

The net increase in the par value of the investments owned by the fund during the fiscal year amounted to \$110 million. New securities at a total par value of \$14,436 million were acquired during the fiscal year through the investment of receipts and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the year was \$14,326 million. Included in these amounts are \$12,538 million in certificates of indebtedness that were acquired, and \$12,016 million in certificates of indebtedness that were redeemed, within the fiscal year.

The effective annual rate of interest earned by the assets of the DI trust fund during the 12 months ending on June 30, 1978, was 7.4 percent. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1978 was 8¼ percent, payable semiannually.

The investment policy and practices described in the preceding section concerning the OASI trust fund apply equally to investments of the assets of the DI trust fund.

VI. ACTUARIAL COST PROJECTIONS

The actuarial cost projections throughout this report are based on the assumption that the present statutory provisions and regulations affecting the OASDI program will remain unchanged.

Section 201(c) of the Social Security Act requires that the Board of Trustees report annually to the Congress on the operations and status of the OASI and DI trust funds during the preceding fiscal year and on the expected operations and status of those trust funds during the ensuing 5 fiscal years. Such information for the fiscal year that ended September 30, 1978, is presented in the preceding section of this report. Such information for fiscal years 1979–1983 is presented later in this section.

Section 201(c) of the Social Security Act also requires that the annual report of the Board of Trustees includes “a statement of the actuarial status of the trust funds”. Such a statement has customarily been made for the medium-range period (25 years) and the long-range period (75 years), each period commencing with the year of the issuance of the report. Basic to the discussion of the medium-range or long-range actuarial status of either trust fund is the concept of expenditures as percent of taxable payroll. The expenditures include benefit payments, administrative expenses, net transfers under the financial interchange between the OASDI trust funds and the railroad retirement account, and payments for vocational rehabilitation services for disability beneficiaries. The taxable payroll consists of the total earnings which are subject to social security taxes, adjusted to reflect the lower effective contribution rates on self-employment income, on tips, and on multiple-employer “excess wages”. With this adjustment, the expenditures (divided by the taxable payroll and expressed as a percentage) can be compared directly to the combined employer-employee tax rate in the law.

Over the medium-range and long-range periods, the actuarial status is measured by the difference between the average of the tax rates scheduled in the law and the estimated average future expenditures, expressed as a percentage of taxable payroll. This difference is referred to as the actuarial balance. If the actuarial balance is positive, the system is said to have an actuarial surplus; and if negative, to have

an actuarial deficit. In recent years the system has been said to be in "close actuarial balance" over the long-range period if the average of the scheduled tax rates over the 75-year period is within 5 percent (either higher or lower) of the estimated average expenditures as a percentage of taxable payroll. Statements of the current actuarial status are shown later in this section. The methods used to estimate the actuarial status are described in Appendix A.

In recent years, until the enactment of the Social Security Amendments of 1977, the taxes collected each year have been intended to approximately equal the expenditures, and the trust funds have been intended only to absorb temporary excesses of expenditures over income that may occur during periods of adverse economic experience. Under this "current-cost" method of financing, the trust funds should not grow too large (through continued annual surpluses) nor too small (through continued annual deficits). Although there is no general agreement as to the optimum trust fund size, the trust funds should have sufficient assets to allow time for executive and legislative action to prevent their exhaustion should the program experience continued annual deficits.

Projections of trust fund assets at the beginning of the year as a percentage of trust fund expenditures during the year (called trust fund ratios) are shown in a later section. Because of the tax increases scheduled in the 1977 amendments, during a period commencing in the 1990's the trust funds are projected to become much larger than would be expected under a current-cost method of financing.

A. ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS

Future income and expenditures for the OASDI system will depend upon many economic and demographic factors. Among those factors are: rates of fertility, mortality, net immigration, labor force participation, marriage, unemployment, inflation, prevalence of retirement, and prevalence of disability. Income to the system will depend upon how these factors affect the size and composition of the working population and the general level of earnings. Similarly, expenditures will depend upon how the size and composition of the beneficiary population and the general level of benefits are affected. Unfortunately, it is impossible to forecast precisely the behavior of these various economic and demographic factors.

The projections presented in this report result from applying the best available knowledge of economic and demographic factors and their inter-relationships to make unbiased assumptions about the future. These cost projections are a meaningful indicator of the trend and range of future income and expenditures. Even though they cannot be considered exact predictions of emerging experience, they provide insights which are essential for making informed policy decisions.

Because future income and expenditures will depend on future economic and demographic developments, the projections presented in this report are based on three alternative sets of assumptions—designated as alternatives I, II, and III. Alternative II is also referred to in this report as the intermediate set of assumptions (or, more briefly, the intermediate assumptions). Alternatives I and III may be characterized respectively as more "optimistic" and more "pessimistic" than alternative II. For ease of reference, alternatives I and III are some-

times referred to as the optimistic and pessimistic sets of assumptions (or, more briefly, the optimistic and pessimistic assumptions), respectively.

Table 10 shows the economic assumptions under the three alternatives. Under both the intermediate assumptions (alternative II) and the optimistic assumptions (alternative I), the rates of economic growth in 1979 and 1980 are assumed to be lower than the rates experienced during 1976-78. Under the pessimistic assumptions (alternative III), economic growth is assumed to decline substantially in 1979 and 1980, with a recession beginning in the last half of 1979 and extending through the first half of 1980. Under all three sets of assumptions, more rapid economic growth is assumed to occur after 1980 than is assumed in 1979 and 1980.

TABLE 10.—SELECTED ECONOMIC ASSUMPTIONS UNDER ALTERNATIVES I, II, AND III, CALENDAR YEARS 1979-2055

Calendar year	Percentage increase in average annual—				Average annual interest rate	Average annual unemployment rate
	Real GNP ¹	Wages in covered employment	Consumer price index	Real wage differential ²		
1960-64.....	4.0	3.4	1.3	2.1	3.7	5.7
1965-69.....	4.3	5.4	3.4	1.9	5.2	3.8
1970-74.....	2.5	6.3	6.1	.2	6.7	5.4
1975.....	-1.3	6.5	9.1	-2.5	7.4	8.5
1976.....	5.7	8.4	5.8	2.5	7.1	7.7
1977.....	4.9	6.9	6.5	.4	7.1	7.0
1978.....	3.9	8.5	7.6	.9	8.2	6.0
Alternative I:						
1979.....	3.7	8.3	9.3	-1.0	9.1	6.0
1980.....	2.3	8.6	7.3	1.3	8.6	6.2
1981.....	4.4	8.7	6.5	2.2	8.5	5.7
1982.....	4.9	7.9	5.2	2.7	7.8	4.9
1983.....	5.0	5.8	4.0	1.8	7.0	4.2
1984.....	3.9	4.9	3.1	1.8	6.1	4.0
1985.....	3.6	5.0	3.0	2.0	6.1	4.0
1986.....	3.9	5.1	3.0	2.1	6.1	4.0
1987.....	3.9	5.4	3.0	2.4	6.1	4.0
1988.....	4.0	5.5	3.0	2.5	6.1	4.0
1989.....	3.8	5.5	3.0	2.5	6.1	4.0
1990.....	3.8	5.5	3.0	2.5	6.1	4.0
1995.....	3.1	5.4	3.0	2.4	6.1	4.0
2000 and later.....	3.1	5.25	3.0	2.25	6.1	4.0
Alternative II:						
1979.....	3.7	8.3	9.4	-1.1	9.1	6.0
1980.....	2.0	8.0	7.4	.6	8.8	6.2
1981.....	4.0	9.1	6.6	2.5	8.4	6.0
1982.....	4.7	7.4	5.5	1.9	7.6	5.3
1983.....	3.6	6.0	4.5	1.5	6.9	5.0
1984.....	3.0	5.4	4.0	1.4	6.6	5.0
1985.....	3.1	5.3	4.0	1.3	6.6	5.0
1986.....	3.2	5.4	4.0	1.4	6.6	5.0
1987.....	3.3	5.7	4.0	1.7	6.6	5.0
1988.....	3.3	6.0	4.0	2.0	6.6	5.0
1989.....	3.2	6.0	4.0	2.0	6.6	5.0
1990.....	3.2	6.0	4.0	2.0	6.6	5.0
1995.....	2.9	5.9	4.0	1.9	6.6	5.0
2000 and later.....	2.9	5.75	4.0	1.75	6.6	5.0
Alternative III:						
1979.....	2.3	9.2	10.3	-1.1	9.1	6.3
1980.....	-1.1	8.7	8.9	-2	9.0	8.2
1981.....	5.4	9.2	7.3	1.9	8.5	7.4
1982.....	4.1	7.7	6.3	1.4	8.1	6.9
1983.....	4.0	7.2	6.0	1.2	8.1	6.4
1984.....	3.7	7.1	6.0	1.1	8.1	6.0
1985.....	2.9	7.2	6.0	1.2	8.1	6.0
1986.....	2.9	7.1	6.0	1.1	8.1	6.0
1987.....	2.9	7.3	6.0	1.3	8.1	6.0
1988.....	2.9	7.5	6.0	1.5	8.1	6.0
1989.....	2.8	7.5	6.0	1.5	8.1	6.0
1990.....	2.8	7.5	6.0	1.5	8.1	6.0
1995.....	2.7	7.4	6.0	1.4	8.1	6.0
2000 and later.....	2.7	7.25	6.0	1.25	8.1	6.0

¹ The total output of goods and services in the Nation expressed in constant dollars.

