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95th Congress, 2d Session - - - - - - - - - House Document No. 95–336

1978 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS

COMMUNICATION

FROM

THE BOARD OF TRUSTEES, FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS

TRANSMITTING

THE 1978 ANNUAL REPORT OF THE BOARD, PURSUANT TO SECTION 201(c) OF THE SOCIAL SECURITY ACT

MAY 16, 1978.—Referred to the Committee on Ways and Means and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

27–924 WASHINGTON : 1978

LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE
FEDERAL OLD-AGE AND SURVIVORS INSURANCE
AND DISABILITY INSURANCE TRUST FUNDS,
Washington, D.C., May 15, 1978.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES,
Washington, D.C.

SIR: We have the honor to transmit to you the 1978 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Fund and the Federal Disability Insurance Trust Fund (the 38th such report), in compliance with the provisions of section 201(c) of the Social Security Act.

Respectfully,

W. MICHAEL BLUMENTHAL,
Secretary of the Treasury,
and Managing Trustee of the Trust Funds.

RAY MARSHALL,
Secretary of Labor.

JOSEPH A. CALIFANO, Jr.,
Secretary of Health, Education, and Welfare.

DON I. WORTMAN,
Acting Commissioner of Social Security
and Secretary, Board of Trustees.

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Washington, D.C.

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1978 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND AND THE FEDERAL DISABILITY INSURANCE TRUST FUND

THE BOARD OF TRUSTEES

The Federal Old-Age and Survivors Insurance Trust Fund, established on January 1, 1940, and the Federal Disability Insurance Trust Fund, established on August 1, 1956, are held by the Board of Trustees under the authority of section 201(c) of the Social Security Act. The Board is comprised of three members who serve in an ex officio capacity. The members of the Board are the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health, Education, and Welfare. The Secretary of the Treasury is designated by law as the Managing Trustee. The Commissioner of Social Security is Secretary of the Board. The Board of Trustees reports to the Congress once each year, in compliance with section 201(c)(2) of the Social Security Act. This report is the annual report for 1978, the 38th such report.

ADVISORY COUNCIL ON SOCIAL SECURITY

The Secretary of Health, Education, and Welfare on February 26, 1978, announced the appointment of an Advisory Council on Social Security under the provisions of section 706 of the Social Security Act. The Council consists of a Chairman and 12 members representing organizations of employers and of employees, self-employed persons, and the public.

Under the law, the Social Security Advisory Council is charged with making a comprehensive study of the status of the social security cash benefit and Medicare programs. This study is to include an examination of the financial status of the trust funds in relation to the long-term commitments of the programs, benefit levels, the scope of coverage, and other aspects of the programs, including their impact on public assistance.

The Council is required to submit its final reports to the Secretary of Health, Education, and Welfare no later than October 1, 1979. After the Council's reports are transmitted by the Secretary to the Congress and to the Board of Trustees of each of the trust funds, the Council will cease to exist. The Council's report and recommendations with respect to the old-age and survivors insurance and the disability insurance program will be included in the 1980 annual report of the Board of Trustees.

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HIGHLIGHTS

The more important features of the 1978 annual report, discussed in greater detail in later sections, are given below:

(a) The Social Security Amendments of 1977, enacted on December 20, 1977, restore the financial soundness of the cash benefit program throughout the remainder of this century and into the early years of the next one. Beginning in 1981, the short-range and medium-range annual deficits of the old-age and survivors insurance and disability insurance trust funds that were projected in the 1977 annual report are eliminated because of the amendments. Estimates of the future operations and status of the trust funds are shown in later sections under three different sets of assumptions to indicate the general range of such estimates. Under the intermediate set of assumptions, the outgo of both trust funds combined is expected to exceed income in each calendar year through 1980. After 1980 it is estimated that income will exceed outgo in every year until after the turn of the century.

(b) Medium-range cost estimates are presented separately in this report in order to call attention to the status of the old-age and survivors insurance and disability insurance trust funds during the next 25 years, 1978–2002. Under the intermediate assumptions, annual outlays during the next 25 years are estimated to be, on the average, 10.64 percent of taxable payroll. The average scheduled tax rate of 11.67 percent is estimated to exceed average annual expenditures by 1.02 percent of taxable payroll during the next 25 years.

(c) With regard to the long-range actuarial status of the old-age and survivors insurance and disability insurance trust funds, annual outlays are estimated to be, on the average, 13.55 percent of taxable payroll over the 75-year period 1978–2052, under the intermediate assumptions. Annual tax income is estimated to be, on the average, 12.16 percent of taxable payroll over the 75-year period. The average annual deficit (i.e., the excess of outlays over tax income) over the 75-year period is estimated to be 1.40 percent of taxable payroll under the intermediate assumptions, as compared to the corresponding projected deficit of 8.20 percent shown in the 1977 annual report. The reduction of 6.80 percent of taxable payroll in the long-range deficit is largely due to the financing provisions and the benefit provisions in the 1977 amendments. During the second 25 years (2003–2027) of the long-range projection period, average annual expenditures are expected to exceed the average scheduled tax rate by 1.11 percent of taxable payroll. The deficit during the third 25-year period (2028–2052) is expected to increase to 4.10 percent of taxable payroll under the intermediate assumptions. Thus, the average annual deficit over the entire 75-year period is due to deficits expected to occur after the turn of the century.

These estimates, particularly for the period after the year 2002, should be interpreted with caution because the degree to which demographic and economic assumptions are expected to approximate actual future conditions is lower for later years than for earlier years.

(d) During fiscal year 1977, the assets of both trust funds combined declined by $3.9 billion, to a level of $39.6 billion on September 30, 1977. Income during the fiscal year amounted to $81.2 billion, up by 11 percent over the preceding 12-month period. Outgo totaled $85.1

billion—12 percent more than in the preceding 12 months. During the fiscal year, several changes occurred under the automatic increase provisions, affecting the comparison with the preceding 12 months. An automatic cost-of-living benefit increase of 5.9 percent became effective for June 1977. The published statement announcing the determination of the increase is shown in appendix B. The contribution and benefit base increased under the automatic provisions, from $15,300 to $16,500, effective January 1, 1977. The amount that a beneficiary may earn in a year and still receive all of his benefits under the retirement test (i.e., the annual exempt amount) also increased under the automatic provisions, from $2,760 to $3,000, effective January 1, 1977.

(e) Increases in the contribution and benefit base and in the annual exempt amount under the retirement test were determined in October 1977 under the automatic increase provisions in the law. The new amounts effective for January 1, 1978, are $17,700 and $3,240, respectively. The published statement announcing the determination of these amounts is shown in appendix C. Under the 1977 amendments, the 1978 retirement test exempt amount for beneficiaries aged 65 and over was increased to $4,000, with further increases scheduled through 1982 and automatic increases thereafter. Beginning in 1982, the age at which the retirement test ceases to apply will be reduced from age 72 to age 70. For beneficiaries under age 65, the exempt amount remains at $3,240 for 1978 and is subject to the automatic provisions thereafter.

(f) An automatic cost-of-living benefit increase of 6.5 percent will become effective for June 1978.

(g) The trust funds earned interest amounting to $2.7 billion during fiscal year 1977. The effective annual rate of interest earned by the combined assets of the trust funds during the 12 months that ended June 30, 1977, was 6.9 percent.

(h) The number of persons receiving monthly benefits under the old-age, survivors, and disability insurance program totaled 33.7 million at the end of September 1977. An estimated 106 million workers had earnings in calendar year 1977 that were taxable and creditable toward benefits under the program.

Social Security Amendments Since the 1977 Report

On December 20, 1977, Public Law 95–216, the Social Security Amendments of 1977, was enacted. Details of these amendments can be found in documents prepared by and for the Congress. In particular, details of the financial effect of these amendments are shown in the Ways and Means Committee print entitled "Actuarial Cost Estimates for the Old-Age, Survivors, Disability, Hospital, and Supplemental Medical Insurance Systems, as Modified by Public Law 95–216" (dated March 3, 1978).

In addition, although not an amendment to the Social Security Act, Public Law 95–256, the Age Discrimination in Employment Act Amendments of 1977, enacted April 6, 1978, is expected to affect the social security program in the future. Principally, the law raises the permissible mandatory retirement age for most nonfederal workers from 65 to 70 and it eliminates the mandatory age-70 retirement age for most Federal civilian employees.

Nature of the Trust Funds

The Federal Old-Age and Survivors Insurance Trust Fund was established on January 1, 1940, as a separate account in the United States Treasury. All the financial operations of the old-age and survivors insurance system are handled through this fund. The Federal Disability Insurance Trust Fund—another separate account in the United States Treasury and thus a fund entirely separate from the old-age and survivors insurance trust fund—was established on August 1, 1956. All the financial operations of the system of monthly disability benefits payable to disabled insured workers under age 65 and to their dependents are handled through this fund.

The major sources of receipts of these two funds are (1) amounts appropriated to each of them under permanent appropriation on the basis of contributions paid by workers and their employers, and by individuals with self-employment income, in work covered by the old-age, survivors, and disability insurance program and (2) amounts deposited in each of them representing contributions paid by workers employed by State and local governments and by such employers with respect to work covered by the program. All employees, and their employers, in employment covered by the program are required to pay contributions with respect to the wages of individual workers. Cash tips, covered as wages beginning in 1966 (under the 1965 amendments), are an exception. Employees pay contributions with respect to cash tips, but prior to 1978 employers did not. Beginning in 1978 (under the 1977 amendments), employers are required to pay contributions on that part of tip income deemed to be wages under the Federal minimum wage law. All covered self-employed persons are required to pay contributions with respect to their self-employment income.

In general, an individual's contributions are computed on annual wages or self-employment income, or both wages and self-employment income combined, up to a specified maximum annual amount, with the contributions being determined first on the wages and then on any self-employment income within the annual maximum amount. The amount of benefits that an individual (or his dependents or survivors) may become entitled to under the old-age, survivors, and disability insurance program is based on the individual's taxable earnings in each year. Therefore, the maximum amount of earnings taxable in a year is also the maximum amount of earnings creditable toward benefits in that year, and the maximum amount is referred to as the contribution and benefit base.

The contribution rates applicable to taxable earnings in each of the calendar years 1937 and later, and the allocation of the rates to finance expenditures from each of the two trust funds, are shown in table 1. For 1979 and later, the contribution rates shown are the rates scheduled in the provisions of present law. The contribution and benefit base for each year 1937–78 is also shown in table 1, as well as the base scheduled in the provisions of present law for each year 1979–81. For 1975–78, the contribution and benefit bases were determined under the automatic increase provisions in section 230 of the Social Security Act. For 1979–81, the base is scheduled to increase to specific amounts, as provided under the 1977 amendments. The automatic increase provisions will again be applicable after 1981.

TABLE 1—CONTRIBUTION AND BENEFIT BASE AND CONTRIBUTION RATES

Calendar years	Contribution and benefit base	Contribution rates (percent of taxable earnings)					
		Employees and employers, each			Self-employed		
		OASDI	OASI	DI	OASDI	OASI	DI
1937–49	$3,000	1.000	1.000	-	-	-	-
1950	3,000	1.500	1.500	-	-	-	-
1951–53	3,600	1.500	1.500	-	2.2500	2.2500	-
1954	3,600	2.000	2.000	-	3.0000	3.0000	-
1955–56	4,200	2.000	2.000	-	3.0000	3.0000	-
1957–58	4,200	2.250	2.000	0.250	3.3750	3.0000	0.3750
1959	4,800	2.500	2.250	.250	3.7500	3.3750	.3750
1960–61	4,800	3.000	2.750	.250	4.5000	4.1250	.3750
1962	4,800	3.125	2.875	.250	4.7000	4.3250	.3750
1963–65	4,800	3.625	3.375	.250	5.4000	5.0250	.3750
1966	6,600	3.850	3.500	.350	5.8000	5.2750	.5250
1967	6,600	3.900	3.550	.350	5.9000	5.3750	.5250
1968	7,800	3.800	3.325	.475	5.8000	5.0875	.7125
1969	7,800	4.200	3.725	.475	6.3000	5.5875	.7125
1970	7,800	4.200	3.650	.550	6.3000	5.4750	.8250
1971	7,800	4.600	4.050	.550	6.9000	6.0750	.8250
1972	9,000	4.600	4.050	.550	6.9000	6.0750	.8250
1973	10,800	4.850	4.300	.550	7.0000	6.2050	.7950
1974	13,200	4.950	4.375	.575	7.0000	6.1850	.8150
1975	14,100	4.950	4.375	.575	7.0000	6.1850	.8150
1976	15,300	4.950	4.375	.575	7.0000	6.1850	.8150
1977	16,500	4.950	4.375	.575	7.0000	6.1850	.8150
1978	17,700	5.050	4.275	.775	7.1000	6.0100	1.0900
Changes scheduled in present law:							
1979	22,900	5.080	4.330	.750	7.0500	6.0100	1.0400
1980	25,900	5.080	4.330	.750	7.0500	6.0100	1.0400
1981	29,700	5.350	4.525	.825	8.0000	6.7625	1.2375
1982–84	(1)	5.400	4.575	.825	8.0500	6.8125	1.2375
1985–89	(1)	5.700	4.750	.950	8.5500	7.1250	1.4250
1990 and later	(1)	6.200	5.100	1.100	9.3000	7.6500	1.6500

[1] Subject to automatic increase.

Except for amounts received under State agreements (to effectuate coverage under the program for State and local government employees) and deposited directly in the trust funds, all contributions are collected by the Internal Revenue Service and deposited in the general fund of the Treasury as internal revenue collections. The contributions so received are immediately and automatically appropriated to the trust funds on an estimated basis. The exact amount of contributions received is not known initially since old-age, survivors, disability, and hospital insurance contributions and individual income taxes are not separately identified in collection reports received by the Treasury Department. Periodic adjustments are subsequently made to the extent that the estimates are found to differ from the amounts of contributions actually payable on the basis of reported earnings.

An employee who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum can receive a refund of the contributions he paid on such excess wages. The amount of contributions subject to refund for any period is a charge against each of the trust funds in the ratio in which the amount was appropriated to or deposited in such trust funds for that period.

Another source from which receipts of the trust funds are derived is interest received on investments held by the funds. The investment procedures of the funds are described later in this section.

The income and expenditures of the trust funds are also affected by the provisions of the Railroad Retirement Act which provide for a system of coordination and financial interchange between the railroad retirement program and the old-age, survivors, and disability insurance program. Under these provisions, transfers between the railroad retirement account and the trust funds are made on an annual basis in order to place each trust fund in the same position as it would have been if railroad employment had always been covered under the Social Security Act.

Sections 217(g) and 229(b) of the Social Security Act authorize annual reimbursements from the general fund of the Treasury to the old-age and survivors insurance and disability insurance trust funds for any costs arising from the granting of noncontributory wage credits for military service, according to periodic determinations made by the Secretary of Health, Education, and Welfare.

Section 228 of the Social Security Act provides monthly cash benefits to certain persons aged 72 and over, almost all of whom are not eligible for cash benefits under other provisions of the old-age, survivors, and disability insurance program. Under section 228, all payments are made initially from the old-age and survivors insurance trust fund, with later reimbursement, with interest, from the general fund of the Treasury for the costs, including administrative expenses, of payments to persons who have less than three quarters of coverage. The reimbursements so made are on a provisional basis and are subject to adjustment, with appropriate interest allowances, as the actual experience develops and is analyzed.

Under section 231 of the Social Security Act, a single reimbursement from the general fund of the Treasury was made in December 1977 to each of the two trust funds for the estimated total costs arising from the granting of 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 U.S citizens of Japanese ancestry.

Section 201(i) of the Social Security Act authorizes the Managing Trustee to accept and deposit in the trust funds unconditional money gifts or bequests made for the benefit of the trust funds or any activity financed through such funds.

Expenditures for benefit payments and administrative expenses under the old-age, survivors, and disability insurance program are paid out of the trust funds. All expenses incurred by the Department of Health, Education, and Welfare and by the Treasury Department in carrying out the provisions of title II of the Social Security Act and of the Internal Revenue Code relating to the collection of contributions are charged to the trust funds. The Secretary of Health, Education, and Welfare certifies benefit payments to the Managing Trustee, who makes the payments from the respective trust funds in accordance therewith.

Section 222(d) of the Social Security Act provides for payments from the trust funds for the costs of vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability. The total amount of funds that may be made available in a fiscal year for payments for the costs of such services, including applicable administrative expenses of State agencies, may not exceed a specified percentage of the benefits certified for payment to these types of beneficiaries in the preceding year. This limitation on the amount to be made available was 1 percent in each of the fiscal years 1966 (when such amounts were first made available) through 1972 and 1¼ percent in fiscal year 1973. Under present law, the limitation is 1½ percent in fiscal years after 1973.

Congress has authorized expenditures from the trust funds for construction, rental, and lease or purchase contract of office buildings and related facilities for the Social Security Administration. Both the capital costs of construction financed directly from the trust funds and the rental, lease, or purchase contract costs of acquiring facilities are included in trust fund expenditures. In 1972–75, construction of several large facilities was authorized under purchase contract authority, wherein initial capital costs are borne by the private sector. Under this method of facilities acquisition, trust fund expenditures for use and ultimate Government ownership of a facility are made over periods of from 10 to 30 years. Whatever the manner of acquisition, the net worth of facilities and other fixed capital assets is not carried in the statements of the operations of the trust funds presented in this report. This is because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures, and therefore is not viewed as being a consideration in assessing the acturial status of the funds.

That portion of each trust fund which, in the judgment of the Managing Trustee, is not required to meet current expenditures for benefits and administration is invested, on a daily basis, in interest-bearing obligations of the U.S. Government (including special public-debt obligations described below), in obligations guaranteed as to both principal and interest by the United States, or in certain federally sponsored agency obligations that are designated in the laws authorizing their issuance as lawful investments for fiduciary and trust funds under the control and authority of the United States or any officer of the United States. These obligations may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust funds that shall bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month next preceding the date of such issue) on all marketable interest-bearing obligations of the United States then forming a part of the public debt which are not due or callable until after the expiration of 4 years from the end of such calendar month.

Summary of the Operations of the Federal Old-Age and Survivors Insurance Trust Fund, Fiscal Year 1977

Beginning with fiscal year 1977, the period of time covered by the fiscal year of the U.S. Government was changed from the 12 months beginning on July 1 of each year and ending on June 30 of the following year to the 12 months beginning on October 1 of each year and ending on September 30 of the following year, in accordance with the Congressional Budget Act of 1974 (Public Law 93–344). This Act further provided that the calendar quarter July-September 1976 be a period of transition from fiscal year 1976, which ended on June 30, 1976, to fiscal year 1977, which began on October 1, 1976.

A statement of the income and disbursements of the Federal Old-Age and Survivors Insurance Trust Fund in fiscal year 1977, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 2. Corresponding amounts for the transition quarter

July-September 1976 (which were not presented in last year's annual report) are also shown in the table.

TABLE 2.—STATEMENT OF OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND DURING THE TRANSITION QUARTER, JULY-SEPTEMBER 1976, AND DURING FISCAL YEAR 1977

[In thousands]

	July–September 1976	Fiscal year 1977
Total assets of the trust fund, beginning of period	$37,979,876	$37,055,202
Receipts:		
Contributions:		
Appropriations	14,259,092	61,517,723
Deposits arising from State agreements	1,846,756	7,676,046
Gross contributions	16,105,848	69,193,769
Less payment into the Treasury for contributions subject to refund		298,960
Net contributions	16,105,848	68,894,809
Reimbursement from general fund of the Treasury for costs of:		
Noncontributory credits for military service		378,000
Payments to noninsured persons aged 72 and over:		
Benefit payments		208,652
Administrative expenses		2,640
Interest		24,610
Total reimbursement for payments to noninsured persons aged 72 and over		235,902
Interest:		
Interest on investments	80,432	2,275,080
Interest on amounts transferred from the supplemental security income general fund account due to adjustment in allocation of administrative expenses		15,033
Gross interest	80,432	2,290,113
Less interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs		3,130
Less interest on amounts transferred to the disability insurance trust fund due to adjustment in allocation of costs of vocational rehabilitation services		95
Net interest	80,432	2,286,838
Gifts	8	10
Total receipts	16,186,287	71,795,610
Disbursements:		
Benefit payments	16,875,545	71,270,51
Transfer to railroad retirement account		1,207,841
Payment for costs of vocational rehabilitation services for disabled beneficiaries:		
For the current period	1,714	6,797
Transfers to the disability insurance trust fund due to adjustment in allocation of costs for fiscal year 1976 and the transition quarter		705
Total payment for costs of vocational rehabilitation services	1,714	7,502
Administrative expenses:		
Department of Health, Education, and Welfare	195,119	830,303
Treasury Department	25,851	127,902
Construction of facilities for Social Security Administration	12,725	14,733
Expenses of the Department of Health, Education, and Welfare for administration of vocational rehabilitation program for disabled beneficiaries	12	48
Interfund transfers due to adjustment in allocation of:		
Administrative expenses		19,229
Costs of construction		2,415
Gross administrative expenses	233,707	994,630
Less transfers from the supplemental security income general fund account due to adjustment in allocation of administrative expenses		1,887
Less receipts from sales of supplies, materials, etc	4	6
Net administrative expenses	233,703	992,737
Total disbursements	17,110,961	73,478,599
Net addition to the trust fund	−924,674	−1,682,989
Total assets of the trust fund, end of period	37,055,202	35,372,213

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

The total assets of the old-age and survivors insurance trust fund amounted to $37,055 million on September 30, 1976. During fiscal year 1977, total receipts amounted to $71,796 million and total disbursements were $73,479 million. The assets of the trust fund thus decreased $1,683 million during the year to a total of $35,372 million on September 30, 1977.

Included in total receipts during fiscal year 1977 were $61,518 million representing contributions appropriated to the fund and $7,676 million representing amounts received by the Secretary of the Treasury in accordance with State agreements for coverage of State and local government employees and deposited in the trust fund. As an offset, $299 million was transferred from the trust fund into the Treasury as repayment for the estimated amount of contributions subject to refund to employees who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum earnings base.

Net contributions amounted to $68,895 million, an increase of 12.2 percent over the amount of $61,408 million for the preceding 12-month period. Growth in contribution income resulted primarily from (1) the higher level of earnings in covered employment and (2) the two increases in the maximum annual amount of earnings taxable—from $14,100 to $15,300 effective on January 1, 1976, and from $15,300 to $16,500 effective on January 1, 1977. Although the first increase in the maximum annual amount of earnings taxable, from $14,100 to $15,300, became effective in 1976, earnings between $14,100 and $15,300, which were taxable during all of fiscal year 1977, were taxable during only part of the preceding 12-month period.

Reference has been made in an earlier section to provisions of the Social Security Act under which the old-age and survivors insurance and disability insurance trust funds are to be reimbursed annually from the general fund of the Treasury for costs of granting noncontributory credits for military service and for the costs of payments to certain noninsured persons aged 72 and over who have less than three quarters of coverage.

