1984 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND DIS-ABILITY INSURANCE TRUST FUNDS

# COMMUNICATION

FROM

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

### TRANSMITTING

THE 1984 ANNUAL REPORT OF THE BOARD, PURSUANT TO SSA, SEC. 201(c)(2)



APRIL 5, 1984.-Referred to the Committee on Ways and Means and ordered to be printed

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### LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, Washington, D.C., April 5, 1984

HONORABLE THOMAS P. O'NEILL, JR. Speaker of the House of Representatives Washington, D.C.

HONORABLE GEORGE BUSH President of the Senate Washington, D.C.

GENTLEMEN: We have the honor of transmitting to you the 1984 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 44th such report), in compliance with the provisions of section 201(c) of the Social Security Act.

Respectfully,

DONALD T. REGAN,

Secretary of the Treasury, and Managing Trustee of the Trust Funds.

RAYMOND J. DONOVAN,

Secretary of Labor, and Trustee.

MARGARET M. HECKLER,

Secretary of Health and Human Services,

MARTHA A. MCSTEEN,

Acting Commissioner of Social Security, and Secretary, Board of Trustees.



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# 1984 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS

#### I. 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. Currently, the Board has three members, who serve in an ex officio capacity. These members are the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health and Human Services. The Social Security Amendments of 1983 (Public Law 98-21, enacted into law on April 20, 1983) provide for the addition of two public members to the Board of Trustees. The two new members are to be nominated by the President for a term of 4 years, and are subject to confirmation by the Senate.

By law, the Secretary of the Treasury is designated as the Managing Trustee, and the Commissioner of Social Security is designated as Secretary of the Board. The Board of Trustees reports to the Congress each year on the operation and status of the trust funds, in compliance with section 201(c)(2) of the Social Security Act. This report, the 44th such report, is the annual report for 1984.

#### II. HIGHLIGHTS

This section summarizes the more important developments since the 1983 Annual Report was issued on June 24, 1983, and describes the major features of this report. These topics are discussed in more detail in later sections.

Trust fund operations during fiscal year 1983

For the Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds in fiscal year 1983, the combined income was \$170.3 billion, while the combined outgo was \$170.1 billion. This was the first year in nearly a decade that income exceeded expenditures. The improved cash-flow situation reflects the effects of the Social Security Amendments of 1983 (Public Law 98-21), the provisions of which are described in detail in the 1983 Annual Report. The provision of the 1983 amendments which had the greatest effect in fiscal year 1983 is the change in the financing basis of deemed wage credits based on military service. This change resulted in lump-sum transfers on May 20, 1983, from the general fund of the Treasury to the OASI and DI Trust Funds, amounting to \$19.7 billion. Another provision that had a significant effect in fiscal year 1983 is the 6-month delay in the automatic annual benefit increases. This provision delayed the OASDI benefit increase in 1983 from June to December.

In addition, loans amounting to \$12.4 billion were made from the Hospital Insurance (HI) Trust Fund to the OASI Trust Fund in December 1982, and loans amounting to \$5.1 billion were made from the DI Trust Fund to the OASI Trust Fund in November and December 1982. Thus, including the effects of these interfund loans, the assets of the OASI Trust Fund increased by \$14.1 billion, and the assets of the DI Trust Fund decreased by \$15.5 billion, during the fiscal year.

- (b) The total number of persons receiving monthly benefits under the OASDI program was 35.9 million at the end of September 1983. An estimated 116 million workers had earnings in calendar year 1983 that were taxable and creditable toward benefits under the program.
- (c) The trust funds earned interest amounting to \$1.8 billion during fiscal year 1983. The effective annual rate of interest earned by the combined assets of the OASI and DI Trust Funds during the 12 months ending June 30, 1983, was 11.3 percent. During the same period, the average interest rate on new securities purchased by the trust funds was also 11.3 percent.
- (d) Administrative expenses for the OASDI program during fiscal year 1983 were \$2.2 billion, which represented 1.3 percent of benefit payments during the year.

# Financial status of the trust funds

The estimates in this report indicate that benefits under the Old-Age, Survivors, and Disability Insurance program can be paid on time well into the next century on the basis of all four sets of assumptions for which estimates are shown. The financial outlook shown in this report

for the OASDI program is therefore similar to that shown in the last annual report.

The stabilizer provision of the 1983 amendments is not expected to affect the automatic benefit increase for December 1984, even on the basis of very adverse economic conditions. Thus, the 1984 automatic increase in OASDI benefits will almost certainly be based on the full increase in the Consumer Price Index, even if average wages increase at a lower rate.

Four sets of financial projections are shown in this report, to indicate future income and outgo under a broad range of conditions which are described in the subsection entitled "Economic and Demographic Assumptions." As in recent annual reports, one set of assumptions, alternative I, is designated as "optimistic," and another, alternative III, is termed "pessimistic." The particular economic and demographic assumptions in each set are so characterized depending on whether they have a favorable or unfavorable effect on the financial status of the trust funds. Two alternative "intermediate" sets of assumptions are used: alternative II-A and alternative II-B. These intermediate sets share the same demographic assumptions. However, for alternative II-A, future economic performance resembling that of the more robust recent economic expansions is assumed. For alternative II-B, a slight deceleration from the recent rates of economic growth is assumed, followed by less robust economic experience than assumed for alternative II-A. This presentation illustrates the beneficial effect on the financial status of the trust funds of higher real growth in wages, higher employment, and lower inflation, for any given set of demographic assumptions. For the "pessimistic" assumptions, a near-term decline in the economy is assumed, followed by slow but steady growth thereafter. Thus, this set of assumptions represents a fairly adverse economic situation but obviously not the worst conditions that could occur.

The estimated trust fund levels shown in this report are relatively low through 1987. Thus, although the OASDI program is estimated to be adequately financed for many years into the future on the basis of the assumptions in this report, the solvency of the program cannot be guaranteed under all circumstances. If actual economic conditions in 1984-87 are, on the average, worse (in regard to their effect on OASDI financing) than those assumed for alternative III, such as a more severe recession in that period, the OASDI program could again experience financial difficulties.

The financial projections are described in detail for three time periods of particular interest—short range, medium range, and long range. The estimates for the various time periods can be summarized as follows:

(a) Short range (1984-88)—On the basis of the four alternative sets of assumptions used in this report, income to the OASI Trust Fund is expected to exceed expenditures in every year of the short-range projection period (excluding the effects of interfund loan repayments to the DI and HI Trust Funds). On the basis of alternatives II-A and II-B, the income to the DI Trust Fund is estimated to exceed expenditures after 1985. This is also the case after 1984 on the basis of alternative I, and after 1987 on the basis

of alternative III. The near-term declines in the assets of the DI Trust Fund are more than offset by increases in the assets of the OASI Trust Fund, on the basis of alternatives I, II-A, and II-B. Based on alternative III, relatively small declines in the combined assets of the OASI and DI Trust Funds, as a percentage of program outgo, are projected to occur through the early part of 1988. This partially reflects the effects of the assumed repayments, in 1988, of the amounts owed to the HI Trust Fund, as described below.

On the basis of alternatives I, II-A, and II-B, the estimated increases in the combined assets of the OASI and DI Trust Funds would be sufficient to trigger the automatic-repayment provisions that apply to the interfund loans made in 1982 from the HI Trust Fund to the OASI Trust Fund. Full repayment of such loans would be required by February 1, 1987, on the basis of alternatives I, II-A, and II-B. Based on alternative III, no repayment of the amounts owed to the HI Trust Fund would be required by law prior to 1988. For the alternative III estimates shown in this report, however, full repayment is assumed to occur in the first half of 1988—in six equal monthly payments. Without such repayments, as indicated in the concurrent 1984 Annual Report for the Hospital Insurance program, the HI Trust Fund would be depleted in 1988 on the basis of the alternative III assumptions.

On the basis of all four sets of assumptions, the OASI and DI Trust Funds would have sufficient assets to permit timely payment of benefits throughout this period. The level of assets compared to annual expenditures, however, would remain relatively low through about 1987, making the funds somewhat vulnerable, during that period, to certain types of adverse economic conditions worse (in terms of their effect on the trust funds) than those assumed for alternative III.

As noted in the concurrent 1984 Annual Report for the Hospital Insurance Trust Fund, on the basis of all four sets of assumptions, the HI Trust Fund would be depleted within about 5-10 years without corrective legislation. Estimates of the assets of the HI Trust Fund, and of the combined assets of the OASI, DI, and HI Trust Funds, are summarized in Appendix F. While the OASI and DI Trust Funds would have sufficient assets to permit loans to the HI Trust Fund which could prevent its depletion in the short-range period and slightly beyond (based on all four sets of assumptions), interfund loans are now permitted only through 1987, and any amounts owed at the beginning of 1988 must be repaid within 2 years. Thus, the expected depletion of the HI Trust Fund could not be prevented or delayed through the use of the present interfund-borrowing provisions.

(b) Medium range (1984-2008)—On the basis of the four alternative sets of assumptions, average annual costs for the OASDI program during the 25-year projection period range from 9.36 to 11.63 percent of taxable payroll, while average income ranges from 12.51 to 12.59 percent. Thus, the projected medium-range

actuarial balance is a surplus varying from 3.15 to 0.97 percent of taxable payroll. As shown in Appendix F, the medium-range actuarial balance for the combined OASI, DI, and HI programs is a surplus of 1.23 percent of taxable payroll on the basis of alternative II-A and 0.71 percent on the basis of alternative II-B.

(c) Long range (1984-2058)—Over the 75-year projection period, annual costs for the OASDI program are projected to average from 10.01 to 17.22 percent of taxable payroll, depending on the assumptions. During this period, average income ranges from 12.76 to 13.10 percent of taxable payroll. Thus, the projected long-range actuarial balance varies from a surplus of 2.75 percent of taxable payroll, on the basis of the alternative I assumptions, to a deficit of 4.12 percent of taxable payroll, on the basis of the alternative III assumptions.

On the basis of alternative II-A, an average surplus of 0.65 percent of taxable payroll is projected. This surplus consists of average surpluses of 2.40 and 0.72 percent of taxable payroll over the first and second 25-year subperiods, respectively, and an average deficit of 1.16 percent over the third 25-year subperiod. On the basis of alternative II-B, a deficit of 0.06 percent of taxable payroll is estimated. This small average deficit of 0.06 percent of taxable payroll over the 75-year projection period is within the range of "close actuarial balance," as defined in the section of this report entitled "Actuarial Cost Projections." However, as was the case for alternative II-A, the 25-year subperiods show a pattern of recurring deficits in the latter part of the 75-year projection period. The actuarial balance based on alternative II-B consists of an average surplus of 2.01 percent of taxable payroll over the first 25-year subperiod, and average deficits of 0.05 and 2.14 percent over the second and third 25year subperiods, respectively.

As shown in Appendix F, the long-range actuarial balance for the combined OASI, DI, and HI programs is a deficit of 4.09 percent of taxable payroll on the basis of alternative II-B. This deficit consists of an average surplus of 0.71 percent of taxable payroll over the first 25-year subperiod, and average deficits of 4.36 and 8.62 percent over the second and third 25-year subperiods, respectively.

These 75-year projections are subject to considerable uncertainty and should be interpreted, not as precise forecasts of expected program operations, but as indications of how the trust funds would operate under present law if the assumed economic and demographic conditions actually were to materialize. Despite their inherent uncertainty, these projections, and the resulting patterns of surpluses and deficits in the various subperiods, provide a valuable picture of the long-range financial obligations of the Social Security program and information on how program costs would respond to changing conditions.

### Developments since the last annual report

- (a) An automatic benefit increase of 3.5 percent became effective for December 1983. (The statement announcing the determination of this increase is shown in Appendix C.)
- (b) Effective for 1984, the contribution and benefit base was increased from \$35,700 to \$37,800. The annual exempt amounts under the retirement earnings test were increased from \$4,920 to \$5,160, for beneficiaries under age 65, and from \$6,600 to \$6,960 for beneficiaries aged 65 through 69. (The retirement earnings test does not apply to beneficiaries aged 70 and over.) The amount of annual earnings required for a quarter of coverage was increased from \$370 to \$390. (The statement announcing these changes is shown in Appendix D.)

### III. SOCIAL SECURITY AMENDMENTS SINCE THE 1983 REPORT

Since the 1983 Annual Report was transmitted on June 24, 1983, only one law affecting the OASDI program in any significant way has been enacted. Public Law 98-118 (enacted into law on October 11, 1983) included two sections affecting the OASDI program:

- 1. It extended the temporary provision of law which permits the continued payment of disability benefits during the appeals process, in certain situations following a decision to terminate such benefits. The original provision, which was included in Public Law 97-455 (enacted on January 12, 1983), applied to termination decisions which were made before October 1, 1983. The new law extended the provision to apply to termination decisions which were made before December 7, 1983.
- 2. It delayed until 1986 the Social Security coverage of salaries paid to Federal judges who return to active duty from retirement. Such coverage had been required to begin on January 1, 1984, under the Social Security Amendments of 1983 (Public Law 98-21, enacted on April 20, 1983).

Details of this law can be found in documents prepared by and for the Congress. The financial projections shown in this report reflect the effects of these amendments.

### IV. 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 OASI program are handled through this fund. The Federal Disability Insurance Trust Fund is another separate account in the United States Treasury; it was established on August 1, 1956. All the financial operations of the DI program are handled through this fund.

The major sources of receipts of these two funds are (1) amounts appropriated to each of them under permanent authority on the basis of contributions paid by workers, their employers, and individuals with selfemployment income, in work covered by the OASDI program, and (2) amounts deposited in each of them representing contributions paid by or on behalf of workers employed by State and local governments and by such employers with respect to wages covered by the program. All employees, and their employers, in covered employment are required to pay contributions with respect to their wages. Employees are required to pay contributions with respect to cash tips, but employers are required to pay contributions on only 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 covered net earnings from self-employment. In addition to making the required employer contributions on the earnings of covered Federal employees. the Federal government also pays amounts equivalent to the employer and employee contributions that would be paid on deemed wage credits attributable to military service performed after 1956 if such wage credits were covered wages.

