

TABLE 2.—STATEMENT OF OPERATIONS OF THE OASI TRUST FUND
DURING FISCAL YEAR 1988 (Cont.)
(In thousands)

Disbursements:		
Benefit payments:		
Gross benefit payments.....	\$193,299,786	
Less collected overpayments.....	759,006	
Less reimbursement for unnegotiated checks.....	39,136	
Net benefit payments.....		\$192,501,645
Transfer to the Railroad Retirement "Social Security Equivalent Benefit Account".....		2,789,968
Administrative expenses:		
Department of Health and Human Services.....	1,461,172	
Department of the Treasury.....	268,855	
Gross administrative expenses.....	1,730,027	
Less reimbursements from general fund of the Treasury for costs of furnishing information on deferred vested pension benefits.....	790	
Less receipts from sales of supplies, materials, etc.....	130	
Net administrative expenses.....		1,729,107
Total disbursements.....		197,020,720
Net increase in assets.....		38,699,591
Total assets, September 30, 1988.....		96,964,333

¹Includes \$29 million transferred to the OASI Trust Fund from the general fund of the Treasury to correct estimated amounts appropriated for calendar year 1986.

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

The total assets of the OASI Trust Fund amounted to \$58,265 million on September 30, 1987. During fiscal year 1988, total receipts amounted to \$235,720 million, and total disbursements were \$197,021 million. The assets of the OASI Trust Fund thus increased by \$38,700 million during the year, to a total of \$96,964 million on September 30, 1988.

Included in total receipts during fiscal year 1988 were \$226,597 million representing contributions appropriated to the fund (including transfers of \$2,072 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 \$40 million representing adjustments to taxes on wages paid to State and local government employees before January 1, 1987. The collection of contributions on wages paid after that date became the responsibility of the Internal Revenue Service as a result of Public Law 99-509, and such contributions are now included in employment taxes appropriated to the trust funds. Another \$284 million was received from the general fund of the Treasury representing partial payment for the contributions that would have been paid on estimated deemed wage credits for military service in 1988 if such credits had been considered to be covered wages. (The amount to be transferred under section 229(b) of the Social Security Act was originally determined to be about \$350 million. Only \$284 million was transferred in fiscal year 1988 because the transfer was limited to amounts available in the fiscal year 1988 appropriation. It is anticipated that the difference will be transferred in 1990.) As an offset to gross contributions, \$512 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 \$226,409 million, an increase of 13.5 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, (2) the increase in the OASI tax rate that became effective on January 1, 1988, and (3) the increases in the contribution and benefit base that became effective on January 1 of each year 1987 and 1988. (Table 1 in the preceding section shows the tax rates that became effective for 1988, and the contribution and benefit bases that became effective for 1987 and 1988.)

Income from the taxation of benefits amounted to \$3,335 million, of which 98 percent represented amounts credited to the trust fund in advance, on an estimated basis, together with an adjustment to 1986 transfers to account for actual experience. The remaining 2 percent of the total income from taxation of benefits represented amounts withheld from the benefits paid to non-resident aliens.

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 \$55 million was transferred to the OASI Trust Fund in fiscal year 1988, as required by section 228 of the Social Security Act. The reimbursement reflected the costs of payments made in fiscal year 1986.

Net receipts totaling \$5,922 million consisted of (1) interest earned on the investments of the trust fund; (2) interest arising from the revised allocation of administrative expenses among the trust funds; less (3) interest on transfers between the trust fund and the general fund account for the Supplemental Security Income program due to adjustments in the allocation of administrative expenses; less (4) reimbursement to the general fund for interest costs resulting from the advance transfer of contributions.

The remaining \$51,669 of receipts consisted of gifts received under the provisions authorizing the deposit of money gifts or bequests in the trust funds.

Of the \$197,021 million in total disbursements, \$192,502 million was for net benefit payments, excluding collected overpayments of \$759 million and the reimbursement of \$39 million for unnegotiated benefit checks. The amount of net benefit payments in fiscal year 1988 represents an increase of 5.8 percent over the corresponding amount in fiscal year 1987. This increase was due primarily to (1) the automatic cost-of-living benefit increases of 1.3 percent and 4.2 percent which became effective for December 1986 and December 1987, 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. The objective of the financial interchanges is to place the trust funds in the same financial position in which they would have been if railroad employment had always been covered under Social Security. Accordingly, the Railroad Retirement Board and the Secretary of Health and Human Services determined that a transfer of \$2,635 million to the Social Security Equivalent Benefit Account (SSEBA) from the OASI Trust Fund would put the trust fund in such a financial position as of September 30, 1987. A total amount of \$2,790 million was transferred to the SSEBA in June 1988, including interest to the date of transfer amounting to \$155 million.

The remaining \$1,729 million of disbursements from the OASI Trust Fund represented net administrative expenses. The expenses of administering the OASDI and Medicare programs are allocated and charged directly to each of the various trust funds, through which those programs are financed, 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 1988 amounted to \$789,816.

Net administrative expenses charged to the OASI and DI Trust Funds in fiscal year 1988 totaled \$2,532 million. (The operations of the DI Trust Fund are presented in detail in the next subsection.) This amount represented 1.0 percent of contribution income and 1.2 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 1984-88

Fiscal year	OASI Trust Fund		DI Trust Fund		Total	
	Contribution income	Benefit payments	Contribution income	Benefit payments	Contribution income	Benefit payments
1984	1.0	1.0	3.6	3.3	1.3	1.3
1985	0.9	1.0	3.6	3.2	1.1	1.2
1986	.9	.9	3.3	3.1	1.1	1.1
1987	.8	.8	3.8	3.6	1.0	1.1
1988	.8	.9	3.7	3.8	1.0	1.2

In table 4, the actual amounts of contributions and benefit payments in fiscal year 1988 are compared to the corresponding estimated amounts which appeared in the 1987 and 1988 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 the 1988 Annual Report. The estimates in the 1987 report, however, understated OASI and DI tax contributions somewhat, as well as DI benefit payments.