In accordance with section 217(g), the Secretary of Health, Education, and Welfare made a determination in 1975 of the level annual appropriations to the trust funds necessary to amortize over a 39-year period, beginning in fiscal year 1977, the estimated total additional costs, for military service performed before 1957, arising from payments that have been made after August 1950 and that will be made in future years, taking into account the amounts of annual appropriations in fiscal years 1966–76 that have been deposited into the trust funds. The annual amounts resulting from this determination were $354 million for the old-age and survivors insurance trust fund and $92 million for the disability insurance trust fund. In accordance with section 229(b), the Secretary determined that the old-age and survivors insurance trust fund should receive reimbursement of $24 million, and the disability insurance trust fund should receive reimbursement of $11 million, for additional costs attributable to noncontributory credits for military service performed after 1956. Thus, reimbursements amounting to $378 million for the old-age and survivors insurance trust fund and $103 million for the disability insurance trust fund were received in December 1976.

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A reimbursement amounting to $236 million for the costs of monthly payments to certain noninsured persons aged 72 and over was transferred from the general fund of the Treasury to the old-age and survivors insurance trust fund in fiscal year 1977. This reimbursement, made under section 228, reflected the costs of payments made in fiscal year 1975 and adjustments in the costs of payments made in prior fiscal years.

The old-age and survivors insurance trust fund received $10,180 in gifts in fiscal year 1977 under the provisions authorizing the deposit of money gifts or bequests in the old-age and survivors insurance and disability insurance trust funds.

The remaining $2,287 million of receipts consisted of interest on the investments of the trust fund and net interest on amounts of interfund transfers arising out of adjustments in the allocation of administrative expenses, construction costs, and the costs of vocational rehabilitation services for prior fiscal years.

Of the $73,479 million in total disbursements, $71,271 million was for benefit payments, an increase of 11.6 percent over the corresponding amount of $63,834 million paid in the preceding 12-month period. This increase was due to (1) the automatic cost-of-living benefit increases of 6.4 percent and 5.9 percent, which became effective for June 1976 and June 1977, respectively, under the automatic provisions in section 215(i), and (2) the continuing growth in both the total number of beneficiaries and the average benefit amounts resulting from the rising level of earnings. Although the first automatic benefit increase of 6.4 percent became effective in 1976, the resulting higher benefit levels, which were in effect during all of fiscal year 1977, were in effect during only part of the preceding 12-month period.

In accordance with the provisions of the Railroad Retirement Act which coordinate the railroad retirement and the old-age and survivors insurance programs and which govern the financial interchanges arising from the allocation of costs between the two systems, the Railroad Retirement Board and the Secretary of Health, Education, and Welfare determined that a transfer of $1,140,700,000 to the railroad retirement account from the old-age and survivors insurance trust fund would place this trust fund in the same position as of June 30, 1976, as it would have been if railroad employment had always been covered under the Social Security Act. This amount was transferred to the railroad retirement account in June 1977, together with interest to the date of transfer amounting to $67,141,000.

Expenditures of the old-age and survivors insurance program for the costs of vocational rehabilitation services amounted to about $7.5 million. These services were furnished to disabled adults—dependents of old-age beneficiaries and survivors of deceased insured workers—who were receiving monthly benefits from the old-age and survivors insurance trust fund because of their disability.

The remaining $993 million of disbursements from the old-age and survivors insurance trust fund represents net administrative expenses. The expenses of administering the programs financed through the four trust funds—the old-age and survivors insurance, disability insurance, hospital insurance, and supplementary medical insurance trust funds—are allocated and charged directly to each trust fund on the basis of provisional estimates. Similarly, the expenses of administering the supplemental security income program are also allocated and charged directly to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses and costs of construction for prior periods are effected by interfund transfers, including transfers between the old-age and survivors insurance trust fund and the supplemental security income general fund account, with appropriate interest allowances.

Net administrative expenses charged to the old-age and survivors insurance trust fund and to the disability insurance trust fund in fiscal year 1977 totaled $1,370 million. This amount represented 1.8 percent of contribution income and 1.7 percent of expenditures for benefit payments and payments for the costs of vocational rehabilitation services during the fiscal year. Corresponding percentages for each of the last 5 years for the old-age, survivors, and disability insurance system as a whole and for each trust fund separately are shown in table 3.

TABLE 3.—RELATIONSHIP OF NET ADMINISTRATIVE EXPENSES OF THE OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM TO CONTRIBUTION INCOME AND BENEFIT PAYMENTS, BY TRUST FUND, FISCAL YEARS 1973–77

Fiscal year	Total [1]—Administrative expenses as a percentage of—		Old-age and survivors insurance trust fund—Administrative expenses as a percentage of—		Disability insurance trust fund [1]—Administrative expenses as a percentage of—	
	Total contribution income	Total benefit payments [2]	Contribution income	Benefit payments [2]	Contribution income	Benefit payments [2]
1973	2.0	1.9	1.6	1.6	4.5	4.7
1974	1.6	1.6	1.5	1.5	2.5	2.5
1975	1.7	1.8	1.5	1.5	3.4	3.3
1976	1.8	1.7	1.6	1.5	3.4	2.9
July–September 1976	1.7	1.6	1.5	1.4	3.3	2.7
1977	1.8	1.7	1.4	1.4	4.2	3.4

[1] The percentages shown for fiscal years 1974 and later reflect the effect of a change in the method of allocating administrative expenses among the four trust funds, which resulted in lower proportions allocated to the disability insurance trust fund. The percentages for fiscal year 1974 also reflect the effect of applying the modified method of allocating expenses retroactively to fiscal year 1973, with a resulting larger interfund transfer to the disability insurance trust fund in fiscal year 1974, than would have otherwise occurred.

[2] In determining the percentages shown, payments for the costs of vocational rehabilitation services are included with benefit payments.

Note: In interpreting the figures in the above table, reference should be made to the accompanying text.

In table 4, the experience with respect to actual amounts of contributions and benefit payments in fiscal year 1977 is compared with the estimates for fiscal year 1977 which appeared in the 1976 and 1977 annual reports. The actual experience for each trust fund was quite close, relatively, to the estimates. 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 1977 reflects the aforementioned type of adjustments to contributions for prior fiscal years. On the other hand, the "actual" amount of contributions in fiscal year 1977 does not reflect adjustments to contributions for fiscal year 1977 that were to be made after September 30, 1977.

TABLE 4.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, FISCAL YEAR 1977

[Amounts in millions]

	Old-age and survivors insurance trust fund		Disability insurance trust fund	
	Net contributions	Benefit payments	Net contributions	Benefit payments
Actual amount	$68, 895	$71, 271	$8, 900	$11, 135
Estimated amount published in 1977 report	$68, 468	$71, 298	$8, 998	$11, 147
Actual as percentage of estimate	101	100	99	100
Estimated amount published in 1976 report	$68, 909	$71, 155	$9, 057	$10, 811
Actual as percentage of estimate	100	100	98	103

Note: In interpreting the figures in the above table, reference should be made to the accompanying text.

At the end of fiscal year 1977, about 33.7 million persons were receiving monthly benefits under the old-age, survivors, and disability insurance program. About 28.9 million of these persons were receiving monthly benefits from the old-age and survivors insurance trust fund. The distribution of benefit payments in the transition quarter and in fiscal year 1977, by type of beneficiary, is shown in table 5. Approximately 73 percent of the total benefit payments from the old-age and survivors insurance trust fund in fiscal year 1977 was accounted for by monthly benefits to retired workers and their dependents and about 16 percent by monthly benefits to aged survivors and disabled widows or widowers of deceased workers. Approximately 10 percent of the benefit payments represented monthly benefits on behalf of children of deceased workers and monthly benefits to widowed mothers and fathers who had children of deceased workers in their care.

TABLE 5.—ESTIMATED DISTRIBUTION OF BENEFIT PAYMENTS FROM THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND, BY TYPE OF BENEFICIARY AND PAYMENT, IN THE TRANSITION QUARTER, JULY–SEPTEMBER 1976, AND IN FISCAL YEAR 1977

[Amounts in millions]

	July–September 1976		Fiscal Year 1977	
	Amount	Percent of total	Amount	Percent of total
Total	$16, 875. 5	100	$71, 270. 5	100
Monthly benefits	16, 799. 4	100	70, 949. 7	100
Retired workers and their dependents	12, 338. 0	73	52, 074. 5	73
Retired workers	11, 106. 2	66	46, 893. 1	66
Wives and husbands	1, 052. 2	6	4, 444. 0	6
Children	179. 6	1	737. 4	1
Survivors of deceased workers	4, 417. 7	26	18, 713. 7	26
Aged widows and widowers	2, 711. 9	16	11, 472. 1	16
Disabled widows and widowers	54. 9	(1)	233. 2	(1)
Parents	12. 7	(1)	51. 2	(1)
Children	1, 358. 0	8	5, 788. 6	8
Widowed mothers and fathers caring for child beneficiaries	280. 1	2	1, 168. 6	2
Noninsured persons aged 72 and over [2]	43. 8	(1)	161. 5	(1)
Lump-sum death payments	76. 1	(1)	320. 8	(1)

[1] Less than 0.5 percent.
[2] The trust fund is reimbursed from the general fund of the Treasury for the costs of payments to beneficiaries with less than three quarters of coverage.

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

Benefit payments to noninsured persons aged 72 and over amounted to $162 million, or less than ½ percent of total benefit payments from the trust fund. As stated earlier, the costs of such payments to persons who have fewer than three quarters of coverage are reimbursable from the general fund of the Treasury. About 97 percent of the total amount of the payments made in fiscal year 1977 to noninsured persons aged 72 and over went to persons with fewer than three quarters of coverage.

The balance of the benefits paid during fiscal year 1977 consisted of lump-sum death payments.

The assets of the old-age and survivors insurance trust fund at the end of the transition quarter July–September 1976 totaled $37,055 million, consisting of $37,042 million in the form of obligations of the U.S. Government or of federally sponsored agency obligations, and an undisbursed balance of $13 million. The assets of the old-age and survivors insurance trust fund at the end of fiscal year 1977 totaled $35,372 million, consisting of $35,398 million in the form of obligations of the U.S. Government or of federally sponsored agency obligations, and, as an offset, an extension of credit amounting to $25 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 the transition quarter and at the end of fiscal year 1977.

TABLE 6.—ASSETS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND, BY TYPE, AT THE END OF THE TRANSITION QUARTER, JULY-SEPTEMBER 1976, AND AT THE END OF FISCAL YEAR 1977

	September 30, 1976		September 30, 1977	
	Par value	Book value[1]	Par value	Book value[1]
Investments in public-debt obligations:				
Public issues:				
Treasury notes:				
8 percent, 1977	$15,000,000	$15,000,000.00		
Treasury bonds:				
2¾-percent, investment series B, 1975–80	1,064,902,000	1,064,902,000.00	$1,064,902,000	$1,064,902,000.09
3-percent, 1995	70,170,000	70,151,228.23	70,170,000	70,152,252.10
3¼-percent, 1978–83	60,200,000	59,805,431.42	60,200,000	59,864,616.62
3¼-percent, 1985	25,700,000	24,953,790.23	25,700,000	25,040,727.35
3½-percent, 1980	449,450,000	451,231,157.82	449,450,000	450,794,956.02
3½-percent, 1990	556,250,000	550,592,346.51	556,250,000	551,016,670.71
3½-percent, 1998	552,037,000	545,219,764.45	552,037,000	545,528,469.61
4-percent, 1980	153,100,000	153,083,789.14	153,100,000	153,088,652.74
4⅛-percent, 1989–94	91,300,000	90,768,522.57	91,300,000	90,798,748.77
4¼-percent, 1975–85	78,023,000	77,842,894.22	78,023,000	77,863,877.54
4¼-percent, 1987–92	33,000,000	34,153,132.68	33,000,000	34,046,689.68
6⅜-percent, 1984	31,500,000	31,859,497.89	31,500,000	31,814,087.61
7-percent, 1981	50,000,000	49,803,333.13	50,000,000	49,843,333.09
7½-percent, 1988–93	99,934,000	98,590,341.20	99,934,000	98,669,769.32
7⅝-percent, 2002–07			15,000,000	14,991,248.32
7⅞-percent, 1995–2000	22,180,000	21,467,483.10	22,180,000	21,498,128.94
8-percent, 1996–2001	90,500,000	90,403,810.56	90,500,000	90,407,683.92
8¼-percent, 2000–05	22,450,000	22,444,050.30	22,450,000	22,444,249.14
8⅜-percent, 1995–2000	50,000,000	50,722,222.25	50,000,000	50,691,919.25
8½-percent, 1994–99	6,352,000	6,515,590.24	6,352,000	6,508,372.96
Total investments in public issues	3,522,048,000	3,509,510,385.94	3,522,048,000	3,509,966,453.78
Obligations sold only to this fund (special issues):				
Certificates of indebtedness:				
7 percent, 1978			5,180,294,000	5,180,294,000.00
7⅛ percent, 1977	4,582,664,000	4,582,664,000.00		
7⅛ percent, 1978			1,649,440,000	1,649,440,000.00
7¼ percent, 1977	1,248,386,000	1,248,386,000.00		
Notes:				
5¾ percent, 1979	1,821,626,000	1,821,626,000.00		
6⅝ percent, 1980	4,547,285,000	4,547,285,000.00	326,153,000	326,153,000.00

See footnotes at end of table.

TABLE 6.—ASSETS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND, BY TYPE, AT THE END OF THE TRANSITION QUARTER, JULY-SEPTEMBER 1976, AND AT THE END OF FISCAL YEAR 1977—Continued

	September 30, 1976		September 30, 1977	
	Par value	Book value [1]	Par value	Book value [1]
Investments in public-debt obligations—Continued				
Obligations sold only to this fund—Continued				
(special issues):				
Bonds:				
7⅛-percent, 1981			$125,846,000	$125,846,000.00
7⅛-percent, 1982			125,846,000	125,846,000.00
7⅛-percent, 1983			125,846,000	125,846,000.00
7⅛-percent, 1984			125,846,000	125,846,000.00
7⅛-percent, 1985			125,846,000	125,846,000.00
7⅛-percent, 1986			125,847,000	125,847,000.00
7⅛-percent, 1987			125,847,000	125,847,000.00
7⅛-percent, 1988			125,847,000	125,847,000.00
7⅛-percent, 1989			125,847,000	125,847,000.00
7⅛-percent, 1990			125,847,000	125,847,000.00
7⅛-percent, 1991			125,848,000	125,848,000.00
7⅛-percent, 1992			2,014,741,000	2,014,741,000.00
7⅜-percent, 1981	$688,956,000	$688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1982	688,956,000	688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1983	688,956,000	688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1984	688,956,000	688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1985	688,956,000	688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1986	688,956,000	688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1987	688,955,000	688,955,000.00	688,955,000	688,955,000.00
7⅜-percent, 1988	688,956,000	688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1989	688,956,000	688,956,000.00	688,956,000	688,956,000.00
7⅜-percent, 1990	1,366,865,000	1,366,865,000.00	1,366,865,000	1,366,865,000.00
7½-percent, 1981	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1982	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1983	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1984	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1985	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1986	522,028,000	522,028,000.00	522,028,000	522,028,000.00
7½-percent, 1987	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1988	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1989	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1990	522,029,000	522,029,000.00	522,029,000	522,029,000.00
7½-percent, 1991	1,888,893,000	1,888,893,000.00	1,888,893,000	1,888,893,000.00
7⅝-percent, 1981	677,910,000	677,910,000.00	677,910,000	677,910,000.00
7⅝-percent, 1982	677,910,000	677,910,000.00	677,910,000	677,910,000.00
7⅝-percent, 1983	677,910,000	677,910,000.00	677,910,000	677,910,000.00
7⅝-percent, 1984	677,910,000	677,910,000.00	677,910,000	677,910,000.00
7⅝-percent, 1985	677,910,000	677,910,000.00	677,910,000	677,910,000.00
7⅝-percent, 1986	677,910,000	677,910,000.00	677,910,000	677,910,000.00
7⅝-percent, 1987	677,910,000	677,910,000.00	677,910,000	677,910,000.00
7⅝-percent, 1988	677,909,000	677,909,000.00	677,909,000	677,909,000.00
7⅝-percent, 1989	677,909,000	677,909,000.00	677,909,000	677,909,000.00
Total obligations sold only to this fund (special issues)	32,977,799,000	32,977,799,000.00	31,332,779,000	31,332,779,000.00
Total investments in public-debt obligations	36,499,847,000	36,487,309,385.94	34,854,827,000	34,842,745,453.78
Investments in federally sponsored agency obligations:				
Participation certificates:				
Federal Assets Liquidation Trust—Government National Mortgage Association:				
5.10-percent, 1987	50,000,000	50,000,000.00	50,000,000	50,000,000.00
5.20-percent, 1982	100,000,000	100,000,000.00	100,000,000	100,000,000.00
Federal Assets Financing Trust—Government National Mortgage Association:				
6.05-percent, 1988	65,000,000	64,861,875.52	65,000,000	64,874,063.08
6.20-percent, 1988	230,000,000	230,000,000.00	230,000,000	230,000,000.00
6.40-percent, 1987	75,000,000	75,000,000.00	75,000,000	75,000,000.00
6.45-percent, 1988	35,000,000	35,000,000.00	35,000,000	35,000,000.00
Total investments in federally sponsored agency obligations	555,000,000	554,861,875.52	555,000,000	554,874,063.08
Total investments	37,054,847,000	37,042,171,261.46	35,409,827,000	35,397,619,516.86
Undisbursed balances [2]		13,030,860.53		−25,406,511.59
Total assets		37,055,202,121.99		35,372,213,005.27

[1] Par value, plus unamortized premium, less discount outstanding.
[2] The negative figure represented an extension of credit against securities to be redeemed within the following few days.

The net decrease in the par value of the investments owned by the fund during the transition quarter amounted to $913 million. New securities at a total par value of $16,148 million were acquired during the transition quarter through the investment of receipts. All of these new securities were certificates of indebtedness. The par value of securities redeemed during the transition quarter was $17,060 million, including $10,316 million in certificates of indebtedness. In addition, $90 million in 7½-percent notes maturing in August 1976 were exchanged for equal amounts of 8-percent bonds maturing in August 2001. Although the interest rate on bonds is generally limited to 4¼ percent by the provisions of 31 U.S.C. 752, amendments to these provisions authorize the issuance of bonds at rates of interest exceeding 4¼ percent, subject to certain restrictions. Public Law 92–5, enacted March 17, 1971, amended the provisions to authorize the issuance to the public and to Government accounts of up to a total of $10 billion in bonds at rates of interest exceeding 4¼ percent. Public Law 93–53, enacted July 1, 1973, further amended the provisions of 31 U.S.C. 752 by (1) removing the $10 billion limitation on the aggregate face amount of such bonds that may be issued and (2) limiting the amount of such bonds that may be held by the public at any one time to $10 billion.

The net decrease in the par value of the investments owned by the fund during fiscal year 1977 amounted to $1,645 million. New securities at a total par value of $78,571 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 fiscal year was $80,216 million. Included in these amounts is $71,143 million in certificates of indebtedness that were acquired, and $70,144 million in certificates of indebtedness that were redeemed, within the fiscal year. In addition, $15 million in 8-percent notes maturing in February 1977 were exchanged for equal amounts of 7⅝-percent bonds maturing in February 2007.

The effective annual rate of interest earned by the assets of the old-age and survivors insurance trust fund during the 12 months ending on June 30, 1977 was 6.9 percent. (This period is used 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 1977 was 7⅛ percent, payable semiannually.

The 1956 amendments provided that the public-debt obligations issued for purchase by the old-age and survivors insurance trust fund and the disability insurance trust fund shall have maturities fixed with due regard for the needs of the funds. Under these amendments, the general practice in the past was to spread the maturity dates for the holdings of special issues as nearly as practicable in equal amounts over a 15-year period.

However, the interest rate on special issues acquired in June of each year 1966–77, as determined under section 201(d) of the Social Security Act, was higher than the maximum rate of 4¼ percent to which the interest rate on long-term issues (bonds) is generally limited. Thus, the former practice of spreading maturity dates over a 15-year period could not be followed, beginning with special issues acquired in June 1966, until the enactment of Public Law 93–53 on July 1, 1973. Accordingly, the entire amounts available for investment in June of each year 1966–73 were invested in short-term issues (notes). As a result at the end of fiscal year 1977, the old-age and survivors insurance trust fund still held $326 million in a special issue consisting of a 7-year note that will mature on June 30, 1980 (table 6).

On June 30, 1974, the investment practice in effect before 1966 was reinstated. As a result, the old-age and survivors insurance trust fund held $24,177 million in special issues at the end of September 1977 that were acquired in 1974–77 and were distributed in virtually equal amounts of about $2,015 million maturing in each of the years 1981–1992 (table 6). The investment operations of the fund in fiscal years 1976 and earlier are described in the 1977, and earlier, annual reports.

Summary of the Operations of the Federal Disability Insurance Trust Fund, Fiscal Year 1977

A statement of the income and disbursements of the Federal Disability Insurance Trust Fund during fiscal year 1977 (which began on October 1, 1976 and ended on September 30, 1977), and of the assets of the fund at the beginning and end of the fiscal year is presented in table 7. Corresponding amounts for the transition quarter July-September 1976 (which were not presented in last year's annual report) are also shown in the table.

The total assets of the disability insurance trust fund amounted to $6,459 million on September 30, 1976. During fiscal year 1977, total receipts amounted to $9,375 million and total disbursements were $11,590 million. The assets of the trust fund thus decreased $2,215 million during the year to a total of $4,243 million on September 30, 1977.

Included in total receipts were $8,134 million representing contributions appropriated to the fund, and $805 million representing amounts received by the Secretary of the Treasury in accordance with State coverage agreements and deposited in the fund. As an offset, $39 million was transferred from the trust fund into the Treasury as repayment for the estimated amount of contributions subject to refund to employees who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum earnings base.

Net contributions amounted to $8,900 million, an increase of 10.2 percent over the amount of $8,076 million for the preceding 12-month period. This increase is accounted for by the same factors that accounted for the increase in contributions to the old-age and survivors insurance trust fund (described in the preceding section).

In addition, the trust fund received $103 million in December from the general fund of the Treasury, as reimbursement for the costs of noncontributory credits for military service. Of this amount, $92 million was reimbursed in accordance with section 217(g) and $11 million was in accordance with section 229(b), as described in the preceding section.

Provisions governing the financial interchanges between the railroad retirement account and the disability insurance trust fund are similar to those referred to in the preceding section relating to the old-age and survivors insurance trust fund. The determination made as of June 30, 1976, required that a transfer of $300,000 be made from the railroad retirement account to the disability insurance trust fund. This amount was transferred to the trust fund in June 1977, together with interest to the date of transfer amounting to $18,000.

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Provisions governing the financial interchanges between the railroad retirement account and the disability insurance trust fund are similar to those referred to in the preceding section relating to the old-age and survivors insurance trust fund. The determination made as of June 30, 1976, required that a transfer of $300,000 be made from the railroad retirement account to the disability insurance trust fund. This amount was transferred to the trust fund in June 1977, together with interest to the date of transfer amounting to $18,000.