² The difference between the percentage increase in average annual wages in covered employment and the percentage increase in the average annual CPI.

³ This value is for the year 2000. The value for the year 2055 is 3.3, 2.4, and 0.8 for alternatives I, II, and III, respectively.

Table 11 shows the demographic assumptions under the three alternatives. Under the intermediate assumptions, fertility is assumed to proceed at a rate which would approximately maintain a constant population, in the absence of net migration and changes in mortality. Under the optimistic assumptions, fertility is assumed to be higher than under the intermediate assumptions, while under the pessimistic assumptions, it is assumed to be lower. Under all three sets of assumptions, mortality is projected to improve through time, but the amount of improvement varies for each set. Additional detail on mortality assumptions for alternative II can be found in table A of Appendix A. Under the optimistic assumptions, disability incidence rates are assumed to remain constant at the average level observed during 1977-78 after increasing from the lower level observed during 1978. Under both the intermediate and pessimistic assumptions, disability incidence rates are assumed to increase above the level observed during 1977-78 before becoming constant, but the amount of increase is larger under the pessimistic assumptions.

TABLE 11.—SELECTED DEMOGRAPHIC ASSUMPTIONS UNDER ALTERNATIVES I, II, AND III, CALENDAR YEARS 1979-2055

Calendar year	Total fertility rate ¹	Age-adjusted mortality rate ²		Adjusted gross disability incidence rate ³	
		Male	Female	Male	Female
1970	2,434	10.96	8.05	5.06	3.54
1971	2,249	10.66	8.06	5.92	4.10
1972	1,997	10.77	7.94	6.35	4.50
1973	1,865	10.66	7.85	6.72	4.93
1974	1,827	10.26	7.54	7.03	5.64
1975	1,771	9.88	7.17	7.76	6.06
1976	1,719	9.73	7.07	7.23	5.51
1977	1,784	9.53	6.89	7.41	5.46
1978	1,757	9.35	6.72	5.97	4.25
Alternative I:					
1979	1,831	9.45	6.80	5.79	4.12
1980	1,871	9.36	6.72	5.85	4.17
1981	1,911	9.32	6.68	5.92	4.22
1982	1,952	9.28	6.64	6.02	4.29
1983	1,992	9.25	6.60	6.12	4.37
1984	2,033	9.21	6.56	6.23	4.46
1985	2,074	9.17	6.52	6.34	4.55
1990	2,292	9.04	6.39	6.62	4.78
1995	2,443	8.92	6.26	6.68	4.84
2000	2,493	8.80	6.13	6.69	4.86
2005 and later	2,500	8.69	6.01	6.69	4.86
Alternative II:					
1979	1,793	9.18	6.55	5.87	4.19
1980	1,809	9.02	6.38	5.97	4.25
1981	1,824	8.85	6.22	6.09	4.34
1982	1,839	8.82	6.18	6.25	4.46
1983	1,855	8.78	6.15	6.42	4.57
1984	1,870	8.75	6.11	6.61	4.72
1985	1,887	8.72	6.08	6.79	4.86
1990	2,036	8.55	5.92	7.25	5.22
1995	2,075	8.39	5.76	7.34	5.32
2000	2,100	8.23	5.60	7.36	5.35
2005 and later	2,100	8.08	5.45	7.36	5.35
Alternative III:					
1979	1,737	8.92	6.30	5.95	4.25
1980	1,715	8.67	6.07	6.09	4.34
1981	1,693	8.57	5.97	6.26	4.46
1982	1,671	8.46	5.86	6.48	4.66
1983	1,649	8.36	5.76	6.71	4.78
1984	1,627	8.26	5.67	6.99	4.98
1985	1,606	8.16	5.57	7.23	5.16
1990	1,544	7.85	5.26	7.87	5.66
1995	1,524	7.58	4.97	8.01	5.79
2000	1,509	7.34	4.72	8.03	5.83
2005 and later	1,500	7.12	4.48	8.03	5.83

¹ The number of children that would be born to 1,000 women in their lifetime if they were to experience the observed age-specific birth rates, and were to survive the entire child-bearing period. Ultimate rates are reached in 2005.

² The annual number of deaths per 1,000 persons in the enumerated population as of April 1, 1970. Improvement is projected to continue throughout the projection period.

³ The number of awards per 1,000 persons exposed to disability, adjusted for changes from the 1978 age distribution.

⁴ This value is for the year 2005. Mortality rates are assumed to continue declining throughout the remainder of the projection period.

The values assumed for the economic and demographic factors after the early years are intended to represent the average experience for those years and are not intended to be predictions of year-by-year values, which are expected to vary because of possible future economic cycles and demographic patterns. Although the assumptions may appear to be reasonable, based on current understanding, they may in some instances imply conditions so different from the current situation that it is important to recognize their overall socioeconomic implications and not just their effect on the OASDI program. For example, because the demographic assumptions imply a future composition of the U.S. population which is significantly different from the present composition, many of the Nation's social and economic arrangements may change substantially.

Under the intermediate assumptions, the annual rate of growth in real GNP rises to 4.7 percent in 1982 and then slows to 3 percent by 1984. At the same time, the average annual unemployment rates declines to the ultimate assumed rate of 5 percent in 1983. It is further assumed that the rate of increase in average annual wages in covered employment will fall to 5.3 percent by 1985, with an accompanying decline in the rate of increase in the average annual CPI to an ultimate rate of 4.0 percent by 1984. After 1985 the assumed rate of increase in average wages rises to 6.0 percent by 1985 and then gradually declines to the ultimate level of $5\frac{3}{4}$ percent by the year 2000. This pattern of change in average wage increases from 1985 to 2000 reflects changes in the composition of the labor force. The real wage differential—the difference between annual rates of increase in the average wage and the average CPI—is assumed to reach an ultimate rate of $1\frac{3}{4}$ percent per year. The annual interest rate is assumed to reach its ultimate value of 6.6 percent in 1984. The ultimate real interest rate—that is, the interest rate after adjusting for inflation—is 2.5 percent. The total fertility rate under alternative II is projected to rise slowly from its 1978 level to an assumed ultimate level of 2.1 children per woman by the year 2000. Mortality rates are expected to decrease gradually during the entire 75-year projection period, with an overall reduction from 1978 levels of about one-third by the end of the 75 years. Under alternative II, it is assumed that disability incidence rates, which declined markedly in 1978, will begin to rise again in 1980 and will continue to increase gradually through 1998, when they reach an ultimate level that is 10 percent higher than the average incidence rates for 1977 and 1978.

Under alternative I, the assumed annual percentage increase in real GNP after 1979 is higher than under alternative II. The assumed percentage increase in average annual CPI is lower in each year, declining to a lower ultimate rate of 3 percent per year by 1985. The assumed real wage differential is generally higher than under alternative II, reaching an ultimate rate of $2\frac{1}{4}$ percent per year by the year 2000. The resulting ultimate rate of increase in average annual wages in covered employment is $5\frac{1}{4}$ percent under alternative I. Although the ultimate interest rate of 6.1 percent is lower under alternative I than under alternative II, the ultimate real interest rate of 3 percent is higher. The total fertility rate is projected to be higher under alternative I

than under alternative II, reaching 2.5 children per woman in the year 2005. The overall percentage reduction in mortality rates during the 75-year projection period is assumed to be one-half the reduction assumed under the intermediate assumptions. Disability incidence rates are assumed to return from their 1978 level to the higher average for 1977-1978, but not to increase above that level.

The assumptions of alternative III are presented in this report to show estimates under a set of less favorable economic and demographic conditions. As a result of the assumed economic recession in 1979-80 and the following period of recovery, the rate of unemployment rises to 8.2 percent in 1980, declines to 6.9 percent by 1982, and reaches its ultimate level of 6 percent in 1984. After 1979, increases in average real wages are assumed to be lower under alternative III than under the intermediate assumptions. Although the ultimate interest rate of 8.1 is higher under alternative III than under alternative II, the real interest rate of 2 percent is lower. Also, the ultimate total fertility rate of 1.5 projected under alternative III is lower than the ultimate rate of 2.1 projected under alternative II. The overall reduction in mortality rates during the 75-year projection is assumed to be 50 percent larger under alternative III than under alternative II. Disability incidence rates are assumed to increase during the next 20 years by 20 percent over the average 1977-78 incidence rates.