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 1988 reflects the aforementioned adjustments to contributions for prior fiscal years. The "estimated" contributions in fiscal year 1988 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 1988
(Amounts in millions)

	OASI Trust Fund		DI Trust Fund	
	Net contributions	Benefit payments ¹	Net contributions	Benefit payments ¹
Actual amount	\$226,404	\$192,502	\$21,736	\$21,405
Estimated amount published in 1987 report	\$221,541	\$193,054	\$21,251	\$21,001
Actual as percentage of estimate	102.2	99.7	102.3	101.9
Estimated amount published in 1988 report	\$224,708	\$192,360	\$21,566	\$21,338
Actual as percentage of estimate	100.8	100.1	100.8	100.3

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

At the end of fiscal year 1988, about 38.5 million persons were receiving monthly benefits under the OASDI program. Of these persons, about 34.5 million and 4.1 million were receiving monthly benefits from the OASI Trust Fund and the DI Trust Fund, respectively. The estimated distribution of benefit payments (before reflecting the reimbursement for unnegotiated checks) in fiscal years 1987 and 1988, 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 1987 AND 1988
[Amounts in millions]

	Fiscal year 1987		Fiscal year 1988	
	Amount	Percentage of total	Amount	Percentage of total
Total OASDI benefit payments.....	\$202,477	100.0	\$213,938	100.0
OASI benefit payments.....	182,055	89.9	192,541	90.0
DI benefit payments.....	20,422	10.1	21,397	10.0
OASI benefit payments, total.....	182,055	100.0	192,541	100.0
Monthly benefits:				
Retired workers and auxiliaries.....	140,050	76.9	148,168	77.0
Retired workers.....	127,374	70.0	134,836	70.0
Wives and husbands.....	11,495	6.3	12,123	6.3
Children.....	1,181	.6	1,209	.6
Survivors of deceased workers.....	41,763	22.9	44,135	22.9
Aged widows and widowers.....	32,030	17.6	34,202	17.8
Disabled widows and widowers.....	434	.2	444	.2
Parents.....	45	(¹)	43	(¹)
Children.....	7,852	4.3	8,058	4.2
Widowed mothers and fathers caring for child beneficiaries.....	1,402	.8	1,389	.7
Uninsured persons generally aged 72 before 1968.....	38	(¹)	30	(¹)
Lump-sum death payments.....	204	.1	207	.1
DI benefit payments, total.....	20,422	100.0	21,397	100.0
Disabled workers.....	17,957	87.9	18,889	88.3
Wives and husbands.....	538	2.6	529	2.5
Children.....	1,927	9.4	1,979	9.2

¹Less 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 1988 totaled \$96,964 million, consisting of \$97,137 million in U.S. Government obligations and, as an offset, an extension of credit amounting to \$173 million against securities to be redeemed within the following few days. Table 6 shows the total assets of the fund and their distribution at the end of each fiscal year 1987 and 1988.

TABLE 6.—ASSETS OF THE OASI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1987 AND 1988

	September 30, 1987	September 30, 1988
Obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
9 percent, 1988	\$4,888,728,000.00	—
9.25 percent, 1989	—	\$12,305,822,000.00
Bonds:		
8.375 percent, 1989	313,296,000.00	—
8.375 percent, 1990	313,296,000.00	313,296,000.00
8.375 percent, 1991-2000	3,132,950,000.00	3,132,950,000.00
8.375 percent, 2001	2,370,396,000.00	2,370,396,000.00
8.625 percent, 1989	1,301,731,000.00	—
8.625 percent, 1990-2001	15,620,772,000.00	15,620,772,000.00
8.625 percent, 2002	3,672,127,000.00	3,672,127,000.00
9.25 percent, 1990	—	2,240,308,000.00
9.25 percent, 1991-2000	—	22,403,090,000.00
9.25 percent, 2001-02	—	4,480,616,000.00
9.25 percent, 2003	—	5,912,435,000.00
10.375 percent, 1988	2,057,101,000.00	—
10.375 percent, 1989-90	4,114,202,000.00	4,114,202,000.00
10.375 percent, 1991	1,865,345,000.00	1,865,345,000.00
10.375 percent, 1992-99	4,521,488,000.00	4,521,488,000.00
10.375 percent, 2000	2,057,101,000.00	2,057,101,000.00
10.75 percent, 1992-96	5,111,155,000.00	5,111,155,000.00
10.75 percent, 1997-98	2,044,460,000.00	2,044,460,000.00
13.75 percent, 1991	191,756,000.00	191,756,000.00
13.75 percent, 1992-96	2,348,420,000.00	2,348,420,000.00
13.75 percent, 1997-98	939,370,000.00	939,370,000.00
13.75 percent, 1999	1,491,915,000.00	1,491,915,000.00
Total investments	58,355,609,000.00	97,137,024,000.00
Undisbursed balances ¹	-90,867,407.08	-172,691,216.36
Total assets	58,264,741,592.92	96,964,332,783.64

¹ Negative figures represented extensions of credit against securities to be redeemed within the following few days.

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. Where the maturity years are grouped for special issues, the amount maturing in each year is the amount shown divided by the number of years.