In general, an individual's contributions are computed on annual wages or net earnings from self-employment, or both wages and net selfemployment earnings combined, up to a specified maximum annual amount. The contributions are determined first on the wages and then on any net self-employment earnings, such that the total does not exceed the annual maximum amount. An employee who pays contributions on wages in excess of the annual maximum amount (because of employment with two or more employers) is eligible for a refund of the excess employee contributions. The monthly benefit amount to which an individual (or his or her spouse and children) may become entitled under the OASDI program is based on the individual's covered earnings over his or her lifetime. In computing benefits for almost all persons who first become eligible to receive benefits in 1979 or later, the earnings in each year are indexed to take account of increases in average wage levels. The maximum amount of earnings on which contributions are payable in a year is also the maximum amount of earnings creditable for benefitcomputation purposes in that year (the contribution and benefit base).

The contribution rates applicable in each calendar year, and the allocation of the rates between the two trust funds, are shown in table 1. For 1985 and later, the rates shown are those scheduled in present law. The contribution and benefit bases are also shown in table 1. The bases for 1975-78 were determined under the automatic-adjustment provisions in section 230 of the Social Security Act. The bases for 1979-81 were

specified in the law, as amended in 1977. The bases for 1982-84 were again determined under the automatic-adjustment provisions, as will be the bases in 1985 and later.

TABLE 1.—CONTRIBUTION AND BENEFIT BASE AND CONTRIBUTION RATES

		Contribution rates (percent)					
	Contribution	Employees and employers, each			Self-employed		
Calendar years	and benefit . base	OASDI	OASi	Dł	OASDI	OASI	DI
1937-49	\$3,000	1.000	1.000	_			_
1950	3,000	1,500	1.500	_			
1951-53	3.800	1,500	1.500	_	2.2500	2.2500	_
1954	3,800	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
	8.800	3.850	3.500	.350	5.8000	5.2750	.5250
1966	8,800	3.900	3.550	.350	5.9000	5,3750	.5250
1967	7,800	3.800	3.325	.475	5.8000	5.0875	.7125
1966	7,800	4.200	3.725	475	6.3000	5.5675	.7125
1969		4.200	3.650	550	6.3000	5.4750	.8250
1970	7,800	4.200	3.000	.550	0.3000	3.4730	.02.00
1971	7,800	4.600	4.050	.550	6.9000	6.0750	.8250
1972	9,000	4.600	4.050	.550	6.9000	8.0750	.8250
1973	10,800	4.850	4.300	.550	7.0000	8.2050	.7950
1974	13,200	4.950	4.375	.575	7.0000	8.1850	.8150
1975	14,100	4.950	4.375	.575	7.0000	8.1850	.8150
1976	15,300	4.950	4.375	.575	7.0000	6.1850	.8150
1977	18,500	4.950	4.375	.575	7.0000	6.1850	.8150
1978	17,700	5.050	4.275	.775	7.1000	6.0100	1.0900
1979	22,900	5.080	4.330	.750	7.0500	6.0100	1.0400
1980	25,900	5.080	4.520	.560	7.0500	8.2725	.7775
4004	29,700	5,350	4.700	.650	8.0000	7.0250	.9750
1981	32,400	5.400	4.575	.825	8.0500	8.8125	1.2375
1982	35,700	5.400	4.775	.625	8.0500	7.1125	.9375
1983		5.700	5.200	.500	11.4000	10.4000	1.0000
1984¹	37,800	5.700	5.200	.500	11.4000	10.4000	1.0000
Rates scheduled in							
present law:	4-4	e 200	E 000	E00	11 4000	10.4000	1.0000
1985-871	(*)	5.700	5.200	.500	11.4000		1.0600
1988-891	(2)	6.060	5.530	.530	12.1200	11.0600	1.2000
1990-99	(*) (*)	6.200	5.800	.800	12.4000	11.2000	
2000 and later	(*)	6.200	5.490	.710	12.4000	10.9800	1.4200

In 1984 only, an immediate credit of 0.3 percent of covered wages is allowed against the OASDI contributions paid by employees, resulting in an effective contribution rate of 5.4 percent (as compared to the employer rate of 5.7 percent). Similar credits of 2.7 percent, 2.3 percent, and 2.0 percent are allowed against the combined OASDI and HI contributions on net earnings from self-employment in 1984, 1985, and 1986-89, respectively.

All contributions are collected by the Internal Revenue Service and deposited in the general fund of the Treasury as internal revenue collections, except for amounts received under State agreements (to effectuate coverage under the program for State and local government employees), which are deposited directly in the trust funds. The internal revenue collections are automatically appropriated to the trust funds on an estimated basis. The exact amount of contributions received is not known initially because contributions under the OASDI and HI programs and individual income taxes are not separately identified in collection reports received by the Department of the Treasury. Periodic adjustments are subsequently made to the extent that the estimates are found to differ from the amounts of contributions actually payable as

<sup>&</sup>lt;sup>a</sup>Subject to automatic adjustment.

determined from reported earnings. Adjustments are also made to account for any refunds to employees (with more than one employer) who paid contributions on wages in excess of the contribution and benefit base.

Prior to May 1983, the internal revenue collections were transferred to the trust funds immediately upon receipt. Beginning in May 1983, estimated total collections for each month are credited to the trust funds on the first day of the month. As the actual collections are received during the month, they are deposited in the general fund of the Treasury and remain there. The trust funds pay interest to the general fund to reimburse it for the interest costs attributable to these advance transfers.

In 1984 only, an immediate credit of 0.3 percent of covered wages is allowed against the OASDI contributions paid by employees, resulting in an effective contribution rate of 5.4 percent (as compared to the employer rate of 5.7 percent). The appropriations of contributions to the trust funds, however, are based on a combined employee-employer rate of 11.4 percent, as if the credit for employees did not apply. Similar credits of 2.7 percent, 2.3 percent, and 2.0 percent are allowed against the combined OASDI and HI contributions on net earnings from self-employment in 1984, 1985, and 1986-89, respectively. The appropriations of contributions to the trust funds, however, are based on the contribution rates, before adjustment for the credit, that apply in each year. After 1989, self-employed persons will be allowed a deduction, for purposes of Federal income taxes, equal to half of the combined OASDI and HI contributions payable, but this will not affect appropriations to the trust funds.

Beginning in 1984, a portion (not more than one-half) of OASDI benefits are subject to Federal income taxation under certain circumstances. The proceeds from this taxation of benefits are credited to the trust funds, in advance, on an estimated basis, at the beginning of each calendar quarter, with no reimbursement to the general fund for interest costs attributable to the advance transfers. Subsequent adjustments are made based on the actual amounts as shown on annual income tax records. The amounts appropriated from the general fund of the Treasury are allocated to the OASI and DI Trust Funds on the basis of the income taxes paid on the benefits from each fund.

Another source of income to the trust funds is interest received on investments held by the trust 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. The Act provides that these obligations shall bear interest at a rate equal to 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.

The major expenditures of the OASI and DI Trust Funds are for (1) OASDI benefit payments, net of any reimbursements from the general fund of the Treasury for unnegotiated benefit checks, and (2) expenses incurred by the Department of Health and Human Services and by the Department of the Treasury in administering the OASDI program and the provisions of the Internal Revenue Code relating to the collection of contributions. Such administrative expenses include expenditures for construction, rental and lease, or purchase of office buildings and related facilities for the Social Security Administration. The Social Security Act does not permit expenditures from the OASI and DI Trust Funds for any purpose not related to the payment of benefits or administrative costs for the OASDI program.

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 Social Security programs. 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 in which it would have been if railroad employment had always been covered under Social Security.

Several other provisions in the Social Security Act also affect the income and expenditures of the trust funds. Income is affected by provisions for (1) transfers between the general fund of the Treasury and the OASI and DI Trust Funds for any adjustments to prior reimbursements for the cost arising from the granting of noncontributory wage credits for military service prior to 1957, according to periodic determinations made by the Secretary of Health and Human Services (the estimated future cost of such wage credits was paid in a lump sum on May 20, 1983, in accordance with section 151 of Public Law 98-21); (2) annual reimbursements from the general fund of the Treasury to the OASI Trust Fund for any costs arising from the special monthly cash payments to certain persons who attained age 72 before 1968 and who generally are not eligible for cash benefits under other provisions of the OASDI program; (3) the receipt of unconditional money gifts or bequests made for the benefit of the trust funds or any activity financed through the funds; and (4) amounts charged to private employee benefit plans for providing the plans with detailed earnings information. In addition to the payment of cash benefits and administrative expenses from the trust funds, expenditures are authorized for the costs of vocational rehabilitation services furnished as an additional benefit to disabled persons receiving cash benefits because of their disability where such services contributed to their successful rehabilitation.

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 the payment of benefits or administrative expenditures, and therefore is not considered in assessing the actuarial status of the trust funds.

The Social Security Act authorizes borrowing among the OASI, DI, and HI Trust Funds when necessary "to best meet the need for financing the benefit payments" from the three funds. The timing and amounts of the loans are largely at the discretion of the Managing Trustee, although no loans can be made after 1987. Loans may not be made from a trust fund if its assets (excluding any amounts borrowed) represent less than 10 percent of its current annual rate of expenditures. The law also specifies that interest on borrowed amounts will be paid monthly at a rate "equal to the rate which the lending Trust Fund would earn on the amount involved if the loan were an investment."

In this report, the assets of a trust fund include any amounts owed to other trust funds. The assets of a trust fund to which amounts are owed do not include such amounts. This procedure is followed because borrowed amounts are available for the payment of benefits or other obligations of the borrowing fund, while such amounts are not readily available to the lending fund.

At the end of each year through 1988, if the combined assets of the OASI and DI Trust Funds exceed 15 percent of the estimated outgo in the next year, such excess over 15 percent must be used to repay any amounts owed to the HI Trust Fund. The same rule applies to loans from the OASI and DI Trust Funds to the HI Trust Fund, although no such loans are anticipated. In any case, all interfund loans must be completely repaid before 1990.

# V. SUMMARY OF THE OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, FISCAL YEAR 1983

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

A statement of the income and disbursements of the Federal Old-Age and Survivors Insurance Trust Fund in fiscal year 1983 and of the assets of the fund at the beginning and end of the fiscal year is presented in table 2. Comparable figures for fiscal year 1982 are also shown in the table.

TABLE 2.—STATEMENT OF OPERATIONS OF THE OASI TRUST FUND DURING FISCAL YEARS 1982 AND 1983 [In thousands]

	Fiscal year 1982	Fiscal year 1983
Total assets, beginning of year	\$23,834,020	\$12,535,224
Receipts:		
Appropriations.  Deposits arising from State agreements.  Transfers from DI Trust Fund due to reallocated contribution rates.  Payments from general fund of the Treasury representing employee employer contributions on deemed wage credits for military service in	112,233,823 12,249,227 —	115,283,832 13,950,260 1,565,019
1957-63	_	5,621,000
Gross contributions  Less payment to the general fund of the Treasury for contributions subject	124,483,050	136,420,111
to refund	236,638	292,800
Net contributions	124,246,412	136,127,311
Payments from general fund of the Treasury for costs of: Noncontributory wage credits for military service (before Pub. L. 98-21) Noncontributory wage credits for military service before 1957 (under Pub. L. 98-21)	534,308	541,515
Total for military-service wage credits	534,308	5,416,000
- Total for Hilliary 3011100 Wago or outs	334,306	3,857,315
Payments to noninsured persons who attained age 72 before 1968: Benefit payments Administrative expenses	116,850 1,097 22,460	109,040 1,005 28,617
Total reimbursement for payments to noninsured persons who	22,400	20,017
attained age 72 before 1968	140,407	138,662
Investment income and interest adjustments: Interest on investments Interest on amounts of interfund transfers due to adjustment in allocation	1,708,038	1,345,348
of administrative expenses and construction costs	895 —	1,501 184,000
service in 1957-83		6,493,000
contribution rates <sup>1</sup>	_	50,191
Gross investment income and interest adjustments.  Less interest on interfund loans from DI and HI Trust Funds.  Less interest on general fund advance tax transfers.  Less interest on amounts transferred to the general fund account for the	1,708,933 — —	8,074,040 1,447,183 96,606
Supplemental Security Income program due to adjustment in allocation of administrative expenses.  Less interest on amounts of interfund transfers due to adjustment in	811	842
allocation of costs of vocational rehabilitation services	_ 8	2 319,249
Net investment income and interest adjustments	1,708,114	6,210,157
·		
Gifts	33	188
Total receipts	126,629,274	148,433,833

TABLE 2.—STATEMENT OF OPERATIONS OF THE OASI TRUST FUND DURING FISCAL YEARS 1982 AND 1983 (Cont.)
[In thousands]

[in triculatives]		
	Fiscal year 1982	Fiscal year 1983
Disbursements:		
Benefit payments:		
Gross benefit payments	\$135,257,381	\$149,165,489
l ess collected overneyments	602,752	853,300
Less reimbursement for unnegotiated checks		288,000
Net benefit payments	134,654,629	148,024,189
Transfer to Railroad Retirement Account	1,793,280	2,250,821
Payment for costs of vocational rehabilitation services for disabled beneficiaries:		
For current fiscal year	259	644
For prior fiscal year	5,466	
Transfers to DI Trust Fund due to adjustment in allocation of costs for	•	
prior periods	432	24
Total payment for costs of vocational rehabilitation services	6,158	668
Administrative expenses:		
Department of Health and Human Services	1,315,448	1,420,136
Department of the Treasury	131,239	95,559
Construction of facilities for Social Security Administration  Expenses of Department of Education for administration of vocational	25,433	38,202
rehabilitation program for disabled beneficiaries	162	_
interfund transfers due to adjustment in allocation of costs of construc-	2,348	-1,913
	1,474,680	1,551,985
Gross administrative expenses	1,474,000	1,001,000
Less reimbursement from general fund of the Treasury for costs of		200
furnishing information on deferred vested pension benefits	565	699
Less receipts from sales of supplies, materials, etc	112	58
Net administrative expenses	1,474,003	1,551,227
Total disbursements	137,928,070	151.826.906
Total disoursements	,	,,
interfund loans:		
From DI Trust Fund	_	5,081,253
From HI Trust Fund		12.437.270
Total interfund loans		17.518.523
		,,
Net increase in assets4	-11,298,796	14,125,450
Total assets, end of year	12,535,224	26,660,674

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

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

The total assets of the OASI Trust Fund amounted to \$12,535 million on September 30, 1982. During fiscal year 1983, total receipts amounted to \$148,434 million, and total disbursements were \$151,827 million. In addition, interfund loans totaling \$17,519 million were made from the DI and HI Trust Funds to the OASI Trust Fund. The assets of the OASI Trust Fund thus increased by \$14,125 million during the year, to a total of \$26,661 million on September 30, 1983.