B. AUTOMATIC ADJUSTMENTS

Under the automatic increase provisions of the law, benefits are adjusted to reflect increases in the CPI. After 1979, as a result of the revised benefit structure provided under the 1977 amendments, these automatic cost-of-living benefit increases will apply only beginning with the year a worker reaches age 62, becomes disabled, or dies. An automatic cost-of-living benefit increase of 6.5 percent, effective for June 1978, was established in May 1978, as described in Appendix B.

With the exception of predetermined amounts provided under the 1977 amendments, the contribution and benefit base, and the amount of earnings exempted from the withholding of benefits under the retirement test, automatically increase in the year following each year in which an automatic cost-of-living benefit increase becomes effective. The automatic increases in the contribution and benefit base and in the exempt amount under the retirement test are proportionate to the increase in average wages.

The 1977 amendments provided specific amounts for the contribution and benefit base for each year 1978-81 and the exempt amount under the retirement test, for beneficiaries aged 65 and over. As a result of these provisions, the contribution and benefit base increased from \$17,700 in 1978 to \$22,900 in 1979. (The \$17,700 base specified for 1978 in the 1977 amendments was the same amount that had been determined for 1978 under the automatic increase provisions, before the 1977 amendments were enacted.) Similarly, the annual exempt amount under the retirement test, for beneficiaries aged 65 and over, increased from \$4,000 in 1978 to \$4,500 in 1979.

Following the cost-of-living benefit increase that became effective for June 1978, an automatic increase in the annual exempt amount

under the retirement test from \$3,240 in 1978 to \$3,480 in 1979 was established in November 1978 for beneficiaries under age 65, as described in Appendix C. Appendix C also describes the determination of the amount of earnings a worker must have to be credited with a "quarter of coverage" in 1979. Quarters of coverage are used in determining whether a worker meets the insured status requirements for the various benefits payable under the old-age, survivors, and disability insurance program. Beginning with wages earned in 1978, when employers began reporting wages annually instead of quarterly, employees are credited with quarters of coverage on an annual basis. For each \$250 of an employee's earnings in 1978, one quarter of coverage was credited up to a maximum of four quarters. In 1979, under the automatic increase provisions, one quarter of coverage will be credited for each \$260 of earnings, up to a maximum of four quarters.

The law as amended in 1977 further provides for the determination of the contribution and benefit base that would have been in effect in each year after 1978 under the law as in effect before the enactment of the 1977 amendments. This "old-law" base is used in determining special minimum benefits for certain workers who have many years of low earnings in covered employment. It is also used for certain purposes under the railroad retirement program and the Employee Retirement Income Security Act of 1974. The old-law base for 1979 was determined to be \$18,900.

Under the automatic provisions of the law, the three different sets of economic assumptions result in the following general benefit increases in each year 1979 through 1985 (by 1985 the assumed benefit increases, under all three sets of assumptions, will have reached their ultimate levels) and the following contribution and benefit bases for each year 1982 through 1985 (amounts for 1978, and the contribution and benefit base scheduled for each year 1979-81 under present law, are also shown as a basis for comparison):

Year	General benefit increase ¹ under alternative (percent)—			Contribution and benefit base ² under alternative—		
	I	II	III	I	II	III
1978.....	6.5	6.5	6.5	\$17,700	\$17,700	\$17,700
1979.....	9.8	9.8	9.8	22,900	22,900	22,900
1980.....	7.6	7.8	9.8	25,900	25,900	25,900
1981.....	7.0	7.1	7.9	29,700	29,700	29,700
1982.....	5.8	5.9	6.5	32,400	32,100	32,400
1983.....	4.4	4.9	6.0	35,100	35,100	35,400
1984.....	3.3	4.1	6.0	37,800	37,800	38,100
1985.....	3.0	4.0	6.0	39,900	40,200	40,800

¹ Effective with benefits for June of the stated year.

² The amounts effective on Jan. 1 of the stated year, are specified in the law for the years 1978-81. After 1981, the amount increases under the automatic provisions.

Under the automatic provisions of the law, the three different sets of economic assumptions result in the following annual exempt amounts under the retirement test, both for beneficiaries under age 65 and for beneficiaries aged 65 and over (the amounts for 1978 and 1979, and the

amounts scheduled for 1980-82 under present law for beneficiaries aged 65 and over, are also shown as a basis for comparison) :

ANNUAL EXEMPT AMOUNTS UNDER THE RETIREMENT TEST¹

Year	Annual exempt amount for beneficiaries under age 65 under alternative—		Annual exempt amount for beneficiaries aged 65 and over ² under alternative—	
	I	II and III	I	II and III
1978.....	\$3,240	\$3,240	\$4,000	\$4,000
1979.....	3,480	3,480	4,500	4,500
1980.....	3,720	3,720	5,000	5,000
1981.....	4,080	4,080	5,500	5,500
1982.....	4,440	4,440	6,000	6,000
1983.....	4,800	4,800	6,480	6,500
1984.....	5,160	5,160	6,960	7,080
1985.....	5,400	5,520	7,320	7,560

¹ Effective on Jan. 1 of the stated year.

² The amounts are specified in the law for the years 1978-82. After 1982, the amount increases automatically. Through the year 1981, the retirement test does not apply to beneficiaries aged 72 and over. After 1981, the retirement test will not apply to beneficiaries aged 70 and over.

C. EXPECTED OPERATIONS AND STATUS OF THE TRUST FUNDS DURING THE PERIOD OCTOBER 1, 1978, TO DECEMBER 31, 1983

The following statement of the expected operations and status of the trust funds during the period October 1, 1978, to December 31, 1983, is based on the assumptions described in the preceding section. As previously stated, it is assumed that present statutory provisions and regulations affecting the old-age, survivors, and disability insurance program will remain unchanged in the period 1979-83. Thus, the estimates reflect the effects of recent changes in the regulations governing the frequency and timing of contributions from State and local governments, which will become effective on July 1, 1980.

Estimates of the operations and status of the OASI trust fund during calendar years 1979-83 are shown in table 12 for each of the three alternative sets of assumptions that were described in the preceding section. Actual data for calendar year 1978 are also shown in the table. Under each alternative, it is assumed that employment and earnings will increase in every year through 1983, except that employment is assumed to decline in 1980 under alternative III. The number of persons with taxable earnings under the OASDI program is expected to increase from 110 million with such earnings during calendar year 1978 to about 123 million during calendar year 1983 under the intermediate assumptions. Under alternatives I and III, the number of persons with taxable earnings is estimated to reach 124 million and 121 million, respectively, by 1983. The total annual amount of taxable earnings is expected to increase from \$913 billion in 1978 to \$1,585 billion in 1983 under the intermediate assumptions. Under alternatives I and III, taxable earnings in 1983 are estimated to be \$1,607 billion and \$1,597 billion, respectively. These increases are due in part to the increases in the contribution and benefit base scheduled for 1979-81 under present law, and the increases in the base assumed to occur in 1982-83 under the automatic provisions. The increases in taxable earnings are also due to projected increases in (1) employment levels, and (2) average earnings in covered employment.

TABLE 12.—ESTIMATED OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND DURING CALENDAR YEARS 1978-83 UNDER 3 ALTERNATIVE SETS OF ASSUMPTIONS

[Amounts in billions]

Calendar year	Income	Disbursements	Net increase in fund	Fund at end of year	Fund at beginning of year as a percentage of disbursements during year
Alternative I:					
1978 ¹	\$78.1	\$83.1	-\$5.0	\$27.5	39
1979.....	90.6	93.0	-2.5	25.1	30
1980.....	103.0	105.0	-2.0	23.0	24
1981.....	118.9	116.8	2.1	25.1	20
1982.....	133.9	128.5	5.4	30.5	20
1983.....	146.1	139.2	6.8	37.4	22
Alternative II:					
1978 ¹	78.1	83.1	-5.0	27.5	39
1979.....	90.6	93.1	-2.6	24.9	30
1980.....	102.5	105.4	-2.9	22.0	24
1981.....	118.3	117.5	.8	22.8	19
1982.....	132.2	129.5	2.7	25.5	18
1983.....	143.6	141.0	2.6	28.2	18
Alternative III:					
1978 ¹	78.1	83.1	-5.0	27.5	39
1979.....	90.8	93.2	-2.4	25.1	30
1980.....	101.1	106.6	-5.5	19.6	24
1981.....	117.1	120.9	-3.8	15.8	16
1982.....	130.9	134.4	-3.5	12.3	12
1983.....	143.5	147.5	-4.0	8.3	8

¹ Figures for 1978 represent actual experience.