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 (and bonds, issued previously) mature on June 30. The amount of bonds acquired on June 30 is equal to the amount of special issues 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 1988. All amounts shown in the table are at par value.

TABLE 7.—INVESTMENT TRANSACTIONS OF THE OASI AND DI TRUST FUNDS
IN FISCAL YEAR 1988
(In thousands)

	OASI Trust Fund	DI Trust Fund	Total
Invested assets, September 30, 1987	\$58,355,609	\$7,192,839	\$65,548,448
Acquisitions:			
Certificates of indebtedness	234,444,860	22,288,584	256,733,444
Bonds	37,276,757	1,395,901	38,672,658
Total acquisitions	271,721,617	23,684,485	295,406,102
Dispositions:			
Certificates of indebtedness	227,027,766	22,005,776	249,033,542
Bonds	5,912,436	1,526,187	7,438,623
Total dispositions	232,940,202	23,531,963	256,472,165
Net increase in invested assets	38,781,415	152,522	38,933,937
Invested assets, September 30, 1988	97,137,024	7,345,361	104,482,385

Note: All investments are shown at par value. No transactions in the marketable securities held by the DI Trust Fund occurred during fiscal year 1988.

The effective annual rate of interest earned by the assets of the OASI Trust Fund during the 12 months ending on June 30, 1988, was 9.9 percent, as compared to 10.8 percent earned during the 12 months ending on June 30, 1987. (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 1988 was 9.25 percent, payable semiannually. Special-issue bonds with a total par value of \$37,277 million were purchased in June 1988.

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, 1988, 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 1989-2003.

B. DISABILITY INSURANCE TRUST FUND

A statement of the income and disbursements of the Federal Disability Insurance Trust Fund during fiscal year 1988, 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 1988
[In thousands]

Total assets, September 30, 1987		<u>\$7,172,732</u>
Receipts:		
Contributions:		
Appropriations:		
Employment taxes	\$21,548,798	
Tax credits	200,054	
Total appropriations	<u>21,748,852</u>	
Deposits arising from State agreements.....	8,849	
Payments from general fund of the Treasury representing employee-employer contributions on deemed wage credits for military service in 1988	27,000	
Gross contributions	<u>21,784,701</u>	
Less payment to the general fund of the Treasury for contributions subject to refund	48,450	
Net contributions.....		21,736,251
Income from taxation of benefit payments:		
Withheld from benefit payments to non-resident aliens.....	3,547	
All other, not subject to withholding ¹	<u>52,000</u>	
Total income from taxation of benefits.....		55,547
Investment income and interest adjustments:		
Interest on investments	689,735	
Less interest on interfund transfers due to adjustment in allocation of administrative expenses	32,360	
Less interest on general fund advance tax transfers.....	<u>79,891</u>	
Net investment income and interest adjustments.....		577,484
Total receipts.....		<u>22,369,282</u>
Disbursements:		
Benefit payments:		
Gross benefit payments.....	21,491,911	
Less collected overpayments	94,925	
Less reimbursement for unnegotiated checks	<u>10,864</u>	
Net benefit payments		21,386,122
Transfer to the Railroad Retirement "Social Security Equivalent Benefit Account"		61,305
Payment for costs of vocational rehabilitation services for disabled beneficiaries		18,897
Administrative expenses:		
Department of Health and Human Services.....	773,987	
Department of the Treasury	<u>28,986</u>	
Gross administrative expenses	802,974	
Less receipts from sales of supplies, materials, etc.....	8	
Net administrative expenses		802,966
Total disbursements		<u>22,269,290</u>
Net increase in assets.....		<u>99,992</u>
Total assets, September 30, 1988		<u>7,272,724</u>

¹Reflects \$116 million transferred from the DI Trust Fund to the general fund of the Treasury to correct estimated amounts appropriated for calendar year 1986.

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

The total assets of the DI Trust Fund amounted to \$7,173 million on September 30, 1987. During fiscal year 1988, total receipts amounted to \$22,369 million, and total disbursements were \$22,269 million. The assets of the trust fund thus increased by \$100 million during the year, to a total of \$7,273 million on September 30, 1988.

Included in total receipts were \$21,749 million representing contributions appropriated to the fund (including transfers of \$200 million from the general fund of the Treasury to offset the tax credits allowed against contributions due on earnings of self-employed persons), \$9 million representing adjustments to taxes on wages paid to State and local government employees before January 1, 1987, and \$27 million in payments from the general fund of the Treasury representing a portion of the contributions that would have been paid on estimated deemed wage credits for military service in 1988 if such credits had been considered to be covered wages (an additional amount will be credited in fiscal year 1990 for this last purpose, for the same reason given in the preceding subsection). As an offset, \$48 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 \$21,736 million, an increase of 12.5 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 \$56 million in fiscal year 1988, representing the net of \$172 million of such income offset by \$116 million transferred to the general fund of the Treasury to correct estimated amounts appropriated for calendar year 1986.

Net interest totaling \$577 million consisted of interest on the investments of the fund, less interest on amounts of interfund and general-fund transfers (see preceding subsection).

Of the \$22,269 million in total disbursements, \$21,386 million was for net benefit payments, excluding collected overpayments of \$95 million and the reimbursement of \$11 million for unnegotiated benefit checks. This represents an increase of 4.8 percent over the corresponding amount of benefit payments in fiscal year 1987. 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, 1987, required that a transfer of \$57,900,000 be made from the DI Trust Fund to the Social Security Equivalent Benefit Account. A total amount of \$61,305,000 was transferred to the SSEBA in June 1988, including interest to the date of transfer amounting to \$3,405,000.