Included in total receipts during fiscal year 1983 were \$115,284 million representing contributions appropriated to the fund, \$13,950 million representing amounts received by the Secretary of the Treasury in accordance with State agreements for coverage of State and local

<sup>\*</sup>Represents capital loss on marketable securities sold in October and November 1982.

<sup>&</sup>lt;sup>a</sup>A positive figure represents a transfer from the OASI Trust Fund to the other Social Security trust funds. A negative figure represents a transfer to the OASI Trust Fund from the other Social Security trust funds.

<sup>\*</sup>Equals total receipts, less total disbursements, plus interfund loans from the DI and HI Trust Funds.

government employees and deposited in the trust fund, \$1,565 representing contributions transferred from the DI Trust Fund to the OASI Trust Fund because of a retroactive reallocation of the OASDI tax rate between the two funds (see below), and \$5,621 million in payments from the general fund of the Treasury representing the contributions that would have been paid on deemed wage credits for military service in 1957-83 if such credits had been considered to be covered wages, less past reimbursements for the cost of OASDI benefits attributable to such credits, as described later in this subsection. As an offset, \$293 million was transferred from the trust fund to the Treasury for the estimated amount of refunds to employees who worked for more than one employer during a year and paid contributions on wages in excess of the maximum earnings base.

Net contributions (including the general fund payments for militaryservice credits) amounted to \$136,127 million, an increase of 9.6 percent over the amount for the preceding fiscal year. This level of growth in contribution income resulted primarily from the net effect of (1) the higher level of earnings in covered employment; (2) the general fund transfer attributable to military-service wage credits in 1957-83, as mentioned above; (3) the two increases in the maximum annual amount of taxable earnings—from \$29,700 to \$32,400 and from \$32,400 to \$35,700—that became effective on January 1, 1982, and January 1, 1983, respectively; and (4) the decrease in the OASI contribution rate for employees and employers, each, from 4.70 percent to 4.575 percent that became effective on January 1, 1982, and the increase from 4.575 percent to 4.775 percent that was enacted on April 20, 1983, but which was retroactive to January 1, 1983. Although the first increase in the maximum annual amount of taxable earnings, from \$29,700 to \$32,400, became effective in 1982, earnings between \$29,700 and \$32,400, which were taxable during all of fiscal year 1983, were taxable during only part of the preceding fiscal year. The retroactive increase in the OASI tax rate for 1983 was exactly offset by a retroactive decrease in the tax rate allocated to the DI Trust Fund (from 0.825 percent to 0.625 percent for employees and employers, each). The resulting adjustments in contribution income were effected by a transfer from the DI Trust Fund to the OASI Trust Fund on June 30, 1983. An associated adjustment to investment income was also made at that time.

Reference has been made above and in earlier sections to provisions of the Social Security Act under which the OASI and DI Trust Funds receive payments from the general fund of the Treasury for costs of granting deemed wage credits for military service and for the costs associated with providing payments to certain noninsured persons who attained age 72 before 1968. The financing basis of military-service wage credits was substantially revised beginning in fiscal year 1983. Prior to the enactment of the 1983 amendments, section 217(g) of the Social Security Act provided for the amortized reimbursement of the total costs (past and future) attributable to noncontributory military-service wage credits granted for such service before 1957. In accordance with section 217(g), as in effect at the time, the Secretary of Health and Human Services made a determination in 1980 of the level annual appropriations

to the trust funds necessary to amortize the estimated total cost over a 34-year period, beginning with fiscal year 1982. The annual amounts resulting from this determination were \$491 million for the OASI Trust Fund and \$126 million for the DI Trust Fund. In accordance with section 229(b) of the Social Security Act, as in effect in December 1982, the Secretary of Health and Human Services determined that the OASI Trust Fund should receive additional reimbursement of \$51 million, and the DI Trust Fund should receive reimbursement of \$48 million, for costs in fiscal year 1982 attributable to deemed wage credits for military service performed after 1956. Thus, reimbursements amounting to \$542 million for the OASI Trust Fund and \$174 million for the DI Trust Fund were received in December 1982.

The 1983 amendments changed the financing basis of all deemed wage credits for military service. For such credits attributable to military service before 1957, the aforementioned amortization schedule was replaced by immediate, full payment from the general fund of the Treasury. This payment was determined on an estimated basis; any adjustments needed to reflect actual future experience are to be made in calendar year 1985 and every fifth year thereafter. For credits attributable to military service after 1956, the annual reimbursements for the additional costs associated with such credits were replaced by annual payments from the general fund of the Treasury (retroactive to 1957) representing the contributions that would be payable, at the combined employee-employer rate, if such credits were covered wages.

As a result of these changes, several amounts were transferred from the general fund of the Treasury to the trust funds on May 20, 1983. These amounts represented:

- The additional past and future benefit payments and administrative costs, adjusted for interest, attributable to noncontributory wage credits granted for military service before 1957, less the accumulated value of past reimbursements for the costs associated with such credits;
- The contributions that would have been paid on deemed wage credits granted for military service in 1957-83, if such credits had been considered to be covered wages, as described above, less past reimbursements for the costs associated with such credits; and
- 3. Interest on the net additional transfers, described in item 2, for deemed wage credits granted for military service in 1957-83.

The amounts transferred on May 20, 1983, are shown in the following table, for both the OASI and the DI Trust Funds:

,	Transfers from the general fund of the Treasury attributable to changes in the financing basis of military-service wage credits (in millions)				
_	OASI	DI	Total		
Total	\$17,530	\$2,205	\$19,735		
military service before 1957	5,416	1,121	6,537		
its for military service in 1957-83	5,621	444	6,065		
ice in 1957-83	6,493	640	7,133		

A reimbursement amounting to \$139 million for the costs associated with providing monthly payments to certain noninsured persons who attained age 72 before 1968 was transferred from the general fund of the Treasury to the OASI Trust Fund in fiscal year 1983. This reimbursement, which was required by section 228 of the Social Security Act, reflected the costs of payments made in fiscal year 1981 and adjustments in the costs of payments made in prior fiscal years.

The OASI Trust Fund received \$187,707 in gifts in fiscal year 1983 under the provisions authorizing the deposit of money gifts or bequests in the OASI and DI Trust Funds.

The remaining \$6,210 million of receipts consisted of (1) interest on the investments of the trust fund; (2) interest on the general fund transfers for deemed wage credits granted for military service after 1956 (as described previously), and for unnegotiated benefit checks (see below); and (3) net interest on amounts of interfund transfers arising from interfund loans, the retroactive tax rate reallocation, and adjustments in the allocation of administrative expenses, construction costs, and the costs of vocational rehabilitation services for prior fiscal years. These net interest amounts were partially offset by a capital loss incurred on the sale of the marketable securities held by the trust fund, in October and November 1982, and by payments from the trust fund to the general fund of the Treasury for its interest costs resulting from the advance transfer of contributions, which began in May 1983 as required by the 1983 amendments.

Of the \$151,827 million in total disbursements, \$148,024 million was for net benefit payments, excluding collected overpayments of \$853 million and the reimbursement of \$288 million (subject to adjustment) for unnegotiated benefit checks, as provided for in the 1983 amendments. (This reimbursement represented the estimated value of all OASI benefit checks issued prior to June 1983 which had not been negotiated within 6 months of issuance. An additional amount of \$184 million representing interest on such unnegotiated checks was also transferred, as noted previously.) This represents an increase of 9.9 percent over the corresponding amount for benefit payments in fiscal year 1982. This increase was due primarily to (1) the automatic cost-of-living benefit increase of 7.4 percent which became effective for June 1982 under the automatic provisions in section 215(i) of the Social Security Act and (2) increases in the total number of beneficiaries and increases in the average benefit amounts resulting from the rising level of earnings. Although the automatic benefit increase of 7.4 percent became effective in 1982, the resulting higher benefit levels (which were in effect during all of fiscal year 1983) were in effect during only part of the preceding fiscal year. The change in benefit payments from fiscal year 1982 to fiscal year 1983 also reflects the net effect of various provisions in the 1977 and later amendments. The Social Security Amendments of 1983 provided for a change in the effective month for the automatic cost-of-living increases in OASDI benefits, from June to December, beginning in 1983. As a result, the 3.5-percent benefit increase determined and announced for 1983 did not affect benefit payments in fiscal year 1983.

In accordance with the provisions of the Railroad Retirement Act which coordinate the Railroad Retirement and OASI 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 and Human Services determined that a transfer of \$2,088 million to the Railroad Retirement Account from the OASI Trust Fund would place this trust fund in the same position as of September 30, 1982, in which it would have been if railroad employment had always been covered under the Social Security Act. A total amount of \$2,251 million was transferred to the Railroad Retirement Account in June 1983, including interest to the date of transfer amounting to \$163 million.

Expenditures of the OASI program for the costs of vocational rehabilitation services amounted to \$668,000. This amount represents payment for services provided in fiscal year 1983 and transfers to the DI Trust Fund resulting from adjustments to the allocations of vocational rehabilitation expenses between the two trust funds in prior years. Rehabilitation services were furnished to disabled adults (children of oldage beneficiaries and survivors of deceased insured workers) who were receiving monthly benefits from the OASI Trust Fund because of their disability. The reimbursement by the trust funds for such services is limited to certain cases where a return to substantial gainful activity results (at least in part) from the rehabilitation services.

The remaining \$1.551 million of disbursements from the OASI Trust Fund represents net administrative expenses. The expenses of administering the programs financed through the four trust funds (the OASI, DI, HI, and Supplementary Medical Insurance Trust Funds) are allocated and charged directly to each trust fund on the basis of provisional estimates. Similarly, the expenses of administering the Supplemental Security Income program are also allocated and charged directly to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses and costs of construction for prior periods are effected by interfund transfers, including transfers between the OASI Trust Fund and the general fund account for the Supplemental Security Income program, with appropriate interest adjustments.

Section 1131 of the Social Security Act authorizes annual reimbursements from the general fund of the Treasury to the OASI Trust Fund for additional administrative expenses incurred as a result of furnishing information on deferred vested benefits to pension plan participants, as required by the Employee Retirement Income Security Act of 1974. This annual reimbursement in fiscal year 1983 amounted to \$699,165.

Net administrative expenses charged to the OASI and DI Trust Funds in fiscal year 1983 totaled \$2,210 million. (The operations of the DI Trust Fund are presented in detail in the next subsection.) This amount represented 1.4 percent of contribution income and 1.3 percent of expenditures for benefit payments. Corresponding percentages for each of the last 5 years for the OASDI system as a whole and for each trust fund separately are shown in table 3.

TABLE 3.—RELATIONSHIP OF NET ADMINISTRATIVE EXPENSES OF THE OASDI PROGRAM TO CONTRIBUTION INCOME AND BENEFIT PAYMENTS, BY TRUST FUND, FISCAL YEARS 1979-83

	Total Administr as a percen		OASI Trust Fund— s Administrative expenses as a percentage of—		DI Trust Administrativ as a percen	e expenses
Fiscal year	Total contribu- tion income	Total benefit payments	Contribution income	Benefit payments	Contribution income	Benefit payments
1979	1.5	1.5	1.3	1.2	2.8	3.0
1980	1.3	1.3	1.2	1.2	2.0	2.2
1981	1.3	1.2	. 1.1	1.1	3.2	2.4
1982	1.4	1.3	1.2	1.1	2.7	3.3
1983	1.4	1.3	1.1	1.0	3.5	3.8

Reference has been made in an earlier section to provisions of the Social Security Act authorizing interfund borrowing among the OASI, DI, and HI Trust Funds. Under these provisions, a total of \$17,519 million was lent to the OASI Trust Fund in November and December of 1982 — \$5,081 million from the DI Trust Fund and \$12,437 million from the HI Trust Fund.

In table 4, the actual amounts of contributions and benefit payments in fiscal year 1983 are compared with the corresponding estimated amounts which appeared in the 1983 Annual Report. The estimates shown are the ones based on the alternative II-B set of assumptions from the 1983 Annual Report. The actual experience for each trust fund was quite close, relatively, to the estimates. Comparisons with estimates from the 1982 Annual Report are not shown, because the effects of the Social Security Amendments of 1983 would invalidate the results. 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 1983 reflects the aforementioned adjustments to contributions for prior fiscal years. On the other hand, the "actual" amount of contributions in fiscal year 1983 does not reflect adjustments to contributions for fiscal year 1983 that were to be made after September 30, 1983.