TABLE 7.—STATEMENT OF OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND DURING THE TRANSITION QUARTER, JULY–SEPTEMBER 1976, AND DURING FISCAL YEAR 1977

[In thousands]

	July–September 1976	Fiscal year 1977
Total assets of the trust fund, beginning of period	$6,939,330	$6,458,609
Receipts:		
Contributions:		
Appropriations	1,873,228	8,133,602
Deposits arising from State agreements	285,823	805,160
Gross contributions	2,159,051	8,938,762
Less payment into the Treasury for contributions subject to refund		39,260
Net contributions	2,159,051	8,899,502
Reimbursement from general fund of the Treasury for costs of noncontributory credits for military service		103,000
Interest:		
Interest on investments	13,294	374,008
Interest on amounts transferred from the old-age and survivors insurance trust fund due to adjustment in allocation of costs of vocational rehabilitation services		95
Gross interest	13,294	374,103
Less interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs		2,362
Net interest	13,294	371,741
Transfer from railroad retirement account		318
Total receipts [1]	2,172,345	9,374,562
Disbursements:		
Benefit payments	2,555,020	11,135,237
Payment for costs of vocational rehabilitation services for disabled beneficiaries:		
For the current period	27,293	77,849
Less transfer from the old-age and survivors insurance trust fund due to adjustment in allocation of costs for fiscal year 1976 and the transition quarter		705
Total payment for costs of vocational rehabilitation services	27,293	77,144
Administrative expenses:		
Department of Health, Education, and Welfare	65,589	329,044
Treasury Department	3,404	17,912
Construction of facilities for Social Security Administration	1,623	116
Expenses of the Department of Health, Education, and Welfare for administration of vocational rehabilitation program for disabled beneficiaries	138	552
Interfund transfers due to adjustment in allocation of administrative expenses		31,692
Gross administrative expenses	70,753	379,361
Less interfund transfers due to adjustment in allocation of costs of construction		1,687
Less receipts from sales of supplies, materials, etc		14
Net administrative expenses	70,753	377,659
Total disbursements	2,653,066	11,590,040
Net addition to the trust fund	−480,721	−2,215,478
Total assets of the trust fund, end of period	6,458,609	4,243,131

[1] Includes gifts amounting to $100 during the transition quarter.

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

The remaining $372 million of receipts consisted of interest on the investments of the fund, plus net interest on amounts of interfund transfers.

Of the $11,590 million in total disbursements, $11,135 million was for benefit payments, an increase of 16.5 percent over the corresponding amount of $9,561 million paid in the preceeding 12-month period.

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This increase is accounted for by the same factors insofar as they apply to disabled-worker beneficiaries and their dependents, that resulted in the increase in benefit payments from the old-age and survivors insurance trust fund (described in the preceding section).

The remaining disbursements amounted to $378 million for net administrative expenses and $77 million for the costs of vocational rehabilitation services furnished to disabled-worker beneficiaries and to those dependents of disabled workers who are receiving benefits on the basis of disabilities that have continued since childhood.

As stated in an earlier section, the total amount of funds that may be made available in a fiscal year for payment for the costs of vocational rehabilitation services may not exceed a specified percentage of the benefits certified for payment in the preceding fiscal year from the old-age and survivors insurance and disability insurance trust funds to disabled persons receiving benefits because of their disability. This statutory limitation on the amounts to be made available was 1¼ percent in fiscal year 1973 and 1½ percent in fiscal years 1974 and later. Beginning with payments for fiscal year 1977, the funds made available for vocational rehabilitation costs are further curtailed by limitations in the Budget of the United States for each year. The data presented below show the relationship between the total amount of payments for the costs of such rehabilitation services for each fiscal year, 1973–75, and the corresponding amount of benefits paid in the prior fiscal year from the trust funds to disabled beneficiaries. The table also shows the amount of payments for costs of rehabilitation services for the 15-month period July 1975 through September 1976 related to the amount of benefits paid to disabled beneficiaries in the corresponding earlier 15-month period July 1974 through September 1975. The table also shows the relationship between the costs of rehabilitation services for fiscal year 1977 and benefits paid in the preceding 12-month period October 1975 through September 1976.

Fiscal year to which costs of rehabilitation services are charged	Amount of payments for costs of rehabilitation services [1] (in thousands)	Estimated amount of benefit payments in preceding fiscal year to disabled beneficiaries (in thousands)	Payments for costs of rehabilitation services as percent of preceding year's benefit payments
1973	$30,308	$3,629,590	0.84
1974	51,443	4,643,016	1.11
1975	78,561	5,533,493	1.42
July 1975—September 1976 [2]	116,895	8,824,547	1.32
1977 [3]	52,041	8,545,798	.61

[1] The amounts shown represent the expenditures for a fiscal year and differ from amounts expended in a fiscal year as shown in accounting statements of the trust funds on a cash basis. The amount shown for each fiscal year is subject to further change.

[2] The amount of payments for costs of rehabilitation services represents the total amount for the 15-month period July 1975, through September 1976. The estimated amount of benefit payments to disabled beneficiaries represents total payments during the corresponding 15-month period July 1974 through September 1975.

[3] The estimated amount of benefit payments to disabled beneficiaries represents total payments during the preceding 12-month period October 1975 through September 1976.

At the end of fiscal year 1977, some 4.8 million persons were receiving monthly benefits from the disability insurance trust fund. The distribution of benefit payments in the transition quarter and in fiscal year 1977, by type of beneficiary, is shown in table 8.

TABLE 8.—ESTIMATED DISTRIBUTION OF BENEFIT PAYMENTS FROM THE DISABILITY INSURANCE TRUST FUND, BY TYPE OF BENEFICIARY, IN THE TRANSITION QUARTER, JULY-SEPTEMBER 1976, AND IN FISCAL YEAR 1977

[Dollar amounts in millions]

	July-September 1976		Fiscal year 1977	
	Amount	Percent of total	Amount	Percent of total
Total	$2,555.0	100	$11,135.2	100
Disabled workers	2,102.1	82	9,180.4	82
Wives and husbands	114.8	4	490.6	4
Children	338.1	13	1,464.3	13

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

The assets of this fund at the end of the transition quarter July-September 1976 totaled $6,459 million, consisting of $6,451 million in the form of obligations of the U.S. Government and an undisbursed balance of $7 million. The assets of the fund at the end of fiscal year 1977 totaled $4,243 million, consisting of $4,240 million in the form of obligations of the U.S. Government and an undisbursed balance of $3 million. Table 9 shows a comparison of the total assets of the fund and their distribution at the end of the transition quarter and at the end of fiscal year 1977.

TABLE 9.—ASSETS OF THE DISABILITY INSURANCE TRUST FUND, BY TYPE, AT THE END OF THE TRANSITION QUARTER, JULY-SEPTEMBER 1976, AND AT THE END OF FISCAL YEAR 1977

	September 30, 1976		September 30, 1977	
	Par value	Book value [1]	Par value	Book value [1]
Investments in public-debt obligations:				
Public issues:				
Treasury notes:				
6-percent, 1978	$2,000,000	$2,001,643.74	$2,000,000	$2,000,885.10
6¼-percent, 1978	2,000,000	2,001,363.46	2,000,000	2,000,340.94
7¾-percent, 1977	14,000,000	13,995,783.29		
8-percent, 1977	10,000,000	10,000,000.00		
Treasury bonds:				
3½-percent, 1990	10,500,000	10,131,100.43	10,500,000	10,158,767.99
3½-percent, 1998	5,000,000	4,770,178.55	5,000,000	4,780,585.55
4-percent, 1980	30,250,000	30,247,218.68	30,250,000	30,248,052.56
4⅛-percent, 1989-94	68,400,000	67,814,353.23	68,400,000	67,847,660.07
4¼-percent, 1975-85	20,795,000	20,782,351.58	20,795,000	20,783,825.06
4¼-percent, 1987-92	80,800,000	80,897,798.76	80,800,000	80,888,771.28
6⅜-percent, 1984	15,000,000	15,042,949.96	15,000,000	15,037,524.64
7½-percent, 1988-93	26,500,000	25,850,904.32	26,500,000	25,889,274.44
7⅝-percent, 2002-07			10,000,000	9,994,165.52
8-percent, 1996-2001	26,000,000	25,972,365.46	26,000,000	25,973,478.22
8¼-percent, 2000-05	3,750,000	3,730,346.21	3,750,000	3,731,031.77
Total investments in public issues	314,995,000	313,238,357.67	300,995,000	299,334,363.14

See footnote at end of table.

TABLE 9.—ASSETS OF THE DISABILITY INSURANCE TRUST FUND, BY TYPE, AT THE END OF THE TRANSITION QUARTER, JULY-SEPTEMBER 1976, AND AT THE END OF FISCAL YEAR 1977—Continued

	September 30, 1976		September 30, 1977	
	Par value	Book value [1]	Par value	Book value [1]
Investments in public-debt obligations—Continued				
Obligations sold only to this fund (special issues):				
Certificates of indebtedness:				
7-percent, 1978			$710,032,000	$710,032,000.00
$7\frac{1}{8}$ percent, 1977	$724,491,000	$724,491,000.00		
Notes:				
$5\frac{3}{4}$-percent, 1979	1,058,617,000	1,058,617,000.00		
$6\frac{1}{8}$-percent, 1978	452,652,000	452,652,000.00		
$6\frac{5}{8}$-percent, 1980	943,266,000	943,266,000.00		
Bonds:				
$7\frac{1}{8}$-percent, 1982			5,830,000	5,830,000.00
$7\frac{1}{8}$-percent, 1983			5,830,000	5,830,000.00
$7\frac{1}{8}$-percent, 1984			5,830,000	5,830,000.00
$7\frac{1}{8}$-percent, 1985			5,380,000	5,830,000.00
$7\frac{1}{8}$-percent, 1986			5,830,000	5,830,000.00
$7\frac{1}{8}$-percent, 1987			5,831,000	5,831,000.00
$7\frac{1}{8}$-percent, 1988			5,831,000	5,831,000.00
$7\frac{1}{8}$-percent, 1989			5,831,000	5,831,000.00
$7\frac{1}{8}$-percent, 1990			5,831,000	5,831,000.00
$7\frac{1}{8}$-percent, 1991			5,831,000	5,831,000.00
$7\frac{1}{8}$-percent, 1992			274,851,000	274,851,000.00
$7\frac{3}{8}$-percent, 1981	84,338,000	84,338,000.00	22,839,000	22,839,000.00
$7\frac{3}{8}$-percent, 1982	84,338,000	84,338,000.00	84,338,000	84,338,000.00
$7\frac{3}{8}$-percent, 1983	84,338,000	84,338,000.00	84,338,000	84,338,000.00
$7\frac{3}{8}$-percent, 1984	84,338,000	84,338,000.00	84,338,000	84,338,000.00
$7\frac{3}{8}$-percent, 1985	84,338,000	84,338,000.00	84,338,000	84,338,000.00
$7\frac{3}{8}$-percent, 1986	84,338,000	84,338,000.00	84,338,000	84,338,000.00
$7\frac{3}{8}$-percent, 1987	84,338,000	84,338,000.00	84,338,000	84,338,000.00
$7\frac{3}{8}$-percent, 1988	84,337,000	84,337,000.00	84,337,000	84,337,000.00
$7\frac{3}{8}$-percent, 1989	84,337,000	84,337,000.00	84,337,000	84,337,000.00
$7\frac{3}{8}$-percent, 1990	206,000,000	206,000,000.00	206,000,000	206,000,000.00
$7\frac{1}{2}$-percent, 1981	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1982	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1983	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1984	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1985	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1986	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1987	63,019,000	63,019,000.00	63,019,000	63,019,000.00
$7\frac{1}{2}$-percent, 1988	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1989	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1990	63,020,000	63,020,000.00	63,020,000	63,020,000.00
$7\frac{1}{2}$-percent, 1991	269,020,000	269,020,000.00	269,020,000	269,020,000.00
$7\frac{5}{8}$-percent, 1981	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1982	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1983	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1984	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1985	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1986	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1987	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1988	121,663,000	121,663,000.00	121,663,000	121,663,000.00
$7\frac{5}{8}$-percent, 1989	121,663,000	121,663,000.00	121,663,000	121,663,000.00
Total obligations sold only to this fund (special issues)	6,138,252,000	6,138,252,000.00	3,940,915,000	3,940,915,000.00
Total investments in public-debt obligations	6,453,247,000	6,451,490,357.67	4,241,910,000	4,240,249,363.14
Undisbursed balances		7,118,361.32		2,881,258.19
Total assets		6,458,608,718.99		4,243,130,621.33

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

The net decrease in the par value of the investments owned by the fund during the transition quarter amounted to $477 million. New securities at a total par value of $2,200 million were acquired during the transition quarter through the investment of receipts. All of these new securities were certificates of indebtedness. The par value of securities redeemed during the transition quarter was $2,678 million, including $1,476 million in certificates of indebtedness. In addition, $26 million in 7½-percent notes maturing in August 1976 were exchanged for equal amounts of 8-percent bonds maturing in August 2001. The net decrease in the par value of the investments owned by the fund during fiscal year 1977 amounted to $2,211 million. New securities at a total par value of $9,965 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 $12,176 million. Included in these amounts is $9,076 million in certificates of indebtedness that were acquired, and $9,091 million in certificates of indebtedness that were redeemed, within the fiscal year.

The effective annual rate of interest earned by the assets of the disability insurance trust fund during the 12 months ending on June 30, 1977, was 7.0 percent. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1977 was 7⅛ percent, payable semiannually.

The investment policy and practices described in the preceding section concerning the old-age and survivors insurance trust fund apply equally to investments of the assets of the disability insurance trust fund.

Actuarial Cost Projections

Section 201(c) of the Social Security Act requires that the Board of Trustees report annually to the Congress on the operations and status of the OASI and DI trust funds during the preceding fiscal year and on the expected operations and status of those trust funds during the ensuing 5 fiscal years. Such information for the fiscal year that ended September 30, 1977, is presented in the two preceding sections of this report.

Section 201(c) of the Social Security Act also requires that the annual report of the Board of Trustees include "a statement of the actuarial status of the trust funds". Such estimates have customarily been made about the acturarial status of the system over three selected periods, namely, short-range (5 years), medium-range (25 years), and long-range (75 years), with each period commencing with the year of the issuance of the report. The medium-range and long-range actuarial statuses have been measured by the differences between the average of the tax rates scheduled in the law and the estimated average future expenditures, expressed as percentages of taxable payroll, for the 25-year and 75-year periods, respectively. These differences are referred to as the medium-range and long-range actuarial balances. Information of the current actuarial statuses is shown in later sections. Information on the methods used to project future expenditures is presented in appendix A.

When considering the year-by-year operations of either trust fund, significant attention is devoted to whether the system is operating under annual surpluses (when the income exceeds the expenditures) or under annual deficits (when the expenditures exceed the income). Attention is also given to the level of the trust fund ratio—that is, to the ratio of the trust fund assets at the beginning of a year to the trust fund expenditures during that year—although there is no general agreement as to the appropriate level of that ratio.

There is general agreement that the OASDI system should be financed on the basis of a "current-cost" method, under which the taxes collected each year are intended to be approximately equal to the expenditures during the year plus a small additional amount needed to maintain the trust funds at appropriate contingency reserve levels. Under this financing method the assets of the trust funds are intended to play the relatively minor role of absorbing temporary excesses of expenditures over income that may occur during periods of adverse economic conditions and to allow time for executive and legislative action if substantive changes in program and financing are needed.

Basic to the discussion of the medium-range or long-range actuarial status of either trust fund is the concept of expenditures as a 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 contribution rates on self-employment income, tips, and multiple-employer "excess wages." This adjustment is made so that the expenditures expressed as percent of taxable payroll—that is, the expenditures divided by the taxable payroll and expressed as a percentage—will be comparable to the combined employer-employee tax rate in the law.

When considering the medium-range or long-range actuarial status of either trust fund, interest generally centers around whether the system has an "actuarial surplus" (when the average of the scheduled tax rates exceeds the estimated average expenditures) or an "actuarial deficit" (when the estimated average expenditures exceeds the average of the scheduled tax rates). In recent years the system has been considered 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 of the estimated average expenditures (either higher or lower).

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

Economic and Demographic Factors and Assumptions

Actual future income and expenditures will depend upon many economic and demographic factors. Future income will depend upon the size and composition of the working population and the level of earnings, which depend in turn upon fertility rates, mortality rates, migration rates, labor force participation rates, unemployment rates, wage patterns, etc. Future expenditures will depend upon the size and composition of the beneficiary population and the level of benefits, which depend in turn upon retirement rates, mortality rates, disability rates, fertility rates, marriage rates, changes in the Consumer Price Index, etc.

In addition, because of the automatic adjustment provisions in the Social Security Act, economic conditions have a direct effect on the operations and status of the trust funds. Under those provisions, economic conditions directly affect benefit levels, the contribution and benefit base (i.e., the maximum amount of a worker's annual earnings that is taxable and creditable toward benefits), the annual exempt amounts in the retirement test (i.e., the maximum amounts, depending on age, that a beneficiary may earn in a year and still receive all of his benefits for the year), the amount of earnings needed to obtain a quarter of coverage, and the indexing of individual earnings records and of the benefit formula. Indirectly, economic conditions affect the program through levels of employment and the resulting amount of taxable earnings.

It is obviously impossible to know what the future holds with respect to these economic and demographic factors. The best that can be done is to make assumptions about the future behavior of these factors in an objective manner based on current understanding of such behavior. Cost projections based on such assumptions are a useful indicator of the trend and range of future income and expenditures. However, due to the inherent uncertainty about future economic and demographic conditions, any such projection is subject to appreciable error, depending on the length of the projection period. Consequently, the projection shown in this report cannot be considered exact predictions of emerging experience. Nonetheless, such projections, if revised periodically to reflect changes in experience and the interpretation thereof, provide information which is essential for making informed policy decisions.

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, since the selection of demographic assumptions implies a certain future composition of the U.S. population, many of the nation's social and economic arrangements may change substantially. Although beyond the scope of this report, it is desirable to view medium-range and long-range financing issues from a perspective that is broad enough to encompass an understanding of how the OASDI program is likely to change as society itself changes in the next 25 to 75 years.

Because of the uncertainties about future economic and demographic developments, estimates are presented in this report based on three different 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 respectively characterized as more "optimistic" and more "pessimistic" than alternative II. For ease of reference, alternatives I and III are sometimes referred to as the optimistic and pessimistic sets of assumptions (or, more briefly, the optimistic and pessimistic assumptions), respectively. Table 10 provides details of the economic and demographic factors that are assumed to differ among the three alternatives. The assumed rate of growth in real gross national product (GNP) is also shown in table 10. The rate of growth in real GNP is a measure of growth in the real level of economic activity, reflecting changes in employment levels, average earnings, etc., all of which affect total earnings taxable under the OASDI program.

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.

TABLE 10.—VALUES OF SELECTED ECONOMIC AND DEMOGRAPHIC FACTORS ASSUMED IN ALTERNATIVES I, II, AND III, BY CALENDAR YEAR

Calendar year	Percentage increase in average annual— Real GNP [1]	Wages in covered employment	Consumer Price Index (CPI)	Real wage differential [2]	Average annual unemployment rate	Total fertility rate [3]
Alternative I:						
1977	4.9	7.7	6.5	1.2	7.0	1,789.5
1978	4.7	7.2	6.1	1.1	6.3	1,764.6
1979	5.1	8.4	6.0	2.4	5.9	1,793.8
1980	5.5	8.1	5.5	2.6	5.3	1,822.9
1981	5.5	7.6	5.0	2.6	4.9	1,852.1
1982	5.1	7.4	4.5	2.9	4.3	1,881.2
1983	4.0	7.1	4.0	3.1	4.0	1,910.4
1984	2.7	6.0	3.5	2.5	4.2	1,940.0
1985	3.0	5.5	3.0	2.5	4.5	1,970.5
1986	3.3	5.5	3.0	2.5	4.5	2,002.5
1987	3.3	5.5	3.0	2.5	4.5	2,036.0
1988	3.3	5.5	3.0	2.5	4.5	2,070.2
1989	(1)	5.5	3.0	2.5	4.5	2,104.3
1990	(1)	5.5	3.0	2.5	4.5	2,137.3
1991	(1)	5.5	3.0	2.5	4.5	2,168.3
1992	(1)	5.4	3.0	2.4	4.5	2,196.3
1993	(1)	5.4	3.0	2.4	4.5	2,220.7
1994	(1)	5.4	3.0	2.4	4.5	2,241.1
1995	(1)	5.4	3.0	2.4	4.5	2,257.6
1996	(1)	5.3	3.0	2.3	4.5	2,270.6
1997	(1)	5.3	3.0	2.3	4.5	2,280.5
1998	(1)	5.3	3.0	2.3	4.5	2,287.8
1999	(1)	5.3	3.0	2.3	4.5	2,292.8
2000	(1)	5.25	3.0	2.25	4.5	2,296.1
2001	(1)	5.25	3.0	2.25	4.5	2,298.0
2002	(1)	5.25	3.0	2.25	4.5	2,299.1
2003	(1)	5.25	3.0	2.25	4.5	2,299.6
2004	(1)	5.25	3.0	2.25	4.5	2,299.9
2005 and later	(1)	5.25	3.0	2.25	4.5	2,300.0
Alternative II: [4]						
1977	4.9	7.7	6.5	1.2	7.0	1,789.5
1978	4.7	7.2	6.1	1.1	6.3	1,758.4
1979	4.8	7.9	6.1	1.8	5.9	1,775.1
1980	4.8	7.9	5.7	2.2	5.4	1,791.7
1981	5.1	7.4	5.2	2.2	5.0	1,808.4
1982	4.1	7.4	5.0	2.4	4.8	1,825.1
1983	3.5	7.1	4.7	2.4	4.6	1,841.8
1984	2.5	6.1	4.1	2.0	4.8	1,858.8
1985	3.0	6.0	4.0	2.0	5.0	1,876.9
1986	3.0	6.0	4.0	2.0	5.0	1,896.7
1987	3.1	6.0	4.0	2.0	5.0	1,918.2
1988	3.0	6.0	4.0	2.0	5.0	1,941.1
1989	(1)	6.0	4.0	2.0	5.0	1,964.5
1990	(1)	6.0	4.0	2.0	5.0	1,987.8
1991	(1)	6.0	4.0	2.0	5.0	2,009.9
1992	(1)	5.9	4.0	1.9	5.0	2,030.0
1993	(1)	5.9	4.0	1.9	5.0	2,047.5
1994	(1)	5.9	4.0	1.9	5.0	2,062.0
1995	(1)	5.9	4.0	1.9	5.0	2,073.7
1996	(1)	5.8	4.0	1.8	5.0	2,082.7
1997	(1)	5.8	4.0	1.8	5.0	2,089.5
1998	(1)	5.8	4.0	1.8	5.0	2,094.3
1999	(1)	5.8	4.0	1.8	5.0	2,097.4
2000	(1)	5.75	4.0	1.75	5.0	2,099.2
2001	(1)	5.75	4.0	1.75	5.0	2,100.1
2002	(1)	5.75	4.0	1.75	5.0	2,100.3
2003	(1)	5.75	4.0	1.75	5.0	2,100.3
2004	(1)	5.75	4.0	1.75	5.0	2,100.1
2005 and later	(1)	5.75	4.0	1.75	5.0	2,100.0

See footnotes at end of table.