Note: Totals do not necessarily equal the sum of rounded components. The assumptions underlying the estimates are described in the preceding section and are shown in tables 10 and 11.

The rise in estimated income shown in table 12 under each set of assumptions reflects the increases in estimated taxable earnings under the different alternatives, as described above. In addition, the estimated income to the fund is affected by the scheduled changes in contribution rates.

Rising disbursements during calendar years 1979-83 reflect the effects of the assumed future automatic benefit increases previously shown, as well as the long-range upward trend in the numbers of beneficiaries and in the amounts of average monthly earnings underlying benefits payable under the program. The estimates also reflect the effects of the benefit provisions in the 1977 amendments. Under alternatives I and II, outgo is expected to exceed income in each year through 1980. After 1980 income is expected to exceed outgo under both alternatives I and II. Under alternative III, it is estimated that the fund will decline each year through 1983.

The growth in the number of beneficiaries in the past and the expected growth in the future results partly from the increase in the aged population and partly from two other factors—(1) in each succeeding year a larger proportion of the persons attaining age 65 are eligible for benefits, and (2) the amendments during the period 1950-77 liberalized the eligibility provisions and extended coverage to additional categories of employment.

In addition, there has been a growth in the proportion of eligible persons who receive benefits. This growth is due to several factors, among which are (1) the amendments enacted during the period 1950-77 which affect the conditions governing the receipt of benefits, and

(2) the increasing percentage of eligible persons who are aged 72 and over and who therefore receive benefits regardless of earnings. As indicated in the previous section, the age at which eligible persons may begin to receive full benefits regardless of earnings will be reduced from 72 to 70 beginning in 1982.

The expected operations and status of the disability insurance trust fund during calendar years 1979-83 under the three sets of assumptions are shown in table 13, together with figures on actual experience in 1978. Income will increase during calendar years 1979-83, under each alternative, reflecting the same factors, insofar as they apply to income to the DI trust fund, that are reflected in the increase in income to the OASI trust fund during the same period. Income will also rise as a result of the scheduled increases in the combined employee-employer contribution rate allocated for disability insurance, and accompanying increases in contribution rates for self-employed persons.

Disbursements will increase because of automatic benefit increases and because of increases in the numbers of beneficiaries and in the amounts of average monthly earnings on which benefits are based. Projected increases in the number of beneficiaries reflect the effects of the assumed increases in disability incidence rates under each set of assumptions, as described in the preceding section.

TABLE 13.—ESTIMATED OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND DURING CALENDAR YEARS 1978-83 UNDER 3 ALTERNATIVE SETS OF ASSUMPTIONS

[Amounts in billions]

Calendar year	Income	Disbursements	Net increase in fund	Fund at end of year	Fund at beginning of year as a percentage of disbursements during year
Alternative I:					
1978 ¹	\$13.8	\$13.0	\$0.9	\$4.2	26
1979.....	15.8	14.4	1.4	5.6	29
1980.....	18.1	16.1	2.0	7.6	35
1981.....	22.1	17.6	4.5	12.1	43
1982.....	25.0	19.2	5.8	17.9	63
1983.....	27.6	20.7	6.9	24.8	87
Alternative II:					
1978 ¹	13.8	13.0	.9	4.2	26
1979.....	15.8	14.4	1.4	5.6	29
1980.....	18.0	16.1	1.9	7.5	35
1981.....	22.0	17.7	4.3	11.7	42
1982.....	24.7	19.4	5.3	17.0	60
1983.....	27.1	21.1	6.1	23.1	81
Alternative III:					
1978 ¹	13.8	13.0	.9	4.2	26
1979.....	15.8	14.5	1.4	5.6	29
1980.....	17.8	16.3	1.4	7.1	34
1981.....	21.8	18.2	3.6	10.6	39
1982.....	24.5	20.1	4.4	15.0	53
1983.....	27.2	22.0	5.2	20.2	68

¹ Figures for 1978 represent actual experience.

Note: Totals do not necessarily equal the sum of rounded components. The assumptions underlying the estimates are described in the preceding section and are shown in tables 10 and 11.

The expected operations and status of the OASI and DI trust funds, combined, during each calendar year 1979-83, under the three alternatives, are shown in table 14, together with figures on actual experience in 1978.

TABLE 14.—ESTIMATED OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, COMBINED, DURING CALENDAR YEARS 1978-83 UNDER 3 ALTERNATIVE SETS OF ASSUMPTIONS

[Amounts in billions]

Calendar year	Income	Disbursements	Net increase in funds	Funds at end of year	Funds at beginning of year as a percentage of disbursements during year
Alternative I:					
1978 ¹	\$91.9	\$96.0	-\$4.1	\$31.7	37
1979	106.4	107.5	-1.1	30.6	30
1980	121.1	121.1	(2)	30.6	25
1981	141.0	134.4	6.6	37.2	23
1982	158.9	147.6	11.2	48.5	25
1983	173.7	159.9	13.7	62.2	30
Alternative II:					
1978 ¹	91.9	96.0	-4.1	31.7	37
1979	106.4	107.6	-1.2	30.5	30
1980	120.5	121.5	-1.0	29.5	25
1981	140.3	135.2	5.0	34.6	22
1982	156.9	148.9	8.0	42.6	23
1983	170.8	162.1	8.7	51.3	26
Alternative III:					
1978 ¹	91.9	96.0	-4.1	31.7	37
1979	106.6	107.6	-1.0	30.7	29
1980	118.9	123.0	-4.1	26.6	25
1981	138.9	139.1	-.2	26.4	19
1982	155.4	154.5	.9	27.3	17
1983	170.7	169.6	1.1	28.5	16

¹ Figures for 1978 represent actual experience.² Outgo exceeds income by less than \$50,000,000.

Note: Totals do not necessarily equal the sum of rounded components. The assumptions underlying the estimates are described in the preceding section and are shown in tables 10 and 11.

The assets of the trust funds at the beginning of each year 1978-83, as a percentage of disbursements during the year, are also shown in tables 12-14. At the beginning of 1978 the assets of the combined OASI and DI trust funds were equal to 37 percent of the disbursements in 1978, as shown in table 14. By the beginning of 1979 the assets had declined to 30 percent of the estimated expenditures in 1979 under both alternatives I and II, and to 29 percent under alternative III. Under the intermediate assumptions, the assets of the combined funds as a percentage of annual expenditures, reach a low point of 22 percent at the beginning of 1981 before rising to 26 percent by the beginning of 1983. Under alternative I, the corresponding percentages are 23 percent at the beginning of 1981 and 30 percent at the beginning of 1983. Under alternative III, the percentage continues to decline throughout the 5-year period, reaching 16 percent at the beginning of 1983.

The assets of the OASI trust fund at the beginning of 1979 were equal to 30 percent of the estimated disbursements in 1979, as shown

in table 12. Under alternative I the percentage reaches a low point of 20 percent at the beginning of 1981 and then rises to 22 percent by the beginning of 1983. Under alternative II, the percentage reaches a low point of 18 percent at the beginning of 1982 and remains at that level at the beginning of 1983. Under alternative III, the percentage continues to decline, reaching 8 percent by the beginning of 1983.

It should be noted here that although a positive balance is projected for the OASI trust fund at the end of each year through 1983, under the pessimistic assumptions, the assets at the end of 1983 would not be large enough to cover the entire amount of benefits that are payable at the beginning of the following month. This kind of cash-flow problem becomes imminent if, at any time, the trust fund falls to less than about 9 percent of the following 12 months of disbursements. Under the pessimistic assumptions, the OASI trust fund would begin to experience cash-flow difficulties early in 1983. The cash-flow problems would arise because almost all of the benefits for a given month are payable, generally, on the third day of the following month, while contribution income is received more or less uniformly throughout the month, on a daily basis. For example, the benefits for December 1983—estimated to be about \$12½ billion under alternative III—are payable on January 3, 1984, before any significant amount of income can be added to the fund's estimated assets of \$8.3 billion on December 31, 1983. After the beginning of the cash-flow problem in 1983, the inability to meet benefit payments when due would continue until a year or two after the scheduled increase in contribution rates in 1990. These OASI cash-flow problems could be remedied, for example, by a reallocation of contribution rates from the DI trust fund to the OASI trust fund, since, as noted later, the DI trust fund continues to increase through the end of the century under the pessimistic assumptions and the assets of the combined OASI and DI trust funds reach a minimum level of 15 percent of annual expenditures in the 1980's.

The assets of the DI trust fund, as a percentage of annual expenditures, increase throughout the 5-year period under all three sets of assumptions—from 29 percent at the beginning of 1979 to 87 percent, 81 percent, and 68 percent at the beginning of 1983 under alternatives I, II, and III, respectively.

