

**IV. SUMMARY OF THE OPERATIONS OF THE OLD-AGE AND  
SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST  
FUNDS, FISCAL YEAR 1986**

*A. OLD-AGE AND SURVIVORS INSURANCE TRUST FUND*

A statement of the income and disbursements of the Federal Old-Age and Survivors Insurance Trust Fund in fiscal year 1986, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 2.

TABLE 2.—STATEMENT OF OPERATIONS OF THE OASI TRUST FUND  
DURING FISCAL YEAR 1986  
(In thousands)

Total assets, September 30, 1985.....		\$33,877,300
<b>Receipts:</b>		
Contributions:		
Appropriations:		
Employment taxes .....	\$167,439,820	
Tax credits .....	1,554,974	
Total appropriations.....	168,994,793	
Deposits arising from State agreements.....	18,224,806	
Payments from general fund of the Treasury representing employee- employer contributions on deemed wage credits for military service in 1986 .....	325,000	
Gross contributions .....	187,544,600	
Less payment to the general fund of the Treasury for contributions subject to refund .....	537,458	
Net contributions.....		187,007,142
Income from taxation of benefit payments:		
Withheld from benefit payments to non-resident aliens.....	73,220	
All other, not subject to withholding .....	3,256,000	
Total income from taxation of benefits.....		3,329,220
Payments from general fund of the Treasury for costs of:		
Noncontributory wage credits for military service before 1957.....	2,203,000	
Payments to uninsured persons who attained age 72 before 1968 .....	90,264	
Total payments from the general fund.....		2,293,264
Investment income and interest adjustments:		
Interest on investments .....	3,307,971	
Interest reimbursement required to compensate the fund for interest losses resulting from debt-limit problems in 1984 and 1985.....	388,090	
Interest on transfers from the general fund account for the Supplemental Security Income program due to adjustment in allocation of administra- tive expenses .....	1,430	
Interest on interfund transfers due to adjustment in allocation of adminis- trative expenses.....	761	
Interest on reimbursement from general fund for unnegotiated checks .....	15,400	
Gross investment income and interest adjustments.....	3,713,652	
Less interest on interfund loans from DI and HI Trust Funds .....	541,790	
Less interest on general fund advance tax transfers .....	471,071	
Net investment income and interest adjustments.....		2,700,791
Gifts .....		150
<b>Total receipts.....</b>		<b>195,330,567</b>

TABLE 2.—STATEMENT OF OPERATIONS OF THE OASI TRUST FUND  
DURING FISCAL YEAR 1986 (Cont.)  
(In thousands)

Disbursements:		
Benefit payments:		
Gross benefit payments.....	\$175,026,267	
Less collected overpayments.....	662,328	
Less reimbursement for unnegotiated checks.....	24,100	
Net benefit payments.....		\$174,339,838
Transfer to the Railroad Retirement "Social Security Equivalent Benefit Account".....		2,585,101
Administrative expenses:		
Department of Health and Human Services.....	1,440,611	
Department of the Treasury.....	166,393	
Construction of facilities for the Social Security Administration.....	2,670	
Gross administrative expenses.....	1,609,673	
Less reimbursements from general fund of the Treasury for costs of furnishing information on deferred vested pension benefits.....	376	
Less receipts from sales of supplies, materials, etc.....	271	
Net administrative expenses.....		1,609,026
Total disbursements.....		178,533,966
Final repayment of interfund loans:		
To DI Trust Fund.....	2,541,253	
To HI Trust Fund.....	10,613,270	
Total repayment.....		13,154,523
Net increase in assets <sup>1</sup> .....		3,642,078
Total assets, September 30, 1986.....		37,519,378

<sup>1</sup>Equals total receipts, less total disbursements, less interfund loan repayments.

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

The total assets of the OASI Trust Fund amounted to \$33,877 million on September 30, 1985. During fiscal year 1986, total receipts amounted to \$195,331 million, and total disbursements were \$178,534 million. In addition, amounts totaling \$13,155 million were transferred to the DI and HI Trust Funds as final repayments on interfund loans. The assets of the OASI Trust Fund thus increased by \$3,642 million during the year, to a total of \$37,519 million on September 30, 1986.

Included in total receipts during fiscal year 1986 were \$168,995 million representing contributions appropriated to the fund (including transfers of \$1,555 million from the general fund of the Treasury to offset the tax credits allowed against contributions due on earnings of self-employed persons). Also included in total receipts were \$18,225 million representing amounts received by the Secretary of the Treasury in accordance with State agreements for coverage of State and local government employees and deposited in the trust fund. Another \$325 million was received from the general fund of the Treasury representing payment for the contributions that would have been paid on estimated deemed wage credits for military service in 1986 if such credits had been considered to be covered wages. As an offset, \$537 million was transferred from the trust fund to the general fund of 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 contribution and benefit base.

Net contributions (including the general fund payments for offsetting tax credits and deemed military-service wage credits) amounted to \$187,007 million, an increase of 6.7 percent over the amount in the

preceding fiscal year. This level of growth in contribution income resulted primarily from the effects of (1) increased covered employment and earnings; and (2) the increases in the contribution and benefit base that became effective on January 1 of each year 1985 and 1986. (Table 1 in the preceding section shows the contribution and benefit bases that became effective for 1985 and 1986.)

Income from the taxation of benefits amounted to \$3,329 million, of which almost 98 percent represented amounts credited to the trust fund in advance, on an estimated basis, at the beginning of each calendar quarter. The remaining 2 percent of the total income from taxation of benefits represented amounts withheld from the benefits paid to non-resident aliens. Total OASDI income from the taxation of benefits amounted to \$3,558 million, and about \$229 million, or 6.4 percent, of the total amount was allocated to the DI Trust Fund.

Section 217(g) of the Social Security Act requires transfers between the general fund of the Treasury and the OASI and DI Trust Funds for any adjustments to prior payments for the cost arising from the granting of noncontributory wage credits for military service prior to 1957. Determinations of such transfers are required in 1985 and every fifth year thereafter. As a result of the 1985 determination, \$2,203 million was transferred to the OASI Trust Fund in December 1985.

Special payments are made to uninsured persons who either attained age 72 before 1968, or who attained age 72 after 1967 and had 3 quarters of coverage for each year after 1966 and before the year of attainment of age 72. The costs associated with providing such payments to persons having fewer than 3 quarters of coverage are reimbursable from the general fund of the Treasury. Accordingly, a reimbursement of \$90 million was transferred to the OASI Trust Fund in fiscal year 1986, as required by section 228 of the Social Security Act. The reimbursement reflected the costs of payments made in fiscal year 1984.

Receipts totaling \$2,701 million consisted of (1) interest earned on the investments of the trust fund; (2) interest reimbursements to compensate the trust fund for actual and estimated future interest losses resulting from debt-limit problems in 1984 and 1985; (3) interest arising from the revised allocation of administrative expenses among the trust funds and the general fund account for the Supplemental Security Income program; (4) interest on reimbursement to the trust funds for unnegotiated checks (see below); less (5) interest paid on outstanding amounts owed to the DI and HI Trust Funds as a result of interfund borrowing; less (6) reimbursement to the general fund for interest costs resulting from the advance transfer of contributions.

The remaining \$149,963 of receipts consisted of gifts received under the provisions authorizing the deposit of money gifts or bequests in the trust funds.