Calendar year	Percentage increase in average annual— Real GNP [1]	Wages in covered employment	Consumer Price Index (CPI)	Real wage differential [2]	Average annual unemployment rate	Total fertility rate [3]
Alternative III:						
1977	4.9	7.7	6.5	1.2	7.0	1,789.5
1978	4.7	7.2	6.1	1.1	6.3	1,745.9
1979	4.1	8.2	6.8	1.4	6.0	1,737.6
1980	0.8	7.4	7.1	.3	7.0	1,729.2
1981	4.0	8.0	7.0	1.0	7.0	1,720.9
1982	4.0	8.3	6.5	1.8	6.6	1,712.6
1983	4.0	8.0	6.0	2.0	6.2	1,704.3
1984	4.0	7.0	5.5	1.5	5.8	1,696.4
1985	3.5	6.5	5.0	1.5	5.5	1,689.6
1986	2.8	6.5	5.0	1.5	5.5	1,684.9
1987	2.8	6.5	5.0	1.5	5.5	1,682.6
1988	2.7	6.5	5.0	1.5	5.5	1,682.7
1989	(1)	6.5	5.0	1.5	5.5	1,684.9
1990	(1)	6.5	5.0	1.5	5.5	1,688.6
1991	(1)	6.5	5.0	1.5	5.5	1,693.0
1992	(1)	6.4	5.0	1.4	5.5	1,697.3
1993	(1)	6.4	5.0	1.4	5.5	1,701.0
1994	(1)	6.4	5.0	1.4	5.5	1,703.9
1995	(1)	6.4	5.0	1.4	5.5	1,705.8
1996	(1)	6.3	5.0	1.3	5.5	1,706.9
1997	(1)	6.3	5.0	1.3	5.5	1,707.3
1998	(1)	6.3	5.0	1.3	5.5	1,707.1
1999	(1)	6.3	5.0	1.3	5.5	1,706.5
2000	(1)	6.25	5.0	1.25	5.5	1,705.4
2001	(1)	6.25	5.0	1.25	5.5	1,704.1
2002	(1)	6.25	5.0	1.25	5.5	1,702.8
2003	(1)	6.25	5.0	1.25	5.5	1,701.6
2004	(1)	6.25	5.0	1.25	5.5	1,700.5
2005 and later	(1)	6.25	5.0	1.25	5.5	1,700.0

[1] Based on GNP expressed in 1972 dollars (i.e., total output of goods and services adjusted for inflation since 1972). Not projected beyond 1988.
[2] Defined to be the difference between percentage increases in average annual wages and average annual CPI.
[3] Average number of children born per 1,000 women in their lifetime.
[4] As explained in the accompanying text, the economic assumptions for the years 1978–81 are similar to the assumptions underlying the President's 1979 budget.

The real level of economic activity is assumed to grow at differing rates under the three sets of assumptions. The economic recovery from the recession that began in 1974 is assumed to continue at a moderate rate under the intermediate assumptions (alternative II) and at a somewhat faster rate under the optimistic assumptions (alternative I). Under the pessimistic assumptions (alternative III), a pronounced slow-down in economic growth is assumed to begin in 1979 and to continue through 1980, accompanied by increased rates of inflation, with higher rates of economic growth resuming in 1981.

After 1979, under the intermediate assumptions, the assumed annual rate of growth in the real GNP rises to 5.1 percent in 1981 and then declines to about 3 percent by 1985. At the same time, the unemployment rate is assumed to decline to less than 5 percent in 1982 before rising by 1985 to the ultimate assumed rate of 5 percent. It is further assumed that the annual rate of increase in average wages in covered employment will fall to about 6 percent by 1984, remaining at 6 percent through 1991, and declining gradually thereafter until it reaches an ultimate level of 5 3/4 percent in the year 2000. The rate of increase in the average annual CPI is assumed to decline to 4 percent by 1985, under the intermediate assumptions.

Also under alternative II, the total fertility rate is projected to rise slowly from its assumed 1978 level to its assumed ultimate level of 2.1 children per woman around the year 2005. The effect of future fertility experience on short-range and medium-range projections is

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relatively minor because few of the projected births produce covered workers or beneficiaries during the short-range or medium-range periods. However, the effect on the long-range projections is significant because the number of covered workers and beneficiaries during the the last 50 years of the long-range projection period is highly dependent on the projected fertility rates. (See appendix A for further information on the projection of fertility rates.)

Under alternative I, the assumed annual percentage increase in real GNP is generally higher than under alternative II. The assumed rate of unemployment after 1979 and the annual percentage increase in CPI after 1978 are lower. During 1979–82 the assumed annual percentage change in average wages in covered employment is higher declining to 5 1/2 percent by 1985 and to an ultimate level of 5 1/4 percent by 2000. Although the assumed rate of increase in average wages after 1982 is lower under the optimistic assumptions than under the intermediate assumptions, the real wage gains are higher because of lower assumed rates of inflation. The total fertility rate is projected to rise to a higher level under alternative I than under alternative II, that is, to 2.3 rather than 2.1 children per woman.

The assumptions of alternative III are presented in this report in order to show estimates under a set of less favorable economic conditions. As a result of the assumed slow-down in economic growth in 1979 and 1980, the rate of unemployment remains above 6 percent through 1983. Because of an assumed higher rate of inflation and lower rate of economic growth, gains in average real wages are lower under alternative III, than under the intermediate assumptions. Also, the ultimate total fertility rate of 1.7 projected under alternative III is lower than the ultimate rate of 2.1 projected under alternative II.

According to 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 only apply beginning with the year a worker reaches age 62, becomes disabled, or dies.

In the year immediately following each year in which an automatic cost-of-living benefit increase becomes effective, the contribution and benefit base, and the amounts of earnings exempted from the withholding of benefits under the retirement test, automatically increase in proportion to the increase in average wages.[1] An automatic cost-of-living benefit increase of 5.9 percent, effective for June 1977, was established in May 1977, as described in appendix B. Following this benefit increase, automatic increases in the contribution and benefit base, from $16,500 in 1977 to $17,700 in 1978, and in the annual exempt amount under the retirement test, from $3,000 in 1977 to $3,240 in 1978, were established in October 1977, as described in appendix C.

Under the automatic provisions of the law, the foregoing assumptions result in the following general benefit increases in each year 1979 through 1986 (when the assumed benefit increases, under all three sets of assumptions, reach their ultimate levels) and the following contribution and benefit bases for each year 1982 through 1986 (amounts for 1978, and the contribution and benefit base scheduled

[1] The amount of the contribution and benefit base for each year 1979–81, and the amount of the retirement test exempt amount for beneficiaries aged 65 and over for each year 1978–82, are specified in the law. (The age at which the retirement test ceases to apply is reduced from age 72 to age 70 beginning in 1982.)

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	6.1	6.1	6.4	22,900	22,900	22,900
1980	5.8	5.9	7.3	25,900	25,900	25,900
1981	5.2	5.4	6.8	29,700	29,700	29,700
1982	4.6	5.0	6.8	32,100	32,100	31,800
1983	4.2	4.9	6.2	34,500	34,500	34,200
1984	3.7	4.3	5.7	37,200	36,900	37,200
1985	3.1	4.0	5.1	39,900	39,600	40,200
1986	3.0	4.0	5.0	42,300	42,000	42,900

[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 1979–81. After 1981, the amount increases under the automatic provisions.

In preparing the intermediate set of assumptions (alternative II), the economic assumptions for 1978 and 1979 that appear on page 31 of the President's 1979 Budget were adopted with one exception—a somewhat larger increase in the average annual CPI in the first quarter of 1978 is assumed in this report because of recent actual experience. As a result of these recent higher increases in the CPI, the automatic benefit increase for June 1978, which was determined to be 6.5 percent after the Budget was completed, is higher than the 6.2 percent increase assumed for the 1979 Budget. In addition, the assumptions adopted for 1980 and 1981 are similar to the Budget assumptions.

Based on the automatic provisions of the law, the estimated changes through 1986 in the annual exempt amount under the retirement test, both for beneficiaries under age 65 and for beneficiaries aged 65 and over (after 1982), are as follows:

ANNUAL EXEMPT AMOUNTS UNDER THE RETIREMENT TEST [1]

Year	Annual exempt amount for beneficiaries under age 65 under alternative—			Annual exempt amount for beneficiaries aged 65 and over [3] under alternative—		
	I	II	III	I	II	III
1978	$3,240	$3,240	$3,240	$4,000	$4,000	$4,000
1979	3,480	3,480	3,480	4,500	4,500	4,500
1980	3,720	3,720	3,720	5,000	5,000	5,000
1981	4,080	3,960	4,080	5,500	5,500	5,500
1982	4,440	4,320	4,440	6,000	6,000	6,000
1983	4,800	4,680	4,800	6,480	6,480	6,480
1984	5,160	5,040	5,160	6,960	6,960	7,080
1985	5,520	5,400	5,520	7,440	7,440	7,680
1986	5,880	5,760	5,880	7,920	7,920	8,160

[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.

Expected Operations and Status of the Trust Funds During the Period October 1, 1977, to December 31, 1982

The following statement of the expected operations and status of the trust funds during the period October 1, 1977, to December 31, 1982, 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 1978–82. Thus, the estimates do not reflect the effects of proposed changes in the regulations governing the frequency and timing of contributions from State and local governments.

Estimates of the operations and status of the old-age and survivors insurance trust fund during calendar years 1978–82 are shown in table 11 for each of the three alternative sets of assumptions that were described in the preceding section. Actual data for calendar year 1977 are also shown in the table. Under each alternative, it is assumed that employment and earnings will increase in every year through 1982. The number of persons with taxable earnings under the old-age, survivors, and disability insurance program is expected to increase from 106 million with such earnings during calendar year 1977 to about 122 million during calendar year 1982 under the intermediate assumptions. Under alternatives I and III, the number of persons with taxable earnings is estimated to reach 122 million and 118 million, respectively, by 1982. The total annual amount of taxable earnings is expected to increase from $820 billion in 1977 to $1,437 billion in 1982 under the intermediate assumptions. Under alternatives I and III, taxable earnings in 1982 are estimated to be $1,457 billion and $1,406 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 increase in the base assumed to occur in 1982 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 11.—ESTIMATED OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND DURING CALENDAR YEARS 1977–82 UNDER THREE 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:					
1977 [1]	$72.4	$75.3	−$2.9	$32.5	47
1978	78.1	83.7	−5.7	26.8	39
1979	90.4	92.6	−2.2	24.7	29
1980	101.8	102.1	−.4	24.3	24
1981	118.2	111.9	6.3	30.6	22
1982	132.7	122.0	10.7	41.3	25
Alternative II:					
1977 [1]	72.4	75.3	−2.9	32.5	47
1978	78.1	83.7	−5.7	26.8	39
1979	90.1	92.6	−2.5	24.3	29
1980	101.0	102.2	−1.2	23.1	24
1981	117.1	112.1	5.0	28.1	21
1982	130.7	122.6	8.1	36.2	23
Alternative III:					
1977 [1]	72.4	75.3	−2.9	32.5	47
1978	78.1	83.7	−5.7	26.8	39
1979	90.2	92.7	−2.6	24.3	29
1980	99.0	103.4	−4.4	19.9	23
1981	113.7	114.8	−1.1	18.8	17
1982	127.0	127.3	−.3	18.5	15

[1] Figures for 1977 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 table 10.

The rise in estimated income shown in table 11 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 1978–82 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 1982. This decline would continue, under alternative III, until the scheduled increase in contribution rates in 1985.

The assets of the trust fund at the beginning of calendar year 1977 were equal to about 47 percent of expenditures during the year 1977. By the beginning of 1978, the assets of the fund had declined to 39 percent of estimated expenditures in 1978. Under alternatives I and II, the fund's assets, as a percentage of annual expenditures, are estimated to decline to 22 percent and 21 percent, respectively, by the beginning of 1981 and to rise to 25 percent and 23 percent, respectively, by the beginning of 1982. Under alternative III, it is estimated that the fund's assets would decline to 15 percent of annual expenditures by the beginning of 1982.

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 new 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 1978–82 under the three sets of assumptions are shown in table 12, together with figures on actual experience in 1977. Income will increase during calendar years 1978–82, under each alternative, reflecting the same factors, insofar as they apply to income to the disability insurance trust fund, that are reflected in the increase in income to the old-age and survivors insurance 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.

TABLE 12.—ESTIMATED OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND DURING CALENDAR YEARS 1977–82 UNDER THREE ALTERNATIVE SETS OF ASSUMPTIONS

[Dollar 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:					
1977 [1]	$9.6	$11.9	−$2.4	$3.4	48
1978	13.8	13.3	.5	3.8	25
1979	15.7	15.2	.5	4.3	25
1980	17.7	17.1	.6	5.0	25
1981	21.6	19.0	2.6	7.6	26
1982	24.2	20.9	3.3	10.9	36
Alternative II:					
1977 [1]	9.6	11.9	−2.4	3.4	48
1978	13.8	13.3	.5	3.8	25
1979	15.7	15.2	.5	4.3	25
1980	17.6	17.1	.5	4.8	25
1981	21.4	19.0	2.4	7.2	25
1982	23.8	21.0	2.8	10.0	34
Alternative III:					
1977 [1]	9.6	11.9	−2.4	3.4	48
1978	13.8	13.3	.5	3.8	25
1979	15.7	15.2	.4	4.3	25
1980	17.2	17.4	−.1	4.1	25
1981	20.8	19.6	1.2	5.3	21
1982	23.2	21.9	1.3	6.6	24

[1] Figures for 1977 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 table 10.

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 assumed continued increases in disability incidence rates. However, because of recent trends in disability incidence rates, the projected incidence rates were assumed to be lower than the rates projected for the 1977 annual report.

The expected operations and status of the old-age and survivors insurance and disability insurance trust funds, combined, during each calendar year 1978–82, under the three alternatives, are shown in table 13, together with figures on actual experience in 1977.

TABLE 13.—ESTIMATED OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, COMBINED, DURING CALENDAR YEARS 1977–82 UNDER THREE ALTERNATIVE SETS OF ASSUMPTIONS

[Dollar 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:					
1977 [1]	$82.0	$87.3	−$5.3	$35.9	47
1978	91.8	97.1	−5.2	30.6	37
1979	106.2	107.8	−1.6	29.0	28
1980	119.5	119.2	.3	29.3	24
1981	139.8	130.9	9.0	38.2	22
1982	156.9	142.9	14.0	52.2	27

TABLE 13.—ESTIMATED OPERATIONS OF THE OLD AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS COMBINED DURING CALENDAR YEARS 1977–82 UNDER 3 ALTERNATIVE SETS OF ASSUMPTIONS—Con.

[Dollar 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 II:					
1977 [1]	$82.0	$87.3	−$5.3	$35.9	47
1978	91.8	97.1	−5.2	30.6	37
1979	105.8	107.8	−2.0	28.6	28
1980	118.6	119.3	−.7	27.9	24
1981	138.5	131.1	7.4	35.3	21
1982	154.5	143.6	10.9	46.2	25
Alternative III:					
1977 [1]	82.0	87.3	−5.3	35.9	47
1978	91.8	97.1	−5.2	30.6	37
1979	105.9	108.0	−2.1	28.5	28
1980	116.2	120.7	−4.5	24.0	24
1981	134.5	134.4	.1	24.1	18
1982	150.2	149.3	1.0	25.1	16

[1] Figures for 1977 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 table 10.

Expenditures in calendar year 1977, from both trust funds combined, were 10.89 percent of taxable earnings for the year—0.99 percent more than the combined employee-employer contribution rate of 9.90 percent. After 1979 expenditures from both trust funds, combined, are estimated to decline from 10.94 percent of taxable earnings in 1978 to 10.17 percent in 1981 and to increase to 10.18 percent of taxable earnings in 1982, under the intermediate set of assumptions. These percentages, as well as the percentages under alternatives I and III, are shown in table 14 for both trust funds combined and for each trust fund separately. Table 14 also shows a comparison of each of the percentages with the corresponding combined employee-employer contribution rate.

As stated previously, estimates of the operations of the trust funds during calendar years 1978–82 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 1978–82 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 1978–82.

Data on the actual operations of the old-age and survivors insurance trust fund for selected years during the period 1940–77, and estimates of the expected operations of the trust fund during 1978–82 under the intermediate set of assumptions, are shown in tables 15 and 16 on a fiscal year basis and a calendar year basis, respectively. Corresponding figures on the operations of the disability insurance trust fund during the period 1960–82 are shown in tables 17 and 18.[1] Operations of both trust funds combined are shown in tables 19 and 20.

[1] Data relating to the operations of the two trust funds for years not shown in tables 15–18 are contained in earlier annual reports.

TABLE 14.—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 1977–82 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:									
1977 [3]	9.40	8.75	−0.65	1.49	1.15	−0.34	10.89	9.90	−0.99
1978	9.44	8.55	−.89	1.50	1.55	.05	10.94	10.10	−.84
1979	8.94	8.66	.28	1.47	1.50	.03	10.41	10.16	−.25
1980	8.79	8.66	−.13	1.47	1.50	.03	10.26	10.16	−.10
1981	8.60	9.05	.45	1.46	1.65	.19	10.06	10.70	.64
1982	8.53	9.15	.62	1.46	1.65	.19	9.99	10.80	.81
Alternative II:									
1977 [3]	9.40	8.75	−.65	1.49	1.15	−.34	10.89	9.90	−.99
1978	9.44	8.55	−.89	1.50	1.55	.05	10.94	10.10	−.84
1979	8.98	8.66	−.32	1.48	1.50	.02	10.45	10.16	−.29
1980	8.86	8.66	−.20	1.48	1.50	.02	10.34	10.16	−.18
1981	8.69	9.05	.36	1.48	1.65	.17	10.17	10.70	.53
1982	8.69	9.15	.46	1.49	1.65	.16	10.18	10.80	.62
Alternative III:									
1977 [3]	9.40	8.75	−.65	1.49	1.15	−.34	10.89	9.90	−.99
1978	9.44	8.55	−.89	1.50	1.55	.05	10.94	10.10	−.84
1979	8.98	8.66	−.32	1.48	1.50	.02	10.46	10.16	−.30
1980	9.15	8.66	−.49	1.54	1.50	−.04	10.69	10.16	−.53
1981	9.14	9.05	−.09	1.56	1.65	.09	10.70	10.70	(4)
1982	9.22	9.15	−.07	1.59	1.65	.06	10.81	10.80	−.01

[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 only the employee contribution is payable on tips taxable as wages before 1978 and the employer contribution is payable on only a portion of such tips after 1977. For 1977, 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, 1978 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 1977–82 are shown in tables 11–13.

[3] Percentages for 1977, though based on actual experience, are preliminary and subject to revision.

[4] Expenditures as a percentage of taxable payroll exceeds the contribution rate by less than 0.005.

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TABLE 15.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND DURING SELECTED FISCAL YEARS 1940–77 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1978–82 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

	Transactions during period											
	Income					Disbursements						
			Reimbursements from general fund of Treasury for costs of—									
Fiscal year [1]	Total	Contributions, less refunds	Noncontributory credits for military service	Payments to noninsured persons aged 72 and over	Interest on investments [2]	Total	Benefit payments	Payments for vocational rehabilitation services	Administrative expenses [2]	Transfers to railroad retirement account	Net increase in fund	Fund at end of period
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
Estimated future experience: [4]												
1978	76,843	74,093	[5] 385	228	2,137	81,635	78,965	9	1,029	1,632	−4,792	30,580
1979	86,395	84,042	384	230	1,739	90,232	87,733	9	1,135	1,355	−3,837	26,743
1980	98,451	96,403	379	162	1,507	99,769	97,161	9	1,197	1,402	−1,318	25,425
1981	112,525	110,508	382	144	1,491	109,617	106,928	10	1,273	1,406	2,908	28,333
1982	127,683	125,308	443	127	1,805	119,937	117,184	10	1,344	1,399	7,746	36,079

[1] Under the Congressional Budget Act of 1974 (Public Law 93–344), fiscal years 1977 and later consist of the 12 months 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] In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in table 10.

[5] 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.

TABLE 16.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND DURING SELECTED CALENDAR YEARS 1940–77 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1978–82 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Calendar year	Transactions during period: Income: Total	Income: Contributions, less refunds	Income: Reimbursements from general fund of Treasury for costs of—: Noncontributory credits for military service	Income: Reimbursements from general fund of Treasury for costs of—: Payments to noninsured persons aged 72 and over	Income: Interest on investments	Disbursements: Total	Disbursements: Benefit payments	Disbursements: Payments for vocational rehabilitation services	Disbursements: Administrative expenses	Disbursements: Transfers to railroad retirement account	Net increase in fund	Fund at end of period
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
Estimated future experience:												
1978	78,067	75,507	384	230	1,946	83,732	81,034	9	1,057	1,632	–5,665	26,826
1979	90,090	87,967	379	162	1,582	92,595	90,084	9	1,147	1,355	–2,505	24,321
1980	101,022	99,033	382	144	1,463	102,210	99,585	9	1,214	1,402	–1,188	23,133
1981	117,066	114,903	443	127	1,593	112,094	109,389	10	1,289	1,406	4,972	28,105
1982	130,684	128,060	446	111	2,067	122,568	119,800	10	1,359	1,399	8,116	36,221

[1] Less than $500,000.

Note: In interpreting the above, reference should be made to the footnotes in table 15.

TABLE 17.—OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND DURING SELECTED FISCAL YEARS 1960–77 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1978–82 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Fiscal year [1]	Transactions during period: Income: Total	Contributions, less refunds	Reimbursements from general fund of Treasury for costs of noncontributory credits for military service	Interest on investments [2]	Disbursements: Total	Benefit payments	Payments for vocational rehabilitation services	Administrative expenses [2]	Transfers to railroad retirement account	Net increase in fund	Fund at end of period
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	$1	183	25	−321	1,686
1967	2,332	2,249	$16	67	1,997	1,861	7	99	31	335	2,022
1968	2,800	2,699	16	85	2,236	2,088	15	112	20	564	2,585
1969	3,705	3,532	32	141	2,613	2,443	15	133	21	1,092	3,678
1970	4,380	4,141	16	223	2,954	2,778	16	149	10	1,426	5,104
1971	4,911	4,569	16	325	3,606	3,381	21	190	13	1,305	6,408
1972	5,291	4,853	50	388	4,309	4,046	28	212	24	982	7,390
1973	5,947	5,461	51	435	5,467	5,162	39	247	20	479	7,869
1974	6,768	6,234	52	482	6,385	6,159	50	154	22	383	8,253
1975	7,920	7,356	52	512	7,982	7,630	71	253	29	−62	8,191
1976	8,355	7,797	90	468	9,606	9,222	92	266	26	−1,251	6,939
July–September 1976	2,172	2,159	----------	13	2,653	2,555	27	71	----------	−481	6,459
1977	9,374	8,900	103	372	11,590	11,135	77	378	(4)	−2,215	4,243
Estimated future experience: [5]											
1978	12,801	12,427	128	246	12,897	12,410	88	350	49	−96	4,147
1979	15,134	14,739	142	253	14,728	14,200	94	428	6	406	4,553
1980	17,103	16,696	126	281	16,626	16,079	99	451	−3	477	5,030
1981	20,320	19,865	130	325	18,517	17,949	104	479	−15	1,803	6,833
1982	23,298	22,678	141	479	20,518	19,938	110	508	−38	2,780	9,613

[1] Under the Congressional Budget Act of 1974 (Public Law 93-344), fiscal years 1977 and later consists of the 12 months 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 table 10.