The remaining disbursements amounted to \$803 million for net administrative expenses and \$19 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 1988 totaled \$7,273 million, consisting of \$7,345 million in U.S. Government obligations and, as an offset, an extension of credit amounting to \$72 million against securities to be redeemed within the following few days. Table 9 shows the total assets of the fund and their distribution at the end of each fiscal year 1987 and 1988.

TABLE 9.—ASSETS OF THE DI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1987 AND 1988

	September 30, 1987	September 30, 1988
Investments in public-debt obligations:		
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	-824,770.04	-714,629.84
Total investments in public issues at book value	260,375,229.96	260,485,370.16
Obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
9.25 percent, 1989	—	282,808,000.00
Bonds:		
8.375 percent, 1990	38,694,000.00	—
8.375 percent, 1991	201,767,000.00	—
8.375 percent, 1992	201,767,000.00	160,260,000.00
8.375 percent, 1993	201,767,000.00	201,767,000.00
8.375 percent, 1994-95	219,226,000.00	219,226,000.00
8.375 percent, 1996-2000	1,008,835,000.00	1,008,835,000.00
8.375 percent, 2001	591,226,000.00	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
9.25 percent, 1990-91	—	930,600,000.00
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, 1990	177,111,000.00	—
10.375 percent, 1991	101,503,000.00	—
10.375 percent, 1992-93	203,006,000.00	203,006,000.00
10.375 percent, 1996-98	304,512,000.00	304,512,000.00
10.375 percent, 1999	152,904,000.00	152,904,000.00
10.375 percent, 2000	389,459,000.00	389,459,000.00

TABLE 9.—ASSETS OF THE DI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1987 AND 1988 (Cont.)

	September 30, 1987	September 30, 1988
Investments in public-debt obligations: (Cont.)		
Obligations sold only to the trust funds (special issues): (Cont.)		
Bonds: (Cont.)		
10.75 percent, 1990.....	\$212,348,000.00	—
10.75 percent, 1991.....	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, 1996-98.....	863,865,000.00	863,865,000.00
13.75 percent, 1999.....	236,555,000.00	236,555,000.00
Total obligations sold only to the trust funds (special issues).....	6,931,639,000.00	7,084,161,000.00
Total investments in public-debt obligations (book value) ¹	7,192,014,229.96	7,344,646,370.16
Undisbursed balances ²	-19,282,218.00	-71,922,200.23
Total assets (book value)¹.....	7,172,732,011.96	7,272,724,169.93

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

²Negative figures represented extensions of credit against securities to be redeemed within the following few days.

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. Where the maturity years are grouped for special issues, the amount maturing in each year is the amount shown divided by the number of years.

The effective annual rate of interest earned by the assets of the DI Trust Fund during the 12 months ending on June 30, 1988, was 9.5 percent, as compared to 9.9 percent earned during the 12 months ending on June 30, 1987. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1988 was 9.25 percent, payable semiannually. Special-issue bonds with a total par value of \$1,396 million were purchased in June 1988.

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, 1988, is presented in the preceding section of this report. Estimates of the operations and status of the trust funds during fiscal years 1989-93 are presented in this section. Similar estimates for calendar years 1989-93 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 multiple-employer "excess wages," and which did apply, before 1984, to net earnings from self-employment and, before 1988, to tips. 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 long-range financial status of the trust funds has generally been summarized by the calculation of the actuarial balance. This is defined as the difference between the income rate and the cost rate over the long-range period—i.e., the next 75 years. If the actuarial balance is estimated to be negative, the program is said to have an actuarial deficit. Such deficit, when estimated, serves as a warning that, unless the projections turn out to be too pessimistic, changes in the program's financing or benefit provisions will be needed in the future.

As in the 1988 report, the actuarial balance in this report is calculated on the "level-financing" basis. The "level-financing" calculations are based on the present value of future income, outgo, and taxable payroll. The present value is calculated by discounting the future annual amounts at the assumed rate of interest. The income and cost rates over the projection period are then obtained by dividing the present value of the taxable payroll into the present values of income and outgo, respectively. The difference between the income rate and cost rate over the long-range projection period, after an adjustment to take into account the fund balance at the valuation date, is computed to obtain the long-range actuarial balance. However, it should be noted that a single measure over a long period, such as the actuarial balance, may not reveal problems which could occur during that period. Thus, other measures should also be considered.

The "level-financing" calculations result in estimated actuarial balances that are sensitive to changes in the assumed rate of interest whenever the projected annual balances vary significantly through time, as is the case with the projections presented in this report. As shown in Appendix B, a change of one percentage point in the assumed rate of interest would change the estimated long-range actuarial balance by about 0.5 percent of taxable payroll based on alternative II-B assumptions.

The Board is of the opinion that decisions about the long-range future of the OASDI program should not be based solely on the estimated long-range actuarial balance. This particular concept, although useful in the decision-making process, does not fully capture all of the information that may be necessary for arriving at appropriate decisions. It is particularly inadequate now since it does not reveal what actually occurs

when a substantial reserve accumulates during the early part of the projection period and decumulates during the latter part of the period. The Board therefore has chosen to focus more attention on: (1) the pattern and ultimate levels of projected annual cost and income rates (particularly to the differences between these two, which have been previously defined as annual balances), (2) the size of future fund accumulations (particularly to the year and amount of maximum projected fund ratio and the year and amount of maximum funds in dollars), and (3) the year of projected fund exhaustion. Estimates of these indicators are highlighted in this section or the appendices.