Assets as a percentage of annual expenditures for selected years prior to 1979 are shown in table 15 for both funds combined and for each fund separately. The corresponding figures projected for 1979–83 under the intermediate assumptions that were shown in tables 12–14, are repeated in table 15 for comparison with past experience.

TABLE 15.—ASSETS AT THE BEGINNING OF THE YEAR AS A PERCENTAGE OF EXPENDITURES DURING THE YEAR, FOR THE OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM, BY TRUST FUND, FOR SELECTED CALENDAR YEARS 1950-78, AND ESTIMATED FUTURE PERCENTAGES FOR CALENDAR YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

Calendar year	Assets at the beginning of the year as a percentage of expenditures during the year		
	Old-age and survivors insurance and disability insurance trust funds, combined	Old-age and survivors insurance trust fund	Disability insurance trust fund
Past experience:			
1950	1,156	1,156	
1955	405	405	
1960	186	180	304
1965	110	109	121
1966	95	96	83
1967	99	101	83
1968	101	103	83
1969	103	102	111
1970	103	101	126
1971	99	94	140
1972	93	88	140
1973	80	75	125
1974	73	68	110
1975	66	63	92
1976	57	54	71
1977	47	47	48
1978	37	39	26
Estimated future experience:¹			
1979	30	30	29
1980	25	24	35
1981	22	19	42
1982	23	18	60
1983	26	18	81

¹ In interpreting the estimates, reference should be made to the preceding section which describes the underlying assumptions.

Expenditures in calendar year 1978, from both trust funds combined, were 10.78 percent of taxable earnings for the year—0.68 percent more than the combined employee-employer contribution rate of 10.10 percent. After dropping to 10.36 percent of taxable earnings in 1979, because of the relatively large increase in the contribution and benefit base in 1979, 1979 expenditures from both trust funds, combined, are estimated to fluctuate within a relatively narrow range of 10.39–10.56 percent of taxable earnings through 1983, under the intermediate set of assumptions. These percentages, as well as the percentages under alternatives I and III, are shown in table 16 for both trust funds combined and for each trust fund separately. Table 16 also shows a comparison of each of the percentages with the corresponding combined employee-employer contribution rate.

TABLE 16.—EXPENDITURES FROM THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS AS A PERCENTAGE OF TAXABLE PAYROLL COMPARED WITH COMBINED EMPLOYEE-EMPLOYER CONTRIBUTION RATES, FOR CALENDAR YEARS 1978-83 UNDER THREE ALTERNATIVE SETS OF ASSUMPTIONS

Calendar year	Old-age and survivors insurance trust fund			Disability insurance trust fund			Old-age and survivors insurance and disability insurance trust funds, combined		
	Expenditures as a percentage of taxable payroll ¹	Combined employee-employer contribution rate	Difference ²	Expenditures as a percentage of taxable payroll ¹	Combined employee-employer contribution rate	Difference ²	Expenditures as a percentage of taxable payroll ¹	Combined employee-employer contribution rate	Difference ²
Alternative I:									
1978 ³	9.32	8.55	-0.77	1.46	1.55	0.09	10.78	10.10	-0.68
1979	8.96	8.66	-.30	1.39	1.50	.11	10.35	10.16	-.19
1980	9.09	8.66	-.43	1.39	1.50	.11	10.48	10.16	-.32
1981	8.93	9.05	.12	1.35	1.65	.30	10.28	10.70	.42
1982	8.88	9.15	.27	1.33	1.65	.32	10.21	10.80	.59
1983	8.84	9.15	.31	1.31	1.65	.34	10.16	10.80	.64
Alternative II:									
1978 ³	9.32	8.55	-.77	1.46	1.55	.09	10.78	10.10	-.68
1979	8.97	8.66	-.31	1.39	1.50	.11	10.36	10.16	-.20
1980	9.16	8.66	-.50	1.40	1.50	.10	10.56	10.16	-.40
1981	9.03	9.05	.02	1.36	1.65	.29	10.39	10.70	.31
1982	9.06	9.15	.09	1.36	1.65	.29	10.41	10.80	.39
1983	9.08	9.15	.07	1.36	1.65	.29	10.44	10.80	.36
Alternative III:									
1978 ³	9.32	8.55	-.77	1.46	1.55	.09	10.78	10.10	-.68
1979	8.96	8.66	-.30	1.39	1.50	.11	10.35	10.16	-.19
1980	9.41	8.66	-.75	1.44	1.50	.06	10.85	10.16	-.69
1981	9.36	9.05	-.31	1.41	1.65	.24	10.77	10.70	-.07
1982	9.44	9.15	-.29	1.41	1.65	.24	10.85	10.80	-.05
1983	9.43	9.15	-.28	1.41	1.65	.24	10.84	10.80	-.04

¹ Percentage takes into account (1) the lower contribution rate payable by the self-employed compared with combined employee-employer rate, (2) employee contributions subject to refund, and (3) that the employer contribution is payable on only a portion of tips taxable as wages. For 1978, expenditures are adjusted to exclude payments to certain noninsured persons aged 72 and over with less than three quarters of coverage, costs of which are financed from the general fund of the Treasury. Similar adjustments are not made in the projection period, 1979 and later, because such payments are relatively small.

² Represents difference between tax contribution income and total outgo, as a percentage of taxable payroll and therefore excludes the effects of other sources of income (principally interest income). Total income and outgo during 1978-83 are shown in tables 12-14.

³ Percentages for 1978, though based on actual experience, are preliminary and subject to revision.

Expenditures as a percentage of taxable earnings for years prior to 1979 are shown in table 17. Corresponding estimates for 1979-83 under the intermediate assumptions, which were shown in table 16, are repeated table 17 for comparison with past experience.

TABLE 17.—EXPENDITURES FROM THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS AS A PERCENTAGE OF TAXABLE PAYROLL FOR SELECTED CALENDAR YEARS 1950-78 AND ESTIMATED FUTURE PERCENTAGES FOR CALENDAR YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

Calendar year	Expenditures as a percentage of taxable payroll ¹		
	Old-age and survivors insurance and disability insurance trust funds, combined	Old-age and survivors insurance trust fund	Disability insurance trust fund
Past experience: ²			
1950.....	1.17	1.17
1955.....	3.34	3.34
1960.....	5.89	5.59	0.30
1965.....	7.93	7.23	.70
1966.....	6.88	6.24	.64
1967.....	6.92	6.27	.65
1968.....	7.03	6.35	.67
1969.....	7.08	6.38	.70
1970.....	8.12	7.32	.81
1971.....	9.23	8.27	.97
1972.....	9.13	8.12	1.01
1973.....	9.68	8.58	1.09
1974.....	9.71	8.55	1.16
1975.....	10.63	9.28	1.35
1976.....	10.84	9.40	1.44
1977.....	10.92	9.42	1.50
1978.....	10.78	9.32	1.46
Estimated future experience: ³			
1979.....	10.36	8.97	1.39
1980.....	10.56	9.16	1.40
1981.....	10.39	9.03	1.36
1982.....	10.41	9.06	1.36
1983.....	10.44	9.08	1.36

¹ See footnote 1, table 16. For 1974-78, percentages are preliminary and subject to revision.

² Expenditures in each year 1966-78 are adjusted to exclude payments to certain noninsured persons aged 72 and over with less than three quarters of coverage, the costs of which are financed from the general fund of the Treasury. Because of the relatively small amount of such payments, similar adjustments are not made for future years.

³ In interpreting the estimates, reference should be made to the preceding section which describes the underlying assumptions.

As stated previously, estimates of the operations of the trust funds during calendar years 1979-83 have been presented in the preceding tables of this section under three different sets of economic assumptions because of the uncertainty of future economic developments. Under the provisions of the Social Security Act, it is required that estimates of the expected operations and status of the trust funds during the next 5 fiscal years be shown in this report. In accordance with these statutory provisions, detailed estimates of the expected operations and status of the trust funds during each fiscal year 1979-83 are shown in the remaining tables of this section for the intermediate set of assumptions (alternative II) only. Similar detailed estimates under the intermediate assumptions are also shown, as in previous annual reports, on a calendar year basis for the period 1979-83.

Data on the actual operations of the OASI trust fund for selected years during the period 1940-78, and estimates of the expected operations of the trust fund during 1979-83 under the intermediate set of assumptions, are shown in tables 18 and 19 on a fiscal year basis and a calendar year basis, respectively. Corresponding figures on the operations of the DI trust fund during the period 1960-83 are shown in tables 20 and 21.¹ Operations of both trust funds combined are shown in tables 22 and 23.

¹ Data relating to the operations of the two trust funds for years not shown in tables 18-23 are contained in earlier annual reports.