TABLE 18.—OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND DURING SELECTED CALENDAR YEARS 1960 77 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1978 82 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Calendar year	Transactions during period: Income: Total	Income: Contributions, less refunds	Income: Reimbursements from general fund of Treasury for costs of noncontributory credits for military service	Income: Interest on investments	Disbursements: Total	Disbursements: Benefit payments	Disbursements: Payments for vocational rehabilitation services	Disbursements: Administrative expenses	Disbursements: Transfers to railroad retirement account	Net increase in fund	Fund at end of period
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	$16	58	1,947	1,781	$3	137	25	133	1,739
1967	2,379	2,286	16	78	2,089	1,939	11	109	31	290	2,029
1968	3,454	3,316	32	106	2,458	2,294	16	127	20	996	3,025
1969	3,792	3,599	16	177	2,716	2,542	15	138	21	1,075	4,100
1970	4,774	4,481	16	277	3,259	3,067	18	164	10	1,514	5,614
1971	5,031	4,620	50	361	4,000	3,758	24	205	13	1,031	6,645
1972	5,572	5,107	51	414	4,759	4,473	29	233	24	813	7,457
1973	6,443	5,932	52	458	5,973	5,718	46	190	20	470	7,927
1974	7,378	6,826	52	500	7,196	6,903	54	217	22	182	8,109
1975	8,035	7,444	90	502	8,790	8,414	91	256	29	−754	7,354
1976	8,757	8,233	103	422	10,366	9,966	89	285	26	−1,609	5,745
1977	9,570	9,138	128	304	11,945	11,463	84	399	(1)	−2,375	3,370
Estimated future experience:											
1978	13,772	13,393	142	237	13,321	12,834	89	349	49	451	3,821
1979	15,677	15,287	126	264	15,217	14,684	95	432	6	460	4,281
1980	17,577	17,152	130	295	17,086	16,532	100	457	−3	491	4,772
1981	21,405	20,876	141	388	19,023	18,446	106	486	−15	2,382	7,154
1982	23,841	23,119	145	577	21,024	20,438	111	513	−38	2,817	9,971

[1] 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 17.

TABLE 19.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, COMBINED, DURING SELECTED FISCAL YEARS 1960-77 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1978-82 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Fiscal year	Transactions during period											Net increase in funds	Funds at end of period
	Income					Disbursements							
			Reimbursements from general fund of Treasury for costs of—										
	Total	Contributions, less refunds	Noncontributory credits for military service	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			
Past experience:													
1960	$11,394	$10,830			$564	$11,606	$10,798		$234	$574	−$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	$1	437	469	−629	21,558
1967	25,703	24,816	$94		793	21,725	20,747	7	433	539	3,979	25,537
1968	26,440	25,362	94		984	23,859	22,825	16	560	458	2,581	28,118
1969	31,054	29,485	188	$226	1,155	27,303	26,175	17	599	513	3,750	31,868
1970	36,127	34,096	94	364	1,572	30,275	29,045	18	623	589	5,852	37,720
1971	38,893	36,485	94	371	1,943	35,874	34,482	23	742	626	3,019	40,739
1972	43,208	40,564	187	351	2,107	40,158	38,587	29	794	749	3,050	43,789
1973	49,586	46,779	189	337	2,281	49,090	47,332	42	914	802	496	44,285
1974	57,704	54,689	191	303	2,521	55,869	54,007	54	878	931	1,835	46,120
1975	66,677	63,374	192	307	2,804	64,658	62,469	79	1,101	1,010	2,018	48,138
1976	70,682	67,352	247	268	2,815	73,901	71,363	100	1,200	1,239	−3,219	44,919
July–September 1976	18,359	18,265			94	19,764	19,431	29	304		−1,405	43,514
1977	81,170	77,794	481	236	2,659	85,068	82,406	85	1,370	1,208	−3,898	39,615
Estimated future experience:													
1978	89,644	86,520	513	228	2,383	94,532	91,375	97	1,379	1,681	−4,888	34,727
1979	101,529	98,781	526	230	1,992	104,960	101,933	103	1,563	1,361	−3,431	31,296
1980	115,554	113,099	505	162	1,788	116,395	113,240	108	1,648	1,399	−841	30,455
1981	132,845	130,373	512	144	1,816	128,134	124,877	114	1,752	1,391	4,711	35,166
1982	150,981	147,986	584	127	2,284	140,455	137,122	120	1,852	1,361	10,526	45,692

Note: In interpreting the above, reference should be made to the footnotes in table 15.

TABLE 20.—OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, COMBINED, DURING SELECTED CALENDAR YEARS 1960–77 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1978–82 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

[In millions]

Calendar year	Transactions during period											
	Income					Disbursements						
			Reimbursements from general fund of Treasury for costs of—									
	Total	Contributions, less refunds	Noncontributory credits for military service	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	Funds at end of period
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
Estimated future experience:												
1978	91,839	88,900	526	230	2,183	97,053	93,868	98	1,406	1,681	−5,214	30,647
1979	105,767	103,254	505	162	1,846	107,812	104,768	104	1,579	1,361	−2,045	28,602
1980	118,599	116,185	512	144	1,758	119,296	116,117	109	1,671	1,399	−697	27,905
1981	138,471	135,779	584	127	1,981	131,117	127,835	116	1,775	1,391	7,354	35,259
1982	154,525	151,179	591	111	2,644	143,592	140,238	121	1,872	1,361	10,933	46,192

Note: In interpreting the above, reference should be made to the footnotes in table 15.

Expenditures as a percentage of taxable earnings for years prior to 1978, as well as the estimated percentages for 1978–82 under the intermediate assumptions, are shown in table 21 for both trust funds combined and for each trust fund separately. (Although the estimated percentages for 1978–82 have been shown in table 14, they are repeated in table 21 for comparison with past experience.)

TABLE 21.—EXPENDITURES FROM THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS AS A PERCENTAGE OF TAXABLE PAYROLL FOR SELECTED CALENDAR YEARS 1950–77 AND ESTIMATED FUTURE PERCENTAGES FOR CALENDAR YEARS 1978–82 UNDER THE INTERMEDIATE SET OF ASSUMPTIONS

	Expenditures as a percentage of taxable payroll [1]		
Calendar 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: [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	9.27	1.35
1976	10.83	9.39	1.44
1977	10.89	9.40	1.49
Estimated future experience: [3]			
1978	10.94	9.44	1.50
1979	10.45	8.98	1.48
1980	10.34	8.86	1.48
1981	10.17	8.69	1.48
1982	10.18	8.69	1.49

[1] See footnote 1, table 14. For 1973–77, percentages are preliminary and subject to revision.

[2] Expenditures in each year 1966–77 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.

Assets at the beginning of the year as a percentage of expenditures during the year for both trust funds combined is estimated to be about 37 percent for calendar year 1978. During the period 1978–80, the percentage will drop each year as the assets of the trust funds decline. By the beginning of 1981, the assets of the combined trust funds are estimated to equal about 21 percent of the estimated outgo in 1981 under the intermediate assumptions. After 1981 the percentage is expected to increase—rising to 25 percent by the beginning of 1982. The estimated percentage for each of the calendar years 1978–82 under the intermediate set of assumptions, as well as the actual percentages for earlier years, are shown in table 22 for both trust funds combined and for each trust fund separately. (Although the estimated percentages for 1978–82 have been shown in earlier tables in this section, they are repeated in table 22 for comparison with past experience.)

TABLE 22.—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 1950–77, AND ESTIMATED FUTURE PERCENTAGES FOR CALENDAR YEARS 1978–82 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
Estimated future experience:[1]			
1978	37	39	25
1979	28	29	25
1980	24	24	25
1981	21	21	25
1982	25	23	34

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

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 noncontributory 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. Despite this increase, the total number of employees becoming covered under new agreements in each year through 1976 has been larger than the number of employees for whom coverge was terminated during the year.

During each of the last 2 years, notice has been given of the intention to terminate coverage on the part of a somewhat larger number of State and local government employees 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 becames 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 1977, tax contributions received by the old-age and survivors insurance and disability insurance trust funds from workers employed by State and local governments and from such employers, under all of the coverage agreements in effect, amounted to $8.5 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 nonprofit organizations under the old-age and survivors insurance, disability insurance, and hospital insurance programs, 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.

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 old-age and survivors insurance 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, 1977, about 480,000 persons were receiving monthly benefits with respect to disability from the old-age and survivors insurance 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

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TABLE 23.—BENEFITS PAYABLE FROM THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND WITH RESPECT TO DISABLED BENEFICIARIES, SELECTED CALENDAR YEARS 1960–82

[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	415	65	844	724	120
Estimated future experience: [4]						
1978	503	434	69	945	814	131
1979	525	453	72	1,059	915	144
1980	546	472	74	1,181	1,027	154
1981	565	489	76	1,312	1,145	167
1982	585	507	78	1,443	1,262	181

[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 23 also shows the expected future experience in calendar years 1978–82, under the intermediate set of economic assumptions described in an earlier section. Total benefit payments from the old-age and survivors insurance trust fund with respect to disabled beneficiaries are estimated to increase from $945 million in calendar year 1978 to $1,443 million in calendar year 1982, under the intermediate assumptions.

In calendar year 1977, benefit payments (including expenditures for vocational rehabilitation services) with respect to disabled persons from the old-age and survivors insurance trust fund and from the disability insurance trust fund (including payments from the latter fund to all dependents of disabled-worker beneficiaries) totaled $12,391 million, of which $844 million, or 6.8 percent, represented payments from the old-age and survivors insurance trust fund. Similar figures for selected calendar years 1960–77 and estimates for calendar years 1978–82, under the intermediate set of assumptions, are presented in table 24. Figures relating to past experience for years not shown in table 24 are contained in the 1976 annual report.

TABLE 24.—BENEFIT PAYMENTS UNDER THE OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM WITH RESPECT TO DISABLED BENEFICIARIES, BY TRUST FUND, SELECTED CALENDAR YEARS 1960–82

[Dollar amounts in millions]

Calendar year	Benefit payments[1] from— Total[1]	Disability insurance trust fund[2]	Old-age and survivors insurance trust fund: Amount[3]	Old-age and survivors insurance trust fund: As a percentage of total benefit payments with respect to disabled beneficiaries
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	12,391	11,547	844	6.8
Estimated future experience:[4]				
1978	13,868	12,923	945	6.8
1979	15,838	14,779	1,059	6.7
1980	17,813	16,632	1,181	6.6
1981	19,864	18,552	1,312	6.6
1982	21,992	20,549	1,443	6.6

[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 23.)
[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.

ACTUARIAL STATUS OF THE TRUST FUNDS

As mentioned in an earlier section, the medium-range and long-range actuarial statuses in recent reports have been customarily measured by the corresponding actuarial balances, which have been 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 contained in this report pertains to the periods 1978–2002 and 1978–2052. In addition to the medium-range and long-range actuarial balances, two other indicators of the financial condition of the trust funds are shown in this report. One is the time series of estimated annual expenditures themselves (expressed as percentages of taxable payroll), and the other is the time series of trust fund ratios described in an earlier section.

The indicators mentioned above are analyzed in a later section.

Significance of the Medium-Range and Long-Range Cost Estimates

Throughout the history of the program, long-range cost estimates have been used to develop the financing schedules for the system. The major indicator used for determining the adequacy of the long-range financing has been the long-range actuarial balance, which since 1965 has been computed over a 75-year period. Throughout most of its existence the system has been maintained in close actuarial balance over the long-range. Recently, increased attention has been paid to the 25-year actuarial balance as an indicator of the medium-range actuarial status of the system.

The year-by-year cost estimates (that is, the annual expenditures as a percentage of taxable payroll) are useful in establishing tax rate schedules. These schedules can be designed to closely approximate the year-by-year estimated cost, thereby financing the system in accordance with the current-cost method described earlier.

Another indicator of the adequacy of the financing is the trust fund ratio (which has been described in an earlier section). In recent years there has been significant additional interest in projections showing how this ratio varies through time, what maximum level it is projected to reach, when it is projected to reach that level, and—if the financing is inadequate—when the trust funds are projected to be exhausted.

The cost estimates do not reflect any adjustment to the level of the trust fund ratio. Therefore, at the time of developing any financing provisions, it is advisable to determine the desired level of the trust fund ratio and the point in time at which such level is to be attained, so that the tax schedule can be designed not only to meet the expenditures but also to provide for the desired change in the level of the trust fund ratio. For example, if it were considered appropriate to provide for increasing the combined OASDI trust fund ratio to 100 percent of the projected annual expenditures by the end of the 75-year period, it is estimated that the trust funds would require, under alternative II, an additional amount of income, in excess of what is needed to meet expenditures, equivalent to 0.14 percent of taxable payroll per year over the 75-year period. Similarly, it if were considered appropriate to increase that ratio to 50 percent, the corresponding estimate would be 0.04 percent.

Medium-range cost estimates: 1978–2002

In this section of the report medium-range cost estimates are presented in order to highlight the status of the trust funds during the period 1978–2002. For convenience of reference, the tables shown in this section summarize not only the medium-range projections but also the long-range (1978–2052) projections discussed in a later section.

In general, the medium-range cost estimates are less sensitive than the long-range estimates to changes in demographic and economic assumptions. In particular, variations in projected fertility rates have little effect on the medium-range cost estimates since almost all covered workers and beneficiaries projected for this period were born prior to the start of the projection period. Furthermore, the degree of confidence that can be placed in demographic and economic assumptions is greater for the first 25 years than for the entire 75-year period. Nonetheless, economic factors such as wage and price increases are subject to such a wide range of possible variation that the projections of expenditures over the medium-range period are only an indication of the trend and general range of the actual expenditures.

Table 25 shows a comparison of the expenditures estimated under alternative II with the scheduled OASDI tax rates.

The comparison in table 25 shows that, after the first three years, the OASDI system is projected to have a surplus in each year of the

TABLE 25.—COMPARISON OF ESTIMATED EXPENDITURES UNDER ALTERNATIVE II WITH SCHEDULED TAX RATES FOR OASDI SYSTEM, CALENDAR YEARS 1978–2055

[In percent of taxable payroll]

Calendar year	Estimated expenditures			Scheduled tax rate	Difference
	OASI	DI	Total		
1978	9.44	1.50	10.94	10.10	−.84
1979	8.98	1.48	10.45	10.16	−.29
1980	8.86	1.48	10.34	10.16	−.18
1981	8.69	1.48	10.17	10.70	.53
1982	8.69	1.49	10.18	10.80	.62
1983	8.66	1.51	10.17	10.80	.63
1984	8.73	1.54	10.27	10.80	.53
1985	8.75	1.57	10.31	11.40	1.09
1986	8.77	1.59	10.36	11.40	1.04
1987	8.79	1.61	10.41	11.40	.99
1988	8.82	1.64	10.46	11.40	.94
1989	8.86	1.66	10.51	11.40	.89
1990	8.90	1.67	10.58	12.40	1.82
1991	8.95	1.71	10.66	12.40	1.74
1992	8.99	1.74	10.73	12.40	1.67
1993	9.02	1.77	10.79	12.40	1.61
1994	9.03	1.81	10.84	12.40	1.56
1995	9.05	1.85	10.90	12.40	1.50
1996	9.02	1.90	10.91	12.40	1.49
1997	8.99	1.94	10.94	12.40	1.46
1998	8.97	1.99	10.96	12.40	1.44
1999	8.96	2.04	10.99	12.40	1.41
2000	8.94	2.08	11.02	12.40	1.38
2001	8.94	2.14	11.08	12.40	1.32
2002	8.95	2.19	11.14	12.40	1.26
2005	8.99	2.33	11.32	12.40	1.08
2010	9.55	2.54	12.08	12.40	.32
2015	10.64	2.66	13.30	12.40	−.90
2020	12.06	2.69	14.74	12.40	−2.34
2025	13.46	2.61	16.06	12.40	−3.66
2030	14.24	2.49	16.73	12.40	−4.33
2035	14.36	2.45	16.80	12.40	−4.40
2040	14.01	2.48	16.49	12.40	−4.09
2045	13.74	2.53	16.28	12.40	−3.88
2050	13.72	2.54	16.26	12.40	−3.86
2055	13.78	2.51	16.29	12.40	−3.89
25-yr averages:					
1978–2002	8.91	1.74	10.64	11.67	1.02
2003–27	10.96	2.56	13.51	12.40	−1.11
2028–52	14.00	2.50	16.50	12.40	−4.10
75-yr average: 1978–2052	11.29	2.26	13.55	12.16	−1.40

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate. Alternative II is defined in the text.

medium-range period. These annual surpluses result in a medium-range actuarial surplus of 1.02 percent of taxable payroll.

Whereas table 25 shows cost estimates only for alternative II, table 26 shows a comparison of those estimates with the estimates based on alternative I and III, which are described earlier in this report.

Table 26 shows that the estimated average medium-range expenditures varies from 10.32 percent under alternative I to 11.08 percent under alternative III. Under each alternative, the expenditures attain their highest level at the end of the medium-range period, at which point they are beginning an accelerated growth which continues into the long-range period The peak values of the annual expenditures range from 10.70 percent to 11.62 percent. In comparison with the 1978 estimated expenditures of 10.94 percent, the highest level attained during the medium-range period varies from a slightly lower value under alternative I (10.70 percent) to a somewhat higher value under alternative III (11.62 percent).

Table 27 shows a comparison of the average scheduled tax rates with the average expenditures projected under alternatives I, II, and III.

TABLE 26.—ESTIMATED EXPENDITURES OF OASDI SYSTEM UNDER ALTERNATIVES I, II, AND III, CALENDAR YEARS 1978–2055

[In percent of taxable payroll]

Calendar year	Estimated expenditures by alternative		
	I	II	III
1978	10.94	10.94	10.94
1979	10.41	10.45	10.46
1980	10.26	10.34	10.69
1981	10.06	10.17	10.70
1982	9.99	10.18	10.81
1983	9.91	10.17	10.83
1984	9.95	10.27	10.83
1985	9.98	10.31	10.82
1986	9.99	10.36	10.87
1987	10.01	10.41	10.93
1988	10.03	10.46	11.00
1989	10.10	10.51	11.01
1990	10.17	10.58	11.03
1991	10.25	10.66	11.10
1992	10.33	10.73	11.17
1993	10.40	10.79	11.23
1994	10.45	10.84	11.27
1995	10.51	10.90	11.31
1996	10.52	10.91	11.33
1997	10.54	10.94	11.36
1998	10.56	10.96	11.39
1999	10.58	10.99	11.43
2000	10.61	11.02	11.46
2001	10.65	11.08	11.54
2002	10.70	11.14	11.62
2005	10.85	11.32	11.88
2010	11.50	12.08	12.88
2015	12.54	13.30	14.43
2020	13.79	14.74	16.34
2025	14.85	16.06	18.22
2030	15.29	16.73	19.54
2035	15.16	16.80	20.22
2040	14.71	16.49	20.42
2045	14.39	16.28	20.61
2050	14.33	16.26	20.84
2055	14.35	16.29	20.98
25-yr averages:			
1978–2002	10.32	10.64	11.08
2003–27	12.72	13.51	14.77
2028–52	14.76	16.50	20.30
75-yr average: 1978–2052	12.60	13.55	15.38

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate. Alternatives I, II, and III are defined in the text.

TABLE 27.—COMPARISON OF ESTIMATED AVERAGE EXPENDITURES UNDER ALTERNATIVES I, II, AND III WITH AVERAGE SCHEDULED TAX RATE FOR OASDI SYSTEM

[In percent of taxable payroll]

Calendar year	Average scheduled tax rate	Estimated average expenditures by alternative			Difference by alternative		
		I	II	III	I	II	III
OASI:							
1978–2002	9.70	8.63	8.91	9.29	1.07	.79	.40
2003–27	10.20	10.26	10.96	12.05	−.06	−.76	−1.85
2028–52	10.20	12.40	14.00	17.53	−2.20	−3.80	−7.33
1978–2052	10.03	10.43	11.29	12.96	−.40	−1.26	−2.93
DI:							
1978–2002	1.97	1.69	1.74	1.79	.28	.23	.18
2003–27	2.20	2.45	2.56	2.72	−.25	−.36	−.52
2028–52	2.20	2.36	2.50	2.76	−.16	−.30	−.56
1978–2052	2.12	2.17	2.26	2.42	−.05	−.14	−.30
Total OASDI:							
1978–2002	11.67	10.32	10.64	11.08	1.35	1.02	.58
2003–27	12.40	12.72	13.51	14.77	−.32	−1.11	−2.37
2028–52	12.40	14.76	16.50	20.30	−2.36	−4.10	−7.90
1978–2052	12.16	12.60	13.55	15.38	−.44	−1.40	−3.23

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips and on multiple-employer "excess wages" as compared with the combined employer-employee rate. Alternatives I, II, and III are defined in the text.

The comparison in table 27 shows that, under alternative II, the OASI and DI programs are estimated to have medium-range actuarial surpluses of 0.79 percent and 0.23 percent, respectively. In addition, under each of the other two alternatives both programs are also estimated to have medium-range actuarial surpluses. Thus, over the medium-range period, as a whole for both the OASI and DI programs, the financing is more than adequate, even if economic conditions as pessimistic as those in alternative III were to materialize.

Table 28 shows the trust fund ratios (as described in an earlier section) projected under alternatives I, II, and III.

The annual surpluses estimated to occur during the medium-range period are reflected in the high levels attained by the trust fund ratios by the end of that period. Under alternative II, the OASI and DI ratios are estimated to increase to 228 percent and 269 percent, respectively. Under alternative I, the ratios are estimated to increase to levels in excess of 300 percent. Even under the pessimistic assumptions (alternative III), the ratios are estimated to increase to levels well above 100 percent, almost to 200 percent for the DI program. These levels indicate that the OASI and DI programs are more than adequately financed over the medium-range period.