TABLE 4.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE OASI AND DI TRUST FUNDS, FISCAL YEAR 1983 [Amounts in millions]

	OASI Trust Fund		Di Trust Fund	
_	Net contributions	Benefit payments	Net contributions	Benefit payments
Actual amount	\$136,127	\$148,024	\$19,036	\$17,540
Estimated amount published in 1983 report	\$136,500	\$147,353	\$19,157	\$17,322
Actual as percentage of estimate	100	100	99	101

At the end of fiscal year 1983, about 35.9 million persons were receiving monthly benefits under the OASDI program. About 32.1 million of these persons were receiving monthly benefits from the OASI Trust Fund. The distribution of benefit payments in fiscal years 1982 and 1983, by type of beneficiary, is shown in table 5. Approximately 76 percent of the total benefit payments from the OASI Trust Fund in fiscal year 1983 represented monthly benefits to retired workers and their

spouses and children, and about 17 percent represented monthly benefits to aged survivors and disabled widows and widowers of deceased workers. Approximately 7 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 such children in their care.

TABLE 5.—ESTIMATED DISTRIBUTION OF BENEFIT PAYMENTS FROM THE CASI TRUST FUND, BY TYPE OF BENEFICIARY AND PAYMENT, FISCAL YEARS 1982 AND 1983 [Amounts in millions]

	Fiscal year 1982		Fiscal ye	ar 1983
_	Amount	Percentage of total	Amount	Percentage of total
otal	\$134,655	100	\$148,312	100
Monthly benefits	134,445	100	148,106	100
Retired workers and their dependents	101,290	75	112,914	76
Retired workers	91,791	68	102,533	69
Wives and husbands	8,230	6	9,224	6
Children	1,269	1	1,157	1
Survivors of deceased workers	33,053	25	35,102	24
Aged widows and widowurs	22,472	17	24,792	17
Disabled widows and widowers	348	(¹)	348	(1
Parents	59	(1)	58	(1
Children	8,331	`6	8,029	`(
Widowed mothers and fathers caring for child beneficiaries	1,843	1	1,877	1
Noninsured persons generally aged 72 before				
1968	102	(1)	89	(r)
Lump-sum death payments	210	(1)	206	(1

<sup>1</sup>Less than 0.5 percent.

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

In fiscal year 1983, special payments to noninsured persons who attained age 72 before 1968 (or who attained age 72 after 1967 and had 3 quarters of coverage for each year after 1966 and before the attainment of age 72) amounted to \$89 million, or about 0.1 percent of total benefit payments. The costs associated with providing such payments to persons who have fewer than 3 quarters of coverage are reimbursable from the general fund of the Treasury. About 96 percent of the total of such payments went to persons with fewer than 3 quarters of coverage.

During fiscal year 1983, lump-sum death payments amounted to \$206 million, or about 0.1 percent of total benefit payments.

The assets of the OASI Trust Fund at the end of fiscal year 1983 totaled \$26,661 million, consisting of \$25,503 million in U.S. Government obligations and an undisbursed balance of \$1,158 million. Table 6 shows the total assets of the fund and their distribution at the end of each fiscal year 1982 and 1983.

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

	1802	AND 1983		
	Septembe	er 30, 1982	September 30, 1983	
	Par value	Book value <sup>1</sup>	Par value	Book value
estments in public-debt obli- pations:				•
Public issues: Treasury bonds:				
3-percent, 1995	\$70,170,000	\$70,157,371.99		_
3½-percent, 1978-83	60,200,000	60,160,542.62		
3½-percent, 1985	25,700,000	25,475,412.95		_
3 - percent, 1990	556,250,000	553,138,291.71	_	_
34-percent, 1998	552,037,000	547,071,995.41	_	
44-percent, 1989-94	91,300,000	90,949,879.77	_	_
42-percent, 1975-85	78,023,000	77,968,794.14	_	
41-percent, 1987-92	33,000,000	33,514,474.68	_	
	31,500,000	31,587,036.21	_	_
6 -percent, 1984	99,934,000	99,066,909.92	_	_
7 - percent, 1988-93		14,992,798.86		_
7g-percent, 2002-07	15,000,000			_
71-percent, 1995-2000	22,180,000	21,651,358.14 90,427,050.72		_
8-percent, 1996-2001	90,500,000	22,445,243.34		
81-percent, 2000-05	22,450,000	50,540,404.25		
8 -percent, 1995-2000	50,000,000		_	_
8)-percent, 1994-99	8,352,000	6,472,286.56	_	
11 -percent, 2010	153,100,000	152,073,345.28		
Total investments in public issues	1,957,696,000	1,947,693,194.55		_
ness: 11 - percent, 1984			\$7,421,193,000	\$7,421,193,000.0
121-percent, 1983	8,209,913,000	8,209,913,000.00	_	_
Bonds:				
101-percent, 1984			3,770,272,000	3,770,272,000.0
101-percent, 1985	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1986	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1967	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1988	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1989	-	_	1,022,231,000	1,022,231,000.0
101-percent, 1990	-		1,022,231,000	1,022,231,000.0
101-percent, 1991	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1992	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1993	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1994		_	1,022,231,000	1,022,231,000.0
101-percent, 1995	_	_	1,022,231,000	1,022,231,000.0
101-percent, 1996	_		1,022,231,000	1,022,231,000.0
101-percent, 1997	_		1,022,230,000	1,022,230,000.0
101-percent, 1996	_		1,022,230,000	1,022,230,000.0
13-percent, 1996	1,308,977,000	1,308,977,000.00	_	_
Total obligations sold only				
to the trust funds (spe- cial issues)	9,516,890,000	9,518,890,000.00	25,502,697,000	25,502,697,000.0
•				

TABLE 6.—ASSETS OF THE OASI TRUST FUND, BY TYPE, AT END OF FISCAL YEAR, 1982 AND 1983 (Cont.)

	1902 /1	ib 1905 (COit.)		
	Septemb	er 30, 1982	Septemb	per 30, 1983
	Par value	Book value <sup>1</sup>	Par value	Book value
Investments in federally spon- sored agency obligations: Participation certificates: Federal Assets Liquidation Trust — Government National Mortgage As- sociation:				
sociation: 5.10-percent, 1987 Federal Assets Financing Trust — Government National Mortgage As- sociation:	\$50,000,000	\$50,000,000.00	-	_
6.05-percent, 1988	65,000,000	64,935,000.88	_	_
6.20-percent, 1988	230,000,000	230,000,000.00	_	_
6.40-percent, 1967	75,000,000	75.000,000.00	_	_
6.45-percent, 1988	35,000,000	35,000,000.00	_	_
Total investments in federally sponsored agency obligations	455,000,000	454,935,000.88	_	_
Total investmentsUndisbursed balances	11,931,586,000	11,921,518,195.43 613,705,878.57	\$25,502,697,000	\$25,502,697,000.00 1,157,976,874.71
Total assets		12,535,224,074.00	<del>-</del>	26,660,673,874.71
1010.00000		,-,,,		

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

The net increase in the par value of the investments owned by the fund during fiscal year 1983 amounted to \$13,571 million. New securities with a total par value of \$195,058 million were acquired during the fiscal year through the investment of receipts and interfund loans, and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the fiscal year was \$181,487 million. Included in these amounts are \$165,077 million in certificates of indebtedness that were acquired, and \$165,865 million in certificates of indebtedness that were redeemed, during the fiscal year.

The effective annual rate of interest earned by the assets of the OASI Trust Fund during the 12 months ending on June 30, 1983, was 11.2 percent. (This period is used, rather than the fiscal year, because (1) rollovers of short-term special-issue notes into longer-term special-issue bonds occur on June 30 of each year, and (2) interest on special issues is paid semiannually on June 30 and December 31.) The effective yield on the assets of the OASI Trust Fund, including the effect of capital gains and losses, would be significantly lower for this period. The difference is attributable to the capital loss that was incurred on the sale of the trust fund's remaining marketable securities in October and November 1982, as discussed previously. The interest rate on special issues purchased by the trust fund in June 1983 was 10.75 percent, payable semiannually. Special issues with a total par value of \$29,982 million were purchased in that month. Although the interest rate on Treasury bonds is generally limited by law to 4½ percent, the law authorizes the issuance of bonds to the trust funds at rates of interest exceeding 4½ percent.

Section 201(d) of the Social Security Act provides that the public-debt obligations issued for purchase by the OASI and DI Trust Funds shall have maturities fixed with due regard for the needs of the funds. The general practice in the past has been to spread the maturity dates for the holdings of special issues as nearly as practicable in equal amounts over a

15-year period. In 1982 and 1983, however, as a result of the relatively low level of assets in the OASI Trust Fund, a somewhat different procedure was followed. In those years, maturity dates on new issues were set by first providing for specific cash-flow requirements in the immediate future and then setting maturity dates for any remaining new issues so that the total portfolio would be distributed as evenly as possible over a 15-year period. On June 30, 1983, for example, slightly over one-half of the total purchase of new special-issue bonds for the OASI Trust Fund carried the maturity date of June 30, 1984. The remainder was spread evenly among bonds maturing in each year 1985-98.

#### B. DISABILITY INSURANCE TRUST FUND

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

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

[in thousands]		
	Fiscal year 1982	Fiscal year 1983
Total assets, beginning of year	\$3,392,434	\$6,755,234
Receipts:		
Appropriations  Deposits arising from State agreements  Payments from general fund of the Treasury representing employee-	18,887,415 2,010,068	18,230,336 1,979,273
employer contributions on wage credits for military service in 1957-83	_	444,000
Gross contributions  Less transfers to OASI Trust Fund due to reallocated contribution rates  Less payment to the general fund of the Treasury for contributions subject	20,897,483 —	20,653,608 1,565,019
to refund	31,027	52,800
Net contributions	20,866,456	19,035,769
Payments from general fund of the Treasury for costs of: Noncontributory wage credits for military service (before Pub. L. 98-21) Noncontributory wage credits for military service before 1957 (under Pub.	188,235	174,292
L. 98-21)	_	1,121,000
Total for military-service wage credits	168,235	1,295,292
Investment income and interest adjustments: Interest on investments	364,168	500,190
Interest on general fund payments for deemed wage credits for military service in 1957-83	<u></u>	640,000 419,034
Interest on amounts of interfund transfers due to adjustment in allocation of costs of vocational rehabilitation services	8	2
Interest on reimbursement from general fund for unnegotiated checks  Gross investment income and interest adjustments	364,176	20,000 1,579,226
Less interest on amounts of transfers to OASI Trust Fund due to reallocated contribution rates <sup>1</sup>	_	50,286
Less interest on general fund advance tax transfers Less interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs		12,677 1,141
Net investment income and interest adjustments	363,420	1,515,123
Total receipts <sup>2</sup>	21,398,104	21,846,204
Disbursements:		
Gross benefit payments. Less collected overpayments Less reimbursement for unnegotiated checks	17,471,465 72,060 —	17,677,286 89,200 48,000
Net benefit payments	17,399,405	17,540,086
Transfer to Railroad Retirement Account	26,354	27,813
Payment for costs of vocational rehabilitation services for disabled		
beneficiaries: For current liscal year For prior fiscal year Less transfer from OASI Trust Fund due to adjustment in allocation of	1, <b>6</b> 33 <b>35,94</b> 5	3,914 —
costs for prior periods	432	24
Total payment for costs of vocational rehabilitation services	37,146	3,891

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

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

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

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

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

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

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

<sup>&</sup>quot;Includes "gifts" amounting to -\$7,000 during fiscal year 1982 (representing the recovery of a prior year gift by the estate of the donor).

<sup>\*</sup>Equals total receipts, less total disbursements, less interfund loans to the OASI Trust Fund.

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

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

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

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

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

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

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

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

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

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

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

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

	Fiscal year 1982		Fiscal year 1983	
<del>-</del>	Amount	Percentage of total	Amount	Percentage of total
	\$17,399	100	\$17,588	100
Disabled workers	14,784 666 1,969	85 4 11	15,206 634 1,748	86 4 10

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

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

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

	September 30, 1962		September 30, 1983		
	Par value	Book value <sup>1</sup>	Par value	Book value	
investments in public-debt obligations:					
Public issues: Treasury bonds:					
3g-percent, 1990	\$10,500,000	810 207 105 70	910 500 000	840 224 770 OF	
31-percent, 1996	5,000,000	\$10,297,105.79 4,832,620.55	\$10,500,000 5,000,000	\$10,324,773.35 4,843,027.55	
41-percent, 1989-94	68,400,000	68,015,194.27	68,400,000		
4½-percent, 1975-85	20,795,000			68,047,501.1	
42-percent, 1987-92	80,800,000	20,791,192.46	20,795,000	20,792,665.94	
6i-percent, 1984	15,000,000	80,843,833.68	80,800,000	80,834,606.44	
74-percent, 1988-93	26,500,000	15,010,398.04	15,000,000	15,004,972.7	
71-percent, 2002-07	10,000,000	26,080,125.04	26,500,000	26,119,495.10	
8-percent, 1996-2001	26,000,000	9,995,197.46 25,979,042.02	10,000,000	9,995,394.2	
61-percent, 2000-05	3,750,000	3,734,459.57	26,000,000	25,980,154.78	
11 - percent, 2010	30,250,000		3,750,000	3,735,145.13	
112-percent 2010	30,250,000	30,047,150.38	30,250,000	30,054,571.40	
Total investments in public is-					
8U88	296,995,000	295,626,119.46	296,995,000	295,732,307.8	
. Obligations sold only to the trust					
funds (special issues):					
Certificates of indebtedness:					
11 -percent, 1984	_		685,422,000	665,422,000.00	
121-percent, 1983	1,551,812,000	1,551,812,000.00			
13½-percent, 1983	1,844,251,000	1,844,251,000.00			
13 -percent, 1983	1,874,067,000	1,874,067,000.00	_	_	
Bonds:	1,014,001,000	1,074,007,000.00			
81-percent, 1993	182,138,000	162,136,000.00	_	_	
81-percent, 1993	97,687,000	97,887,000.00	47,479,000	47,479,000.00	
82-percent, 1994	339,277,000	339,277,000.00	339,277,000	339,277,000.00	
9‡-percent, 1993	142,337,000	142,337,000.00	142,337,000	142,337,000.00	
9‡-percent, 1994	142,336,000	142,336,000.00	142,336,000	142,336,000.00	
92-percent, 1995	461,613,000	481,813,000.00	461,613,000	481,613,000.00	
101-percent, 1965		401,010,000.00	195,340,000		
102-percent, 1986	_	_		195,340,000.00	
101-percent, 1987	_	_	287,956,000	287,956,000.00	
· 101-percent, 1988	_		287,956,000	287,956,000.00	
	_	-	287,956,000	287,956,000.00	
101-percent, 1989	_		287,956,000	287,956,000.00	
101-percent, 1990			287,956,000	287,956,000.00	
10t-percent, 1991		_	287,956,000	287,956,000.00	
10‡-percent, 1992	_	_	287,956,000	287,956,000.00	
10‡-percent, 1993	_	_	98,140,000	98,140,000.00	
101-percent, 1996	_	_	287,955,000	287,955,000.00	
101-percent, 1997	-	_	287,955,000	287,955,000.00	
10 -percent, 1998	_	_	287,955,000	287,955,000.00	
13‡-percent, 1983	19,947,000	19,947,000.00	_	_	
Total obligations sold only to the trust funds (special is-	,				
sues)	6,455,663,000	6,455,663,000.00	4,991,501,000	4,991,501,000.00	
Total investments in public-debt obligations	8,752,658,000	6,751,289,119.48	5,288,496,000	5,287,233,307.82	
Indisbursed balances		3,944,459.84		2 205 570 00	
				2,295,570.88	
Otal assets		6,755,233,579.30		5,289,528,878.50	