TABLE 18.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND DURING SELECTED FISCAL YEARS 1940-78 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

(In millions)

Fiscal year ¹	Transactions during period										Fund at end of period	
	Income					Disbursements						
	Total	Reimbursements from general fund of Treasury for costs of—			Interest on investments ²	Total	Benefit payments	Payments for vocational rehabilitation services	Administrative expenses	Transfers to railroad retirement account		Net increase in fund
		Contributions, less refunds	Noncontributory credits for military service	Payments to noninsured persons aged 72 and over								
Past experience:												
1940	\$592	\$550			\$42	\$28	\$16		\$12		\$564	\$1,745
1945	1,434	1,310			124	267	240		27		1,167	6,613
1950	2,367	2,106	\$4		257	784	727		57		1,583	12,893
1955	5,525	5,087			438	4,427	4,333		103	-\$10	1,098	21,141
1960	10,360	9,843			517	11,073	10,270		202	600	-713	20,829
1965	16,443	15,857			586	15,962	15,226		300	436	482	20,180
1966	18,461	17,866			595	18,769	18,071		254	444	-308	19,872
1967	23,371	22,567	78		726	19,728	18,886	(³)	334	508	3,643	23,515
1968	23,640	22,662	78		899	21,622	20,737	(³)	447	438	2,018	25,533
1969	27,348	25,953	156	\$226	1,014	24,690	23,732	\$2	465	491	2,658	28,191
1970	31,746	29,955	78	364	1,350	27,321	26,267	1	474	579	4,425	32,616
1971	33,982	31,915	78	371	1,618	32,268	31,101	2	552	613	1,714	34,331
1972	37,917	35,711	137	351	1,719	35,849	34,541	2	582	724	2,068	36,399
1973	43,639	41,318	138	337	1,847	43,623	42,170	2	667	783	17	36,416
1974	50,936	48,455	139	303	2,039	49,485	47,849	4	723	909	1,451	37,867
1975	58,757	56,017	140	307	2,292	56,676	54,839	8	848	982	2,081	39,948
1976	62,327	59,555	157	268	2,347	64,295	62,140	7	935	1,212	-1,968	37,980
July-September 1976	16,186	16,106			80	17,111	16,876	2	234		-925	37,055
1977	71,796	68,895	378	236	2,287	73,479	71,271	8	993	1,208	-1,683	35,372
1978	76,811	74,047	385	228	2,152	81,205	78,524	6	1,086	1,589	-4,394	30,978
Estimated future experience: ³												
1979	87,051	84,526	384	230	1,911	90,032	87,462	9	1,169	1,392	-2,981	27,997
1980	100,135	97,887	393	164	1,691	102,446	99,730	9	1,248	1,459	-2,311	25,686
1981	113,486	111,392	385	149	1,560	114,425	111,581	10	1,310	1,524	-939	24,747
1982	129,445	127,276	463	135	1,571	126,580	123,646	10	1,376	1,548	-2,865	27,612
1983	141,229	138,957	466	118	1,688	138,196	135,178	11	1,445	1,562	3,033	30,645

¹ Under the Congressional Budget Act of 1974 (Public Law 93-344), fiscal years 1977 and later consist of the 12 month ending on September 30 of each year. The act further provides that the calendar quarter July-September 1976 is a period of transition from fiscal year 1976, which ended on June 30, 1976, to fiscal year 1977, which began on October 1, 1976.

² Interest on investments includes net profits on marketable investments. Beginning in 1967, administrative expenses incurred under the old-age and survivors insurance program are charged currently to the appropriate trust fund on an estimated basis, with a final adjustment, including interest, made in the following fiscal year. The amounts of these interest adjustments are included in

interest on investments. For years prior to 1967, a description of the method of accounting for administrative expenses is contained in the 1970 Annual Report of the Board of Trustees.

³ Less than \$500,000.

⁴ Includes \$3,000,000 as a single reimbursement for the estimated total costs of granting noncontributory wage credits to individuals who were interned during World War II at a place within the United States operated by the Federal Government for the internment of persons of Japanese ancestry.

⁵ In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in tables 10 and 11.

TABLE 19.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND DURING SELECTED CALENDAR YEARS 1940-78 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Calendar year	Transactions during period										Fund at end of period	
	Income					Disbursements						
	Total	Reimbursements from general fund of Treasury for costs of—			Interest on investments	Total	Benefit payments	Payments for vocational rehabilitation services	Administrative expenses	Transfers to railroad retirement account		Net increase in fund
		Contributions, less refunds	Noncontributory credits for military service	Payments to noninsured persons aged 72 and over								
Past experience:												
1940	\$368	\$325			\$43	\$62	\$35		\$26		\$306	\$2,031
1945	1,420	1,285			134	304	274	30			1,116	7,121
1950	2,928	2,667	\$4		257	1,022	961	61			1,905	13,721
1955	6,167	5,713			454	5,079	4,968	119		\$7	1,087	21,663
1960	11,382	10,866			516	11,198	10,677	203		318	184	20,324
1965	16,610	16,017			593	17,501	16,737	328		436	-890	18,235
1966	21,302	20,580	78		644	18,967	18,267	(1)	256	444	2,335	20,570
1967	24,034	23,138	78		818	20,382	19,468	(1)	406	508	3,652	24,222
1968	25,040	23,719	156	\$226	939	23,557	22,642	\$1	476	438	1,483	25,704
1969	29,554	27,947	78	364	1,165	25,176	24,209	1	474	491	4,378	30,082
1970	32,220	30,256	78	371	1,515	29,848	28,796	2	471	579	2,371	32,454
1971	35,877	33,723	137	351	1,667	34,542	33,413	2	514	613	1,335	33,789
1972	40,050	37,781	138	337	1,794	38,522	37,122	2	674	724	1,528	35,318
1973	48,344	45,975	139	303	1,928	47,175	45,741	3	647	783	1,169	36,487
1974	54,688	52,081	140	307	2,159	53,397	51,618	5	865	909	1,291	37,777
1975	59,605	56,816	157	268	2,364	60,395	58,509	9	896	982	-790	36,987
1976	66,276	63,362	378	236	2,301	67,876	65,699	6	959	1,212	-1,600	35,388
1977	72,412	69,572	385	228	2,227	75,309	73,113	8	981	1,208	-2,897	32,491
1978	78,094	75,471	384	230	2,008	83,064	80,352	9	1,115	1,589	-4,971	27,520
Estimated future experience:												
1979	90,562	88,208	393	164	1,797	93,137	90,558	9	1,178	1,392	-2,575	24,945
1980	102,509	100,380	385	149	1,595	105,405	102,675	9	1,262	1,459	-2,896	22,049
1981	118,263	116,123	463	135	1,542	117,480	114,621	10	1,325	1,524	783	22,832
1982	132,201	129,980	466	118	1,637	129,518	126,568	10	1,392	1,548	2,683	25,515
1983	143,626	141,308	469	102	1,747	140,982	137,948	11	1,461	1,562	2,644	28,159

¹ Less than \$500,000.

Note: In interpreting the above, reference should be made to the footnotes in table 18.

TABLE 20.—OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND DURING SELECTED FISCAL YEARS 1960-78 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Fiscal year ¹	Transactions during period										Fund at end of period
	Income				Disbursements						
	Total	Contributions, less refunds	Reimbursements from general fund of Treasury for costs of noncontributory credits for military service	Interest on investments ²	Total	Benefit payments	Payments for vocational rehabilitation services	Administrative expenses ³	Transfers to railroad retirement account	Net increase in fund	
Past experience: ³											
1960	\$1,034	\$987		\$47	\$533	\$528		\$32	-\$27	\$501	\$2,167
1965	1,237	1,175		62	1,495	1,392		79	24	-257	2,007
1966	1,611	1,557		54	1,931	1,721		183	25	-321	1,686
1967	2,332	2,249	\$16	67	1,997	1,861		99	31	335	2,022
1968	2,800	2,699	16	85	2,236	2,088		112	20	564	2,585
1969	3,705	3,532	32	141	2,613	2,443		133	21	1,092	3,678
1970	4,380	4,141	16	223	2,954	2,778		149	10	1,426	5,104
1971	4,911	4,569	16	325	3,606	3,381		190	13	1,305	6,408
1972	5,291	4,853	50	388	4,309	4,046		212	24	982	7,390
1973	5,947	5,461	51	435	5,467	5,162		247	20	479	7,869
1974	6,768	6,234	52	482	6,385	6,159		154	22	383	8,253
1975	7,920	7,356	52	512	7,982	7,630		253	29	-62	8,191
1976	8,355	7,797	90	468	9,606	9,222		266	26	-1,251	6,939
July-September 1976	2,172	2,159		13	2,653	2,555		71		-481	6,459
1977	9,374	8,900	103	372	11,590	11,135		378	(-)	-2,215	4,243
1978	12,784	12,404	128	251	12,655	12,214		327	3	129	4,372
Estimated future experience: ⁵											
1979	15,297	14,850	142	305	14,005	13,552		364	-5	1,292	5,664
1980	17,494	16,954	118	422	15,709	15,199		423	-15	1,785	7,449
1981	20,759	20,041	128	590	17,323	16,798		442	-26	3,436	10,885
1982	24,097	23,031	155	911	18,984	18,452		465	-48	5,113	15,998
1983	26,522	25,067	159	1,296	20,648	20,106		488	-66	5,874	21,872

¹ Under the Congressional Budget Act of 1974 (Public Law 93-344), fiscal years 1977 and later consist of the 12 month ending on September 30 of each year. The act further provides that the calendar quarter July-September 1976 is a period of transition from fiscal year 1976, which ended on June 30, 1976, to fiscal year 1977, which began on October 1, 1976.