TABLE 28.—ESTIMATED TRUST FUND RATIOS FOR OASDI SYSTEM UNDER ALTERNATIVES I, II, AND III, CALENDAR YEARS 1978–2040

Calendar year	Estimated trust fund ratio under alternative [1]—								
	I			II			III		
	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
1978	.39	.25	.37	.39	.25	.37	.39	.25	.37
1979	.29	.25	.28	.29	.25	.28	.29	.25	.28
1980	.24	.25	.24	.24	.25	.24	.23	.25	.24
1981	.22	.26	.22	.21	.25	.21	.17	.21	.18
1982	.25	.36	.27	.23	.34	.25	.15	.24	.16
1983	.31	.48	.34	.27	.43	.30	.13	.27	.15
1984	.39	.58	.42	.32	.51	.35	.12	.29	.14
1985	.47	.68	.50	.37	.57	.40	.11	.30	.14
1986	.59	.90	.63	.44	.75	.49	.13	.45	.18
1987	.71	1.11	.77	.52	.93	.58	.16	.59	.22
1988	.82	1.29	.90	.59	1.08	.67	.17	.71	.26
1989	.94	1.47	1.02	.66	1.22	.75	.19	.83	.29
1990	1.05	1.64	1.14	.73	1.35	.82	.21	.92	.32
1991	1.23	1.96	1.35	.86	1.62	.98	.30	1.15	.43
1992	1.41	2.24	1.55	.99	1.87	1.13	.38	1.36	.54
1993	1.59	2.50	1.74	1.11	2.08	1.27	.46	1.54	.63
1994	1.76	2.72	1.92	1.24	2.27	1.41	.53	1.70	.73
1995	1.94	2.91	2.11	1.36	2.42	1.54	.61	1.83	.81
1996	2.12	3.06	2.28	1.48	2.54	1.67	.68	1.93	.90
1997	2.30	3.18	2.46	1.61	2.63	1.79	.76	1.99	.98
1998	2.49	3.27	2.64	1.74	2.69	1.91	.84	2.03	1.06
1999	2.69	3.34	2.81	1.88	2.73	2.03	.93	2.05	1.13
2000	2.88	3.38	2.98	2.01	2.74	2.15	1.01	2.04	1.20
2001	3.08	3.39	3.14	2.15	2.72	2.26	1.10	2.01	1.27
2002	3.27	3.38	3.29	2.28	2.69	2.36	1.18	1.95	1.33
2005	3.85	3.24	3.72	2.66	2.47	2.62	1.39	1.67	1.45
2010	4.53	2.80	4.16	3.03	1.88	2.79	1.49	.94	1.38
2015	4.65	2.23	4.16	2.89	1.12	2.53	1.09	(2)	[3] .88
2202	4.22	1.63	3.73	2.21	.27	1.86	.17	(2)	(2)
2035	3.41	1.09	3.02	1.16	(2)	[3] .87	(2)	(2)	(2)
2000	2.46	.70	2.19	(2)	(2)	(2)	(2)	(2)	(2)
2035	1.51	.43	1.35	(2)	(2)	(2)	(2)	(2)	(2)
2040	.63	.17	.55	(2)	(2)	(2)	(2)	(2)	(2)
Trust fund is projected to be exhausted in calendar year	2043	2042	2043	2029	2021	2028	2020	2014	2019

[1] The trust fund ratio is defined to be the trust fund assets at the beginning of the year expressed as a percentage of expenditures during that year.
[2] Fund is projected to be exhausted.
[3] This figure is theoretical, since the DI trust fund is projected to be exhausted.

The cost estimates and actuarial balances shown in this report are different from those published in the actuarial report on Public Law 95–216.[1] Table 29 traces the difference between the two estimates.

TABLE 29.—CHANGES IN ESTIMATED AVERAGE EXPENDITURES AND ACTUARIAL BALANCE OF OASDI SYSTEM, UNDER ALTERNATIVE II BY REASON FOR CHANGE

[In percent of taxable payroll]

Item	Medium range			Long range		
	OASI	DI	Total	OASI	DI	Total
Shown in actuarial report on Public Law 95–216:[1]						
Actuarial balance	+0.89	+0.08	+0.97	−1.08	−0.38	−1.46
Average scheduled tax rate	9.64	1.93	11.57	10.01	2.11	12.12
Estimated average expenditures	8.75	1.85	10.60	11.09	2.49	13.58
Changes in estimated average expenditures due to changes in:						
Mandatory retirement age	−.04	−0	−.05	−.08	−0	−.08
Valuation date	−.03	+.04	+.01	+.05	+.02	+.07
Economic assumptions	−.10	−.02	−.13	−.12	−.02	−.14
Mortality assumptions	+.07	+0	+.07	+.12	+0	+.12
Disability assumptions		−.08	−.08		−.10	−.10
Methodology	+.19	−.01	+.18	+.10	−.11	−.01
All other factors	+.07	−.04	+.03	+.12	−.01	+.11
Total change in estimated average expenditures	+.16	−.12	+.04	+.20	−.23	−.03
Current averages:[2]						
Estimated average expenditures	8.91	1.74	10.64	11.29	2.26	13.55
Average scheduled tax rate	9.70	1.97	11.67	10.03	2.12	12.16
Actuarial balance	+.79	+.23	+1.02	−1.26	−.14	−1.40

[1] Expenditures and taxable payroll are calculated under the intermediate set of assumptions (alternative II) described in last year's report which incorporates ultimate annual increases of 5¾ percent in average wages in covered employment and 4 percent in the CPI, an ultimate annual unemployment rate of 5 percent, and an ultimate total fertility rate of 2.1 children per woman. The averages are computed over projection periods commencing with 1977.

[2] Expenditures and taxable payroll are calculated under the intermediate set of assumptions (alternative II) described in the text of this report. The ultimate values for the annual increases in average wages in covered employment and in the CPI, for the annual unemployment rate and for the total fertility rate are the same as those included in the intermediate set of assumptions described in last year's report. The averages are computed over projection periods commencing with 1978.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

As mentioned in the section entitled "Social Security Amendments since the 1977 Report" the minimum allowable mandatory retirement age was increased to 70 by an act of Congress early in 1978. As a result of more delayed retirements, costs are expected to decrease.

In changing from the valuation periods of the report on Public Law 95–216, 1977–2001 and 1977–2051 for the medium-range and long-range periods, respectively, to the valuation periods of this report, 1978–2002 and 1978–2052, the year 1977 is replaced by 2002 in the medium-range and 2052 in the long-range. Except for the OASI medium-range, the replacement year is a year of relatively high cost compared to the year being replaced, thereby increasing the estimated average expenditures even in the absence of any other changes.

The ultimate economic assumptions as to wage-CPI increases are the same as in the report on Public Law 95–216. The decrease in cost due to economic assumptions is primarily because of higher productivity assumed for the remainder of this century due to the changing age structure of the working-age population.

[1] "Actuarial Cost Estimates for the Old-Age, Survivors, Disability, Hospital, and Supplementary Medical Insurance Systems, as Modified by Public Law 95–216." WMCP: 95-68, March 1978.

In the demographic area, the ultimate fertility assumption has not been changed, but the ultimate mortality level assumed in this report is about 6 percent lower than in the previous report. The difference in mortality levels assumed for the two reports results from incorporating in this projection an additional year of experience both in determining the trends and also in determining the level at the beginning of the projection period. Both factors reflect more improvement in mortality than was previously assumed.

Large decreases in the estimated cost of the disability insurance program in both the medium-range and long-range were due to changes in assumptions regarding disability incidences and terminations. Both incidence and termination rates have been changed to reflect more recent experience. In addition, lower incidence rates are projected due to the decreased attractiveness of disability benefits, because of the generally lower benefits available under the new decoupled benefit calculation procedure.

Numerous changes were made in the methodology used to project the costs of the OASDI system, the net result of which was to increase the OASI estimated cost and decrease the DI estimated cost. A discussion of these changes is included in appendix A.

Long-range cost estimates: 1978–2052

In this section of the report, in accordance with the customary presentation of previous reports, long-range cost estimates are shown for the 75-year period beginning with the year of the report (1978–2052). The tables referred to in this section are shown in the section on the medium-range cost estimates.

As shown in table 25 under alternative II the cost of the OASI program is projected to be a relatively constant percentage of taxable payroll during the remainder of this century. After the turn of the century, it is projected to increase rapidly to a peak around 2035. The reason for the increase is that the number of beneficiaries will be increasing faster than the number of covered workers, since the large number of persons born during the period from the post-World War II years through the late 1950's and into the 1960's (when fertility rates were high) will reach retirement age and begin to receive benefits while the relatively small number of persons born during the period of current and projected low fertility rates will comprise the labor force. During the last years of the projection period, the OASI expenditures are projected to decrease slightly, because of the effect on the number of beneficiaries of the low birth rates experienced during the 1970's and projected through the 1980's.

Table 25 also shows that, as a percentage of taxable payroll, the cost of the DI program is projected to increase steadily until about 2020 after which it decreases slightly. The pattern of the estimated DI expenditures is affected by the same demographic factors affecting the pattern of the estimated OASI expenditures, and in addition, by the assumptions about future disability incidence experience. The increasing DI costs that are projected result in part from the projection of disability incidence rates that are higher than current levels (see appendix A for further information).

Table 25 shows that under alternative II for the OASDI system, estimated annual surpluses continue beyond the medium-range period to about 2010, after which the system experiences annual deficits. These deficits grow rapidly in the second 25-year portion of the long-range projection period before essentially stabilizing in the third 25-year portion around 4 percent of taxable payroll. These large deficits in the third 25 years result in a long-range actuarial deficit for the total 75-year period of 1.40 percent of taxable payroll, even though the surpluses of the medium-range period largely offset the deficits of the second 25 years. This long-range deficit is about 10 percent of the estimated 75-year average expenditures which is estimated to be 13.55 percent of taxable payroll. Since the deficit exceeds 5 percent of the estimated average expenditures (that is, exceeds 0.68 percent of taxable payroll), the system is not regarded as being in close actuarial balance over the long-range period. Nonetheless, because the projected deficits described above do not occur until after the turn of the century, there is ample time to study the system and to make well-considered decisions regarding how to improve its long-range financial status. This fact is the basis of recent executive and legislative decisions, reflected in the passage of the 1977 social security amendments which delayed the consideration of possible solutions to the long-range financial problem until more thorough studies are conducted. This fact is also reflected in the charge to the Social Security Advisory Council to examine the financial status of the trust funds in relation to the long-term commitments of the programs.

Table 26 shows that the patterns of the expenditures estimated under alternatives I, II, and III are similar, although the magnitudes are different. Under each alternative the estimated expenditures increase slowly to the turn of the century (after decreasing slightly at the beginning of the projection period) and then increase rapidly to about 2030. Under alternatives I and II, the expenditures peak around 2030 or 2035, while under alternative III they are still increasing somewhat at the end of the projection period. The rapid increase that occurs shortly after the turn of the century results from the post-World War II births mentioned above, a factor which is reflected in the estimates based on each set of assumptions.

Table 27 shows that a long-range actuarial deficit is projected for both the OASI and DI programs under each set of assumptions. In every case, a deficit is projected for each of the two 25-year periods following the medium-range period. The OASDI long-range actuarial deficit ranges from 0.44 percent to 3.23 percent.

The effect on the level of the trust funds of the surpluses projected to occur in the medium-range period and the deficits that occur thereafter is shown in table 28. Under alternative II, the OASI trust fund ratio is projected to rise steadily after 1981 to a peak of about 303 percent around 2010 before decreasing rapidly until 2029, the year in which the OASI trust fund is projected to be exhausted. Similarly, the DI trust fund ratio is projected to rise steadily after 1981 to a peak of about 274 percent around 2000 before decreasing rapidly until 2021, the year in which the DI trust fund is projected to be exhausted. Similar patterns occur under alternatives I and III. Under each alternative, the OASI and DI trust funds are projected to be exhausted well before the end of the long-range projection period.

Replacement ratios

The estimates presented in this report are based on a system designed to pay benefits which replace, in part, the earnings loss occurring upon the retirement, disability, or death of a worker. No general agreement exists regarding the way in which this replacement of earnings should be measured. In this section, which is limited to retiring workers, the amount of lost earnings replaced by benefits is measured by the "replacement ratio", which is defined as the ratio of the benefit amount payable to a worker for his first year of retirement to his gross earnings in the year prior to retirement.

Table 30 shows illustrative replacement ratios for male retired workers (with and without wives) with three assumed earnings histories, namely, (1) a worker with "low" earnings, defined as $4,600 in 1977 and with the values for earlier years deflated according to the trend in the average wage in covered employment, (2) a worker with "average" earnings defined as four times the average first-quarter wage in covered employment throughout his working life, and (3) a worker with maximum taxable earnings under social security throughout his working life. The selection of the $4,600 figure for the low earnings is based on the assumption that the 1977 Federal minimum wage of $2.30 per hour is paid for 50 work-weeks of 40 hours each.

Table 30 shows that, for a selected earnings level, the replacement ratios after the turn of the century remain nearly constant through time. In addition, the sharp declines that occur in the early 1980's in the replacement ratios for workers with maximum earnings and the subsequent rise to their ultimate values result, in part, from the

TABLE 30.—ILLUSTRATIVE REPLACEMENT RATIOS FOR MALE RETIRED WORKERS AT SELECTED EARNINGS LEVELS UNDER ALTERNATIVES I, II, AND III

Earnings level and year of retirement	Replacement ratio					
	Worker without spouse			Worker with spouse age 65		
	Alternative I	Alternative II	Alternative III	Alternative I	Alternative II	Alternative III
Low:						
1978	0.63	0.63	0.63	0.94	0.94	0.94
1980	.63	.63	.63	.94	.94	.95
1985	.53	.54	.55	.79	.81	.83
1990	.54	.55	.56	.81	.82	.83
1995	.54	.55	.56	.81	.82	.83
2000	.54	.55	.56	.81	.82	.84
2025	.54	.55	.56	.81	.83	.84
2050	.54	.55	.56	.81	.83	.84
Average:						
1978	.47	.47	.47	.70	.70	.70
1980	.48	.48	.48	.72	.72	.73
1985	.40	.41	.42	.60	.62	.63
1990	.41	.41	.42	.61	.62	.63
1995	.41	.42	.42	.61	.62	.63
2000	.41	.42	.42	.62	.63	.64
2025	.41	.42	.42	.62	.63	.64
2050	.41	.42	.42	.62	.63	.64
Maximum:						
1978	.35	.35	.35	.52	.52	.52
1980	.30	.30	.30	.45	.45	.45
1985	.23	.23	.24	.34	.35	.36
1990	.23	.24	.25	.35	.36	.37
1995	.24	.25	.25	.36	.37	.38
2000	.25	.26	.26	.37	.39	.39
2025	.27	.28	.29	.41	.42	.43
2050	.27	.28	.29	.41	.42	.43

Note: Alternatives I, II, and III and the replacement ratio are defined in the text. It is assumed the worker retires at age 65 at the beginning of the year.

ad hoc earnings base increases in 1979, 1980, and 1981. The relatively larger earnings bases in those years are taken into account immediately in the denominators of the replacement ratios, but their full effect in the numerators (the annual benefit amounts) is not felt for 35 years (the ultimate length of the benefit computation period). Thus, in one sense, the replacement ratios for the workers with maximum earnings in the early years are not truly comparable with those for workers with maximum earnings in succeeding years. The declines in the replacement ratios that occur before the turn of the century reflect the intended effect of the 1977 social security amendments to a portion of the inadvertent rise in replacement ratios which resulted from the 1972 amendments.

Table 30 also shows that the replacement ratios remain nearly constant under different economic conditions. These two characteristics—that is, constant replacement ratios both through time and under different economic conditions—are desirable so that similar treatment can be provided to workers retiring at different times.

Conclusion

As indicated in this report, the recently enacted Social Security Amendments of 1977 made substantial improvements in the financial status of the cash benefit program. As a result of the amendments, the combined assests of the old-age and survivors insurance and disability insurance trust funds, which have been declining since 1975, are expected to begin increasing by 1981 under the intermediate and under the pessimistic assumptions. Under the optimistic assumptions, the combined assets of the funds begin to increase in 1980. In addition, the 1977 amendments significantly reduce the excess of outgo over income projected for earlier years.

The short-range actuarial cost estimates indicate that the old-age and survivors insurance trust fund will begin to increase in 1981 under both the intermediate and optimistic assumptions, while under the pessimistic assumptions, the fund continues to decline through 1982. The disability insurance trust fund is expected to begin increasing in 1978 under all three sets of assumptions and to decline only in 1 year, 1980, under the pessimistic assumptions.

The medium-range actuarial cost estimates indicate that for both trust funds combined, the average annual income from taxes under present law will exceed the estimated average annual expenditures by about 1.0 percent of taxable payroll over the 25-year period 1978–2002, based on the intermediate assumptions. Under the optimistic assumptions the excess of income over expenditures is projected to average about 1.4 percent of taxable payroll, and under the pessimistic assumptions about 0.6 percent. Therefore, all the medium-range cost estimates presented in this report indicate that through the turn of the century the old-age, survivors, and disability insurance system is more than adequately financed under present law.

The long-range actuarial cost estimates indicate that for both trust funds combined, the estimated average annual expenditures exceeds the average annual income from taxes under present law by about 1.4 percent of taxable payroll over the 75-year period 1978–2052, based on the intermediate assumptions. Under the optimistic assumptions the excess of expenditures over income is projected to average about 0.4 percent of taxable payroll, and under the pessimistic assumptions about 3.2 percent. Under all three sets of assumptions the average annual expenditures are estimated to exceed average annual income from taxes during each of the last two 25-year periods in the long-range projection, as well as over the entire 75 years.

When interpreting all of the above statements regarding the cost of the program, it should be recognized that although the demographic and economic assumptions on which the estimates are based appear reasonable according to today's understanding, actual future experience may differ considerably from the assumptions. In particular, it is important to recognize that the degree of uncertainty of the estimates increases with the length of the projection period.

The Social Security Amendments of 1977 have restored the financial soundness of the cash benefit program over the short-range and medium-range periods, beginning in 1981, and greatly improved the long-range actuarial status. The additional financing provided by the 1977 amendments in calendar years 1978-80 prevents the assets of the combined trust funds from falling below 21 percent of expenditures (or the equivalent of about two and one-half months of expenditures) at the beginning of 1981 under the intermediate assumptions. The recently appointed Advisory Council on Social Security is studying the long-range financial status of the social security program and will report their findings and recommendations in 1979. In view of these considerations, and the short time that has elapsed since the enactment of the 1977 amendments, the Board recommends that no action be taken to change the financing arrangements of the social security system at this time. The Board believes that there is ample time to await the Advisory Council's report before making any proposals to change the financing provisions in present law. Nonetheless, the Board also recommends that the likelihood of significant long-range deficits be recognized in all current planning and in all proposals that would modify the system.

APPENDIX A.—STATEMENT OF ASSUMPTIONS, METHODOLOGY, AND DETAILS OF LONG-RANGE COST ESTIMATES

The basic assumptions and methodology used in preparing the long-range cost estimates of the OASDI program are described in this appendix. The first section covers the assumptions and methodology underlying the cost estimates, as well as the results themselves. The second section deals with the sensitivity of the estimates to change in particular assumptions.

The cost estimates were prepared under three different sets of basic assumptions, designated as alternatives I, II, and III. The assumptions comprising each alternative have been summarized in an earlier section entitled "Economic and Demographic Factors and Assumptions." They will not be resummarized here but will be discussed within the context of methodology. Within that discussion all comments pertain to the cost estimates under each of the three alternatives unless specifically stated otherwise.

ASSUMPTIONS, METHODOLOGY, AND RESULTS

Population

Projections were made of the United States population (including persons overseas covered by the OASDI program) by age and sex for future years to 2055. The starting point was the population on July 1, 1977, as estimated by the Bureau of the Census from the 1970 census and from births, deaths, and migration during 1970–77. This population estimate (which included an adjustment for net census undercount) was augmented by the population in the geographical areas covered by the OASDI program but not included in the estimate of the Bureau of the Census. The starting population was then projected forward to reflect anticipated deaths, births, and net immigration.

In projecting the population, the general trend of improving mortality during 1950–75 was assumed to continue to 2050. As shown in appendix table A the projected mortality level in 2050 is 19.1 percent below the 1977 level, which was estimated from preliminary mortality data. This projected improvement in mortality ranges from a low of about 13 percent for men aged 20–64 to a high of about 38 percent for women under 20. Mortality was assumed to remain level after 2050.

Fertility rates in the United States have shown a much more erratic history than have mortality rates. The total fertility rate decreased from a post-World War I level of about 3.3 children per woman to a Great Depression level of about 2.1, only to rise again to about 3.7 in 1957, and then fall to an estimated level of 1.7 in 1976. A slight upturn to 1.8 in 1977 is indicated from preliminary data. The total fertility rate is the number of children a woman would have during her lifetime if age-by-age she experiences the birth rates observed in a given year.

APPENDIX TABLE A.—PROJECTED MORTALITY IMPROVEMENT FROM 1977 TO 2050

Sex and age	Age-adjusted death rate [1] 1977	Age-adjusted death rate [1] 2050	Mortality improvement (percent)
Men:			
Under 20	149.4	110.8	25.8
20 to 64	655.3	572.5	12.6
65 and over	6,366.0	5,419.2	14.9
Total	939.2	800.7	14.7
Women:			
Under 20	102.0	63.0	38.2
20 to 64	342.5	266.4	22.2
65 and over	4,312.2	3,249.7	24.6
Total	698.6	525.8	24.7
Total: [2]			
Under 20	126.1	87.3	30.8
20 to 64	493.9	414.5	16.1
65 and over	5,717.7	4,157.6	19.6
Total	815.7	659.6	19.1

[1] Deaths per 100,000 persons in the population.
[2] The rates for men and women combined are based on the sex distribution of the enumerated population of the United States as of Apr. 1, 1970.

The historical variations in fertility rates result from many changeable and unpredictable factors such as social attitudes and economic conditions. Because of these intangible factors, a range of fertility assumptions was deemed preferable to a single assumption. With due consideration given to recent social attitudes and developments, ultimate total fertility rates of 2.3, 2.1, and 1.7 children per woman were selected for use in alternatives I, II, and III respectively. In each alternative, the total fertility rate was projected from its current level to its ultimate level in the year 2005 by the cohort method, which projects the fertility rate separately for women born in a given year. By way of comparison with the 1.7 to 2.3 ultimate range used in this report, it may be noted that the Bureau of Census used ultimate total fertility rates ranging from 1.7 to 2.7 children per woman in their latest series of population projections.[1] Included in both ranges is the theoretical population replacement rate of 2.1 children per woman, that is, the total fertility rate which in the absence of migration would eventually result in just enough births in a year to compensate for the deaths in that year. This is the rate used in the intermediate set of assumptions in this report.

Net immigration was assumed to be 400,000 persons per year in all three alternative sets of assumptions.

Appendix table B presents the projected population by broad age groups under alternatives I, II, and III.

Employment

The total annual unemployment rate has averaged about 5.3 percent for the last 25 years and 5.7 percent for the last 10 years. Under alternatives I, II, and III, respectively, the total annual unemployment rate after 1984 was assumed to be 4.5 percent, 5.0 percent, and 5.5 percent, respectively, with varying rates in the earlier years. Unemployment rates by age and sex were projected on the basis of the historical trend of their relationships with the total unemployment rate existing since 1966.

[1] U.S. Bureau of the Census, Current Population Reports, Series P–25, No. 704 "Projections of the Populations of the United States: 1977–2050," U.S. Government Printing Office, Washington, D.C., 1977.