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

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

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

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

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

#### VI. ACTUARIAL COST PROJECTIONS

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

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

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

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

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

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

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

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

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

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

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

### A. ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS

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

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

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

## Economic assumptions

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

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

	Average a	innual percenta in—	ge increase			Average annual unemploy- ment rate* (percent)
Calendar year	Real GNP	Average wages in covered employ-ment	Consumer price index	Real-wage differential* (percent)	Average annual in- terest rate <sup>3</sup> (percent)	
Past experience:						
1960-64	4.0	3.4	1.3	2.1	3.7	
1965-69	4.4		3.4	2.0	5.2	5.7
1970	2		5.9			3.8
1971	3.4		4.3	-1.0	7.3	4.9
1972	5.7	7.3	3.3	.6	6.0	5.9
1973	5.6			4.0	5.9	5.6
1974	6		6.2	.7	6.6	4.9
1975	-1.2		11.0	-3.6	7.5	5.6
1976	5.4		9.1	-2.5	7.4	8.5
1977	5.5		5.7	2.8	<u>7.1</u>	7.7
1978	5.0		6.5	.3	7.1	7.1
1979			7.6	.6	8.2	6.1
1980	2.8		11.4	•-2.3	9.1	5.8
1001	3	*9.0	13.5	4.5-	11.0	7.1
1981	2.6		10.2	•1	13.3	7.6
1982	-1.9		6.0	2	12.8	9.7
1983	3.3	•4.2	3.0	*1.2	11.0	9.6

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

	Average ann	ual percentaç	e increase			
Calendar year	Real GNP	Average wages in covered employ- ment	Consumer price index	Real-wage differential* (percent)	Average annual in- terest rate* (percent)	Average annual unemploy- ment rates (percent)
Alternative I:						
1984	6.1	6.1	3.9	2.2	10.9	7.7
1985	4.6	5.5	3.6	1.7	9.6	7.0 6.4
1986	4.2	5.5	3.7	1.7 1.9	9.2 6.6	6.0
1987	4.0	5.5 5.5	3.6 3.3	2.2	7.8	5.6
1986	4.0 4.0	5.3	2.9	2.3	7.0	5.2
1989	4.0 3.2	5.3 4.6	2.6	2.2	6.1	5.0
1990	3.2	4.5	2.1	2.3	5.1	5.0
1991	3.2	4.5	2.0	2.5	4.6	5.0
1992 1993	3.4	4.5	2.0	2.5	4.9	5.0
1994	3.7	4.6	2.0	2.6	5.0	5.0
1995	3.6	4.6	2.0	2.6	5.1	5.0
2000	3.7	4.6	2.0	2.6	5.1	5.0
2010 & later	•3.0	4.5	2.0	2.5	5.1	5.0
Alternative II-A:	0.0					
1984	5.4	6.0	4.4	1.6	11.0	7.6
1985	4.0	5.6	4.6	1.2	9.9	7.3
1966	3.5	5.6	4.5	1.3	9.9	7.0
1987	3.5	5.7	4.2	1.5	9.2	6.7
1968	3.5	5.7	3.9	1.6	8.4	6.3
1989	3.5	5.6	3.6	2.0	7.6	6.0
1990	3.5	5.4	3.3	2.1	6.1	5.6
1991	3.1	5.0	3.0	2.0	6.2	5.5
1992	3.0	5.1	3.0	2.1	5.6	5.5
1993	3.0	5.1	3.0	2.1	5.6	5.5
1994	3.0	5.1	3.0	2.1	5.6	5.5
1995	3.1	5.1	3.0	2.1	5.6	5.5
2000	3.1	5.1	3.0	2.1	5.6	5.5
2010 & later	12.4	5.0	3.0	2.0	5.6	5.5
Alternative II-B:						_,
1984	4.9	5.9	4.7	1.2	11.1	7.9
1985	3.6	6.1	5.3	.8	10.3	7.5
1986	3.0	6.4	5.5	.9	10.6	7.2
1987	3.0	6.3	5.2	1.1	10.2	7.0
1986	3.0	6.1	4.7	1.4	9.4	6.7
1989	3.0	5.8	4.3	1.5	8.4	6.4 8.2
1990	3.0	5.6	4.0	1.6	7.5	8.2 6.0
1991	2.7	5.5	4.0	1.5	6.7 6.4	6.0
1992	2.4	5.6	4.0	1.6 1.6	8.2	6.0
1993	2.4	5.6	4.0 4.0	1.6	6.2	6.0
1994	2.5	5.6	4.0	1.6	6.1	6.0
1995	2.5	5.6	4.0	1.6	6.1	6.0
2000	2.6	5.6 5.5	4.0	1.5	6.1	6.0
2010 & later	•2.0	5.5	4.0	1.5	<b>Q.</b> 1	0.0
Alternative III:	3.4	5.2	5.2	1	11.1	6.3
1984	:	5.0	5.7	.7	10.5	9.0
1985	.4 2.7	6.4	6.0	.4	11.0	8.6
1986	2.7	5.9	5.5		10.5	6.4
1987 1988	2.7	6.0	5.1	.9	9.8	8.
1989	2.7	6.1	5.0	1.1	8.9	7.
1990	2.7	6.3	5.0	1.3	8.2	7.5
1991	2.7	6.3	5.0	1.3	7.8	7.0
1992	2.3 1.8	6.2	5.0	1.2	7.2	7.0
1993	1.8	6.1	5.0	1.1	7.0	7.0
	1.8	6.1	5.0	iii	6.7	7.0
1994	2.0	6.1	5.0	1.1	6.6	7.0
1 2 2 3 CHE 1						
2000	2.0	6.1	5.0	1.1	6.6	7.0

<sup>\*</sup>The real GNP (Gross National Product) is the total output of goods and services, expressed in 1972 dollars.

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

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

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

Preliminary.

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

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

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

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

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

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

### Demographic assumptions

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

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

			Life expectancy*				
	Tota	. ——	At birth		At age 65	j	
Calendar year	fertility rate		Male	Female	Male	Femak	
ast experience:		_		65.7	11.9	13.4	
1940	2.2		61.4			14.4	
1945	2.4		82.9	68.4	12.6	15.	
1950	3.0		<b>65</b> .6	71.1	12.8		
1955	3.5	0	66.7	72.8	13.1	15.	
1960	3.8	1	66.7	73.2	12.9	15.	
1965	2.8	8	66.8	73.8	12.9	16.	
1970	2:4	3	87.1	74.9	13.1	17.	
1975	1.7	7	88.7	7 <b>8</b> .6	13.7	18.	
1976	1.7		69.1	76.8	13.7	18.	
	1.8		89.4	77.2	13.9	18.	
1977			89.8	77.3	13.9	18	
1978	1.7			77.7	14.2	18	
1979	1.8		70.0		14.0	18	
1960	1.8		69.9	77.5		18	
1961,	1.8		70.2	77.8	14.2		
1982	1.6	8	70.7	78.1	14.3	18	
Iternative I:							
1983	1.8	8	70.6	78.2	14.3	18	
1984	1.8		70.9	78.3	14.4	18	
	1.9		71.0	78.4	14.4	18	
1985	2.0		71.4	78.9	14.5	19	
1990			71.8	79.3	14.7	19	
1995	2.0			79.5	14.8	19	
2000	2.1		72.1			19	
2010	2.3		72.4	79.8	15.0		
2020	2.3		72.7	80.1	15.2	20	
2030	2.3	10	73.0	80.4	15.4	20	
2040	2.3	10	73.3	80.7	15.6	20	
2050	2.3	Ю	73.6	81.0	15.8	20	
2060	2.3		73.9	81.3	16.0	21	
Alternatives II-A and II-B:							
	1.8	e e	70.9	78.4	14.4	18	
1983			71.2	78.6	14.5	18	
1984	1.8			78.8	14.6	19	
1985	1.6		71.4			19	
1 <b>990</b> .	1.9		72.4	79.9	15.1		
1995	1.8	93	73.2	80.7	15.4	20	
2000	1.9	<b>36</b>	73.7	81.1	15.7	20	
2010	2.0	00	74.2	81.7	16.0	2	
2020	2.0		74,7	82.3	16.4	2.	
2030	2.0		75.2	82.8	16.7	2	
	2.0		75.7	83.4	17.1	2:	
2040			76.2	83.9	17.5	2	
2050	2.0				17.8	2	
2060	2.0	)()	76.7	84.5	17.0	2.	
Alternative III:						4	
1983	1.8	34	71.1	78.5	14.5	11	
1984	1.8	33	71.5	78.9	1 <b>4</b> .7	11	
1985	1.8	31	71.8	79.2	14.8	19	
1990	1.3	76	73.4	80.8	15.6	20	
1995	1.5		74.5	82.0	16.2	2	
	1.0		75.2	82.7	16.6	2	
2000			76.3	83.9	17.4	2	
2010	1.9			85.1	18.2	2	
2020	1.0		77.4			2	
2030		60	78.5	86.3	19.1		
2040	1.4	80	79.6	87.4	19.9	2:	
2050	1.3	80	80.6	88.5	20.7	20	
2060		60	81.7	89.6	21.6	2	

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

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

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

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

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

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

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

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

#### B. AUTOMATIC ADJUSTMENTS

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

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

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

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

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

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

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

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

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

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

Calendar year	General benefit increase <sup>1</sup> (percent) based on alternative—				Contribution and benefit base <sup>a</sup> based on alternative—			
	- 1	II-A	II-B	III	1	II-A	II-B	111
1983	3.5	3.5	3.5	3.5	\$35,700	\$35,700	\$35,700	\$35,700
1984	3.8	4.4	4.7	5.3	37,800	37,800	37,800	37,800
1985	3.8	4.6	5.4	*5.1	39,300	39,300	39,300	39,300
1986	3.7	4.5	5.5	*4.8	41,700	41,700	41,700	41,400
1987	3.6	4.2	5.2	5.4	43,800	44,100	44,100	43.500
1988	3.3	3.9	4.6	5.1	46,200	46,500	46.800	46,200
1989	(4)	3.6	4.3	5.0	48,600	49,200	49,800	48,900

<sup>&#</sup>x27;Automatic benefit increases prior to 1983 were effective with benefits for June of each year. As a result of the Social Security Amendments of 1983, automatic benefit increases in 1983 and later are effective with benefits for December of the year shown.

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

<sup>\*</sup>Effective on January 1 of the stated year.

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

<sup>&</sup>lt;sup>4</sup>Based on the alternative I assumptions, no benefit increase would occur in 1989 because the assumed increase in the Consumer Price Index is less than the 3-percent rate required to trigger a benefit increase.

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

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

ANNUAL EXEMPT AMOUNTS UNDER THE RETIREMENT EARNINGS TEST!

Calendar year	Annual e	cempt amou ge 65 basec	nt for benef i on alternat	iciaries ive—	Annual exempt amount for beneficiaries aged 65 through 69 based on alternative—			
	1	II-A	- II-B	III	ī	II-A	II-B	111
1983	\$4,920	\$4,920	\$4,920	\$4,920	\$6,600	\$6,600	\$6,600	\$6,600
1984	5,160	5,160	5,160	5,160	6,960	6,960	6,960	6,960
1985	5,400	5,400	5,400	5.400	7,200	7.200	7,200	7,200
1986	5,760	5.760	5.760	5.640	7,680	7.680	7,560	7,560
1987	6,120	6,120	6,120	5.880	8.040	6,160	6,040	7,920
1988	6.480	6.480	6.480	6,240	8.520	8.640	8.520	8,400
1989	8.640	6,640	8.640	6,600	9,000	9,120	9,000	8,880

Effective on January 1 of the stated year.

# C. ESTIMATED OPERATIONS AND STATUS OF THE TRUST FUNDS DURING THE PERIOD OCTOBER 1, 1983, TO DECEMBER 31, 1988

The following statement of the estimated operations and status of the trust funds during the period October 1, 1983, to December 31, 1988, is based on the assumptions described in the preceding subsections. As previously stated, present statutory provisions and regulations affecting the program are assumed to remain unchanged in the period.