² Interest on investments includes net profits on marketable investments. Beginning in 1967, administrative expenses incurred under the disability insurance program are charged currently to the trust fund on an estimated basis, with a final adjustment, including interest, made in the following fiscal year. The amounts of these interest adjustments are included in interest on investments. For

years prior to 1967, a description of the method of accounting for administrative expenses is contained in the 1970 Annual Report of the Board of Trustees.

³ The financial operations of the disability insurance trust fund began in the latter half of fiscal year 1957.

⁴ Less than \$500,000 was transferred from the railroad retirement account to the disability insurance trust fund.

⁵ In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in tables 10 and 11.

TABLE 21.—OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND DURING SELECTED CALENDAR YEARS 1960-78 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Calendar year	Transactions during period										Fund a end of period	
	Income				Disbursements							
	Total	Reimbursements from general fund of Treasury for costs of	Contributions, less refunds	Noncontributory cred- its for mili- tary service	Interest on invest- ments	Total	Benefit payments	Payments for voca- tional rehabili- tation services	Adminis- trative expenses	Transfers to railroad retirement account		Net increase in fund
Past experience:												
1960	\$1,063	\$1,010			\$53	\$600	\$568		\$36	-\$5	\$464	\$2,289
1965	1,247	1,188			59	1,687	1,573		90	24	-440	1,606
1966	2,079	2,006			58	1,947	1,781		137	25	133	1,739
1967	2,379	2,286	\$16		78	2,089	1,939		11	109	31	2,029
1968	3,454	3,316			32	2,458	2,294		16	127	20	996
1969	3,792	3,599			16	2,716	2,542		15	138	21	1,075
1970	4,774	4,481			16	2,777	3,067		18	164	10	1,514
1971	5,031	4,620			50	4,000	3,758		24	205	13	1,031
1972	5,572	5,107			51	4,414	4,473		29	233	24	813
1973	6,443	5,932			52	5,973	5,718		46	190	20	470
1974	7,378	6,826			52	7,196	6,903		54	217	22	182
1975	8,035	7,444			90	8,790	8,414		91	256	29	8,109
1976	8,757	8,233			103	10,366	9,966		89	285	26	7,354
1977	9,570	9,138			128	11,945	11,463		84	399	(*)	5,745
1978	13,810	13,413			142	12,954	12,513		86	325	30	3,370
Estimated future experience:												
1979	15,798	15,317			118	14,439	13,952		96	396	-5	1,359
1980	18,004	17,385			128	16,118	15,600		104	429	-15	1,886
1981	21,997	21,109			155	17,746	17,212		111	449	-26	2,471
1982	24,727	23,465			159	19,403	18,863		116	472	-48	3,122
1983	27,146	25,492			164	21,073	20,523		121	495	-66	3,724

* Less than \$500,000 was transferred from the railroad retirement account to the disability insurance trust fund.

Note: In interpreting the above, reference should be made to the footnotes in table 20.

TABLE 22.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, COMBINED, DURING SELECTED FISCAL YEARS 1960-78 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Fiscal year	Transactions during period										Funds at end of period	
	Income					Disbursements						
	Total	Contri- butions, less refunds	Noncontri- butory credits for military service	Payments to nonin- sured per- sons aged 72 and over	Interest on invest- ments	Total	Benefit payments	Payments for voca- tional rehabili- tation services	Admini- strative expenses	Transfers to railroad retirement account		Net increase in funds
Past experience:												
1960	\$11,394	\$10,830			\$564	\$11,606	\$10,798		\$234	\$534	-\$212	\$22,996
1965	17,681	17,032			648	17,456	16,618		379	459	224	22,187
1966	20,071	19,423			649	20,700	19,793		437	469	-629	21,558
1967	25,703	24,816	\$94		793	21,725	20,747		7	433	539	3,979
1968	26,440	25,362	94		984	23,859	22,825		16	560	458	2,581
1969	31,054	29,485	188	\$226	1,155	27,303	26,175		17	599	513	3,750
1970	36,127	34,096	94	364	1,572	30,275	29,045		18	623	589	5,852
1971	38,893	36,485	94	371	1,943	35,874	34,482		23	742	626	3,019
1972	43,208	40,564	187	351	2,107	40,158	38,587		29	794	749	3,050
1973	49,586	46,779	189	337	2,281	49,090	47,332		42	914	802	496
1974	57,704	54,689	191	303	2,521	55,869	54,007		54	878	931	1,835
1975	66,677	63,374	192	307	2,804	64,658	62,469		79	1,101	1,010	2,018
1976	70,682	67,352	247	268	2,815	73,901	71,363		100	1,200	1,239	-3,219
July-September 1976	18,359	18,265			94	19,764	19,431		29	304		-1,405
1977	81,170	77,794	481	236	2,659	85,068	82,406		85	1,370	1,208	-3,898
1978	89,595	86,451	513	228	2,403	93,861	90,738		91	1,413	1,618	-4,265
Estimated future experience:												
1979	102,348	99,376	526	230	2,216	104,037	101,014		103	1,533	1,387	-1,689
1980	117,629	114,841	511	164	2,113	118,155	114,929		111	1,671	1,444	-526
1981	134,245	131,433	513	149	2,150	131,748	128,379		119	1,752	1,498	2,497
1982	153,542	150,307	618	135	2,482	145,564	142,098		125	1,841	1,500	7,978
1983	167,751	164,024	625	118	2,984	158,844	155,284		131	1,933	1,496	8,907

Note: In interpreting the above, reference should be made to the footnotes in table 18.

TABLE 23.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, COMBINED, DURING SELECTED CALENDAR YEARS 1960-78 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1979-83 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Calendar year	Transactions during period										Funds at end of period	
	Income					Disbursements						
	Total	Contributions, less refunds	Reimbursements from general fund of Treasury for costs of—	Payments to noninsured persons aged 72 and over	Interest on investments	Total	Benefit payments	Payments for vocational rehabilitation services	Administrative expenses	Transfers to railroad retirement account		Net increase in funds
Past experience:												
1960	\$12,445	\$11,876			\$569	\$11,798	\$11,245		\$240	\$314	\$647	\$22,613
1965	17,857	17,205			651	19,187	18,311		418	459	-1,331	19,841
1966	23,381	22,585	\$94		702	20,913	20,048	\$3	393	469	2,467	22,308
1967	26,413	25,424	94		896	22,471	21,406	11	515	539	3,942	26,250
1968	28,493	27,034	188	\$226	1,045	26,015	24,936	17	603	458	2,479	28,729
1969	33,346	31,546	94	364	1,342	27,892	26,751	16	612	513	5,453	34,182
1970	36,993	34,737	94	371	1,791	33,108	31,863	20	635	589	3,886	38,068
1971	40,908	38,343	187	351	2,027	38,542	37,171	26	719	626	2,366	40,434
1972	45,622	42,888	189	337	2,208	43,281	41,595	30	907	749	2,341	42,775
1973	54,787	51,907	191	303	2,386	53,148	51,459	49	837	802	1,639	44,414
1974	62,066	58,907	192	307	2,660	60,593	58,521	59	1,082	931	1,472	45,886
1975	67,640	64,259	247	268	2,866	69,184	66,923	99	1,152	1,010	-1,544	44,342
1976	75,034	71,595	481	236	2,722	78,242	75,665	95	1,244	1,239	-3,209	41,133
1977	81,982	78,710	513	228	2,531	87,254	84,576	92	1,379	1,208	-5,272	35,861
1978	91,904	88,883	526	230	2,264	96,018	92,865	95	1,439	1,618	-4,115	31,746
Estimated future experience:												
1979	106,360	103,525	511	164	2,160	107,576	104,510	105	1,574	1,387	-1,216	30,530
1980	120,513	117,765	513	149	2,086	121,523	118,275	113	1,691	1,444	-1,010	29,520
1981	140,260	137,232	618	135	2,275	135,226	131,833	121	1,774	1,498	5,034	34,554
1982	156,928	153,445	625	118	2,740	148,921	145,431	126	1,864	1,500	8,007	42,561
1983	170,772	166,800	633	102	3,237	162,055	158,471	132	1,956	1,496	8,717	51,278

Note: In interpreting the above, reference should be made to the footnotes in table 18.