APPENDIX TABLE B.—PROJECTIONS OF THE U.S. POPULATION BY BROAD AGE GROUPS

Year	Population (in thousands) as of July 1				Dependency ratio	
	Under 20	20–64	65 and over	Total	Aged [1]	Total [2]
Alternative I—2.3 ultimate fertility:						
1977	76,024	126,037	24,105	226,166	0.191	0.794
1978	75,092	128,207	24,641	227,940	.192	.778
1979	74,287	130,351	25,160	229,798	.193	.763
1980	73,613	132,445	25,675	231,733	.194	.750
1985	72,108	142,061	28,145	242,314	.198	.706
1990	74,679	148,180	30,708	253,567	.207	.711
1995	78,788	153,171	32,392	264,351	.211	.726
2000	82,311	158,706	32,960	273,977	.208	.726
2005	83,781	165,750	33,633	283,163	.203	.708
2010	85,143	171,791	36,045	292,978	.210	.705
2015	87,564	175,080	40,739	303,383	.233	.733
2020	91,010	176,131	46,409	313,550	.263	.780
2025	94,340	176,109	52,430	322,878	.298	.833
2030	96,796	177,856	56,871	331,523	.320	.864
2035	98,935	183,049	58,048	340,031	.317	.858
2040	101,603	189,772	57,375	348,749	.302	.838
2045	104,909	196,309	56,483	357,702	.288	.822
2050	108,289	201,250	57,420	366,958	.285	.823
2055	111,276	205,921	59,454	376,651	.289	.829
Alternative II—2.1 ultimate fertility:						
1977	76,024	126,037	24,105	226,166	.191	.794
1978	75,092	128,207	24,641	227,940	.192	.778
1979	74,262	130,351	25,160	229,773	.193	.763
1980	73,538	132,445	25,675	231,659	.194	.749
1985	71,398	142,061	28,145	241,603	.198	.701
1990	72,753	148,180	30,708	251,641	.207	.698
1995	75,292	153,171	32,392	260,855	.211	.703
2000	77,168	158,632	32,960	268,760	.208	.694
2005	77,295	165,049	33,633	275,977	.204	.672
2010	77,384	169,893	36,045	283,321	.212	.668
2015	78,306	171,642	40,739	290,687	.237	.694
2020	79,986	171,011	46,409	297,406	.271	.739
2025	81,517	169,072	52,430	303,019	.310	.792
2030	82,334	168,420	56,871	307,625	.338	.827
2035	82,892	170,675	58,048	311,615	.340	.826
2040	83,813	174,096	57,375	315,284	.330	.811
2045	85,158	177,182	56,425	318,765	.318	.799
2050	86,512	178,854	56,880	322,246	.318	.802
2055	87,552	180,272	58,047	325,871	.322	.808
Alternative III—1.7 ultimate fertility:						
1977	76,024	126,037	24,105	226,166	.191	.794
1978	75,092	128,207	24,641	227,940	.192	.778
1979	74,213	130,351	25,160	229,724	.193	.762
1980	73,388	132,445	25,675	231,509	.194	.748
1985	69,975	142,061	28,145	240,181	.198	.691
1990	68,899	148,180	30,708	247,787	.207	.672
1995	68,298	153,171	32,392	253,861	.211	.657
2000	66,895	158,484	32,960	258,339	.208	.630
2005	64,455	163,645	33,633	261,733	.206	.599
2010	62,333	166,096	36,045	264,473	.217	.592
2015	60,862	164,765	40,739	266,365	.247	.617
2020	59,814	160,785	46,409	267,008	.289	.661
2025	58,637	155,124	52,430	266,191	.338	.716
2030	57,106	150,005	56,871	263,982	.379	.760
2035	55,560	146,980	58,048	260,588	.395	.773
2040	54,292	144,601	57,375	256,268	.397	.772
2045	53,262	141,765	56,308	251,335	.397	.773
2050	52,246	138,129	55,799	246,174	.404	.782
2055	51,120	134,651	55,231	241,003	.410	.790

[1] Population 65 and over as ratio to population 20–64.
[2] Population 65 and over plus those under 20 as ratio to population 20–64.

Note: Alternatives I, II, and III are defined in the text of this report.

Labor force participation rates were projected on the basis of historical data since 1960. The assumed ultimate rates by age and sex are attained by 2010. The ultimate age-adjusted rates reflect a decrease of 1.3 percent for men and an increase of 19.2 percent for women, relative to the 1977 level. These assumptions result in ultimate labor force participation rates for women which average about 75 percent of those for men.

Projections of the percentage of the population in covered employment—that is, coverage rates—were made by age and sex on the basis of the projections of unemployment rates and labor force participation rates, and the relationships existing among those rates during 1970–75. For men the projected coverage rates increase slightly for those aged 16–39, and decrease slightly for those of other ages, reflecting the trend of increased value placed upon leisure time. For women the coverage rates are projected to increase for all ages, as women become more active in the labor force. Under alternative II, the ultimate age-adjusted coverage rates by sex, reflect increases of 0.8 percent for men and 18.3 percent for women, relative to the 1977 rates. Under alternatives I and III, the trends in projected coverage rates are similar to those under alternative II.

Coverage rates projected for persons at the older ages reflect a significant deceleration in the recent trend toward earlier retirement. Most of this deceleration was projected because of Public Law 95–256, which generally prohibits mandatory retirement before age 70. For the group aged 60 and over, ultimate coverage rates, on an age-adjusted basis, are only 4.4 percent lower for men and are 1.0 percent higher for women than the corresponding rates in 1977. This compares with a decrease in these rates from 1970 to 1977 of 16.5 percent for men and 9.5 percent for women.

Insured population

There are three types of insured status under the OASDI program: fully, currently, and disability insured. Fully insured status is required of an aged worker for his eligibility for a primary retirement benefit, and for his dependents' eligibility for secondary benefits. Fully insured status is also required of a deceased worker, for his survivors' eligibility for benefits (with the exception of child survivors and parents of eligible child survivors, who may be eligible if the deceased worker had currently insured status). Disability insured status, which is more restrictive than fully insured status, is required of a disabled worker for his eligibility for a primary benefit, and for his dependents' eligibility for secondary benefits.

Projections of the percentage of the population who are fully insured were made by age and sex based on recent experience and projected coverage rates. Under all three sets of assumptions, the ultimate levels are projected to be 95 percent for aged men and 85 percent for aged women. Currently insured status was disregarded in the cost projection because the number of cases in which eligibility for benefits is based on currently insured status is relatively small. Projections of the percentage of the population who are disability insured were developed from the percentages fully insured on the basis of projections of historical trends relating disability insured to fully insured.

Old-age and survivors insurance beneficiaries

Several types of benefits, at different benefit levels, are payable under the OASI program, so that the numbers of beneficiaries have been projected by type of benefit received.

Retired-worker beneficiaries were projected on the basis of the aged insured population (which was developed from the projections of the aged population and the percentages of the population who are fully insured). The percentages, by age and sex, of the insured population who were receiving benefits at the beginning of 1978 were projected to increase gradually on the basis of past trends (after adjustment for change in the earnings test, in the retirement ages, and in the level of unemployment). The resulting proportions of beneficiaries to aged population yield gradual increases in the implicit retirement rates.

Wives aged 62 and over of male retired-worker beneficiaries were estimated by using insured population projections and census data on marital status. The potential wife beneficiaries, after the exclusion of those eligible for their own retired-worker benefits and those eligible for a government pension from earnings in noncovered employment, were assumed to claim benefits as soon as they became eligible, even if this occurred at ages 62–64, when they would have to take reduced benefits. The experience to date indicates that, in the vast majority of cases, such immediate claiming of wives benefits does occur. Benefits payable to husbands aged 62 and over were estimated in a similar manner.

Children of retired workers were projected by ratios to male retired-worker beneficiaries, as derived from recent actual data and projected according to the fertility assumptions.

Young wife beneficiaries were estimated by extrapolating the base year ratio of such beneficiaries to the estimated number of beneficiaries who are children of retired-worker beneficiaries. The extrapolation reflects projected fertility and female labor force participation.

Child-survivor beneficiaries were based on the number of orphans in the United States, which was projected by multiplying the projected child population by the age-specific probability of being an orphan. These probabilities were derived by using distributions of age of parent at birth of child and death rates consistent with the population projections. The number of orphans was then adjusted to include eligible disabled orphans aged 18 and over and to eliminate orphans of uninsured deceased parents. For nondisabled children aged 18-21 a further reduction was made to exclude those not attending school.

Mother beneficiaries were estimated by a method similar to the one used to estimate young wife beneficiaries, that is, extrapolating the present ratio of such beneficiaries to child-survivor beneficiaries (excluding those nondisabled children aged 18-21 who were attending school). Benefits payable to father beneficiaries were estimated in a similar manner.

To estimate widow beneficiaries the proportions of widows in the female aged population were projected according to mortality assumptions and adjusted for eligibility for their own retired-worker benefits, for eligibility for a government pension from earnings in noncovered employment, and for the insured status of their deceased husbands. For ages 50–59, the disabled widow beneficiaries were estimated from the eligible widows by using disability prevalence rates. Benefits payable to widower beneficiaries were estimated in a similar manner.

These projected wife, widow, husband, and widower beneficiaries consist only of uninsured persons. Actually, however, some insured persons also receive residual benefits consisting of the excess of the potential secondary benefits over their own retired-worker benefits. Estimates of such residual benefits were incorporated into the projections of the wives, widows, husbands, and widowers benefits.

The minor category of parent beneficiaries was projected on the basis of the past trend in numbers of such beneficiaries. Parents were projected by assuming a decrease from a level of 18,000 at the beginning of 1978 to an ultimate level of 7,000 in 1990 under the intermediate set of assumptions.

Appendix table C shows the estimated number of beneficiaries in the OASI program.

APPENDIX TABLE C.—OASI BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS UNDER ALTERNATIVES I, II, AND III

[In thousands]

Calendar year	Beneficiaries with monthly benefits in current-payment status as of June 30							
	Retired workers and dependents			Survivors of deceased workers				
	Old age	Wives and husbands	Children	Mothers and fathers	Children	Widows and widowers	Parents	Total
Actual data:								
1970	13,066	2,651	535	514	2,673	3,151	29	22,619
1971	13,604	2,673	556	523	2,745	3,287	28	23,416
1972	14,181	2,706	578	536	2,847	3,433	27	24,308
1973	14,880	2,756	602	548	2,887	3,575	25	25,273
1974	15,589	2,806	619	565	2,908	3,706	24	26,217
1975	16,210	2,836	633	568	2,905	3,823	22	26,997
1976	16,789	2,867	674	576	2,876	3,938	21	27,741
1977	17,380	2,899	655	573	2,859	4,042	19	28,427
Alternative I:								
1980	19,293	3,054	708	595	2,791	4,440	15	30,896
1985	22,104	3,106	751	636	2,597	4,970	10	34,174
1990	25,008	3,170	505	527	2,439	4,203	7	35,859
1995	26,664	3,114	363	606	2,557	4,103	7	37,414
2000	27,549	3,040	379	662	2,749	4,043	7	38,429
2005	29,004	2,920	431	679	2,850	3,851	7	39,742
2010	32,109	2,975	521	676	2,875	3,800	7	42,963
2015	37,056	3,080	639	678	2,899	3,602	7	47,961
2020	43,088	3,203	760	687	2,986	3,417	7	54,148
2025	49,022	3,274	843	697	3,105	3,280	7	60,228
2030	52,828	3,154	844	707	3,200	3,200	7	63,940
2035	54,168	3,058	807	720	3,269	3,118	7	65,147
2040	53,717	2,854	768	744	3,326	2,971	7	64,387
2045	53,581	2,825	777	773	3,422	2,837	7	64,222
2050	54,808	2,972	829	795	3,535	2,676	7	65,622
2055	56,674	3,183	875	812	3,642	2,660	7	67,853
Alternative II:								
1980	19,296	3,054	708	595	2,791	4,440	15	30,899
1985	22,119	3,108	750	636	2,593	4,970	10	34,186
1990	25,024	3,172	506	525	2,414	4,203	7	35,851
1995	26,682	3,115	364	595	2,486	4,103	7	37,352
2000	27,569	3,043	380	640	2,613	4,043	7	38,295
2005	29,029	2,919	412	651	2,656	3,851	7	39,525
2010	32,139	2,976	459	645	2,641	3,799	7	42,706
2015	37,090	3,082	600	643	2,626	3,600	7	47,648
2020	43,127	3,207	700	642	2,660	3,411	7	53,754
2025	49,063	3,287	762	641	2,718	3,271	7	59,749
2030	52,867	3,190	762	642	2,755	3,189	7	63,412
2035	54,203	3,126	729	646	2,771	3,110	7	64,592
2040	53,750	2,940	693	656	2,776	2,955	7	63,777
2045	53,458	2,889	698	669	2,813	2,794	7	63,328
2050	54,155	2,964	730	677	2,860	2,585	7	63,978
2055	55,187	3,100	756	682	2,902	2,485	7	65,119
Alternative III:								
1980	19,344	3,062	710	595	2,790	4,440	15	30,956
1985	22,134	3,110	748	636	2,585	4,970	10	34,193
1990	25,041	3,172	507	517	2,358	4,203	7	35,805
1995	26,697	3,118	365	573	2,345	4,103	7	37,208
2000	27,587	3,045	371	595	2,342	4,043	7	37,990
2005	29,052	2,917	384	593	2,271	3,851	7	39,075
2010	32,168	2,975	443	582	2,180	3,797	7	42,152
2015	37,129	3,081	507	571	2,100	3,594	7	46,989
2020	43,172	3,219	579	557	2,055	3,400	7	52,989
2025	49,108	3,328	631	537	2,015	3,252	7	58,878
2030	52,907	3,275	631	519	1,963	3,166	7	62,468
2035	54,242	3,276	603	506	1,908	3,091	7	63,633
2040	53,786	3,124	574	496	1,852	2,985	7	62,824
2045	53,181	3,015	569	488	1,812	2,858	7	61,930
2050	52,809	2,962	573	478	1,778	2,690	7	61,297
2055	52,167	2,937	566	465	1,743	2,624	7	60,509

Note: Alternatives I, II, and III are defined in the text of this report.

Lump-sum death payments

The number of lump-sum death payments was projected by applying the death rates used in the population projections to the projected insured population.

Disability insurance beneficiaries

Disabled-worker beneficiaries were projected on the basis of the population exposed to disability, which was developed from the general population by applying the projected percentages of disability insured and then removing those persons already entitled to disabled-worker benefits. The number of newly entitled beneficiaries was developed from the exposed population by applying disability incidence rates. To obtain the number of currently entitled beneficiaries, termination rates were applied to the population consisting of the newly entitled beneficiaries and those already currently entitled.

The incidence rates were projected on the basis of age, sex, and year of exposure to disability. They were based on estimated average annual rates for the period 1972–75, smoothed to reflect the relative age-sex distributions during the 4-year period, and updated to reflect the disability benefit award experience through calendar year 1977. Although the disability award rate during 1977 remained level as compared with 1976, a generally upward trend in incidence rates, as experienced over the past decade, was assumed to continue. Age-sex specific incidence rates were assumed to increase over the period 1978–97 to a level about 25 percent higher than that estimated for 1977, and to remain at that level thereafter.

The termination rates were projected on the basis of age, sex, and duration of entitlement. They were based on mortality and recovery experience of disabled-worker beneficiaries during 1973–76, and were assumed to remain level in the future. All disability benefits were assumed to terminate at age 65, when retired-worker benefits would become payable.

The number of child beneficiaries entitled under the DI program was projected as a proportion of the number of male disabled-worker beneficiaries, based on recent experience and allowing for projected changes in fertility.

The number of young wife beneficiaries was projected as a proportion of the number of child beneficiaries, based on recent experience and allowing for projected changes in fertility and female labor force participation. The number of aged wife beneficiaries was projected as a proportion of the number of male disabled-worker beneficiaries.

The numbers of young husband and aged husband beneficiaries were projected as proportions of the number of female disabled-worker beneficiaries.

Appendix table D shows the projected number of beneficiaries in the DI program.

Annual increases in average wages in covered employment and in the Consumer Price Index

In previous years, the assumptions as to future increases in average wages and in the Consumer Price Index (CPI) have had considerable influence on the actuarial balance of the trust funds. As a result of the 1977 Social Security Amendments, however, that influence has been greatly reduced. This is mainly because of the new method of

APPENDIX TABLE D.—DISABILITY INSURANCE BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS UNDER ALTERNATIVES I, II, AND III—CONTINUED

[In thousands]

Calendar year	Beneficiaries with monthly benefits in current-payment status as of June 30			
	Workers	Wives and husbands	Children	Total
Actual data:				
1970	1,436	271	861	2,568
1971	1,561	293	934	2,788
1972	1,737	327	1,028	3,092
1973	1,925	364	1,127	3,416
1974	2,098	391	1,203	3,692
1975	2,363	429	1,333	4,125
1976	2,602	468	1,462	4,532
1977	2,755	482	1,496	4,733
Alternative I:				
1980	3,248	535	1,641	5,424
1985	4,031	578	1,733	6,342
1990	4,696	732	1,863	7,291
1995	5,458	844	1,953	8,255
2000	6,413	965	2,109	9,487
2005	7,457	1,092	2,362	10,911
2010	8,310	1,192	2,661	12,163
2015	8,777	1,225	2,929	12,931
2020	8,860	1,234	3,132	13,226
2025	8,612	1,225	3,175	13,012
2030	8,341	1,207	3,093	12,641
2035	8,407	1,224	3,097	12,728
2040	8,782	1,263	3,214	13,259
2045	9,252	1,326	3,405	13,983
2050	9,541	1,368	3,529	14,438
2055	9,682	1,397	3,591	14,670
Alternative II:				
1980	3,249	535	1,641	5,425
1985	4,040	579	1,737	6,356
1990	4,709	734	1,868	7,311
1995	5,465	844	1,935	8,244
2000	6,415	966	2,058	9,439
2005	7,455	1,086	2,257	10,798
2010	8,299	1,175	2,492	11,966
2015	8,750	1,203	2,700	12,653
2020	8,811	1,203	2,829	12,843
2025	8,523	1,188	2,811	12,522
2030	8,190	1,158	2,692	12,040
2035	8,161	1,159	2,650	11,970
2040	8,390	1,178	2,708	12,276
2045	8,675	1,209	2,819	12,703
2050	8,792	1,227	2,873	12,892
2055	8,793	1,237	2,877	12,907
Alternative III:				
1980	3,273	535	1,653	5,461
1985	4,049	580	1,741	6,370
1990	4,725	735	1,869	7,329
1995	5,468	845	1,897	8,210
2000	6,415	965	1,946	9,326
2005	7,447	1,070	2,043	10,560
2010	8,278	1,142	2,154	11,574
2015	8,702	1,151	2,234	12,087
2020	8,712	1,140	2,248	12,100
2025	8,347	1,112	2,139	11,598
2030	7,895	1,065	1,966	10,926
2035	7,677	1,035	1,866	10,578
2040	7,625	1,009	1,835	10,469
2045	7,551	990	1,833	10,374
2050	7,350	966	1,801	10,117
2055	7,107	946	1,748	9,801

Note: Alternatives I, II, and III are defined in the text of this report.

benefit calculation which removes the double indexing of future benefits to both average wages and the CPI.

The assumed ultimate percentage increases in the average annual CPI under alternatives I, II, and III are 3 percent, 4 percent, and 5 percent, respectively. The corresponding real-wage differentials, are 2¼ percent, 1¾ percent, and 1¼ percent. The sums of these differentials and the corresponding percentage increases in the average annual CPI yield the assumed ultimate percentage increases in average annual wages in covered employment, which are 5¼ percent, 5¾ percent, and 6¼ percent, for alternatives I, II, and III, respectively.

For alternative II, the CPI was assumed to increase ultimately at an annual rate of 4 percent, which is slightly higher than the 3.4 percent average over the last 30 years. This level was selected because the trend over the last 65 years indicates a tendency for the rate of increase in the CPI to increase slowly with time. The current outlook does not support a cessation or reversal of this tendency, although the recent high rates of increase in the CPI are not expected to continue over the long-range. The ultimate percentage increases in the average annual CPI of 3 percent under alternative I and 5 percent under alternative III were chosen to be 1 percentage point lower and higher, respectively, than the 4 percent used in alternative II.

The alternative II ultimate real-wage differential of 1¾ percent was based on projections of productivity and consideration of the factors linking productivity and the real-wage differential. Since 1951, average annual increases in productivity have averaged 2.7 percent, while the real-wage differential has averaged 1.7 percent. This difference of 1 percent results from such factors as changes in the average number of hours worked, the degree to which employees share in productivity gains, and the methods of employee compensation. The ultimate average annual increase in productivity is projected to be 2½ percent, and the differential adjustment from the above mentioned factors is assumed to be ¾ percent, thereby yielding an ultimate real-wage differential of 1¾ percent. For alternatives I and III, the ultimate real-wage differentials of 2¼ percent and 1¼ percent were chosen to be ½ percentage point higher and lower, respectively, than the 1¾ percent used in alternative II.

The ultimate real-wage differentials are not projected to be attained until the year 2000. During 1978–2000, the real-wage differentials are generally higher than the ultimate values, averaging 2.4 percent, 1.9 percent, and 1.4 percent for alternatives I, II, and III, respectively. The higher real-wage differentials thereafter projected for the next couple of decades reflect the transition to a different demographic structure which is expected to result in productivity growth before the turn of the century that is higher than the assumed ultimate growth.

More detail on the short-range wage and CPI assumptions for all three alternatives appears in the section of this report entitled "Economic and Demographic Factors and Assumptions".

Interest rate

Interest on the trust funds is assumed to accrue ultimately at 6.6 percent under alternative II. This rate was adopted to yield a real interest rate of 2.5 percent, based on the assumed ultimate 4 percent rate of increase in the CPI. In the short-range, interest rates somewhat higher than 6.6 percent were used. The assumed ultimate interest rates under alternatives I and III were chosen to yield real interest rates of 2.5 as under alternative II.

The assumed interest rates have no effect on the estimated expenditures as a percent of payroll or on the actuarial balance. They do, however, affect the projected trust fund ratios.

Average benefits

The amount of the average retired-worker benefit awarded was projected by simulating the automatic benefit adjustment provisions, and calculating future benefits for workers at various earnings levels. The average retired-worker benefit in current payment status was projected on the basis of the distribution of current beneficiaries by year of award, their average awarded benefits, and the increases in their benefits since the year of award. The average benefits for all other persons receiving monthly benefits from the OASI trust fund (except young survivors benefits and residual benefits paid to wives, widows, husbands, and widowers) were projected to increase at the same rate as the average retired-worker benefit. The average benefits for young survivors and the average residual benefits were projected to increase at rates that were slightly faster and slower, respectively, than the rate of increase in the average retired-worker benefit. The average benefits for all persons receiving monthly benefits from the DI trust fund were assumed to increase at the same rate as the average disabled-worker benefit, which was projected in a manner similar to that of the average retired-worker benefit.

Benefit payments

Total benefit payments were calculated as the product of the number of beneficiaries and their corresponding average benefits; these amounts were then adjusted to include retroactive payments to newly entitled beneficiaries, and residual payments to dually entitled beneficiaries.

Administrative expenses

The projection of administrative expenses through 1988 was based on increases in average wages, increases in the CPI, and increases in the number of beneficiaries. For the years after 1988, administrative expenses were assumed to increase at the combined rate of the estimated increases in the number of beneficiaries and in average wages.

Railroad retirement financial interchange

The effect of the financial interchange was evaluated on the basis of trends similar to those used for estimating the cost of the OASDI benefits. The resulting effect is a small long-range loss to the OASDI program.

Military service reimbursement

Although the effect of noncontributory credits for military service is implicit in the calculation of expenditures, the reimbursement from the general fund of the Treasury for such credits has not been reflected in the cost estimates. Under alternative II the reduction in cost resulting from such reimbursement is estimated to be about 0.05 percent of taxable payroll currently and to decrease as a percent of taxable payroll until about 2015, after which it is negligible.

Change in cost due to methodology changes

One of the reasons for the change in projected cost from the last estimates given to the Congress to the estimates in this report is that changes were made in the cost-estimation methodology. In other words, if all assumptions had remained the same from last year's report to this report, and actual experience in the intervening period exactly matched what had been projected, the projected cost would nevertheless have changed due to a number of changes in the methods used to calculate the projections.

