unemployment rate declines from 9.6 percent in 1983 to its ultimate level of 5.5 percent in 1991. The annual rate of increase in average wages in covered employment is assumed to generally decline to its ultimate rate of 5.0 percent per year by 2010, after first rising to 6.0 percent in 1984. The annual rate of increase in the CPI is assumed to rise from 3.0 percent in 1983 to 4.6 percent in 1985 and then to decline to an ultimate rate of 3.0 percent in 1991. The real-wage differential (i.e., the difference between the annual rates of increase in average wages in covered employment and the CPI) is assumed to generally rise from 1.2 percent in 1983 to its ultimate value of 2.0 percent by 2010. The annual interest rate is assumed to reach its ultimate value of 5.6 percent in 1993.

For alternative II-B, the average annual unemployment rate declines to its ultimate level of 6.0 percent in 1991. The annual rate of increase in average wages in covered employment is assumed to rise to 6.4 percent in 1986 and then to generally decline to its ultimate rate of 5.5 percent per year by 2010. The annual rate of increase in the CPI is assumed to rise from 3.0 percent in 1983 to 5.5 percent in 1986 and then to decline to an ultimate rate of 4.0 percent in 1990. The real-wage differential is assumed to reach 1.6 percent in 1990 and to attain its ultimate value of 1.5 percent per year by 2010. The annual interest rate is assumed to reach its ultimate value of 6.1 percent in 1995.

Alternatives I and III are designed to represent plausible sets of assumptions which are more optimistic and more pessimistic, respectively (in terms of their effect on OASDI financing), than is either of the two intermediate sets of assumptions. The higher rate of growth in real GNP assumed for alternative I results in a lower average annual unemployment rate, while the generally lower rate of growth in real GNP for alternative III results in a higher average annual unemployment rate, for each year.

Demographic assumptions

The principal demographic assumptions for the four alternatives are shown in table 11.

TABLE 11.—SELECTED DEMOGRAPHIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1940-2060

Calendar year	Total fertility rate[1]	Life expectancy[2]			
		At birth		At age 65	
		Male	Female	Male	Female
Past experience:					
1940	2.23	61.4	65.7	11.9	13.4
1945	2.42	62.9	68.4	12.6	14.4
1950	3.03	65.6	71.1	12.8	15.1
1955	3.50	66.7	72.8	13.1	15.6
1960	3.61	66.7	73.2	12.9	15.9
1965	2.88	66.8	73.8	12.9	16.3
1970	2.43	67.1	74.9	13.1	17.1
1975	1.77	68.7	76.6	13.7	18.0
1976	1.74	69.1	76.8	13.7	18.1
1977	1.80	69.4	77.2	13.9	18.3
1978	1.76	69.6	77.3	13.9	18.3
1979	1.82	70.0	77.7	14.2	18.6
1980	1.85	69.9	77.5	14.0	18.4
1981	1.85	70.2	77.8	14.2	18.6
1982	1.86	70.7	78.1	14.3	18.7
Alternative I:					
1983	1.88	70.8	78.2	14.3	18.8
1984	1.89	70.9	78.3	14.4	18.8
1985	1.91	71.0	78.4	14.4	18.9
1990	2.00	71.4	78.9	14.5	19.2
1995	2.09	71.8	79.3	14.7	19.4
2000	2.17	72.1	79.5	14.8	19.5
2010	2.30	72.4	79.8	15.0	19.8
2020	2.30	72.7	80.1	15.2	20.1
2030	2.30	73.0	80.4	15.4	20.3
2040	2.30	73.3	80.7	15.6	20.6
2050	2.30	73.6	81.0	15.8	20.8
2060	2.30	73.9	81.3	16.0	21.0
Alternatives II-A and II-B:					
1983	1.86	70.9	78.4	14.4	18.9
1984	1.87	71.2	78.6	14.5	19.0
1985	1.87	71.4	78.8	14.6	19.2
1990	1.90	72.4	79.9	15.1	19.8
1995	1.93	73.2	80.7	15.4	20.3
2000	1.96	73.7	81.1	15.7	20.7
2010	2.00	74.2	81.7	16.0	21.1
2020	2.00	74.7	82.3	16.4	21.6
2030	2.00	75.2	82.8	16.7	22.0
2040	2.00	75.7	83.4	17.1	22.5
2050	2.00	76.2	83.9	17.5	22.9
2060	2.00	76.7	84.5	17.8	23.4
Alternative III:					
1983	1.84	71.1	78.5	14.5	19.0
1984	1.83	71.5	78.9	14.7	19.2
1985	1.81	71.8	79.2	14.8	19.4
1990	1.76	73.4	80.8	15.6	20.5
1995	1.71	74.5	82.0	16.2	21.3
2000	1.67	75.2	82.7	16.6	21.8
2010	1.60	76.3	83.9	17.4	22.7
2020	1.60	77.4	85.1	18.2	23.7
2030	1.60	78.5	86.3	19.1	24.6
2040	1.60	79.6	87.4	19.9	25.5
2050	1.60	80.6	88.5	20.7	26.4
2060	1.60	81.7	89.6	21.6	27.3