To further reinforce this view, the Board agreed at its April 1988 meeting to drop the concept of "close actuarial balance" from the report beginning in 1989. The Board does not want to put undue emphasis on the concept of close actuarial balance by continuing to report on whether the actuarial balance falls within an arbitrary range of values. The Board is of the opinion that the "close actuarial balance" test, by itself, might inappropriately influence the decision as to whether and when changes in the program's financing or benefit provisions are needed in the future. The system may be out of close actuarial balance because of projected deficits in the very long run, even though benefits could be paid for many years into the future, and immediate action may not be required.¹

Because the program is entering a period of large fund accumulation, the Board believes that the subject of the proper level of fund accumulation should be made a specific part of the agenda for the next Social Security Advisory Council. The Board particularly requests that a Panel of Financing Experts (consisting of actuaries, economists, and demographers) be appointed by the Advisory Council, and that the panel be instructed to provide advice regarding the measures that should be used to judge the program's short-range and long-range financial soundness.

¹The Social Security Administration's Chief Actuary believes that "close actuarial balance" is a valid concept, that it is generally accepted by the actuarial profession in evaluating the actuarial status of the OASDI program, and that it should be included in the report, continuing the practice in effect since the late 1950's. Furthermore, the Chief Actuary wishes to note that the General Accounting Office in an independent study recognizes the importance of the concept of "close actuarial balance" but also recommends adding other measures to it to serve as an early-warning device. A program is out of close actuarial balance if its actuarial deficit or surplus is greater than 5 percent of its cost rate. If the concept were continued this year, it would show (using the alternative II-B assumptions) that the OASI program (long-run actuarial deficit equal to 4.4 percent of its cost rate) is in close actuarial balance, the DI program (deficit equal to 11 percent of its cost rate) is out of close actuarial balance, and the combined OASDI program (deficit equal to 5.1 percent of its cost rate) is just barely out of close actuarial balance. This has not, however, been unexpected. It has been clear for some time that the annual revisions in OASDI projections involve the addition of future high-cost years, which adversely affect the actuarial balance of the program.

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 1960-2065

Calendar year	Average annual percentage increase in—					
	Real GNP ¹	Average annual wage in covered employment	Consumer Price Index ²	Real-wage differential ³ (percent)	Average annual interest rate ⁴ (percent)	Average annual unemployment rate ⁵ (percent)
Past experience:						
1960-64.....	3.9	3.4	1.3	2.1	3.7	5.7
1965-69.....	4.4	5.4	3.4	2.0	5.2	3.8
1970-74.....	2.4	6.3	6.1	1	6.7	5.4
1975.....	-1.3	6.7	9.2	2.5	7.4	8.5
1976.....	4.9	8.7	5.7	3.0	7.1	7.7
1977.....	4.7	7.9	6.5	8	7.1	7.1
1978.....	5.3	9.7	7.6	2.1	8.2	6.1
1979.....	2.5	9.8	11.4	-1.6	9.1	5.8
1980.....	-2	8.7	13.5	-4.7	11.0	7.1
1981.....	1.9	9.9	10.3	4	13.3	7.6
1982.....	-2.5	6.5	6.0	5	12.8	9.7
1983.....	3.6	*4.8	3.0	*1.8	11.0	9.6
1984.....	6.8	*6.5	3.4	*3.0	12.4	7.5
1985.....	3.4	*4.4	3.5	*8	10.8	7.2
1986.....	2.8	*4.1	1.6	*2.5	8.0	7.0
1987.....	3.4	*5.8	3.6	*2.2	8.4	6.2

TABLE 10.—SELECTED ECONOMIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1960-2065 (Cont.)

Calendar year	Average annual percentage increase in—					
	Real GNP ¹	Average annual wage in covered employment	Consumer Price Index ²	Real-wage differential ³ (percent)	Average annual interest rate ⁴ (percent)	Average annual unemployment rate ⁵ (percent)
Alternative I:						
1988	3.9	6.4	4.0	2.4	8.8	5.5
1989	3.7	6.4	3.8	2.6	9.3	5.2
1990	3.6	5.5	3.0	2.4	8.7	5.0
1991	3.6	5.4	2.8	2.5	7.8	5.0
1992	3.4	5.0	2.5	2.5	6.9	4.9
1993	3.3	4.7	2.3	2.5	6.2	4.9
1994	3.2	4.4	2.1	2.3	5.5	4.8
1995	3.2	4.1	2.0	2.1	4.9	4.7
1996	3.0	4.0	2.0	2.0	4.7	4.7
1997	2.9	4.1	2.0	2.1	4.9	4.7
1998	2.9	4.1	2.0	2.1	5.0	4.7
2000	3.1	4.3	2.0	2.2	5.0	5.0
2010 & later ⁶	2.6	4.2	2.0	2.2	5.0	5.0
Alternative II-A:						
1988	3.9	6.4	4.0	2.4	8.8	5.5
1989	3.2	6.0	3.9	2.1	9.3	5.2
1990	3.2	5.5	3.7	1.8	9.0	5.1
1991	3.1	5.1	3.2	1.9	8.2	5.1
1992	2.9	5.0	3.0	2.0	7.5	5.1
1993	2.8	5.0	3.0	2.0	6.7	5.2
1994	2.7	4.9	3.0	1.9	6.2	5.2
1995	2.6	4.7	3.0	1.7	5.8	5.2
1996	2.6	4.7	3.0	1.7	5.6	5.2
1997	2.6	4.8	3.0	1.8	5.6	5.2
1998	2.5	4.7	3.0	1.7	5.6	5.2
2000	2.6	4.8	3.0	1.7	5.5	5.5
2010 & later ⁶	2.1	4.7	3.0	1.7	5.5	5.5
Alternative II-B:						
1988	3.8	6.4	4.0	2.4	8.8	5.5
1989	2.6	6.2	4.8	1.4	9.5	5.4
1990	2.6	5.3	4.5	.8	9.4	5.5
1991	2.6	5.5	4.5	1.0	9.1	5.5
1992	2.5	5.6	4.3	1.2	8.6	5.5
1993	2.5	5.8	4.2	1.6	8.0	5.5
1994	2.4	5.6	4.0	1.6	7.4	5.5
1995	2.3	5.5	4.0	1.5	6.9	5.5
1996	2.3	5.5	4.0	1.5	6.6	5.6
1997	2.3	5.6	4.0	1.6	6.4	5.6
1998	2.2	5.4	4.0	1.4	6.2	5.6
2000	2.2	5.4	4.0	1.3	6.0	6.0
2010 & later ⁶	1.8	5.3	4.0	1.3	6.0	6.0
Alternative III:						
1988	3.8	5.2	4.0	1.2	8.8	5.5
1989	-.6	4.7	5.4	-.8	9.7	5.9
1990	.9	5.4	5.8	-.4	10.1	6.7
1991	2.4	6.4	6.4	(*)	10.5	6.4
1992	1.2	5.8	6.3	-.5	10.3	6.2
1993	-.7	4.6	5.0	-.3	9.6	7.2
1994	2.7	6.8	5.3	1.5	8.8	6.9
1995	1.9	5.9	5.0	.9	7.9	6.7
1996	1.8	5.9	5.0	.9	7.5	6.6
1997	1.6	6.0	5.0	1.0	7.2	6.5
1998	1.6	5.8	5.0	.8	6.8	6.5
2000	1.7	5.9	5.0	.8	6.5	7.0
2010 & later ⁶	1.2	5.8	5.0	.8	6.5	7.0