Of the \$178,534 million in total disbursements, \$174,340 million was for net benefit payments, excluding collected overpayments of \$662 million and the reimbursement of \$24 million for unnegotiated benefit checks. (An additional amount of \$15 million representing interest on the reimbursement for unnegotiated benefit checks was also transferred, as noted previously.) The amount of net benefit payments in fiscal year

1986 represents an increase of 5.5 percent over the corresponding amount in fiscal year 1985. This increase was due primarily to (1) the automatic cost-of-living benefit increases of 3.5 percent and 3.1 percent which became effective for December 1984 and December 1985, respectively, under the automatic-adjustment provisions in section 215(i) of the Social Security Act, (2) an increase in the total number of beneficiaries, and (3) an increase in the average benefit amount resulting from the rising level of earnings.

As described in the preceding section, certain provisions of the Railroad Retirement Act coordinate the Railroad Retirement and OASDI programs and govern the financial interchanges arising from the allocation of costs between the two programs. In accordance with those provisions, the Railroad Retirement Board and the Secretary of Health and Human Services determined that a transfer of \$2,415 million to the Social Security Equivalent Benefit Account (SSEBA) from the OASI Trust Fund would place this trust fund in the same position as of September 30, 1985, in which it would have been if railroad employment had always been covered under Social Security. A total amount of \$2,585 million was transferred to the SSEBA in June 1986, including interest to the date of transfer amounting to \$170 million.

The remaining \$1,609 million of disbursements from the OASI Trust Fund represents net administrative expenses. The expenses of administering the programs financed through the four trust funds (the OASI, DI, HI, and Supplementary Medical Insurance Trust Funds) are allocated and charged directly to each trust fund on the basis of provisional estimates. Similarly, the expenses of administering the Supplemental Security Income program are also allocated and charged directly to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses for prior periods are effected by interfund transfers and transfers between the OASI Trust Fund and the general fund account for the Supplemental Security Income program, with appropriate interest adjustments.

Section 1131 of the Social Security Act authorizes annual reimbursements from the general fund of the Treasury to the OASI Trust Fund for additional administrative expenses incurred as a result of furnishing information on deferred vested benefits to pension plan participants, as required by the Employee Retirement Income Security Act of 1974 (Public Law 93-406). The reimbursement in fiscal year 1986 amounted to \$376,149.

Net administrative expenses charged to the OASI and DI Trust Funds in fiscal year 1986 totaled \$2,209 million. (The operations of the DI Trust Fund are presented in detail in the next subsection.) This amount represented 1.1 percent of contribution income and 1.1 percent of expenditures for benefit payments. Corresponding percentages for each trust fund separately and for the OASDI program as a whole are shown in table 3 for each of the last 5 years.

TABLE 3.—NET ADMINISTRATIVE EXPENSES AS A PERCENTAGE OF CONTRIBUTION INCOME AND OF BENEFIT PAYMENTS, BY TRUST FUND, FISCAL YEARS 1982-86

Fiscal year	OASI Trust Fund		DI Trust Fund		Total	
	Contribution income	Benefit payments	Contribution income	Benefit payments	Contribution income	Benefit payments
1982 .....	1.2	1.1	2.7	3.3	1.4	1.3
1983 .....	1.1	1.0	3.5	3.8	1.4	1.3
1984 .....	1.0	1.0	3.6	3.3	1.3	1.3
1985 .....	.9	1.0	3.6	3.2	1.1	1.2
1986 .....	.9	.9	3.3	3.1	1.1	1.1

Reference has been made in an earlier section to provisions of the Social Security Act authorizing interfund borrowing among the OASI, DI, and HI Trust Funds. Late in 1982, \$17,519 million was lent to the OASI Trust Fund under these provisions—\$12,437 million from the HI Trust Fund and \$5,081 million from the DI Trust Fund. Under the automatic-repayment provisions of the law, \$10,613 million was repaid from the OASI Trust Fund to the HI Trust Fund in January 1986. In addition, \$2,541 million was repaid to the DI Trust Fund in April 1986. With these payments, all amounts lent to the OASI Trust Fund were fully repaid. The various interfund loan transactions since 1982 are summarized in the following table:

Transaction and date	Lending fund		Total
	DI Trust Fund	HI Trust Fund	
Loans on-			
November 5, 1982 .....	\$581,252,899.48	—	\$581,252,899.48
December 7, 1982 .....	—	\$3,437,270,125.90	3,437,270,125.90
December 31, 1982 .....	4,500,000,000.00	9,000,000,000.00	13,500,000,000.00
Total .....	5,081,252,899.48	12,437,270,125.90	17,518,523,025.38
Repayments on January 31, 1985 .....	2,540,000,000.00	1,824,000,000.00	4,364,000,000.00
Balance on February 1, 1985 .....	2,541,252,899.48	10,613,270,125.90	13,154,523,025.38
Repayment on January 31, 1986 .....	—	10,613,270,125.90	10,613,270,125.90
Balance on February 1, 1986 .....	2,541,252,899.48	—	2,541,252,899.48
Repayment on April 30, 1986 .....	2,541,252,899.48	—	2,541,252,899.48
Balance on May 1, 1986 .....	—	—	—

In table 4, the actual amounts of contributions and benefit payments in fiscal year 1986 are compared to the corresponding estimated amounts which appeared in the 1985 and 1986 Annual Reports. The estimates shown are the ones based on the alternative II-B set of assumptions from each report. Actual OASI and DI contributions and benefit payments were reasonably close, relatively, to the estimates shown in both the 1985 and 1986 Annual Reports.

Reference was made in an earlier section to the appropriation of contributions to the trust funds on an estimated basis, with subsequent periodic adjustments to account for differences from the amounts of contributions actually payable on the basis of reported earnings. In interpreting the figures in table 4, it should be noted that the "actual" amount of contributions in fiscal year 1986 reflects the aforementioned adjustments to contributions for prior fiscal years. The "estimated" contributions in fiscal year 1986 also include the adjustments for prior

years, but on an estimated basis.

TABLE 4.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE OASI AND DI TRUST FUNDS, FISCAL YEAR 1986  
[Amounts in millions]

	OASI Trust Fund		DI Trust Fund	
	Net contributions	Benefit payments <sup>1</sup>	Net contributions	Benefit payments <sup>1</sup>
Actual amount.....	\$187,007	\$174,340	\$18,139	\$19,529
Estimated amount published in 1985 report.....	\$186,877	\$177,146	\$17,968	\$19,481
Actual as percentage of estimate.....	100.1	98.4	101.0	100.2
Estimated amount published in 1986 report.....	\$186,394	\$174,910	\$17,925	\$19,496
Actual as percentage of estimate.....	100.3	99.7	101.2	100.2

<sup>1</sup>Includes payments for vocational rehabilitation services furnished to disabled persons receiving benefits because of their disabilities.

At the end of fiscal year 1986, about 37.5 million persons were receiving monthly benefits under the OASDI program. Of these persons, about 33.5 million and 4.0 million were receiving monthly benefits from the OASI Trust Fund and the DI Trust Fund, respectively. The distribution of benefit payments (before reflecting the reimbursement for unnegotiated checks) in fiscal years 1985 and 1986, by type of beneficiary, is shown in table 5 for each trust fund separately.