The major methodological change is in the updating of the procedure for relating assumed future wage and CPI increases to the resulting increases in future benefit levels. Under the decoupling provisions enacted in 1977, awarded benefits increase approximately, but not exactly, in proportion to wage increases. Because of the increasing computation period, which will continue to force the use of relatively lower earnings in the benefit calculations for approximately the next 15 years, the awarded benefits will increase in the future at a lower rate than wages. In the last estimates given to the Congress the magnitude of this effect was estimated by using a sample of workers with theoretical earnings histories to project future benefits. This year, in order to improve the usefulness of the procedure, the sample was expanded, the distribution of earnings was updated, the pattern of assumed age-specific wage increases was modified, and other minor changes were made as well. The net result was an increase in projected cost for OASI and a decrease in projected cost for DI.

As for other methodological changes, the procedure used to get from the age-specific fertility rates in the starting year to the ultimate rates was changed to smooth out the dip in fertility previously projected to occur in 1980. In addition, the assumed rates of increase of benefits in current payment status were updated to better reflect the effect of earnings after retirement under the new decoupled benefit structure, as well as the effect of the three percent delayed retirement credit enacted in 1977. There were also a number of other changes which had minor effect on the projected costs.

Sensitivity of Cost Estimates to Changes in Selected Assumptions

The estimates under alternatives I, II, and III illustrate the variation in the projected cost of the OASDI system resulting from different combinations of assumptions. However, because of the complex interactions among the various assumptions, these estimates cannot be used to discern how changes in a single assumption affect the cost projections. This section is devoted to an analysis of the sensitivity of the long-range cost estimates to changes in selected individual assumptions. In the following tables, only the assumption whose effect is being analyzed is varied from its counterpart in the intermediate set of assumptions.

Sensitivity to mortality improvement assumptions

Appendix table E shows the projected average expenditures (as a percent of taxable payroll) under alternative II in combination with three different assumptions as to ultimate future improvement in mortality. Those three assumptions are: no improvement in mortality rates from the level experienced in 1977, improvement of approximately 19 percent (as assumed for alternative II), and improvement of about 35 percent.

Over the medium-range period, the estimated average expenditures increases with increasing mortality improvement, from 10.51 percent (for no mortality improvement) to 10.77 percent (for 35 percent improvement). Over the long-range period, a similar but more pro-

APPENDIX TABLE E.—ESTIMATED AVERAGE EXPENDITURES OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS MORTALITY IMPROVEMENT ASSUMPTIONS

[In percent of taxable payroll]

Calendar years	Average expenditures based on ultimate mortality improvement of [1]—		
	Zero percent	19 percent	35 percent
1978–2002	10.51	10.64	10.77
2003–27	12.85	13.51	14.19
2028–52	14.95	16.50	18.05
1978–2052	12.77	13.55	14.34

[1] The rate of mortality improvement refers to the ratio of the age-adjusted death rate in the year 2050 to that in 1977. The 19 percent improvement in mortality was used in alternatives I, II, and III.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

nounced trend exists. The estimated long-range average varies from 12.77 percent (for no mortality improvement) to 14.34 percent (for 35 percent improvement).

That the projected average medium-range and long-range costs increase with greater improvement in mortality is largely due to the relationship between age and mortality. For the population over age 65, where mortality rates are the highest, any mortality improvement means a relative extension to the length of time that retirement benefits are paid. Between ages 50 and 65, mortality improvements would result in relatively more tax contributions, but this gain in taxes would be more than offset by the resulting benefits payable to the additional new retirees at age 65. At the ages of 20 through 50, mortality rates are quite low so that even substantial improvement in the rates would not result in significant gains in the number of covered workers paying social security taxes. Mortality improvement at ages under 20 has relatively little effect, in the long run, on expenditures versus income. Consequently, the net effect of mortality improvement is to increase expenditures more than tax income, thereby resulting in higher costs as a percent of taxable payroll. Sensitivity to total fertility rate assumptions.

Appendix table F shows the projected average expenditures under alternative II and various ultimate total fertility rate assumptions. Those assumptions are: 1.7, 1.9, 2.1 (as in alternative II), 2.3, and 2.5 children per woman.

APPENDIX TABLE F.—ESTIMATED AVERAGE EXPENDITURES OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS FERTILITY ASSUMPTIONS

[In percent of taxable payroll]

Calendar years	Average expenditures based on ultimate total fertility rate of [1]—				
	1.7	1.9	2.1	2.3	2.5
1978–2002	10.64	10.64	10.64	10.64	10.65
2003–27	14.25	13.87	13.51	13.18	12.87
2028–52	19.59	17.93	16.50	15.28	14.22
1978–2052	14.83	14.15	13.55	13.04	12.58

[1] The total fertility rate is expressed in terms of children per woman. See text for further details of fertility projection. All other assumptions are given by alternative II, which is defined in the text of this report.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

Over the medium-range period, the estimated average expenditures increases with increasing fertility—albeit very minutely—from 10.64 percent (for 1.7 children per woman) to 10.65 percent (for 2.5 children per woman). Over the long-range period, that trend is reversed. The long-range estimated average expenditures varies from 14.83 percent (for 1.7 children per woman) to 12.58 percent (for 2.5 children per woman).

The reversal of the effect of the fertility assumptions between the medium-range and long-range periods is due to the time lag between the effect of fertility increases on the beneficiary population and on the worker population. Under high fertility, for example, the relatively large number of children receiving benefits during the medium-range period is not offset to any appreciable extent by additional taxpayers. This results in an average medium-range cost that increases with increasing fertility. Later in the 75-year period, however, under higher fertility the labor force increases more than the beneficiary population, so that the average long-range expenditures when expressed as percent of taxable payroll decreases with increasing fertility.

Sensitivity to Consumer Price Index Assumptions

Appendix table G shows the projected average expenditures under alternative II with assumed ultimate annual CPI increases of 2 percent, 4 percent (as in alternative II), and 6 percent. In each case the ultimate real-wage differential is assumed to be 1¾ percent, yielding ultimate percentage increases in average annual wages of 3¾ percent, 5¾ percent, and 7¾ percent, respectively.

Over both the medium-range and long-range periods, the projected average expenditures decreases with increasing rates of increase in the CPI. The estimated average medium-range expenditures varies from 10.85 percent (assuming an ultimate rate of increase in the CPI of 2 percent) to 10.44 percent (assuming an ultimate rate of 6 percent). Over the long-range, the estimated average expenditures varies from 14.01 percent to 13.14 percent. The estimated average medium-range and long-range expenditures decrease by about .1 and .2 percentage points, respectively, for each 1 percent increase in the rate of increase in the CPI.

APPENDIX TABLE G.—ESTIMATED AVERAGE EXPENDITURES OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS CONSUMER PRICE INDEX ASSUMPTIONS

[In percent of taxable payroll]

Calendar years	Average expenditures based on ultimate wage-CPI increases of [1]—		
	3¾—2	5¾—4	7¾—6
1978–2002	10.85	10.64	10.44
2003–2027	13.99	13.51	13.09
2028–2052	17.18	16.50	15.88
1978–2052	14.01	13.55	13.14

[1] The initial value in each pair refers to the assumed annual percentage increases in average wages after 1999. The 2d value refers to the assumed annual percentage increases in CPI after 1984. The wage-CPI assumptions used in the earlier years were designed so as to gradually reflect the difference in ultimate values. All other assumptions are given by alternative II, which is defined in the text of this report.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

The trend of decreasing cost with increasing rate of increase in the CPI, results from the time lag between the effect on the income to the system and the effect on benefit expenditures. When assuming a higher rate of increase in the CPI (in conjunction with a constant real-wage differential), the effect on income to the system of the corresponding higher rate of increase in wages is experienced immediately, while the effect on benefits of the higher rate of increase in the CPI is experienced with about a half-year lag. In addition, the effect on benefits of the higher rate of increase in wages is experienced with about a two-year lag.

Sensitivity to Average Real-Wage Assumptions

Appendix table H shows the estimated average expenditures under alternative II with assumed ultimate real-wage differentials of 1 percent, 1¾ percent (as in alternative II), and 2½ percent. In each case the ultimate annual rate of increase in the CPI is assumed to be 4 percent, yielding ultimate annual increases in average wages of 5 percent, 5¾ percent, and 6½ percent, respectively.

Over the medium-range period, the estimated average expenditures decreases from 11.13 percent (assuming a 1 percent real-wage differential) to 10.19 percent (assuming a 2½ percent differential). Over the long-range period, the average decreases from 14.47 percent to 12.72 percent. For each 1 percent increase in the assumed real-wage differential, the estimated average medium-range expenditures decreases by about 0.6 percentage points, and the estimated average long-range expenditures decreases by about 1.1 to 1.2 percentage points.

That the average medium-range and long-range expenditures decrease with increasing real-wage differentials results from the substantial lag between the time when a worker makes contributions based on the assumed higher earnings and the time when he draws benefits based on those higher earnings. In addition, the marginal increase to benefits is relatively small for high earners, resulting in a greater increase in income to the system than in benefits to those workers.

APPENDIX TABLE H.—ESTIMATED AVERAGE EXPENDITURES OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS REAL-WAGE ASSUMPTIONS

[In percent of taxable payroll]

Calendar years	Average expenditures based on ultimate wage-CPI increases of[1] 5—4	5¾—4	6½—4
1978–2002	11.13	10.64	10.19
2003–27	14.51	13.51	12.62
2028–52	17.77	16.50	15.35
1978–2052	14.47	13.55	12.72

[1] The initial value in each pair refers to the assumed annual percentage increases in average wages after 1999. The 2d value refers to the assumed annual percentage increases in CPI after 1984. The difference between the 2 values is approximately the annual percentage increase in real wages. The wage assumptions used in the earlier years were designed so as to gradually reflect the difference in ultimate values. All other assumptions are given by alternative II, which is defined in the text of this report.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

APPENDIX B.—DETERMINATION AND ANNOUNCEMENT OF SOCIAL SECURITY BENEFIT INCREASES [1]

I hereby determine and announce a cost-of-living increase of 5.9 percent in benefits under the Social Security Act, (the Act) under title II effective with the month of June 1977 and under title XVI effective with the month of July 1977. This is pursuant to authority contained in section 215(i) of the Social Security Act (42 U.S.C. 415(i)), as amended by section 3 of Pub. Law. 93–233, enacted December 31, 1973, and in section 1617 of the Social Security Act (42 U.S.C. 1382f).

The revised table of benefits following this notice is deemed to appear in section 215(a) of the Act. With respect to benefits for transitional insured persons aged 72 and over entitled under section 227 of the Act (42 U.S.C. 427) and for uninsured persons aged 72 and over entitled under section 228 of the Act (42 U.S.C. 428), the amounts $78.50 and $39.30 for a month are established and deemed to appear in sections 227 and 228, in lieu of the respective amounts of $74.10 and $37.10 that were established by the last cost-of-living increase. The additional amount of the supplemental security income benefit with respect to essential persons payable under section 211 of Public Law 93–66 is established in the amount of $1,068.00 for a year in lieu of the amount of $1,008.00 that was in effect under section 211(a)(1)(A) of the law as a result of the last cost-of-living increase.

Annual income limitations under the Supplemental Security Income Program for the aged, blind, and disabled, are established in the amounts of $2,133.60 and $3,200.40 in lieu of the respective amounts of $2,013.60 and $3,021.60 that were in effect under sections 1611(a)(1)(A), 1611(a)(2)(A), 1611(b)(1), and 1611(b)(2) of the Act, as a result of the last cost-of-living increase. (The last cost-of-living increase in benefits under titles II and XVI of the Social Security Act and in income limitations for beneficiaries under the Supplemental Security Income Program herein referred to was published on May 14, 1976, at 41 FR 19999.)

AUTOMATIC BENEFIT INCREASE DETERMINATION

Section 215(i) of the Social Security Act requires that, when certain conditions are met in the first calendar quarter of a year, the Secretary shall determine that a cost-of-living increase in benefits and income limitations is due. That section further specifies a formula which automatically determines the amount of any cost-of-living increase in benefits and income limitations, based on the Consumer Price Index reported by the Department of Labor.

[1] This statement was published in the Federal Register for May 12, 1977 (Vol. 42, No. 92, pp. 24209–14).

Section 215(i)(2)(A) of the Act provides that the Secretary shall determine each year, beginning with 1975, whether there is a cost-of-living computation quarter in such year. If he so determines, he shall, effective with June of that year, increase benefits for individuals entitled under sections 227 and 228 of the Act, and shall increase the primary insurance amounts of all other individuals entitled to benefits under title II of the Act (excluding primary insurance amounts determined under section 215(a)(3)). The percentage of increase in benefits shall be equal to the percentage of increase by which the Consumer Price Index for the cost-of-living computation quarter exceeds the Index for the most recent prior base quarter or cost-of-living computation quarter.

Section 215(i)(1) of the Act defines a base quarter as a calendar quarter ending on March 31 in each year after 1974, or any other calendar quarter in which occurs the effective month of a general benefit increase. This subsection of the Act also defines a cost-of-living computation quarter as a base quarter in which the Consumer Price Index prepared by the Department of Labor exceeds by not less than 3 percent such Index in the later of (1) the last prior cost-of-living computation quarter or, (2) the most recent calendar quarter in which a general benefit increase was effective; with the exception that there shall be no cost-of-living computation quarter in any calendar year if, in the year prior to such year, a law has been enacted providing a general benefit increase or if, in such prior year, such a general benefit increase becomes effective. Section 215(i)(1) of the Act further provides that the Consumer Price Index for a base quarter or a cost-of-living computation quarter shall be the arithmetical mean of such Index for the 3 months in such quarter.

The Consumer Price Index prepared by the Department of Labor for each month in the quarter ending March 31, 1977, was: for January 1977, 175.3; for February 1977, 177.1, for March 1977, 178.2. The arithmetical mean for this calendar quarter is 176.9. This result is compared to the last prior cost-of-living computation quarter, which was the quarter ending March 31, 1976. The Consumer Price Index prepared by the Department of Labor for each month in that quarter was: for January 1976, 166.7; for February 1976, 167.1, for March 1976, 167.5. The arithmetical mean for that calendar quarter was 167.1. The increase for the calendar quarter ending March 31, 1977, is 5.9 percent. Thus, since the percentage of increase in the Consumer Price Index from the calendar quarter ending March 31, 1976, to the calendar quarter ending March 31, 1977, is not less than 3 percent, the quarter ending March 31, 1977, is a cost-of-living computation quarter. Consequently, a cost-of-living benefit increase of 5.9 percent is effective for benefits under title II of the Act beginning June 1977.

Title II Benefits

Title II benefits are payable under the Federal old-age, survivors, and disability insurance program. Individuals entitled under such programs include insured workers, wives, husbands, children, widows, widowers, mothers, and parents.

In accordance with section 215(1)(2)(D)(iv) of the Act, the primary insurance amounts and the maximum family benefits shown in columns IV and V, respectively, of the revised benefit table set forth in this announcement were obtained by increasing by 5.9 percent the corresponding amounts shown in the benefit table heretofore established by the last cost-of-living increase and further extended, by the operation of section 215(i)(2)(D)(v), as a result of the increase in the contribution and benefit base determined in 1976 under section 230 of the Act and published on October 13, 1976, at 41 FR 44878. Section 227 of the Act provides limited benefits to a worker, who became age 72 before 1969 and was not insured under the usual requirements, and to his wife or widow. Such an individual has a transitional insured status. Section 228 of the Act provides similar benefits at age 72 for certain uninsured persons. The monthly benefit amounts of $74.10 and $37.10 heretofore established, for persons entitled under sections 227 and 228 of the Act, were increased by 5.9 percent to obtain the new amounts of $78.50 and $39.30, respectively.

Title XVI Benefits

Section 1617 of the Social Security Act provides that, whenever the benefits under title II are increased as a result of a determination made under section 215(i), the amounts in sections 1611(a)(1)(A), 1611(a)(2)(A), 1611(b)(1), and 1611(b)(2) of the Social Security Act and in section 211(a)(1)(A) of Pub. L. 93–66 shall be increased, effective with months after the month in which the title II increase is effective, and that the percentage of such increase shall be the same as the percentage of increase by which the title II benefits are increased (and rounded, when not a multiple of $1.20, to the next higher multiple of $1.20).

In accordance with section 1617, monthly Federal Supplemental Security Income (SSI) guarantees under the SSI program for the aged, blind, and disabled are increased effective with July 1977, by 5.9 percent. The benefits, under that program, other than income excluded under section 1612(b), of $2,013.60 and $3,021.60 heretofore established are increased by 5.9 percent to $2,133.60 and $3,200.40, respectively. The amount of $1,008.00 previously established as the amount of the additional supplemental security income benefit with respect to essential persons payable under section 211(a)(1)(A) of Public Law 93–66, is increased by 5.9 percent to obtain a new amount of $1,068.00.

[Catalog of Federal Domestic Assistance Programs Nos. 13.802–5, and 13.807 Social Security Programs.]

Dated: May 5, 1977.

Joseph A. Califano, Jr.,
Secretary.

[The revised table of benefits that followed the above announcement in the Federal Register is not reproduced here because of its length.]

APPENDIX C.—DETERMINATION AND ANNOUNCEMENT OF SOCIAL SECURITY CONTRIBUTION AND BENEFIT BASE AND RETIREMENT TEST EXEMPT AMOUNT FOR 1978 [1]

Summary

The Secretary has determined and announces the social security contribution and benefit base to be $17,700 with respect to remuneration paid in, and taxable years beginning in, 1978. He has also determined and announces the monthly exempt amount under the social security retirement test to be $270 for taxable years ending in calendar year 1978. Also authorized and published is a table reflecting the new higher average monthly wage and related benefit amounts made possible by the higher contribution and benefit base.

Supplementary information

Sections 203(f)(8) and 230 of the Social Security Act (42 U.S.C. 403(f)(8) and 430), as amended by section 8(h) and (i) of Public Law 94–202, require the Secretary of Health, Education, and Welfare to publish in the Federal Register on or before November 1, 1977, the contribution and benefit base and the retirement test exempt amount for calendar year 1978.

ACTUARIAL COMPUTATIONS

Each of the 1978 amounts of $270 and $17,700 for the retirement test monthly exempt amount and the contribution and benefit base, respectively, is determined according to a formula specified in the law, which automatically produces a mathematical result based upon reported statistics.

Section 203(f)(8) of the Social Security Act provides that the retirement test monthly exempt amount for 1978 shall be equal to the 1977 amount of $250 multiplied by the ratio of (1) the average amount, per employee, of the taxable wages of all employees reported under the program for the first calendar quarter of 1976 to (2) the average amount of such wages reported for the first calendar quarter of 1975. The section further provides that if the amount so determined is not a multiple of $10, it shall be rounded to the nearest multiple of $10.

Similarly, section 230 of the Social Security Act provides that the contribution and benefit base for 1978 shall be equal to the 1977 amount of $16,500 multiplied by the ratio of (1) the average amount, per employee, of the taxable wages of all employees reported under the program for the first calendar quarter of 1976 to (2) the average amount of such wages reported for the first calendar quarter of 1975.

[1] This statement, edited for presentation here, was published in the Federal Register for November 4, 1977 (Vol. 42, No. 213, pp. 57754–5).

The section further provides that if the amount so determined is not a multiple of $300, it shall be rounded to the nearest multiple of $300.

The data used to make the necessary computations of such average taxable wages were derived from reports submitted to the Social Security Administration of taxable wages paid to employees by their employers. Each quarter, taxable wages are posted to the record of earnings of each individual employee for whom wages were reported. These records are referred to hereinafter as Summary Earnings Records. As the wages were posted to the Summary Earnings Records, the data were tabulated on a 100-percent basis to obtain the total amount of reported taxable wages and the total number of employees for whom such wages were reported. The tabulated data on taxable wages reported for the first calendar quarter of each year 1975 and 1976 were limited to those wages that were reported and posted to the Summary Earnings Records by the end of the quarterly updating operations completed in September of the same year.

About 70.6 million employees had taxable wages reported for the first calendar quarter of 1975 that were posted to the Summary Earnings Records by the end of September 1975, and the average amount of their taxable wages was $2,157.73 per employee. The corresponding number of employees and average amount of taxable wages for the first calendar quarter of 1976 were 72.8 million and $2,306.62, respectively. The ratio of average taxable wages reported for the first quarter of 1976 to average taxable wages reported for the first quarter of 1975 is therefore 1.069003.

Retirement Test Exempt Amount

Multiplying the 1977 retirement test monthly exempt amount of $250 by the ratio of 1.069003 produces the amount of $267.25, which must then be rounded to $270. Accordingly, the retirement test exempt amount for taxable years ending in calendar year 1978 is $270 on a monthly basis, or $3,240 on an annual basis.

Contribution and Benefit Base

Multiplying the 1977 contribution and benefit base of $16,500 by the ratio of 1.069003 produces the amount of $17,638.55, which must then be rounded to $17,700. Accordingly, the contribution and benefit base for remuneration paid in, and taxable years beginning in, calendar year 1978 is $17,700.

Extension Table Effective January 1978

The following is an extension of the Table for Determining Primary Insurance Amount and Maximum Family Benefits provided in section 215(a) of the Social Security Act. This extension reflects the new higher average monthly wage and related benefit amounts now possible under the increased contribution and benefit base promulgated herein effective January 1978 in accordance with section 215(i) of the Social Security Act.

TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING JANUARY 1978

I (Primary insurance benefits under 1939 Act, as modified)		II (Primary insurance amount effective for June 1976)	III (Average monthly wage)		IV (Primary insurance amount)	V (Maximum family benefits)
If an individual's primary insurance benefit (as determined under subsec. (d)) is—		Or his primary insurance amount (as determined under subsec. (c)) is—	Or his average monthly wage (as determined under subsec. (b)) is—		The amount referred to in the preceding paragraphs of this subsection shall be—	And the maximum amount of benefits payable (as provided in sec. 203(a)) on the basis of his wages and self-employment income shall be—
At least—	But not more than—		At least—	But not more than—		
			$1,376	$1,380	$633.90	$1,109.40
			1,381	1,385	634.90	1,111.10
			1,386	1,390	635.90	1,112.90
			1,391	1,395	636.90	1,114.60
			1,396	1,400	637.90	1,116.40
			1,401	1,405	638.90	1,118.10
			1,406	1,410	639.90	1,119.90
			1,411	1,415	640.90	1,121.60
			1,416	1,420	641.90	1,123.40
			1,421	1,425	642.90	1,125.10
			1,426	1,430	643.90	1,126.90
			1,431	1,435	644.90	1,128.60
			1,436	1,440	645.90	1,130.40
			1,441	1,445	646.90	1,132.10
			1,446	1,450	647.90	1,133.90
			1,451	1,455	648.90	1,135.60
			1,456	1,460	649.90	1,137.40
			1,461	1,465	650.90	1,139.10
			1,466	1,470	651.90	1,140.90
			1,471	1,475	652.90	1,142.60

(Catalog of Federal Domestic Assistance Programs Nos. 13.802–5, and 13.807 Social Security Programs.)

Dated: October 31, 1977.

JOSEPH A. CALIFANO, Jr.,
Secretary.

[After the above determination was announced, the 1978 retirement test exempt amount for beneficiaries aged 65 and over was increased to $4,000 under the Social Security Amendments of 1977. The exempt amount for beneficiaries under age 65 remains at $3,240 for 1978.]