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

²The 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).

³The real-wage differential is the difference between the percentage increases, before rounding, in (1) the average annual wage in covered employment, and (2) the average annual Consumer Price Index.

⁴The 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.

⁵Through 1998, the rates shown are crude civilian unemployment rates. After 1998, the rates are total rates (including military personnel), adjusted by age and sex based on the estimated total labor force on July 1, 1988.

⁶Preliminary.

⁷This 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 2065 are 2.7, 1.8, 1.5, and 0.5 percent for alternatives I, II-A, II-B, and III, respectively.

*This value is between 0.05 percent and -0.05 percent.

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. A range for GNP and wages was included for 1988 because complete data for the year were not available at the time the assumptions were established. 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 real economic growth, which began in the fourth quarter of 1982 and includes a significant increase in estimated U.S. wages relative to GNP during 1988, 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. During the last 3 quarters of 1989, under the alternative II-B assumptions, a period of relatively slow growth is assumed to occur. A return to steady growth at more normal rates is assumed thereafter.

For alternative III, a significantly lower average wage increase is assumed for 1988 as a result of not recognizing the full 1988 estimated increase in U.S. wages relative to GNP. (This assumption allows for the possibility of future downward revisions in estimated total wages and a decline in the proportion of total wages which are taxable, both of which have adverse implications for program revenues.) The recovery is assumed to have ended in the first quarter of 1989; a recession is assumed to occur during the balance of 1989. After 9 quarters of recovery, a second recession is assumed to begin in the second quarter of 1992, lasting through the first quarter of 1993.

For each of the alternatives I, II-A, and II-B, the unemployment rate is assumed to move gradually toward its ultimate average level. For alternative III, the unemployment rate is assumed to reach its ultimate average level after the recovery that is assumed to follow the second recession. Unemployment rates through 1998 represent the most commonly cited crude civilian rate, which describes the differences between aggregate civilian labor force and aggregate civilian employment. For years after 1998, however, total rates are presented that include the military (which reduces the rate by about 0.1 percent relative to the civilian rate) and are age-sex adjusted to the 1988 labor force. Such total rates better represent the total population covered by the OASDI program and adjust for the changing age-sex distribution of the labor force, which can obscure the comparison of unemployment rates over

different time periods. 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 slightly from the level experienced for 1988, 5.5 percent, before returning to the assumed ultimate average rate of 5.5 percent (age-sex adjusted to the 1988 labor force) by the year 2000. The annual rate of increase in the average wage in covered employment is assumed to decline from the assumed 6.4-percent increase in 1988 to its ultimate rate of 4.7 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 decline steadily from 4.0 percent in 1988 to an ultimate rate of 3.0 percent in 1992. 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 the average wage in covered employment and in the CPI) is assumed to remain between 1.7 and 2.1 percentage points after 1988, reaching its ultimate value of 1.7 percentage points by 2010. The annual interest rate is assumed to reach its ultimate value of 5.5 percent by 2000.

For alternative II-B, the average annual unemployment rate remains between 5.4 and 5.6 percent (on a non-age-sex-adjusted basis) from 1988 through 1998. Because of the changing age structure of the population, however, the age-sex-adjusted average annual unemployment rate (adjusted to the 1988 labor-force distribution) rises gradually to its ultimate level of 6.0 percent by 2000. The annual rate of increase in the average wage in covered employment is assumed to decline generally from the assumed 6.4-percent increase in 1988 to its ultimate rate of 5.3 percent by 2010. The annual rate of increase in the CPI is assumed to rise from 4.0 percent in 1988 to 4.8 percent in 1989, and then to decline to an ultimate rate of 4.0 percent in 1994. The real-wage differential is assumed to remain between 0.8 and 1.6 percentage points after 1988, reaching its ultimate value of 1.3 percentage points by 2010. The annual interest rate is assumed to decline to its ultimate value of 6.0 percent by 2000.