[1]The total fertility rate for any year is the average number of children who would be born to a woman in her lifetime if she were to experience the birth rates by age observed in, or assumed for, the selected year, and if she were to survive the entire child-bearing period.

[2]The life expectancy for any year is the average number of years of life remaining for a person if that person were to experience the death rates by age observed in, or assumed for, the selected year.

The demographic assumptions for alternatives II-A and II-B are identical. The assumed ultimate total fertility rate is 2.0 children per woman. This ultimate level of fertility is attained in 2008, after a gradual increase from the 1982 level of 1.86 children per woman. Mortality rates

are assumed to decrease gradually during the entire projection period, with an average reduction from 1982 levels of 39 percent by the year 2060. This reduction results in life expectancies at birth in 2060 of 76.7 years for men and 84.5 years for women, compared to 70.7 and 78.1 years, respectively, observed in 1982. Life expectancies at age 65 in 2060 are projected to be 17.8 years for men and 23.4 years for women, compared to 14.3 and 18.7 years, respectively, observed in 1982.

For alternative I, the total fertility rate is assumed to be higher than for the other alternatives, reaching an ultimate level of 2.3 children per woman in 2008. Mortality rates are assumed to decrease more slowly than for alternatives II-A and II-B, with the average reduction from 1982 levels being 22 percent by the year 2060. The resulting life expectancies at birth in 2060 are projected to be 73.9 years for men and 81.3 years for women, while at age 65 they are 16.0 and 21.0 years, respectively.

For alternative III, the total fertility rate is assumed to be lower than for the other alternatives, decreasing from the estimated 1982 level to an ultimate level of 1.6 in 2008. Mortality rates are assumed to decrease more rapidly than for alternatives II-A and II-B, with the average reduction from 1982 levels being 60 percent by the year 2060. The resulting life expectancies at birth in 2060 are projected to be 81.7 years for men and 89.6 years for women, while at age 65 they are 21.6 and 27.3 years, respectively.

The values assumed after the early years for both the economic and the demographic factors are intended to represent the average experience for those years and are not intended to be predictions of year-by-year values. Actual future values will likely exhibit fluctuations or cyclical patterns, as in the past.

In addition to the assumptions discussed above, many other assumed or derived factors (such as labor force participation rates, marriage rates, and others) are necessary to prepare the cost estimates presented in this report. Appendix A includes a discussion of some of those factors.