TABLE 5.—ESTIMATED DISTRIBUTION OF BENEFIT PAYMENTS FROM THE OASI AND DI TRUST FUNDS, BY TYPE OF BENEFICIARY OR PAYMENT, FISCAL YEARS 1985 AND 1986  
[Amounts in millions]

	Fiscal year 1985		Fiscal year 1986	
	Amount	Percentage of total	Amount	Percentage of total
Total OASDI benefit payments.....	\$184,076	100.0	\$193,890	100.0
OASI benefit payments.....	165,422	89.9	174,364	89.9
DI benefit payments.....	18,654	10.1	19,526	10.1
OASI monthly benefits, total.....	165,215	100.0	174,160	100.0
Retired workers and auxiliaries.....	127,062	76.8	133,943	76.8
Retired workers.....	115,524	69.8	121,798	69.9
Wives and husbands.....	10,400	6.3	10,988	6.3
Children.....	1,138	.7	1,157	.7
Survivors of deceased workers.....	38,093	23.0	40,168	23.0
Aged widows and widowers.....	28,402	17.2	30,410	17.4
Disabled widows and widowers.....	418	.3	430	.2
Parents.....	51	( <sup>1</sup> )	49	( <sup>1</sup> )
Children.....	7,750	4.7	7,815	4.5
Widowed mothers and fathers caring for child beneficiaries.....	1,472	.9	1,465	.8
Uninsured persons generally aged 72 before 1968.....	60	( <sup>1</sup> )	49	( <sup>1</sup> )
Lump-sum death payments.....	207	.1	204	.1
DI benefit payments, total.....	18,654	100.0	19,526	100.0
Disabled workers.....	16,322	87.5	17,110	87.6
Wives and husbands.....	543	2.9	547	2.8
Children.....	1,789	9.6	1,869	9.6

<sup>1</sup>Less than 0.05 percent.

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

The assets of the OASI Trust Fund at the end of fiscal year 1986 totaled \$37,519 million, consisting of \$36,948 million in U.S. Government obligations and an undisbursed balance of \$571 million. Table 6 shows the total assets of the fund and their distribution at the end of each fiscal year 1985 and 1986.

TABLE 6.—ASSETS OF THE OASI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1985 AND 1986

	September 30, 1985	September 30, 1986
Obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
7.250 percent, 1987.....	—	\$1,424,689,000.00
7.750 percent, 1987.....	—	174,724,000.00
10.375 percent, 1986.....	\$8,209,540,000.00	—
Bonds:		
8.375 percent, 1987.....	—	2,144,094,000.00
8.375 percent, 1988.....	—	313,296,000.00
8.375 percent, 1989.....	—	313,296,000.00
8.375 percent, 1990.....	—	313,296,000.00
8.375 percent, 1991.....	—	313,295,000.00
8.375 percent, 1992.....	—	313,295,000.00
8.375 percent, 1993.....	—	313,295,000.00
8.375 percent, 1994.....	—	313,295,000.00
8.375 percent, 1995.....	—	313,295,000.00
8.375 percent, 1996.....	—	313,295,000.00
8.375 percent, 1997.....	—	313,295,000.00
8.375 percent, 1998.....	—	313,295,000.00
8.375 percent, 1999.....	—	313,295,000.00
8.375 percent, 2000.....	—	313,295,000.00
8.375 percent, 2001.....	—	2,370,396,000.00
10.375 percent, 1987.....	—	18,922,000.00
10.375 percent, 1988.....	—	2,057,101,000.00
10.375 percent, 1989.....	129,852,000.00	2,057,101,000.00
10.375 percent, 1990.....	2,057,101,000.00	2,057,101,000.00
10.375 percent, 1991.....	1,865,345,000.00	1,865,345,000.00
10.375 percent, 1992.....	565,186,000.00	565,186,000.00
10.375 percent, 1993.....	565,186,000.00	565,186,000.00
10.375 percent, 1994.....	565,186,000.00	565,186,000.00
10.375 percent, 1995.....	565,186,000.00	565,186,000.00
10.375 percent, 1996.....	565,186,000.00	565,186,000.00
10.375 percent, 1997.....	565,186,000.00	565,186,000.00
10.375 percent, 1998.....	565,186,000.00	565,186,000.00
10.375 percent, 1999.....	565,186,000.00	565,186,000.00
10.375 percent, 2000.....	2,057,101,000.00	2,057,101,000.00
10.75 percent, 1992.....	1,022,231,000.00	1,022,231,000.00
10.75 percent, 1993.....	1,022,231,000.00	1,022,231,000.00
10.75 percent, 1994.....	1,022,231,000.00	1,022,231,000.00
10.75 percent, 1995.....	1,022,231,000.00	1,022,231,000.00
10.75 percent, 1996.....	1,022,231,000.00	1,022,231,000.00
10.75 percent, 1997.....	1,022,230,000.00	1,022,230,000.00
10.75 percent, 1998.....	1,022,230,000.00	1,022,230,000.00
13.75 percent, 1991.....	191,756,000.00	191,756,000.00
13.75 percent, 1992.....	469,684,000.00	469,684,000.00
13.75 percent, 1993.....	469,684,000.00	469,684,000.00
13.75 percent, 1994.....	469,684,000.00	469,684,000.00
13.75 percent, 1995.....	469,684,000.00	469,684,000.00
13.75 percent, 1996.....	469,684,000.00	469,684,000.00
13.75 percent, 1997.....	469,685,000.00	469,685,000.00
13.75 percent, 1998.....	469,685,000.00	469,685,000.00
13.75 percent, 1999.....	1,491,915,000.00	1,491,915,000.00
Total investments.....	30,967,503,000.00	36,947,976,000.00
Undisbursed balances.....	2,909,796,915.90	571,402,083.59
<b>Total assets.....</b>	<b>33,877,299,915.90</b>	<b>37,519,378,083.59</b>

Note: Special issues are always purchased at par value. Therefore, book value and par value are the same for each special issue, and the common value is shown above.

All securities held by the OASI Trust Fund are special issues (i.e., securities sold only to the trust funds). These are of two types: short-term certificates of indebtedness and long-term bonds. The certificates of indebtedness are issued through the investment of receipts not required to meet current expenditures, and they mature on the next June 30 following the date of issue. Special-issue bonds, on the other hand, are normally acquired only when the certificates of indebtedness mature on June 30. The amount of bonds acquired on June 30 is equal to the amount of certificates of indebtedness maturing, less amounts required to meet expenditures on that day.

Table 7 shows the investment transactions of the OASI and DI Trust Funds, separate and combined, in fiscal year 1986. All amounts shown in the table are at par value.

TABLE 7.—INVESTMENT TRANSACTIONS OF THE OASI AND DI TRUST FUNDS  
IN FISCAL YEAR 1986  
(In thousands)

	OASI Trust Fund	DI Trust Fund	Total
Invested assets, September 30, 1985.....	\$30,967,503	\$5,703,827	\$36,671,330
Acquisitions:			
Certificates of indebtedness .....	213,949,974	22,954,771	236,904,745
Bonds .....	31,265,082	6,289,056	37,554,138
Total.....	245,215,056	29,243,827	274,458,883
Dispositions:			
Certificates of indebtedness .....	220,560,101	23,620,239	244,180,340
Bonds .....	18,674,482	2,991,942	21,666,424
Total.....	239,234,583	26,612,181	265,846,764
Net increase in invested assets.....	5,980,473	2,631,646	8,612,119
Invested assets, September 30, 1986.....	36,947,976	8,335,473	45,283,449

Note: All investments are shown at par value. No transactions in the marketable securities held by the DI Trust Fund occurred during fiscal year 1986.