The 1983 Annual Report described the substantial improvement in the financial outlook for the OASDI program that resulted from the enactment of the Social Security Amendments of 1983. The estimates shown in this section, on the basis of each of the alternative sets of assumptions, are generally similar to the corresponding estimates in the 1983 report. As explained below, this similarity results in part from the effect of automatic repayments of amounts owed to the HI Trust Fund. The differences are attributable to the net effects of (1) actual economic experience in 1983, which was better than had been anticipated, (2) other program experience in 1983 (that is, factors not directly related to 1983 economic experience), which was worse than anticipated, and (3) changes in assumed economic growth rates and other assumptions in 1984-88. On the basis of alternatives I, II-A, and II-B in this report, the financial status of the OASI and DI Trust Funds, on a combined basis, is initially somewhat worse, and after about 1985 somewhat better, than was indicated in the 1983 report. For DI alone, significant deterioration is evident throughout the projection period.

On the basis of the alternative III assumptions, the financial status for the short-range projection period is somewhat worse than was indicated in the 1983 report. This result is primarily attributable to the change in the interpretation of the stabilizer provision of the 1983 amendments with respect to the determination of the "OASDI fund ratio" for 1984. as described in the previous subsection. The estimates in last year's report reflected the effects of limitations on the December benefit increases for 1984-86, under the stabilizer provision of the 1983 amendments. In this report, the assumed benefit increase for December 1984 would not be limited by the stabilizer provision for reasons which are described later in this subsection. Based on alternative III, as presented in this report, benefit increases would be limited under the stabilizer provision for December of 1985 and 1986 only. Catch-up benefit increases would occur for December 1991. The negative financial effect resulting from this change in the interpretation of the stabilizer provision is somewhat offset by delaying repayment of the amounts owed to the HI Trust Fund until 1988 (as described below).

On the basis of the four alternative sets of assumptions used in this report, the assets of the OASI and DI Trust Funds would be sufficient to permit timely benefit payments throughout the short-range projection period. As discussed below, however, the assets of both trust funds would remain at low levels, relative to annual expenditures, through about 1987 based on each set of assumptions. Because the primary purpose of the trust funds is to act as contingency reserves when outgo temporarily exceeds income, through 1987 the trust funds will remain vulnerable to a severe economic downturn or other adverse experience

which is worse, in terms of its effect on the OASDI program, than alternative III.

The 1983 amendments included provisions requiring, under certain conditions, the automatic repayment of some or all of the amounts lent to the OASI Trust Fund from the HI Trust Fund in 1982 (see section V). Based on alternatives II-A and II-B, growth in OASI Trust Fund assets would be sufficient to trigger the repayment process during 1986-87. Based on alternative I, repayment would occur during 1985-87. Based on each of these alternatives, the amounts lent to the OASI Trust Fund from the HI Trust Fund would be required by law to be fully repaid before 1988. This provision in the law has the effect of narrowing the range of possible trust fund operations during 1984-88. Under favorable conditions, such as assumed for alternative I, loan repayments would occur earlier than under less favorable conditions, such as alternative II-B. Thus during 1984-88, the estimated asset levels (relative to outgo) based on alternatives I, II-A, and II-B are somewhat similar to each other and to the corresponding estimates shown in the 1983 Annual Report.

On the basis of alternative III, growth in OASI assets would be too slow to trigger the automatic repayment requirements prior to 1988. In addition to specifying minimum repayment requirements, however, the 1983 amendments specify that any interfund loans "shall be repaid at the earliest feasible date." In practice, this provision allows the Managing Trustee some discretion in the timing and amounts of the repayment, subject to the minimum requirements. For purposes of calculating the estimated trust fund operations in this report and the concurrent 1984 Annual Report for the HI Trust Fund, repayment of amounts owed to the HI Trust Fund is assumed to occur according to the automatic requirements only, unless (1) earlier repayment is required to prevent or postpone the depletion of the HI Trust Fund, and (2) the assets of the OASI Trust Fund are sufficient to allow both the earlier repayment of amounts owed and the timely payment of OASI benefits.

On the basis of the alternative III assumptions, and in the absence of any repayment of interfund loans, the HI Trust Fund would be depleted early in 1988. Consequently, repayment from the OASI Trust Fund of the full \$12.4 billion owed to the HI Trust Fund is assumed to occur in the first half of 1988—in six equal monthly payments. On the basis of alternative III, OASI assets would be adequate to permit such repayment without affecting the timely payment of OASI benefits; however, the margin for safety would be slim. If, as in the 1983 HI Annual Report, full repayment were required in 1987, OASI assets would be drawn down to extremely low levels. The assumed repayment in 1988 would delay the depletion of the HI Trust Fund until 1989.

On the basis of alternatives I, II-A, and II-B, the amounts lent to the OASI Trust Fund from the DI Trust Fund are assumed to be repaid in 1988. As explained below, on the basis of alternative III, the assets of the DI Trust Fund would decline to the point that earlier repayment of these amounts would be necessary. Thus, on the basis of alternative III, the amounts owed to the DI Trust Fund are assumed to be repaid during 1985-89 in such a way as to place the OASI and DI Trust Funds in an approximately equivalent financial condition.

As described in the preceding subsection, the stabilizer provision of the 1983 amendments requires the modification of OASDI benefit increases in periods when trust fund assets are at low levels and increases in the Consumer Price Index exceed increases in average wages. For the 1984 determination, the inclusion of the amounts owed to the HI Trust Fund in the estimated assets of the OASI Trust Fund at the end of 1984 virtually assures that the stabilizer provision would not limit the benefit increase for December 1984, even on the basis of conditions which are much more adverse than those assumed for alternative III. This is the case because the amounts owed to the HI fund-\$12.4 billion-represent about 7 percent of estimated OASDI expenditures in 1984. On the basis of alternatives I, II-A, and II-B, the stabilizer provision would not affect benefit increases during the short-range projection period. As discussed below, however, based on these assumptions the "OASDI fund ratio" would be very close to the 15.0-percent threshold in 1985. Thus, the possibility of a limitation on the automatic benefit increase in December 1985, even under favorable economic conditions, should not be dismissed.

As indicated in the preceding subsection on "Automatic Adjustments," the stabilizer provision would limit the benefit increases otherwise payable in December of 1985 and 1986, based on alternative III. In the absence of this provision, the assets of the OASI and DI Trust Funds would still be sufficient to pay benefits on time on the basis of the alternative III assumptions but with very little margin for safety. As a result of the provision, however, the timely payment of benefits would be possible with a somewhat greater safety margin, and subsequent trust fund growth in 1988 and later would allow "catch-up" benefit increases for December 1991 for those beneficiaries whose benefit increases had been restricted in 1985-86. Thus, during conditions of slow real growth in the economy accompanied by accelerating wage and price increases, as assumed for alternative III, the stabilizer provision would help prevent the depletion of the trust funds. Under other types of adverse conditions, however, such as high unemployment and decelerating wages and prices, this provision could have little or no effect. Under such circumstances, the relatively low level of OASDI assets through about 1987 might prove insufficient to cover the resulting shortfall between income and outgo; without corrective legislation, the trust funds could be unable to make benefit payments on time. After 1987, the expected growth in trust fund assets would make the program less vulnerable to adverse economic conditions.

At this time, the strong recovery from the 1981-82 recession appears to be continuing. As indicated by the alternative projections, under most economic conditions the trust funds are expected to operate satisfactorily. Until the anticipated growth in assets during the late 1980's has actually occurred, however, the OASDI program will remain vulnerable to certain types of adverse economic conditions, such as a more severe recession in 1984-87 than assumed for alternative III.

## OASI Trust Fund operations

Estimates of the operations and status of the OASI Trust Fund during calendar years 1984-88 are shown in table 12 based on each of the four

alternative sets of assumptions, which are described in the preceding subsections. Actual operations for calendar year 1983 are also shown in the table. For each alternative, employment and earnings are assumed to increase in every year through 1988. The number of persons with taxable earnings under the OASDI program is expected to increase on the basis of alternatives I, II-A, II-B, and III, from 116 million during calendar year 1983 to about 133 million, 132 million, 131 million, and 128 million, respectively, by 1988. The total annual amount of taxable earnings is expected to increase from \$1,454 billion in 1983 to \$2,193 billion, \$2,184 billion, \$2,207 billion, and \$2,117 billion, in 1988, on the basis of alternatives I, II-A, II-B, and III, respectively. (In 1983 dollars—taking account of assumed increases in the CPI from 1983 to 1988 based on each alternative—the estimated amounts of taxable earnings in 1988 are \$1,830 billion, \$1,768 billion, \$1,723 billion, and \$1,619 billion, on the basis of alternatives I, II-A, II-B, and III, respectively.) These increases are due in part to the increases in the contribution and benefit base assumed to occur in 1984-88 under the automatic-adjustment provisions. The increases in taxable earnings are also due to (1) projected increases in employment levels and average earnings in covered employment, and (2) various provisions in the Social Security Amendments of 1983, including the extensions of coverage, beginning in 1984, to all newly hired Federal civilian employees and all employees of nonprofit organizations.

TABLE 12.—ESTIMATED OPERATIONS OF THE OASI TRUST FUND DURING CALENDAR YEARS 1983-88 ON THE BASIS OF FOUR ALTERNATIVE SETS OF ASSUMPTIONS [Amounts in billions]

Calendar year	Income	Disbursements	Interfund borrowing transfers <sup>1</sup>	Net increase in fund	Fund at end of year	Fund at begin- ning of year as a percentage of disburse- ments during year
1983*	\$150.6	\$153.0		-\$2.4	\$19.7	14
Alternative I:	•					
1984	168.1	162.8	_	5.3	25.0	20
1985	186.0	173.0	-\$0.4	12.6	37.5	22
1986	202.7	184.0	-11.3	7.4	44.9	28
1987	220.1	195.6	7	23.8	68.7	31
1988	252.8	207.4	-5.1	40.4	109.1	41
Alternative II-A:						
1984	167.6	163.0	_	4.5	24.2	20
1985	185.0	174.7	_	10.3	34.5	21
1988	201.1	187.8	-7.0	6.6	41.0	26
1987	218.4	201.3	-5.4	11.7	52.7	28
1988	250.6	215.0	-5.1	30.4	83.1	32
Alternative II-B:				,		
1984	167.2	163.0		4.2	23.9	20
1985	184.7	175.2		9.6	33.4	21
1986	201.7	189.5	-5.5	8.7	40.1	25
1987	219.7	205.2	-6.9	7.6	47.7	27
1988	252.8	221.1	-5.1	26.6	74.3	29
Alternative III:						
1984	165.6	163.3		2.4	22.0	20
1985	178.1	176.6	5	.8	22.9	19
1986	192.3	191.1	-1.2	(•)	22.8	19
1987	208.1	208.0	-1.3	(*) .8	23.6	18
1988	238.9	222.8	-12.6	3.4	27.0	18

<sup>&#</sup>x27;Negative figures represent interfund loan repayments from the OASI Trust Fund to the DI and HI Trust Funds.

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

<sup>&</sup>lt;sup>2</sup>Assets at the beginning of the year are defined as assets at the end of the prior year, plus advance tax transfers for January.

<sup>\*</sup>Figures for 1983 represent actual experience.

<sup>&</sup>lt;sup>4</sup>Between \$0 and -\$50 million.

The increases in estimated income shown in table 12 on the basis of each set of assumptions reflect the increases in estimated taxable earnings, as described above. In addition, the estimated income to the fund is affected by the scheduled changes in contribution rates and the effects of the 1983 amendments.

Rising disbursements during calendar years 1984-88 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 growth in the number of beneficiaries in the past and the expected growth in the future result 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 62 are eligible for benefits, and (2) the amendments during the period 1950-83 modified the eligibility provisions and extended coverage to additional categories of employment. On the other hand, this growth will be reduced somewhat by the effects of the Omnibus Budget Reconciliation Act of 1981.

There has also been, and will continue to be, 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 1950-83 which affect the conditions governing the receipt of benefits, and (2) the increasing percentage of eligible persons who are aged 70 and over and who therefore receive benefits regardless of earnings. (The age at which eligible persons may begin to receive full benefits regardless of earnings was reduced from 72 to 70 beginning in 1983.)

The estimates shown in table 12 indicate that income would exceed disbursements in every year after 1983, based on each of the four alternative sets of assumptions used in this report. The assets of the OASI Trust Fund at the beginning of 1983, including amounts owed to the DI and HI Trust Funds, were equal to about 14 percent of the fund's disbursements in 1983. During 1983, disbursements exceeded income by \$2.4 billion. At the beginning of 1984, the assets of the OASI Trust Fund represented about 20 percent of estimated annual expenditures. This increase appears to be contradictory, because expenditures exceeded income during 1983. The explanation is that, at the beginning of 1984, tax income for the month of January was transferred to the trust fund on the first day of the month and thus was available for the payment of benefits. As such, the advance tax transfer is reflected in assets at the beginning of the year. This provision for advance tax transfers, which was included in the Social Security Amendments of 1983, became effective in May 1983.

Assets are estimated to remain at roughly 20-30 percent of annual expenditures through 1987, based on alternatives II-A and II-B, and to increase rapidly thereafter. On the basis of alternative I, somewhat faster growth would occur, with assets reaching about 41 percent of annual outgo at the beginning of 1988. Based on alternative III, assets would decrease to about 18 percent of annual expenditures at the beginning of 1988. While not shown in table 12, rapid growth would occur for the

next several years, primarily as a result of the increases in OASI tax rates scheduled for 1988 and 1990 and, to a lesser degree, because of the benefit-increase limitations in 1985-86. The relatively low level of OASI assets during 1984-87, even under favorable economic conditions, could limit the trust fund's ability to act as a contingency reserve during this period in the event of a significant economic downturn, particularly if it became necessary to repay the amounts owed to the HI Trust Fund prior to 1988. In interpreting the trust fund ratios in table 12, it should be noted that, at the beginning of any month, assets of at least 8-9 percent of annual expenditures are required to make the benefit payments that are due, generally, on the third day of the month. Therefore, the difference between the estimated assets as a percentage of expenditures shown above, and the 8-9 percent minimum level, represents the reserve available to handle adverse contingencies.