The estimates in the tables in this section include the effects of various provisions to which reference has been made in earlier sections, namely, the provisions for (1) reimbursements to the trust funds from the general fund of the Treasury for the costs of granting non-contributory credits for military service and for the costs of monthly payments to certain noninsured persons aged 72 and over and (2) financial interchanges between the railroad retirement account and the trust funds.

State and local government systems may terminate the agreements under which social security coverage is provided for their public employees. Such coverage is available only on a group voluntary basis through agreements between the Secretary of Health, Education, and Welfare and the individual States. After coverage of the employees of a State, or of a political subdivision of the State, has been in effect for at least 5 years, the State may give notice of its intention to terminate the coverage of such employees. The termination of coverage becomes effective 2 years after such notice is given, unless the State withdraws the notice of termination within the 2-year period. However, once the termination becomes effective, it is irrevocable and the same group cannot be covered under social security again.

In the past few years there has been some increase in the number of terminations of coverage among State and local government employees. The total number of employees becoming covered under new agreements in each year through 1976 was larger than the number of employees for whom coverage was terminated during the year. However, in each of the last 2 years, the number of State and local government employees for whom coverage was terminated was somewhat larger than the number of employees becoming covered under new agreements. Notices have also been given of the intention to terminate coverage on the part of a larger number of State and local government employees in each of the next 2 years than the number of employees becoming covered under new agreements each year. The filing of such a notice by a State does not necessarily mean that coverage will be terminated because, as noted above, the State may withdraw the notice during the 2-year period before the termination becomes effective.

The termination of coverage for any large number of State or local government employees would have an adverse effect on the status of the trust funds, especially in the short range. In fiscal year 1978, tax contributions received by the combined OASI and DI trust funds from workers employed by State and local governments and from such employers, under all of the coverage agreements in effect, amounted to \$9.2 billion, or about 11 percent of total contributions in the year. The estimates presented in this section, and in the following sections of this report, do not reflect the effects of (1) future terminations of coverage which may become effective as a result of such notices that have been filed and that are still pending, or that may be filed in the future, or (2) future agreements that would bring additional groups of public employees under covered employment.

Under the Social Security Amendments of 1977, the Congress has directed the Secretary of Health, Education, and Welfare to undertake a study of the feasibility and desirability of covering Federal employees, State and local government employees, and employees of non-profit organizations under the OASDI and hospital insurance pro-

grams on a mandatory basis. The study is to be conducted in consultation with the Department of the Treasury, the Office of Management and Budget, and the Civil Service Commission.

D. ACTUARIAL ANALYSIS OF BENEFIT DISBURSEMENTS FROM THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND WITH RESPECT TO DISABLED BENEFICIARIES

(Specifically required by sec. 201(c) of the Social Security Act)

Effective January 1957, monthly benefits have been payable from the OASI trust fund to disabled sons and daughters aged 18 and over of retired and deceased workers in those cases in which the disability of the son or daughter has continued since childhood. Effective February 1968, reduced monthly benefits have been payable from this trust fund to disabled widows and widowers beginning at age 50.

On December 31, 1978, about 494,000 persons were receiving monthly benefits with respect to disability from the OASI trust fund. In addition to disabled beneficiaries, this total includes 41,000 mothers and fathers. These mothers and fathers—wives under age 65 of retired-worker beneficiaries and widows or widowers of deceased insured workers—met all other qualifying requirements and were receiving full-rate (i.e., not reduced for age) benefits solely because they had at least one disabled-child beneficiary in their care. Benefits paid from this trust fund to persons receiving benefits with respect to disability totaled \$950 million in calendar year 1978. Similar figures are presented in table 24 to show the experience in selected calendar years 1960-78. Figures relating to past experience for years not shown in table 24 are contained in the 1976 annual report.

TABLE 24.—BENEFITS PAYABLE FROM THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND WITH RESPECT TO DISABLED BENEFICIARIES, SELECTED CALENDAR YEARS 1960-83

[Beneficiaries in thousands; benefit payments in millions]

Calendar year	Disabled beneficiaries, end of year			Amount of benefit payments ¹		
	Total	Children ²	Widows and widowers	Total	Children ²	Widows and widowers ³
Past experience:						
1960.....	117	117	-----	\$59	\$59	-----
1965.....	214	214	-----	134	134	-----
1970.....	316	281	36	301	260	\$41
1971.....	338	298	40	363	307	56
1972.....	360	314	46	409	343	66
1973.....	381	331	51	492	417	75
1974.....	409	355	53	567	479	88
1975.....	435	376	59	664	560	104
1976.....	457	395	62	748	637	111
1977.....	480	414	65	868	748	120
1978.....	494	430	64	950	823	127
Estimated future experience:⁴						
1979.....	504	440	64	1,051	919	132
1980.....	516	453	63	1,177	1,037	140
1981.....	526	464	62	1,301	1,153	148
1982.....	534	473	61	1,424	1,269	155
1983.....	541	481	60	1,539	1,379	160

¹ Beginning in 1966, includes payments for vocational rehabilitation services.

² Reflects effect of including certain mothers and fathers. (See text.)

³ Reflects the offsetting effect of lower benefits payable to disabled widows and widowers who continue to receive benefits past age 60 (62, for disabled widowers, prior to 1973) as compared to the higher nondisabled widow's (and widower's) benefits that would otherwise be payable.

⁴ The estimates are based on the intermediate set of assumptions and reflect the resulting assumed changes under the automatic increase provisions, as described in an earlier section.

Table 24 also shows the expected future experience in calendar years 1979–83, under the intermediate set of economic assumptions described in an earlier section. Total benefit payments from the OASI trust fund with respect to disabled beneficiaries are estimated to increase from \$1,051 million in calendar year 1979 to \$1,539 million in calendar year 1983, under the intermediate assumptions.

In calendar year 1978, benefit payments (including expenditures for vocational rehabilitation services) with respect to disabled persons from the OASI trust fund and from the DI trust fund (including payments from the latter fund to all dependents of disabled-worker beneficiaries) totaled \$13,549 million, of which \$950 million, or 7.0 percent, represented payments from the OASI trust fund. Similar figures for selected calendar years 1960–78 and estimates for calendar years 1979–83, under the intermediate set of assumptions, are presented in table 25. Figures relating to past experience for years not shown in table 25 are contained in the 1976 annual report.

TABLE 25.—BENEFIT PAYMENTS UNDER THE OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM WITH RESPECT TO DISABLED BENEFICIARIES, BY TRUST FUND, SELECTED CALENDAR YEARS 1960–83

[Amounts in millions]

Calendar year	Total ¹	Benefit payments ¹ from—		
		Disability insurance trust fund ²	Old-age and survivors insurance trust fund	As a percentage of total benefit payments with respect to disabled beneficiaries
		Amount ³		
Past experience:				
1960.....	\$627	\$568	\$59	9.4
1965.....	1,707	1,573	134	7.9
1970.....	3,386	3,085	301	8.9
1971.....	4,146	3,783	363	8.8
1972.....	4,911	4,502	409	8.3
1973.....	6,256	5,764	492	7.9
1974.....	7,524	6,957	567	7.5
1975.....	9,169	8,505	664	7.2
1976.....	10,803	10,055	748	6.9
1977.....	12,415	11,547	868	7.0
1978.....	13,549	12,599	950	7.0
Estimated future experience: ⁴				
1979.....	15,099	14,048	1,051	7.0
1980.....	16,881	15,704	1,177	7.0
1981.....	18,624	17,323	1,301	7.0
1982.....	20,403	18,979	1,424	7.0
1983.....	22,183	20,644	1,539	6.9

¹ Beginning in 1966, includes payments for vocational rehabilitation services.

² Benefit payments to disabled workers and their dependents.

³ Benefit payments to disabled children aged 18 and over, to certain mothers and fathers (see text), and to disabled widows and widowers. (See footnote 3, table 24.)

⁴ The estimates are based on the intermediate set of assumptions and reflect the resulting assumed changes under the automatic increase provisions, as described in an earlier section.

E. ACTUARIAL STATUS OF THE TRUST FUNDS

In recent reports, the medium-range and long-range actuarial statuses have been measured by the corresponding actuarial balances, computed over the 25-year and 75-year periods beginning with the calendar year of issuance of the report. In accordance with this practice, the statement of the medium-range and long-range actuarial statuses