The securities held by the OASI and DI Trust Funds are included in the Federal debt that is subject to a statutory limit on the total amount outstanding. In September 1985, the amount of outstanding Federal debt reached the applicable limit before legislation to raise the limit was enacted into law. The investment of advance tax transfers in short-term certificates of indebtedness could not be made until the limit was raised, and long-term bonds were redeemed in order to permit the Treasury to acquire cash to pay benefits on time. Public Law 99-155 (enacted into law on November 14, 1985) provided for a temporary increase in the limit and also provided for the restoration of the bonds that had been redeemed in October and November 1985 due to the unusual investment procedures in those months. Public Law 99-177 (enacted into law on December 12, 1985) permanently increased the debt limit and provided for the restoration of bonds that had been redeemed due to the debt-limit problem in September 1985. The legislation also provided for transfers from the general fund of the Treasury to the trust funds to compensate them for actual and estimated future interest losses attributable to the bond redemptions that were due solely to debt-limit problems in both 1984 and 1985. (See the 1986 Annual Report for further information on the 1984 and 1985 debt-limit problems and their resolution.)

The effective annual rate of interest earned by the assets of the OASI Trust Fund during the 12 months ending on June 30, 1986, was 11.2 percent, as compared to 12.4 percent earned during the 12 months ending on June 30, 1985. (This period is used, rather than the fiscal year, because interest on special issues is paid semiannually on June 30 and December 31.) The interest rate on special issues purchased by the trust fund in June 1986 was 8.375 percent, payable semiannually. Special-issue bonds with a total par value of \$8,795 million were purchased in June 1986.

Section 201(d) of the Social Security Act provides that the public-debt obligations issued for purchase by the OASI and DI Trust Funds shall have maturities fixed with due regard for the needs of the funds. The usual practice in the past has been to spread the holdings of special issues, as of each June 30, so that the amounts maturing in each of the next 15 years are approximately equal. Accordingly, the amounts and maturity dates of the special-issue bonds purchased on June 30, 1986, were selected in such a way that the maturity dates of the total portfolio of special issues were spread evenly over the 15-year period 1987-2001.

**B. DISABILITY INSURANCE TRUST FUND**

A statement of the income and disbursements of the Federal Disability Insurance Trust Fund during fiscal year 1986, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 8.

TABLE 8.—STATEMENT OF OPERATIONS OF THE DI TRUST FUND DURING FISCAL YEAR 1986  
(In thousands)

Total assets, September 30, 1985.....		\$5,872,650
<b>Receipts:</b>		
Contributions:		
Appropriations:		
Employment taxes.....	\$16,128,666	
Tax credits.....	147,919	
Total appropriations.....	16,276,585	
Deposits arising from State agreements.....	1,883,618	
Payments from general fund of the Treasury representing employee-employer contributions on deemed wage credits for military service in 1986.....	31,000	
Gross contributions.....	18,191,202	
Less payment to the general fund of the Treasury for contributions subject to refund.....	52,342	
Net contributions.....		18,138,860
Income from taxation of benefit payments:		
Withheld from benefit payments to non-resident aliens.....	3,816	
All other, not subject to withholding.....	225,000	
Total income from taxation of benefits.....		228,816
Payments from general fund of Treasury for costs of noncontributory wage credits for military service before 1957.....		1,017,000
Investment income and interest adjustments:		
Interest on investments.....	630,954	
Interest reimbursement required to compensate the fund for interest losses resulting from debt-limit problems in 1985.....	437	
Interest on reimbursement from general fund for unnegotiated checks.....	600	
Interest on loan to OASI Trust Fund.....	158,855	
Gross investment income and interest adjustments.....	790,846	
Less interest on interfund transfers due to adjustment in allocation of administrative expenses.....	169	
Less interest on general fund advance tax transfers.....	45,019	
Net investment income and interest adjustments.....		745,658
Total receipts.....		20,130,334
<b>Disbursements:</b>		
Benefit payments:		
Gross benefit payments.....	19,622,469	
Less collected overpayments.....	96,091	
Less reimbursement for unnegotiated checks.....	1,900	
Net benefit payments.....		19,524,478
Transfer to the Railroad Retirement "Social Security Equivalent Benefit Account".....		67,654
Payment for costs of vocational rehabilitation services for disabled beneficiaries.....		4,411
Administrative expenses:		
Department of Health and Human Services.....	575,696	
Department of the Treasury.....	23,633	
Construction of facilities for the Social Security Administration.....	350	
Gross administrative expenses.....	599,679	
Less receipts from sales of supplies, materials, etc.....	43	
Net administrative expenses.....		599,636
Total disbursements.....		20,196,179
Final repayment, from OASI Trust Fund, of interfund loans.....		2,541,253
Net increase in assets <sup>1</sup> .....		2,475,409
Total assets, September 30, 1986.....		8,348,059

<sup>1</sup>Equals total receipts, less total disbursements, plus interfund loan repayment.

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

The total assets of the DI Trust Fund amounted to \$5,873 million on September 30, 1985. During fiscal year 1986, total receipts amounted to \$20,130 million, and total disbursements were \$20,196 million. In addition, \$2,541 million was transferred from the OASI Trust Fund to the DI Trust Fund as final repayment of interfund loans. The assets of the trust fund thus increased by \$2,475 million during the year, to a total of \$8,348 million on September 30, 1986.

Included in total receipts were \$16,277 million representing contributions appropriated to the fund (including transfers of \$148 million from the general fund of the Treasury to offset the tax credits allowed against contributions due on earnings of self-employed persons), \$1,884 million representing amounts received by the Secretary of the Treasury in accordance with State coverage agreements and deposited in the fund, and \$31 million in payments from the general fund of the Treasury representing the contributions that would have been paid on estimated deemed wage credits for military service in 1986 if such credits had been considered to be covered wages. As an offset, \$52 million was transferred from the trust fund to the general fund of 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 contribution and benefit base.

Net contributions amounted to \$18,139 million, an increase of 7.5 percent from the amount in the preceding fiscal year. This increase is primarily attributable to 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 subsection). Income from the taxation of benefit payments amounted to \$229 million in fiscal year 1986, or about 6.4 percent of the total amount of such income to both the OASI and DI Trust Funds.

As described in the preceding subsection, a determination was required in 1985 to adjust prior payments from the general fund of the Treasury for the costs arising from the granting of noncontributory wage credits for military service prior to 1957. Accordingly, a transfer of \$1,017 million from the general fund to the DI Trust Fund was made in December 1985. The remaining \$746 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 \$20,196 million in total disbursements, \$19,524 million was for net benefit payments, excluding collected overpayments of \$96 million and the reimbursement of \$2 million for unnegotiated benefit checks. This represents an increase of 4.7 percent over the corresponding amount of benefit payments in fiscal year 1985. 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).

Provisions governing the financial interchanges between the Railroad Retirement and OASDI programs are described in a preceding section. The determination made as of September 30, 1985, required that a transfer of \$63,200,000 be made from the DI Trust Fund to the Social Security Equivalent Benefit Account. A total amount of \$67,654,000 was

transferred to the SSEBA in June 1986, including interest to the date of transfer amounting to \$4,454,000.