## DI Trust Fund operations

The estimated operations and status of the DI Trust Fund during calendar years 1984-88 on the basis of the four sets of assumptions are shown in table 13, together with figures on actual experience in 1983. Income is estimated to decrease initially from its level in 1983 as a result of the scheduled reductions in the combined employee-employer contribution rate allocated for DI. Income will increase after 1984 on the basis of each alternative, reflecting the same factors, insofar as they apply to income to the DI Trust Fund, that are reflected in the estimated increases in income to the OASI Trust Fund during the same period.

Disbursements are estimated to increase because of automatic benefit increases and because of projected increases in the amounts of average monthly earnings on which benefits are based. In addition, on the basis of all but alternative I, the number of DI beneficiaries is projected to begin increasing in the very near future. Based on alternative I, the number of DI beneficiaries is projected to continue to decline for several more years before beginning to increase in about 1987.

Since about 1978, the number of persons receiving benefits under the DI program has been declining. This decline is attributable to (1) disability incidence rates that have been significantly lower than those experienced prior to 1978, and (2) benefit termination rates that have been somewhat higher, in part as a result of the increased reviews of the continuing eligibility of disabled beneficiaries as required by the Social Security Disability Amendments of 1980. While this experience was not expected to continue indefinitely (see discussion in 1983 report, for example), actual disability incidence rates were higher, and termination rates were lower, than had been anticipated. As a result of the revised incidence and termination assumptions prepared for this report, the number of disability awards is projected to exceed the number of terminations in the relatively near future on the basis of alternatives II-A, II-B, and III.

At the beginning of 1983, the assets of the DI Trust Fund represented about 15 percent of annual expenditures. During 1983, total DI income exceeded DI expenditures, primarily as a result of the lump-sum transfers from the general fund of the Treasury for deemed military-service wage credits (see section V). The DI Trust Fund assets at the beginning of

1984, including advance tax transfers for January, amounted to about 35 percent of estimated outgo in 1984. Based on the two intermediate sets of assumptions, DI assets are projected to remain in the range of 23-28 percent of annual expenditures during 1984-87. Based on the alternative I assumptions, DI assets would increase to about 43 percent of annual expenditures at the beginning of 1988. Based on the alternative III assumptions, DI assets would decline to about 18 percent of outgo.

As indicated in table 13, the loans made in 1982 from the DI Trust Fund to the OASI Trust Fund are assumed to be repaid in 1988 on the basis of alternatives I, II-A, and II-B. Financial problems would not result on the basis of these three sets of assumptions if the repayment did not occur in 1988. Based on alternative III, however, earlier repayment would be required to allow timely payment of DI benefits in 1987 and 1988 (and possibly by late 1986). Consequently, the amounts owed to the DI Trust Fund are assumed to be repaid in stages during 1985-89, in such a way as to place the two trust funds in an approximately equivalent financial condition during this period.

TABLE 13.—ESTIMATED OPERATIONS OF THE DI TRUST FUND DURING CALENDAR YEARS 1983-88 ON THE BASIS OF FOUR ALTERNATIVE SETS OF ASSUMPTIONS [Amounts in billions]

Calendar year	Income	Disbursements	Interfund borrowing transfers <sup>1</sup>	Net increase in fund	Fund at end of year	Fund at begin- ning of year as a percentage of disburse- ments during year?
19831	\$20.7	\$18.2	_	\$2.5	\$5.2	15
Alternative I:	•	•		*	*	,,,
1984	17.3	18.3	_	-1.1	4.1	35
1985	18.6	18.5		.1	4.2	29
1986	20.1	19.0		1.0	5.2	29
1987	21.7	19.7	_	2.0	7.2	34
1988	24.5	20.5	\$5.1	9.1	16.3	43
Alternative II-A:						
1984	17.2	18.5	_	-1.3	3.9	35
1985	18.4	18.8	_	4	3.5	27
1986	19.9	19.7	_	.2	3.7	25
1987	21.4	20.7	_	.7	4.4	25
1988	24.2	21.8	5.1	7.5	11.9	28
Alternative II-B:						
1984	17.2	18.5		-1.3	3.9	35
1985	18.4	18.9		5	3.4	27
1986	19.9	19.9		(4)	3.5	24
1987	21.5	21.0		Ì.Ś	4.0	23
1988	24.4	22.3	5.1	7.2	11.2	25
Alternative III:						
1984	17.0	18.6	_	-1.6	3.6	35
1985	17.8	19.3	.5	-1.0	2.6	25
1986	18.9	20.3	1.2	2	. 2.4	19
1987	20.3	21.4	1.3	.2	2.5	18
1988	23.0	22.9	.2	.3	2.9	18

Positive figures represent repayments of amounts lent to the OASI Trust Fund in 1982.

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

# Combined OASI and DI Trust Fund operations

The estimated operations and status of the OASI and DI Trust Funds, combined, during calendar years 1984-88 on the basis of the four alternatives, are shown in table 14 together with figures on actual experience in 1983. These figures are the sums of the corresponding figures shown in tables 12 and 13.

<sup>\*</sup>See footnote 2 of table 12.

<sup>&</sup>lt;sup>a</sup>See footnote 3 of table 12.

Between \$0 and \$50 million.

TABLE 14.—ESTIMATED OPERATIONS OF THE OASI AND DI TRUST FUNDS, COMBINED, DURING CALENDAR YEARS 1983-88 ON THE BASIS OF FOUR ALTERNATIVE SETS OF ASSUMPTIONS [Amounts in billions]

Calendar year	Income	Disbursements	Interfund borrowing transfers	Net increase in funds	Funds at end of year	Funds at begin- ning of year as a percentage of disburse- ments during year*
19831	\$171.3	\$171.2		\$0.1	\$24.9	14
Alternative I:	•					
1984	185.3	181.1	_	4.2	29.1	21
1985	204.6	191.5	-\$0.4	12.7	41.7	23
1986	222.7	203.0	-11.3	8.4	50.1	28
1987	241.8	215.3	7	25.8	75.9	31
1988	277.3	227.9	_	49.5	125.3	41
Alternative II-A:						
1984	184.8	181.5	_	3.2	28.1	21
1985	203.4	193.5	_	9.9	38.0	22
1986	221.0	207.2	-7.0	6.7	44.7	26
1987	239.8	222.0	-5.4	12.4	57.1	27
1988	274.7	236.8	_	37.9	95.0	32
Alternative II-B:						
1984	184.4	181.5		2.9	27.7	21
1985	203.2	194.1		9.1	38.8	21
1986	221.6	209.3	-5.5	6.7	43.6	25
1987	241.2	226.2	-6.9	8.1	51.7	27
1988	277.2	243.4	_	33.8	85.4	29
Alternative III:						
1984	182.6	181.9	_	.7	25.6	21
1985	195.9	196.0	_	-,2	25.4	20
1986	211.2	211.4	_	2 .9	25.2	19
1987	228.3	227.4	_	.9	26.1	18
1988	261.9	245.6	-12.4	3.8	29.9	18

Negative figures represent interfund loan repayments from the OASI Trust Fund to the HI Trust Fund.

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

At the beginning of 1983, the combined assets of the OASI and DI Trust Funds were equal to 14 percent of the disbursements in 1983, as shown in table 14. During 1983, total income to the two trust funds (including the lump-sum transfers from the general fund for deemed military-service wage credits) was \$0.1 billion higher than total expenditures. As a result of reflecting advance tax transfers for January 1984, combined OASDI assets at the beginning of 1984 represented 21 percent of estimated combined expenditures for the year. Based on alternatives II-A and II-B, the combined funds are projected to increase gradually to roughly 30 percent of annual outgo at the beginning of 1988. Somewhat faster growth would occur on the basis of alternative I, with combined assets reaching about 41 percent of annual outgo at the beginning of 1988. Based on the alternative III assumptions, assets would decline from their current level to 18 percent at the beginning of 1988. Although OASDI benefit payments could be made on time on the basis of the alternative III assumptions, the level of assets available above the 8-9 percent that is needed to meet monthly cash flows would be relatively small. The alternative III assumptions include a moderate recession in late 1984. Under a longer or more severe recession, the OASDI program could become unable to both make its benefit payments on time and also repay the amounts owed to the HI Trust Fund when needed to pay HI benefits. This problem would be particularly acute if the HI Trust Fund required repayment prior to 1988, as a result of the more adverse

<sup>\*</sup>See footnote 2 of table 12.

<sup>\*</sup>See footnote 3 of table 12.

economic conditions. On the basis of all four sets of assumptions, combined assets would increase substantially in 1988 and later, primarily as a result of the scheduled increases in OASDI tax rates.

The Social Security Amendments of 1983 contained several provisions requiring automatic actions if certain "trust fund ratios" are above or below specified levels. Each of these provisions has a unique definition of the ratio to be used, and none of these definitions coincides with the one that is generally used to evaluate the overall financial status of the Social Security program. Table 15 presents detailed information on the calculation of the usual trust fund ratio and two of the more critical new definitions from the 1983 amendments.

The usual definition of the ratio of assets to expenditures, denoted in table 15 as the "contingency reserve trust fund ratio," has already been described. Its purpose is to measure the amount of assets that is readily available for the payment of monthly benefits.

TABLE 15.—ESTIMATED OASDI "TRUST FUND RATIOS" BASED ON VARIOUS DEFINITIONS FOR CALENDAR YEARS 1984-88 ON THE BASIS OF FOUR ALTERNATIVE SETS OF ASSUMPTIONS

[Amounts in millions]

Calendar year	Cash and invested assets of OASI and DI Trust Funds on January 11	Advance fax transfers for January	Amounts owed to HI Trust Fund on January 1	OASDI outgo during year	"Contingency reserve trust fund ratio"	"Fund ratio" for December benefit increase	"Trust fund ratio" for Hi loan repay- ment in January
Alternative I:							**
1984	\$24,867	\$13,794	\$12,437	\$181,139	21.3%	*23.8%	13.7%
1985	29,065	14,049	12,437	191,507	22.5	16.0	15.2
1986	41,744	15,272	12,037	203,035	28.1	22.2	20.6
1987	50,134	16,363	737	215,310	30.9	30.5	23.3
1988	75,887	18,592	_	227,861	41.5	41.5	(9)
Alternative II-A:	, -,,	,			*****		()
1984	24,867	13,794	12,437	181,523	21.3	•23.2	13.7
1985	28,110	13,971	12,437	193,521	21.7	15.3	14.5
1986	37.988	15,185	12,437	207,249	25.7	19.7	18.3
1987	44,732	16,268	5,437	221,957	27.5	25.0	20.2
1988	57.118	18,507	-,	236,806	31.9	31.9	(9)
Alternative II-B:	0.,	,		200,000	01.0	01.0	()
1984	24.867	13,794	12,437	181,524	21.3	•23.0	13.7
1985	27,749	13,932	12,437	194,059	21.5	15.1	14.3
1966	36.842	15,217	12,437	209,338	24.9	18.9	17.6
1987	43,581	18,382	6,937	226,193	26.5	23.4	19.3
1968	51.651	18,695	5,551	243,434	28.9	26.9	(*)
Alternative III:	- /,00	. 5,000		,	20.0	20.0	(7
1984	24,867	13,794	12,437	161,915	21.3	•21.5	13.7
1985	25,598	13,465	12,437	198,031	19.9	13.6	13.1
1986	25,436	14,516	12,437	211,402	16.9	13.0	12.0
1987	25,229	15,616	12.437	227,416	18.0	12.5	11.1
1988	26,149	17,856	12,437	245,643	17.9	12.9	10.6

<sup>&</sup>lt;sup>1</sup>Before appropriation of advance tax transfers for January. Includes amounts owed to the HI Trust Fund.

<sup>\*</sup>Combined assets of OASI and DI Trust Funds, plus advance tax transfers for January, as a percentage of OASDI outgo during year. This is the ratio normally used to evaluate the financial status of the trust funds. See estimates in tables 12-14, for example.

<sup>\*</sup>For 1985 and later, combined assets of OASI and DI Trust Funds, plus advance tax transfers for January, minus amounts owed to the HI Trust Fund, as a percentage of OASDI outgo during year. See section 215(i) of the Social Security Act.

<sup>\*</sup>Combined assets of OASI and DI Trust Funds, as a percentage of OASDI outgo during year. See section 201(I) of the Social Security Act.

<sup>\*</sup>For 1984 "fund ratio" (for December 1984 benefit increase), assets and advance tax transfers are as of January 1, 1985, and amounts owed to the HI Trust Fund are not subtracted. If these ratios were computed with the exclusion of amounts owed to the HI Trust Fund, as was assumed for purposes of the 1983 Annual Report, the corresponding percentages would be 16.9, 16.3, 16.1, and 14.6, based on alternatives 1, II-A, II-B, and III, respectively.

Based on this set of assumptions, amounts owed to the HI Trust Fund are repaid by this year.

Section 215(i) of the Social Security Act defines an "OASDI fund ratio" for the purpose of determining automatic benefit increases in 1984 and later. If this ratio falls below specified thresholds, the automatic benefit increases would be based on the lesser of certain wage and price increases. For reasons discussed in the previous subsection entitled "Automatic Adjustments," the "OASDI fund ratio" for the December 1984 benefit increase would be well above the 15.0-percent threshold—under any reasonable set of economic assumptions. The projections in table 15 indicate that on the basis of alternatives I, II-A, and II-B, the ratio would not be lower than 15.0 percent in 1985-88. Based on alternative III, the ratio would be less than 15.0 percent throughout this period.