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 1.9 children per woman is attained in 2013, after a very gradual decrease from the estimated 1988 level of 1.91 children per woman. The age-sex-adjusted death rate is assumed to decrease gradually during the entire projection period, with a reduction of 34 percent from the 1988 level by 2065. The resulting life expectancies at birth in 2065 are 77.0 years for men and 83.9 years for women, compared to 71.6 and 78.6 years, respectively, in 1988. Life expectancies at age 65 in 2065 are projected to be 18.0 years for men and 22.4 years for women, compared to 14.9 and 18.8 years, respectively, in 1988. The projected death rates reflect the effects of

assumed new infections by the Human Immunodeficiency Virus (HIV) throughout the 75-year period and the resulting cases of Acquired Immunodeficiency Syndrome (AIDS), using projections through 1992 prepared by the Centers for Disease Control (CDC) as a starting point. Total net immigration is assumed to be 600,000 persons per year. The assumed level of net annual immigration is the combination of 400,000 net legal immigrants per year and 200,000 net other-than-legal immigrants per year.

For alternative I, the total fertility rate is assumed to reach an ultimate level of 2.2 children per woman in 2013. 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 1988 level being 19 percent by 2065. The resulting life expectancies at birth in 2065 are 74.9 years for men and 81.0 years for women, while at age 65 they are 16.1 and 20.1 years, respectively. Total net immigration is assumed to be 750,000 persons per year. The assumed level of net annual immigration is the combination of 450,000 net legal immigrants per year and 300,000 net other-than-legal immigrants per year.

For alternative III, the total fertility rate is assumed to decrease from the estimated 1988 level to an ultimate level of 1.6 in 2013. 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 1988 level being 51 percent by 2065. The resulting life expectancies at birth in 2065 are 80.8 years for men and 88.1 years for women, while at age 65 they are 21.3 and 25.8 years, respectively. Total net immigration is assumed to be 450,000 persons per year. The assumed level of net annual immigration is the combination of 350,000 net legal immigrants per year and 100,000 net other-than-legal immigrants per year.

TABLE 11.—SELECTED DEMOGRAPHIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1940-2065

Calendar year	Total fertility rate ¹	Age-sex-adjusted death rate ² (per 100,000)	Life expectancy ³			
			At birth		At age 65	
			Male	Female	Male	Female
Past experience:						
1940.....	2.23	1,532.8	61.4	65.7	11.9	13.4
1945.....	2.42	1,366.4	62.9	68.4	12.6	14.4
1950.....	3.03	1,225.3	65.6	71.1	12.8	15.1
1955.....	3.50	1,134.2	66.7	72.8	13.1	15.6
1960.....	3.61	1,128.6	66.7	73.2	12.9	15.9
1965.....	2.88	1,103.6	66.8	73.8	12.9	16.3
1970.....	2.43	1,041.8	67.1	74.9	13.1	17.1
1975.....	1.77	934.0	68.7	76.6	13.7	18.0
1976.....	1.74	923.2	69.1	76.8	13.7	18.1
1977.....	1.80	898.0	69.4	77.2	13.9	18.3
1978.....	1.76	892.4	68.6	77.3	13.9	18.3
1979.....	1.82	864.2	70.0	77.7	14.2	18.6
1980.....	1.85	878.0	69.9	77.5	14.0	18.4
1981.....	1.83	853.4	70.4	77.9	14.2	18.6
1982.....	1.83	827.8	70.8	78.2	14.5	18.8
1983.....	1.81	835.0	70.9	78.1	14.3	18.6
1984.....	1.80	828.2	71.1	78.2	14.4	18.7
1985.....	1.84	830.0	71.1	78.2	14.4	18.6
1986.....	1.84	821.8	71.2	78.3	14.5	18.7
1987.....	1.88	808.5	71.5	78.4	14.9	18.7
1988 ⁴	1.91	801.1	71.6	78.6	14.9	18.8
Alternative I:						
1989.....	1.92	797.8	71.7	78.6	14.9	18.8
1990.....	1.93	794.3	71.8	78.7	15.0	18.8
1995.....	1.99	773.9	72.4	78.9	15.0	18.9
2000.....	2.05	760.9	72.8	79.1	15.0	18.9
2005.....	2.11	749.8	73.0	79.3	15.1	18.9
2010.....	2.17	739.5	73.2	79.5	15.2	19.0

TABLE 11.—SELECTED DEMOGRAPHIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1940-2065 (Cont.)