The remaining disbursements amounted to \$600 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. Reimbursement from the trust funds for the costs of such services is made only in those cases where the services contributed to the successful rehabilitation of the beneficiaries.

The assets of the DI Trust Fund at the end of fiscal year 1986 totaled \$8,348 million, consisting of \$8,335 million in U.S. Government obligations and an undisbursed balance of \$14 million. Table 9 shows the total assets of the fund and their distribution at the end of each fiscal year 1985 and 1986.

TABLE 9.—ASSETS OF THE DI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1985 AND 1986

	September 30, 1985	September 30, 1986
<b>Investments in public-debt obligations:</b>		
Public issues:		
Treasury bonds:		
3.5 percent, 1990 .....	\$10,500,000.00	\$10,500,000.00
3.5 percent, 1998 .....	5,000,000.00	5,000,000.00
4.125 percent, 1989-94 .....	68,400,000.00	68,400,000.00
4.25 percent, 1987-92 .....	80,800,000.00	80,800,000.00
7.5 percent, 1988-93 .....	26,500,000.00	26,500,000.00
7.625 percent, 2002-07 .....	10,000,000.00	10,000,000.00
8 percent, 1996-2001 .....	26,000,000.00	26,000,000.00
8.25 percent, 2000-05 .....	3,750,000.00	3,750,000.00
11.75 percent, 2010 .....	30,250,000.00	30,250,000.00
Total investments in public issues at par value, as shown above .....	261,200,000.00	261,200,000.00
Unamortized premium or discount, net.....	-1,045,050.44	-934,910.24
Total investments in public issues at book value.	260,154,949.56	260,265,089.76
<b>Obligations sold only to the trust funds (special issues):</b>		
Certificates of indebtedness:		
10.375 percent, 1986 .....	665,468,000.00	—
Bonds:		
8.375 percent, 1988 .....	—	315,070,000.00
8.375 percent, 1989 .....	—	223,049,000.00
8.375 percent, 1990 .....	—	201,768,000.00
8.375 percent, 1991 .....	—	201,767,000.00
8.375 percent, 1992 .....	—	201,767,000.00
8.375 percent, 1993 .....	—	201,767,000.00
8.375 percent, 1994 .....	—	109,613,000.00
8.375 percent, 1995 .....	—	109,613,000.00
8.375 percent, 1996 .....	—	201,767,000.00
8.375 percent, 1997 .....	—	201,767,000.00
8.375 percent, 1998 .....	—	201,767,000.00
8.375 percent, 1999 .....	—	201,767,000.00
8.375 percent, 2000 .....	—	201,767,000.00
8.375 percent, 2001 .....	—	591,226,000.00
8.75 percent, 1993 .....	47,479,000.00	47,479,000.00
8.75 percent, 1994 .....	339,277,000.00	339,277,000.00
9.75 percent, 1993 .....	142,337,000.00	142,337,000.00
9.75 percent, 1994 .....	142,336,000.00	142,336,000.00
9.75 percent, 1995 .....	481,613,000.00	481,613,000.00
10.375 percent, 1988 .....	—	73,263,000.00
10.375 percent, 1989 .....	308,802,000.00	368,178,000.00
10.375 percent, 1990 .....	177,111,000.00	177,111,000.00

TABLE 9.—ASSETS OF THE DI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1985 AND 1986 (Cont.)

	September 30, 1985	September 30, 1986
Investments in public-debt obligations: (Cont.)		
Obligations sold only to the trust funds (special issues): (Cont.)		
Bonds: (Cont.)		
10.375 percent, 1991.....	\$101,503,000.00	\$101,503,000.00
10.375 percent, 1992.....	101,503,000.00	101,503,000.00
10.375 percent, 1993.....	101,503,000.00	101,503,000.00
10.375 percent, 1996.....	101,504,000.00	101,504,000.00
10.375 percent, 1997.....	101,504,000.00	101,504,000.00
10.375 percent, 1998.....	101,504,000.00	101,504,000.00
10.375 percent, 1999.....	152,904,000.00	152,904,000.00
10.375 percent, 2000.....	389,459,000.00	389,459,000.00
10.75 percent, 1990.....	212,348,000.00	212,348,000.00
10.75 percent, 1991.....	287,956,000.00	287,956,000.00
10.75 percent, 1992.....	287,956,000.00	287,956,000.00
10.75 percent, 1993.....	98,140,000.00	98,140,000.00
10.75 percent, 1996.....	287,955,000.00	287,955,000.00
10.75 percent, 1997.....	287,955,000.00	287,955,000.00
10.75 percent, 1998.....	287,955,000.00	287,955,000.00
13.75 percent, 1999.....	236,555,000.00	236,555,000.00
Total obligations sold only to the trust funds (special issues).....	5,442,627,000.00	8,074,273,000.00
Total investments in public-debt obligations (book value <sup>1</sup> ).....	5,702,781,949.56	8,334,538,089.76
Undisbursed balances.....	169,868,150.98	13,520,558.71
Total assets (book value <sup>1</sup> ).....	5,872,650,100.54	8,348,058,648.47

<sup>1</sup>Par value, plus unamortized premium or less discount outstanding.

Note: Special issues are always purchased at par value. Therefore, book value and par value are the same for each special issue, and the common value is shown above.

As described in the previous subsection, a delay in increasing the Federal debt limit in 1985 resulted in the redemption of bonds in order to pay benefits on time and a delay in the investment of advance tax transfers. As in the case of the OASI Trust Fund, the adverse consequences of these effects have since been corrected by legislation.

The effective annual rate of interest earned by the assets of the DI Trust Fund during the 12 months ending on June 30, 1986, was 10.2 percent, as compared to 10.9 percent earned during the 12 months ending on June 30, 1985. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1986 was 8.375 percent, payable semiannually. Special-issue bonds with a total par value of \$3,959 million were purchased in June 1986.

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.

## V. ACTUARIAL ESTIMATES

Section 201(c)(2) of the Social Security Act requires the Board of Trustees to 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, 1986, is presented in the preceding section of this report. Estimates of the operations and status of the trust funds during fiscal years 1987-91 are presented in this section. Similar estimates for calendar years 1987-91 are also presented.

In the short range, the adequacy of the trust fund level is often measured by the "contingency fund ratio," which is defined to be the assets at the beginning of the year, including advance tax transfers for January, expressed as a percentage of the outgo during the year. (For the years 1983-86, the assets at the beginning of the year also included amounts owed or excluded amounts lent, to another trust fund.) Thus, this ratio represents the proportion of the year's outgo which is available at the beginning of the year. During periods when outgo temporarily exceeds income, as might happen during an economic recession, trust fund assets are used to meet the shortfall. In the event of recurring shortfalls for an extended period, the trust funds can allow sufficient time for the development and enactment of legislation to restore financial balance to the program.

Section 201(c) of the Act also requires that the annual report include "a statement of the actuarial status of the Trust Funds." Such statements have customarily been made for the medium-range valuation period (25 years) and the long-range valuation 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 short-range operations of the trust funds and the actuarial status are described in Appendix A.