B. AUTOMATIC ADJUSTMENTS

Under the automatic-adjustment provisions of the law, benefits are generally increased once a year to reflect increases in the cost of living. Beginning in 1984, these automatic increases may be modified under certain circumstances, as explained below. For persons becoming eligible for benefits in 1979 and later, the increases generally begin with the year in which the worker reaches age 62, or becomes disabled or dies, if earlier. An automatic cost-of-living benefit increase of 3.5 percent, effective for December 1983, was announced in April 1983, as described in Appendix C.

If the combined assets of the OASI and DI Trust Funds, as a percentage of annual expenditures, are below a specified level, automatic benefit increases will be limited to the *lesser* of the increases in wages or prices. This specified level is 15.0 percent for benefit increases in December of 1984-88, and 20.0 percent thereafter. The price increase is defined in the usual way—i.e., the percentage increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) from the third quarter of the preceding year to the third quarter of the year in which the December benefit increase will occur. The wage increase is defined to be the increase in average wages in the preceding year as compared to the second preceding year. (This wage increase is also used for adjusting the contribution and benefit base and other wage-indexed program amounts.) The law provides for subsequent "catch-up" benefit increases, for any beneficiaries remaining on the rolls whose previous benefit increases were affected by this provision, when trust fund assets exceed 32.0 percent of annual expenditures.

For purposes of this "stabilizer" provision in 1985 and later, assets are to be measured as of the beginning of the year, including advance tax transfers for the month of January, but excluding any amounts owed to the HI Trust Fund. For 1984 only, the law specifies that estimated end-of-year assets are to be used, including advance tax transfers for January 1985. The estimates in this report are based on the assumption that, for the 1984 determination, amounts owed to the HI Trust Fund will not be excluded from estimated OASI assets at the end of 1984.[1]

The law provides for an automatic increase in the contribution and benefit base for the year following a year in which an automatic benefit increase becomes effective, based on the increase in average wages. For 1984, the contribution and benefit base was automatically increased to $37,800.

The exempt amounts under the retirement earnings test are also increased automatically by the increase in average wages. An automatic

[1]This interpretation of the stabilizer provision represents a change from that used for last year's report. The estimates shown in the 1983 Annual Report were based on the assumption that amounts owed to the HI Trust Fund would be excluded from the estimated assets of the OASI Trust Fund, for purposes of the 1984 determination, as is required for the determinations in 1985 and later. However, the section of the law which modifies the general stabilizer provision with respect to the 1984 determination (section 112(f) of the Social Security Amendments of 1983) does not state that amounts owed to the HI fund are to be excluded. The estimates shown in this report are based on the assumption that such amounts will not be excluded. Although this revised interpretation has been used for purposes of this report, the final determination of the benefit increase for December 1984 cannot be made until October 1984.

increase in the exempt amount for beneficiaries at ages 65 through 69, from $6,600 in 1983 to $6,960 in 1984, was announced in November 1983. Similarly, an automatic increase was announced in the exempt amount for beneficiaries under age 65, from $4,920 in 1983 to $5,160 in 1984. Appendix D describes the aforementioned automatic adjustments, as well as the determinations of the following amounts:

1. The amount of earnings a worker must have to be credited with a quarter of coverage in 1984;
2. The dollar amounts (or "bend points") in the formulas used to compute benefits payable on the earnings of workers who first become eligible for retirement or disability benefits, or who die before becoming eligible for such benefits, in 1984; and
3. The average of total wages reported for calendar year 1982, to be used for indexing earnings of workers who first become eligible for benefits, or who die before such eligibility, in 1984 or later.

An historical summary of the Social Security program amounts determined under the automatic provisions, and the average-wage series used for indexing earnings, are shown in Appendix E. Estimates of the corresponding amounts through 1989, based on the two intermediate sets of assumptions, are also shown in Appendix E.