Calendar year	Total fertility rate ¹	Age-sex-adjusted death rate ² (per 100,000)	Life expectancy ³			
			At birth		At age 65	
			Male	Female	Male	Female
Alternative I: (Cont.)						
2015.....	2.20	729.9	73.4	79.6	15.3	19.1
2020.....	2.20	720.7	73.5	79.7	15.3	19.2
2025.....	2.20	711.7	73.7	79.9	15.4	19.3
2030.....	2.20	703.0	73.8	80.0	15.5	19.4
2035.....	2.20	694.4	74.0	80.2	15.6	19.5
2040.....	2.20	686.1	74.1	80.3	15.7	19.6
2045.....	2.20	678.0	74.3	80.4	15.8	19.7
2050.....	2.20	670.2	74.4	80.6	15.9	19.8
2055.....	2.20	662.5	74.6	80.7	15.9	19.9
2060.....	2.20	655.1	74.7	80.8	16.0	20.0
2065.....	2.20	647.8	74.9	81.0	16.1	20.1
Alternatives II-A and II-B:						
1989.....	1.91	801.9	71.7	78.7	15.0	18.9
1990.....	1.91	794.5	71.8	78.9	15.1	19.0
1995.....	1.91	756.3	72.1	79.5	15.4	19.3
2000.....	1.91	725.1	72.7	80.1	15.6	19.6
2005.....	1.91	694.5	73.5	80.5	15.8	19.8
2010.....	1.90	673.2	74.1	80.8	16.0	20.1
2015.....	1.90	656.6	74.4	81.1	16.2	20.3
2020.....	1.90	641.1	74.6	81.4	16.4	20.5
2025.....	1.90	626.3	74.9	81.7	16.6	20.7
2030.....	1.90	611.9	75.2	82.0	16.8	20.9
2035.....	1.90	598.1	75.5	82.3	16.9	21.1
2040.....	1.90	584.8	75.7	82.6	17.1	21.4
2045.....	1.90	571.9	76.0	82.8	17.3	21.6
2050.....	1.90	559.5	76.3	83.1	17.5	21.8
2055.....	1.90	547.5	76.5	83.4	17.7	22.0
2060.....	1.90	536.0	76.8	83.6	17.8	22.2
2065.....	1.90	524.8	77.0	83.9	18.0	22.4
Alternative III:						
1989.....	1.90	806.9	71.8	78.8	15.1	19.0
1990.....	1.88	796.3	71.9	79.1	15.2	19.1
1995.....	1.82	754.6	72.3	80.1	15.8	19.8
2000.....	1.75	735.9	72.0	80.7	16.2	20.4
2005.....	1.69	682.6	73.2	81.4	16.6	20.8
2010.....	1.63	623.2	75.0	82.3	17.0	21.2
2015.....	1.60	587.6	76.0	82.9	17.4	21.6
2020.....	1.60	561.8	76.5	83.4	17.8	22.0
2025.....	1.60	539.2	77.0	84.0	18.2	22.5
2030.....	1.60	517.8	77.4	84.5	18.6	22.9
2035.....	1.60	497.3	77.9	85.0	18.9	23.3
2040.....	1.60	477.6	78.4	85.5	19.3	23.7
2045.....	1.60	458.7	78.8	86.0	19.7	24.1
2050.....	1.60	440.7	79.3	86.5	20.1	24.5
2055.....	1.60	423.5	79.8	87.1	20.5	24.9
2060.....	1.60	407.2	80.3	87.6	20.9	25.4
2065.....	1.60	391.7	80.8	88.1	21.3	25.8

¹The 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 birthrates 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 2013.

²The 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.

³The 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.

⁴Estimated.

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.

The economic and demographic assumptions described in this section differ in some significant respects from the assumptions used in the 1988

report to take account of recent experience and research. In particular, the ultimate annual real-wage differential for alternative II-B was reduced from 1.4 percent in the 1988 report to 1.3 percent in this report. A comparable reduction was also made in the other alternative sets of assumptions. Also, as already mentioned in this section, the estimates in this report reflect the projected effects of new HIV infections and cases of AIDS throughout the projection period using estimates prepared by the Centers for Disease Control through 1992 as a starting point. In the 1988 report no new HIV infections beyond those implied by the CDC estimates for years through 1991 were included.

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 4.0 percent, effective for December 1988, was announced in October 1988, as described in Appendix C. The automatic cost-of-living benefit increase for any year is normally based on the change in the CPI from the third quarter of the previous year through the third quarter of the current year.¹

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 1989, the contribution and benefit base was automatically increased to \$48,000.

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 \$8,400 in 1988 to \$8,880 in 1989—was announced in October 1988. Similarly, an automatic increase was announced in the exempt amount for beneficiaries under age 65— from \$6,120 in 1988 to \$6,480 in 1989. 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 1989 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 1989; and

¹ 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 in 1983, and it would not affect any specific future increases shown in this report under any of the four sets of assumptions. Based on alternatives II-B and III, however, the combined trust funds eventually fall below the 20.0-percent threshold shortly before exhaustion in the next century. Thus, at that time, the stabilizer provision could affect a benefit increase if average wages are then increasing at a slower pace than prices.

3. The average of total wages reported for calendar year 1987, to be used for indexing earnings of workers who first become eligible for benefits, or who die before such eligibility, in 1989 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 1994 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 1994. (The actual benefit increase for 1988 and the actual contribution and benefit bases for 1988 and 1989 are also shown as a basis for comparison.)

TABLE 12.—COST-OF-LIVING BENEFIT INCREASES AND CONTRIBUTION AND BENEFIT BASES, BY ALTERNATIVE, CALENDAR YEARS 1988-94

Calendar year	Cost-of-living benefit increase ¹ (percent)				Contribution and benefit base ² based on alternative—			
	based on alternative—							
	I	II-A	II-B	III	I	II-A	II-B	III
1988.....	4.0	4.0	4.0	4.0	\$45,000	\$45,000	\$45,000	\$45,000
1989.....	3.6	3.6	4.8	5.5	48,000	48,000	48,000	48,000
1990.....	3.0	3.9	4.5	5.9	50,700	50,400	50,400	49,800
1991.....	2.8	3.2	4.4	6.5	53,700	53,400	53,400	51,900
1992.....	2.5	3.0	4.4	6.2	56,700	56,400	56,100	54,600
1993.....	2.3	3.0	4.1	5.0	59,700	59,100	59,100	57,900
1994.....	2.0	3.0	4.0	5.1	62,700	61,800	62,400	61,200

¹Effective with benefits for December of the year shown.

²Effective on January 1 of the year shown.