Basic to the discussion of the actuarial status are the concepts of "income rate" and "cost rate," each of which is expressed as a percentage of taxable payroll. The OASDI taxable payroll consists of the total earnings which are subject to OASDI taxes, adjusted to include, after 1982, deemed wages based on military service, and to reflect the lower effective tax rates (as compared to the combined employee-employer rate) which apply to tips and to multiple-employer "excess wages," and which did apply, before 1984, to net earnings from self-employment. Because the taxable payroll reflects these adjustments, the income rate can be defined to be the sum of the OASDI combined employee-employer contribution 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). As such, it excludes reimbursements from the general fund of the Treasury for the costs associated with special monthly payments to certain uninsured persons who attained age 72 before 1968 and who have fewer than 3 quarters of

coverage, transfers under the interfund borrowing provisions, and net investment income. The cost rate is the ratio of the cost (or outgo or disbursements) of the program to the taxable payroll. In this context, the outgo is defined to include benefit payments, special monthly payments to certain uninsured persons who have 3 or more quarters of coverage (and whose payments are therefore not reimbursable from the general fund of the Treasury), administrative expenses, net transfers from the trust funds to the Railroad Retirement program under the financial-interchange provisions, and payments for vocational rehabilitation services for disabled beneficiaries; it excludes special monthly payments to certain uninsured persons whose payments are reimbursable from the general fund of the Treasury (as described above), and transfers under the interfund borrowing provisions. For any year, the income rate minus the cost rate is referred to as the "balance" for the year.

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 appropriate annual balances). If the actuarial balance is negative, the program is said to have 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 program's financing or benefit provisions 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 status of the program 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 positive actuarial balance into a deficit, or vice versa. In addition, while early deficits followed by later positive balances could result in a positive actuarial balance, the trust fund could be depleted before the annual positive balances occur. Conversely, while early positive balances followed by later deficits could result in a positive actuarial balance, the trust fund that would accumulate in the early years could eventually be depleted at some point beyond the end of the projection period, leaving the program 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 program is said to be in close actuarial balance for the long-range period if the estimated average income rate is between 95 percent and 105 percent of the estimated average cost rate.

Estimates of income, outgo, income rates, 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 gross national product, labor force, unemployment, average earnings, productivity, inflation, fertility, mortality, net immigration, marriage, divorce, 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, estimates 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 presentation illustrates the effect on the financial status of the program of higher real earnings growth, higher employment, and lower inflation, for a given set of demographic assumptions. In terms of the net effect on the status of the program, alternative II-A is more optimistic than is alternative II-B. Of all four sets, 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 estimates 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, under a variety of plausible economic and demographic conditions.

#### *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-wage differential <sup>b</sup> (percent)	Average annual interest rate <sup>c</sup> (percent)	Average annual unemployment rate <sup>d</sup> (percent)
	Real GNP <sup>a</sup>	Average wages in covered employment	Consumer Price Index <sup>e</sup>			
Past experience:						
1960-64.....	3.9	3.4	1.3	2.1	3.7	5.7
1965-69.....	4.2	5.4	3.4	2.0	5.2	3.8
1970-74.....	2.4	6.3	6.1	.2	6.7	5.4
1975.....	-1.3	6.7	9.1	-2.5	7.4	8.5
1976.....	4.9	8.5	5.7	2.8	7.1	7.7
1977.....	4.7	7.2	6.5	.7	7.1	7.1
1978.....	5.3	9.6	7.6	2.0	8.2	6.1
1979.....	2.5	9.2	11.4	-2.2	9.1	5.9
1980.....	-2	9.1	13.5	-4.4	11.0	7.2
1981.....	1.9	9.3	10.3	-1.0	13.3	7.6
1982.....	-2.5	*6.6	6.0	*6	12.8	9.7
1983.....	3.6	*5.0	3.0	*2.0	11.0	9.6
1984.....	6.4	*5.9	3.4	*2.4	12.4	7.5
1985.....	2.7	*4.1	3.5	*6	10.8	7.2

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

Calendar year	Average annual percentage increase in—			Real-wage differential <sup>1</sup> (percent)	Average annual interest rate* (percent)	Average annual unemployment rate* (percent) <sup>a</sup>
	Real GNP <sup>1</sup>	Average wages in covered employment	Consumer Price Index <sup>2</sup>			
<b>Alternative I:</b>						
1986 .....	2.7	4.4	1.6	2.9	8.0	7.0
1987 .....	3.5	4.7	2.6	2.1	7.4	6.9
1988 .....	4.2	5.3	3.1	2.2	6.9	6.6
1989 .....	4.1	5.5	3.0	2.5	7.0	6.1
1990 .....	4.0	5.1	2.7	2.4	6.7	5.7
1991 .....	4.0	4.6	2.2	2.4	6.0	5.2
1992 .....	3.3	4.3	2.0	2.3	5.3	5.0
1993 .....	3.0	4.1	2.0	2.1	4.7	4.9
1994 .....	3.0	4.2	2.0	2.2	4.6	4.9
1995 .....	3.0	4.1	2.0	2.1	4.8	4.9
1996 .....	3.0	4.3	2.0	2.3	4.9	4.8
2000 .....	3.2	4.6	2.0	2.6	5.0	5.0
2010 & later..	*2.8	4.5	2.0	2.5	5.0	5.0
<b>Alternative II-A:</b>						
1986 .....	2.6	3.9	1.6	2.3	8.0	7.0
1987 .....	2.9	4.9	3.0	1.9	7.5	7.0
1988 .....	3.5	5.1	3.6	1.5	7.1	6.8
1989 .....	3.6	5.4	3.6	1.9	7.5	6.4
1990 .....	3.6	5.2	3.2	2.0	7.2	6.0
1991 .....	3.4	5.1	3.0	2.1	6.6	5.7
1992 .....	2.9	5.0	3.0	2.0	6.1	5.5
1993 .....	2.6	4.7	3.0	1.7	5.6	5.4
1994 .....	2.6	4.9	3.0	1.9	5.5	5.4
1995 .....	2.6	4.8	3.0	1.8	5.5	5.4
1996 .....	2.6	4.9	3.0	1.9	5.6	5.3
2000 .....	2.6	5.1	3.0	2.1	5.5	5.5
2010 & later..	*2.2	5.0	3.0	2.0	5.5	5.5
<b>Alternative II-B:</b>						
1986 .....	2.6	3.8	1.6	2.3	8.0	7.0
1987 .....	2.3	4.3	3.2	1.1	7.6	7.1
1988 .....	3.0	5.2	4.5	.7	7.5	7.1
1989 .....	2.9	5.2	4.3	.8	8.1	6.9
1990 .....	3.0	5.8	4.5	1.3	8.2	6.6
1991 .....	3.0	5.9	4.3	1.6	7.8	6.2
1992 .....	2.6	5.6	4.0	1.6	7.3	6.0
1993 .....	2.3	5.4	4.0	1.4	6.8	5.9
1994 .....	2.3	5.5	4.0	1.5	6.5	5.9
1995 .....	2.3	5.4	4.0	1.4	6.3	5.8
1996 .....	2.3	5.6	4.0	1.6	6.2	5.8
2000 .....	2.1	5.6	4.0	1.6	6.0	6.0
2010 & later..	*1.7	5.5	4.0	1.5	6.0	6.0
<b>Alternative III:</b>						
1986 .....	2.5	3.3	1.6	1.7	8.0	7.0
1987 .....	-1.2	2.6	3.4	-9	7.6	7.9
1988 .....	1.2	5.2	5.4	-3	7.9	9.0
1989 .....	1.8	5.8	6.0	-2	9.1	8.5
1990 .....	-3	5.0	5.7	-7	9.5	9.6
1991 .....	3.7	6.8	5.0	1.8	9.0	8.7
1992 .....	2.4	5.9	5.0	.9	8.3	8.2
1993 .....	2.2	5.8	5.0	.8	7.7	7.8
1994 .....	2.2	6.0	5.0	1.0	7.4	7.4
1995 .....	2.2	5.9	5.0	.9	7.1	7.1
1996 .....	2.1	6.1	5.0	1.1	6.8	6.9
2000 .....	1.5	6.1	5.0	1.1	6.5	7.0
2010 & later..	*1.2	6.0	5.0	1.0	6.5	7.0

<sup>1</sup>The real GNP (gross national product) is the total output of goods and services, expressed in 1982 dollars.