The four alternative sets of economic assumptions described previously result in the following general benefit increases and contribution and benefit bases for each year through 1989 (the actual benefit increase for 1983 and actual contribution and benefit bases for 1983 and 1984 are also shown as a basis for comparison):

Calendar year	General benefit increase[1] (percent) based on alternative—				Contribution and benefit base[2] based on alternative—			
	I	II-A	II-B	III	I	II-A	II-B	III
1983	3.5	3.5	3.5	3.5	$35,700	$35,700	$35,700	$35,700
1984	3.8	4.4	4.7	5.3	37,800	37,800	37,800	37,800
1985	3.8	4.6	5.4	[3]5.1	39,300	39,300	39,300	39,300
1986	3.7	4.5	5.5	[3]4.8	41,700	41,700	41,700	41,400
1987	3.6	4.2	5.2	5.4	43,800	44,100	44,100	43,500
1988	3.3	3.9	4.6	5.1	46,200	46,500	46,800	46,200
1989	([4])	3.6	4.3	5.0	48,600	49,200	49,800	48,900

[1]Automatic benefit increases prior to 1983 were effective with benefits for June of each year. As a result of the Social Security Amendments of 1983, automatic benefit increases in 1983 and later are effective with benefits for December of the year shown.

[2]Effective on January 1 of the stated year.

[3]Based on the alternative III assumptions, benefit increases for December of 1985 and 1986 would be determined under the benefit-increase stabilizer provision of the 1983 amendments. If the benefit increases were calculated without the limitations imposed by the stabilizer provision, they would be 5.7 percent and 6.0 percent, respectively, based on these assumptions.

[4]Based on the alternative I assumptions, no benefit increase would occur in 1989 because the assumed increase in the Consumer Price Index is less than the 3-percent rate required to trigger a benefit increase.

The automatic benefit increases shown in the above table based on alternative III reflect the effects of the benefit-increase stabilizer provision in December of 1985 and 1986. Based on alternative III, the combined assets of the OASI and DI Trust Funds (excluding amounts owed to the HI Trust Fund) would represent less than 15.0 percent of annual expenditures at the beginning of each year 1985-86. In addition,

the assumed increases in average annual wages in 1984 and 1985 are less than the assumed annual increases in prices (as measured by the third-quarter CPI) in 1985 and 1986, respectively. Under these conditions, the stabilizer provision would require that the automatic benefit increase in each year be based on the lower increase in average wages rather than on the CPI increase, which would normally apply. While not shown in the table, on the basis of alternative III, the assets of the trust funds would increase sufficiently after 1987 to trigger "catch-up" benefit increases for December 1991 for those beneficiaries remaining on the benefit rolls whose benefit increases were limited at any time during 1985-86 as a result of this provision. The catch-up increases would raise each affected individual's benefit to the level at which it would have been if all previous increases had been based on the CPI.

Under the automatic-adjustment provisions of the law, the four different sets of economic assumptions result in the following annual exempt amounts under the retirement earnings test, both for beneficiaries under age 65 and for beneficiaries aged 65 through 69 (the actual amounts for 1983 and 1984 are also shown as a basis for comparison):

ANNUAL EXEMPT AMOUNTS UNDER THE RETIREMENT EARNINGS TEST[1]

Calendar year	Annual exempt amount for beneficiaries under age 65 based on alternative—				Annual exempt amount for beneficiaries aged 65 through 69 based on alternative—			
	I	II-A	II-B	III	I	II-A	II-B	III
1983	$4,920	$4,920	$4,920	$4,920	$6,600	$6,600	$6,600	$6,600
1984	5,160	5,160	5,160	5,160	6,960	6,960	6,960	6,960
1985	5,400	5,400	5,400	5,400	7,200	7,200	7,200	7,200
1986	5,760	5,760	5,760	5,640	7,680	7,680	7,560	7,560
1987	6,120	6,120	6,120	5,880	8,040	8,160	8,040	7,920
1988	6,480	6,480	6,480	6,240	8,520	8,640	8,520	8,400
1989	6,840	6,840	6,840	6,600	9,000	9,120	9,000	8,880

[1]Effective on January 1 of the stated year.