<sup>2</sup>The Consumer Price Index is the average of the 12 monthly values of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

<sup>1</sup>The real-wage differential is the difference between the percentage increases, before rounding, in (1) average annual wages in covered employment, and (2) the average annual Consumer Price Index.

<sup>a</sup>The average annual interest rate is the average of the nominal interest rates, which, in practice, are compounded semiannually, for special public-debt obligations issuable to the trust funds in each of the 12 months of the year.

\*Through 1996, the rates shown are crude civilian unemployment rates. After 1996, the rates are total rates (including military personnel), adjusted by age and sex based on the estimated total labor force on July 1, 1986.

\*Preliminary.

<sup>1</sup>This value is for 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 increases for 2060 are 3.1, 2.1, 1.7, and 0.5 percent for alternatives I, II-A, II-B, and III, respectively.

Alternatives I, II-A, II-B, and III present a range of generally consistent sets of economic assumptions which have been designed to encompass most of the possibilities that might be encountered. Alternative I presents the most optimistic outlook, with robust economic growth and low inflation. The intermediate sets of assumptions—alternatives II-A and II-B—bracket the current consensus view of moderate growth and inflation for the first few years; thereafter, alternative II-A continues to reflect more robust economic growth than does alternative II-B. Alternative III is a pessimistic forecast in which the economy experiences two recessions during the next 10 years. The total declines in real GNP for the projected recessions in alternative III are slightly less than those of recent recessions; however, the intervening recoveries are assumed to be substantially weaker than those experienced in the recent past. This scenario presents an assessment of the combined effects on the OASDI program of business cycles and generally weak economic growth.

The period of economic growth, which began in the first quarter of 1983, is assumed to continue through the end of the decade under alternatives I, II-A, and II-B. Real GNP is assumed to be stronger for alternative I than for alternative II-A. Similarly, growth for alternative II-A is stronger than that for alternative II-B.

For alternative III, the recovery is assumed to have faded during the fourth quarter of 1986; a recession is assumed to occur during 1987. After 5 quarters of recovery, a second recession is assumed to begin in the second quarter of 1989, lasting through the first quarter of 1990.

For alternatives I, II-A, and II-B, the unemployment rate is assumed to decline gradually toward its ultimate level. For alternative III, the unemployment rate is assumed to reach its ultimate level after the recovery that is assumed to follow the second recession. After the early 1990s, the projected rates of growth in real GNP, for all four alternatives, are determined by the assumed rates of growth in employment, average hours worked, and productivity.

Assumed values for the other economic variables are consistent with the assumed rates of real GNP growth. For alternative II-A, the average annual unemployment rate declines from 7.0 percent in 1986 to its ultimate level of 5.5 percent (age-sex adjusted to the 1986 labor force) by 2000. The annual rate of increase in average wages in covered employment is assumed to rise from the assumed 3.9-percent increase in 1986 to a 5.4-percent increase in 1989, and thereafter to decline gradually to its ultimate rate of 5.0 percent by 2010. The annual rate of increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is assumed to rise from 1.6 percent in 1986 to 3.6 percent in 1988, and then to decline to an ultimate rate of 3.0 percent in 1991. The CPI-W (hereinafter denoted as "CPI") is used to determine automatic cost-of-living benefit increases under the OASDI program. The real-wage differential (i.e., the difference between the annual rates of increase in average wages in covered employment and in the CPI) is assumed to remain between 1.5 and 2.1 percentage points after 1986, reaching its ultimate value of 2.0 percentage points by 2010. The annual interest rate is assumed to reach its ultimate value of 5.5 percent by 1997.

For alternative II-B, the average annual unemployment rate declines generally to its ultimate level of 6.0 percent by 2000. The annual rate of increase in average wages in covered employment is assumed to rise from the assumed 3.8-percent increase in 1986 to 5.9 percent in 1991, and then to decline generally to its ultimate rate of 5.5 percent by 2010. The annual rate of increase in the CPI is assumed to rise from 1.6 percent in 1986 to 4.5 percent in 1990, and then to decline to an ultimate rate of 4.0 percent in 1992. The real-wage differential is assumed to remain between 0.7 and 1.6 percentage points after 1986, reaching its ultimate value of 1.5 percentage points by 2010. The annual interest rate is assumed to decline to its ultimate value of 6.0 percent by 1997.

*Demographic assumptions*

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

The demographic assumptions for alternatives II-A and II-B are identical. The assumed ultimate total fertility rate of 2.0 children per woman is attained in 2011, after a gradual increase from the 1985 level of 1.84 children per woman. The age-sex-adjusted death rate is assumed to decrease gradually during the entire projection period, with a reduction of 38 percent from the 1985 level by 2060. The resulting life expectancies at birth in 2060 are 77.1 years for men and 84.2 years for women, compared to 71.1 and 78.3 years, respectively, in 1985. Life expectancies at age 65 in 2060 are projected to be 17.7 years for men and 22.8 years for women, compared to 14.5 and 18.6 years, respectively, in 1985. Net legal immigration is assumed to be 400,000 per year.

For alternative I, the total fertility rate is assumed to reach an ultimate level of 2.3 children per woman in 2011. The age-sex-adjusted death rate is assumed to decrease more slowly than for alternatives II-A and II-B, with the reduction from the 1985 level being 22 percent by 2060. The resulting life expectancies at birth in 2060 are 74.5 years for men and 81.3 years for women, while at age 65 they are 16.0 and 20.6 years, respectively. Net legal immigration is assumed to be 600,000 per year.

For alternative III, the total fertility rate is assumed to decrease from the estimated 1985 level to an ultimate level of 1.6 in 2011. The age-sex-adjusted death rate is assumed to decrease more rapidly than for alternatives II-A and II-B, with the reduction from the 1985 level being 58 percent by 2060. The resulting life expectancies at birth in 2060 are 82.0 years for men and 89.0 years for women, while at age 65 they are 21.2 and 26.4 years, respectively. Net legal immigration is assumed to be 200,000 per year.

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

Calendar year	Total fertility rate <sup>1</sup>	Age-sex-adjusted death rate <sup>2</sup> (per 100,000)	Life expectancy <sup>3</sup>			
			At birth		At age 65	
			Male	Female	Male	Female
<b>Past experience:</b>						
1940.....	2.23	1,583.2	61.4	65.7	11.9	13.4
1950.....	3.03	1,275.5	65.6	71.1	12.8	15.1
1960.....	3.61	1,182.8	66.7	73.2	12.9	15.9
1970.....	2.43	1,097.2	67.1	74.9	13.1	17.1
1975.....	1.77	985.4	68.7	76.6	13.7	18.0
1976.....	1.74	974.5	69.1	76.8	13.7	18.1
1977.....	1.80	968.0	69.4	77.2	13.9	18.3
1978.....	1.76	942.3	69.6	77.3	13.9	18.3
1979.....	1.82	912.4	70.0	77.7	14.2	18.6
1980.....	1.85	926.8	69.9	77.5	14.0	18.4
1981.....	1.83	900.6	70.4	77.9	14.2	18.6
1982.....	1.83	872.9	70.8	78.2	14.5	18.8
1983.....	1.81	880.7	70.9	78.2	14.3	18.6
1984.....	1.80	874.6	71.1	78.2	14.4	18.7
1985.....	1.84	872.7	71.1	78.3	14.5	18.6
1986*.....	1.84	859.4	71.4	78.5	14.6	18.7
<b>Alternative I:</b>						
1987.....	1.86	854.3	71.5	78.6	14.6	18.8
1990.....	1.91	838.9	71.8	78.8	14.7	18.9
1995.....	2.01	816.4	72.2	79.2	14.8	19.0
2000.....	2.10	797.9	72.6	79.4	14.8	19.2
2010.....	2.28	772.8	73.0	79.8	15.0	19.4
2020.....	2.30	752.6	73.3	80.1	15.2	19.7
2030.....	2.30	733.5	73.6	80.4	15.4	19.9
2040.....	2.30	715.4	73.9	80.7	15.6	20.1
2050.....	2.30	698.2	74.2	81.0	15.8	20.4
2060.....	2.30	681.9	74.5	81.3	16.0	20.6
<b>Alternatives II-A and II-B:</b>						
1987.....	1.85	846.1	71.6	78.7	14.7	18.9
1990.....	1.86	808.4	72.3	79.3	14.9	19.2
1995.....	1.90	755.3	73.2	80.1	15.3	19.7
2000.....	1.93	717.1	73.9	80.8	15.6	20.1
2010.....	1.99	678.4	74.6	81.4	16.0	20.6
2020.....	2.00	648.0	75.1	82.0	16.3	21.0
2030.....	2.00	619.5	75.7	82.6	16.7	21.5
2040.....	2.00	592.8	76.2	83.1	17.0	21.9
2050.....	2.00	567.6	76.7	83.7	17.4	22.4
2060.....	2.00	544.0	77.1	84.2	17.7	22.8
<b>Alternative III:</b>						
1987.....	1.83	837.9	71.8	78.8	14.7	18.9
1990.....	1.79	779.2	72.8	79.7	15.2	19.5
1995.....	1.74	700.8	74.2	81.1	15.8	20.3
2000.....	1.69	647.2	75.2	82.0	16.3	21.0
2010.....	1.61	582.1	76.5	83.3	17.1	21.9
2020.....	1.60	528.0	77.6	84.5	17.9	22.8
2030.....	1.60	479.6	78.7	85.7	18.7	23.7
2040.....	1.60	436.3	79.8	86.8	19.6	24.6
2050.....	1.60	397.5	80.9	87.9	20.4	25.5
2060.....	1.60	362.7	82.0	89.0	21.2	26.4

<sup>1</sup>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. The ultimate total fertility rate is assumed to be reached in 2011.

<sup>2</sup>The age-sex-adjusted death rate is the crude rate that would occur in the enumerated total population as of April 1, 1980, if that population were to experience the death rates by age and sex observed in, or assumed for, the selected year.

<sup>3</sup>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.

\*Estimated.

The values assumed after the early years for both the economic and the demographic factors are intended to represent the average experience and are not intended to be exact 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 factors are necessary to prepare the 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 generally are increased once a year to reflect increases in the cost of living. 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 1.3 percent, effective for December 1986, was announced in October 1986, as described in Appendix C.

The automatic cost-of-living benefit increase for any year is based on the change in the CPI from the third quarter of the previous year through the third quarter of the current year. (Prior to October 1986, the law required that the increase in the CPI be at least 3.0 percent for an automatic benefit increase to become effective for that year. This requirement was permanently eliminated by Public Law 99-509.) If the combined assets of the OASI and DI Trust Funds, as a percentage of annual expenditures, are below a specified level, the automatic benefit increase is limited to the lesser of the increases in wages or prices. This specified level is 15.0 percent with respect to benefit increases for December of each year 1984-88, and 20.0 percent thereafter. This "stabilizer" provision has not affected any benefit increases since its enactment into law in 1983, and it would not affect any future increases shown in this report under any of the four sets of assumptions.

The law provides for an automatic increase in the contribution and benefit base, based on the increase in average wages, for the year following a year in which an automatic benefit increase becomes effective. For 1987, the contribution and benefit base was automatically increased to \$43,800.

The exempt amounts under the retirement earnings test are also increased automatically by the increase in average wages, following an automatic benefit increase. An automatic increase in the exempt amount for beneficiaries at ages 65 through 69—from \$7,800 in 1986 to \$8,160 in 1987—was announced in October 1986. Similarly, an automatic increase was announced in the exempt amount for beneficiaries under age 65—from \$5,760 in 1986 to \$6,000 in 1987. Appendix C describes the aforementioned automatic adjustments, as well as the determinations of the following amounts:

1. The amount of earnings a worker must have in 1987 to be credited with a quarter of coverage;
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 1987; and

3. The average of total wages reported for calendar year 1985, to be used for indexing earnings of workers who first become eligible for benefits, or who die before such eligibility, in 1987 or later.

An historical summary of the Social Security program amounts determined under the automatic-adjustment provisions, and the average-wage series used for indexing earnings, are shown in Appendix D. Estimates of the corresponding amounts through 1992 are also shown in Appendix D.

The four alternative sets of economic assumptions described previously result in the cost-of-living benefit increases and contribution and benefit bases shown in table 12 for each year through 1992. (The actual benefit increase for 1986 and the actual contribution and benefit bases for 1986 and 1987 are also shown as a basis for comparison.)

TABLE 12.—COST-OF-LIVING BENEFIT INCREASES AND CONTRIBUTION AND BENEFIT BASES, BY ALTERNATIVE, CALENDAR YEARS 1986-92

Calendar year	Cost-of-living benefit increase <sup>a</sup> (percent) based on alternative—				Contribution and benefit base <sup>a</sup> based on alternative—			
	I	II-A	II-B	III	I	II-A	II-B	III
	1986.....	1.3	1.3	1.3	1.3	\$42,000	\$42,000	\$42,000
1987.....	3.0	3.5	3.7	4.0	43,800	43,800	43,800	43,800
1988.....	3.0	3.6	4.5	5.6	45,600	45,300	45,300	45,000
1989.....	3.0	3.6	4.3	6.1	47,700	47,400	47,100	46,200
1990.....	2.6	3.1	4.6	5.6	50,100	49,800	49,500	48,600
1991.....	2.1	3.0	4.2	5.0	52,800	52,500	51,900	51,300
1992.....	2.0	3.0	4.0	5.0	55,500	55,200	54,900	53,700

<sup>a</sup>Effective with benefits for December of the year shown.

<sup>a</sup>Effective on January 1 of the year shown.