The relevant wage and price assumptions for 1984-86 are compared in the following table. It should be noted that these figures are not the same as similar ones shown previously in table 10, because their definitions are not the same. For example, the wage increases shown below are based on the same wage series which is used for indexing the contribution and benefit base and other wage-indexed program amounts. The wage increases shown in table 10 are based on average wages in covered employment.

	Applicable increase	in-	
Calendar year .	Average wages <sup>1</sup>	CPI	Resulting benefit increases
Alternative I:			
1984	4.2%	3.8%	3.8%
1985	8.0	3.8	3.8
1986	5.2	3.7	3.7
Alternative II-A:	5.2	•	•
1984	4.2	4.4	4.4
	5.9	4.6	4.6
1985			
1986	5.5	4.5	4.5
Alternative II-B:			
1984	4.2	4.7	4.7
1985	5.8	5.4	5.4
1986	5.8	5.5	5.5
Alternative III:			
1984	4.2	5.3	5.3
1985	5.1	5.7	5.1
	7.1	6.0	4.8
1986	4.8		4.0

<sup>&</sup>lt;sup>1</sup>Increase in average total wages (both covered and noncovered) in preceding year as compared to second preceding

Based on alternative I, the applicable wage increases are assumed to exceed the corresponding price increases (taking into account the difference in measuring periods) for 1984 and later. Based on alternatives II-A and II-B, this relationship is assumed for 1985 and later. Based on these three sets of assumptions, then, at no time would the "OASDI fund ratio" be less than 15.0 percent at the same time that the wage increase falls below the price increase. Consequently, the benefit-increase stabilizer provision would not affect the automatic benefit increases in 1984-88. For December 1985, however, considering both the proximity of the ratio to 15.0 percent and the substantial variation that can occur in actual wage and price increases, it should be clear that a limitation could occur even if the economy continues to perform well. Based on the less

Increase in average Consumer Price Index from third quarter of preceding year to third quarter of year shown.

<sup>\*</sup>Equals increase in Consumer Price Index unless "OASDI fund ratio" (as shown in table 15) is less than 15.0 percent, in which case equals lesser of wage or price increase. Effective for December of year shown.

favorable alternative III assumptions, as already stated, such limitations would occur in 1985 and 1986. Finally, it should be noted that under adverse conditions involving decelerating wage and price increases, it is possible that the stabilizer provision would *not* limit benefit increases, or would have only a slight effect. Thus, while the stabilizer provision has the potential to improve the financial status of the OASDI program in the event of adverse economic conditions, its effect is somewhat unpredictable because the applicable wage and price indices are measured over time periods which are not contemporaneous.

Table 15 also presents OASDI trust fund ratios as used for determining the minimum schedule of repayments on amounts lent to the OASI Trust Fund from the HI Trust Fund. Any assets in excess of 15 percent (as defined by section 201(l) of the Social Security Act) are to be used to repay such loans. Any amounts still owed as of January 1, 1988, are to be repaid in 24 monthly installments during 1988-89. Full repayment would occur in 1985-87 based on alternative I, and in 1986-87 on the basis of alternatives II-A and II-B. As described previously, no repayment would be required on the basis of alternative III until 1988, but full repayment is assumed to occur in the first half of 1988, in order to postpone the depletion of the HI Trust Fund.

As in prior years' reports, for purposes of evaluating the financial status of the program, the amounts lent to the OASI Trust Fund from the DI and HI Trust Funds are included in the invested assets of the OASI Trust Fund. This procedure is followed because such amounts are readily available for the payment of benefits and thus should be considered when determining the ability of the OASI program to meet its benefit payment obligations. Similarly, the amounts owed to the DI and HI Trust Funds are not included in DI or HI assets, because these amounts are not readily available for the payment of DI or HI benefits.

It can be argued that a more proper accounting treatment would be to exclude interfund loans from the borrowing fund's assets and to include them in the assets of the lending funds. This "net value" basis would recognize the obligation of the OASI Trust Fund to repay the amounts owed and would reflect the fact that, to the lending funds, such amounts are investments for which interest is received and return of principal is promised. While these are sound arguments, the existing treatment is used to facilitate the evaluation of the trust funds' actual cash operations—in particular, whether sufficient invested assets (borrowed or otherwise) are available at the beginning of any given month to pay the benefits for that month.

For informational purposes, table 16 presents (1) the estimated assets of the OASI and DI Trust Funds, as shown elsewhere in this report, (2) the amounts owed to or owing from other trust funds, and (3) the "net value" of trust fund assets. For the OASI Trust Fund, this last figure represents invested assets plus cash balances less amounts owed to other funds. For the DI Trust Fund, the "net value" represents invested assets plus cash balances plus amounts owing from the OASI Trust Fund. Figures are shown at the end of each calendar year 1981-88 on the basis of the four sets of assumptions. As indicated, the "net value" of the OASI Trust Fund is very low at this time and will remain relatively low

for several years. It should be emphasized, however, that the low "net values" do not imply an inability to pay benefits on time, for the reasons described in the prior paragraphs. The "net value" of the DI Trust Fund, as indicated in table 16, exceeds the level of DI assets as regularly defined. Under certain conditions, however, the DI program could become unable to pay benefits on time, even though the "net value" of the DI Trust Fund might be relatively large. Thus, the "net value" is not particularly useful as an indicator of a trust fund's ability to operate satisfactorily, although it may be of interest as an additional indicator of the trust fund's underlying financial status.

TABLE 16.—ESTIMATED ASSETS, INTERFUND LOANS OUTSTANDING, AND "NET VALUES" OF THE OASI AND DI TRUST FUNDS AT THE END OF CALENDAR YEARS 1961-86 ON THE BASIS OF FOUR ALTERNATIVE SETS OF ASSUMPTIONS [In billions]

			(iii oiiiioiio)			
	0	ASI Trust Fund		DI	Trust Fund	
Calendar year	Assets <sup>1</sup>	Outstanding amounts borrowed*	"Net value"	Assets <sup>1</sup>	Outstanding amounts lent*	"Net value"
Past experience:		·				
1981	\$21.5	_	\$21.5	\$3.0	_	\$3.0
1982	22.1	\$17.5	4.8	2.7	<b>\$</b> 5.1	7.8
1983	19.7	17.5	2.2	5.2	5.1	10.3
Alternative I:						
1984	25.0	17.5	7.4	4.1	5.1	9.2
1985	37.5	17.1	20.4	4.2	5.1	9.3
1986	44.9	5.8	39.1	5.2	5.1	10.3
1987	68.7	5.1	63.6	7.2	5.1	12.3
1988	109.1	<u></u> :	109.1	16.3	_	16.3
Alternative II-A:						
1984	24.2	17.5	6.7	3.9	5.1	9.0
1985	34.5	17.5	16.9	3.5	5.1	8.6
1986	41.0	10.5	30.5	3.7	5.1	8.8
1987	52.7	5.1	47.6	4.4	5.1	9.5
1988	83.1	<u></u>	83.1	11.9		11.9
Alternative II-B:	00.1		••••			
1984	23.9	17.5	6.3	3.9	5.1	9.0
1985	33.4	17.5	15.9	3.4	5.1	8.5
1986	40.1	12.0	28.1	3.5	5.1	8.5
1987	47.7	5.1	42.6	4.0	5.1	9.0
1988	74.3	3.1	74.3	11.2	<u>-</u>	11.2
Alternative III:	74.3	_	77.0	11.2		
1984,	22.0	17.5	4.5	3.6	5.1	8.6
1985	22.9	17.0	5.9	2.6	4.6	7.1
1900			7.0	2.4	3.4	5.8
1986	22.8	15.8		2.5	2.1	4.6
1987	23.6	14.5	9.1		1.9	4.8
1988	27.0	1.9	25.2	2.9	1.9	4.0

Represents invested assets plus cash balance at end of year.

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

Assets as a percentage of annual expenditures for selected years prior to 1984 are shown in table 17 for both funds combined and for each fund separately. These figures represent "contingency reserve trust fund ratios," as defined previously.

<sup>\*</sup>Represents total amounts owed to the DI and HI Trust Funds at the end of calendar year.

<sup>\*</sup>See text for description of "net value."

<sup>&</sup>lt;sup>4</sup>Represents total amounts lent to OASI Trust Fund less repayments made by end of calendar year.

TABLE 17.—ASSETS AT THE BEGINNING OF THE YEAR AS A PERCENTAGE OF EXPENDITURES DURING THE YEAR, BY TRUST FUND, FOR SELECTED CALENDAR YEARS 1950-83

Calendar year	OASI and DI Trust Funds, combined	OASI Trust Fund	DI Trust Fund	
1950	1,156	1,156		
1955	405	405	_	
1960	186	160	304	
1965	110	109	121	
1970	103	101	126	
1975	66	63	92	
1976	57	54	71	
1977	47	47	ÀA	
1976	37	39	26	
1979	30	30	30	
1960	25	23	35	
1981	16	18	21	
1982	15	15	17	
1983	14	15	14	

Expenditures in calendar year 1983 from both trust funds, combined, were 11.51 percent of taxable payroll for the year—0.27 percentage point more than the total income rate of 11.24 percent. Based on alternatives I, II-A, and II-B, cost rates are estimated to decline slowly in 1984-88, reaching 10.42 percent, 10.87 percent, and 11.06 percent, respectively, in 1988. Based on alternative III, cost rates would increase slightly, to 11.63 percent in 1988. These percentages are shown in table 18 for both trust funds, combined, and for each trust fund separately. Table 18 also shows a comparison of the cost rates with the corresponding total income rates. As explained previously, the total income rate represents the sum of the combined employee-employer payroll tax rate and the income derived from the Federal income taxation of OASDI benefits, expressed as a percentage of effective taxable payroll. In 1983, the total income rate also includes the lump-sum payment from the general fund of the Treasury for the cost of military-service wage credits for service performed prior to 1957.

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TABLE 18.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES, BY TRUST FUND, FOR CALENDAR YEARS
1983-88 ON THE BASIS OF FOUR ALTERNATIVE SETS OF ASSUMPTIONS
[As a percentage of taxable payroll]

		[ve a be	rcentage or tax	able payroll						
	OAS	I Trust Fund			DI Trust Fund		OASI and DI Trust Funds, combined			
-	To				Total income		otal income			
Calendar year	Cost rate	rate	Balance	Cost rate	rate	Balance	Cost rate	rate	Balanc	
9831	10.28	9.91	-0.37	1.22	1.33	0.10	11.51	11.24	-0.2	
ernative I:										
1984	10.10	10.58	.48	1.14	1.01	-,13	11.24	11.59	.:	
1985	9.89	10.59	.70	1.06	1.01	04	10.94	11.60		
1986	9.72	10.60	.88	1.01	1,01	.01	10.73	11.61	j	
1987	9.60	10.61	1.01	.97	1.01	.04	10.56	11.62	1.	
1988	9.48	11.28	1.80	.94	1.07	.13	10.42	12.35	1.	
	0.40	11.20	1.00							
ernative II-A: 1984	10.15	10.58	.43	1.15	1.01	- 14	11.30	11.59		
	10.13	10.59	.56	1.08	1.01	.07	11,11	11.60		
1985			.64	1.05	1.01	03	11.01	11.61		
1986	9.96	10.60				03	10.93	11.63		
1987	9.92	10.61	.70	1.02	1.01	01 .07		12.36	1	
1988	9.87	11.29	1.42	1.00	1.07	.07	10.87	12.30	•	
ernative II-B:								44.50		
1984	10.17	10.58	.41	1.15	1.01	14	11.32	11.59		
1985	10.06	10.59	.53	1.09	1.01	07	11.15	11.60		
1986	10.03	10.60	.58	1.05	1.01	04	11.08	11.62		
1987	10.04	10.62	.58	1.03	1.01	02	11.06	11.63		
1988	10.04	11.29	1.25	1,01	1.07	.06	11.06	12.37	1.	
mative III:										
1984	10.29	10.58	.30	1.17	1.01	16	11.46	11.60		
1985	10.52	10.60	.08	1.15	1.01	13	11.66	11.61		
1986	10.53	10.61	.09	1.12	1.01	11	11.65	11.63	٠.	
1987	10.51	10.63	.12	1.09	1.01	08	11.61	11.64		
	10.55	11.30	.76	1.08	1.07	01	11.63	12.38		
1988	10.00	11.00		1.00						

<sup>&</sup>lt;sup>1</sup>Percentages for 1983, though based on actual experience, are preliminary and subject to revision.

Cost rates for years prior to 1984 are shown in table 19.

TABLE 19.—COST RATES, BY TRUST FUND, FOR SELECTED CALENDAR YEARS 1950-831

Calendar year	OASI and DI Trust Funds, combined	OASI Trust Fund	DI Trust Fund
1950	1,17	1,17	
1955	3.34	3.34	
1960	5.89	5.59	0.30
1965	7.93	7.23	.70
1970	8.12	7.32	.81
1975	10.65	9.29	1.36
1976	10.86	9.42	1.44
1977	10.97	9.46	1.50
1978	10.74	9.29	1.45
1979	10.26	8.90	1.36
1980	10.74	9.36	1.36
1981	11.32	9.93	1.39
1982	12.02	10.67	1.35
1983	11.51	10.28	1.22

For 1979-83, percentages are preliminary and subject to revision.

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

As stated previously, estimates of the operations of the trust funds during calendar years 1984-88 have been presented in the preceding tables of this section on the basis of four different sets of economic assumptions because of the uncertainty of future economic developments. Under the provisions of the Social Security Act, estimates of the expected operations and status of the trust funds during the next 5 fiscal years are required to be shown in this report. Accordingly, detailed estimates of the expected operations and status of the trust funds during each fiscal year 1984-88 are shown in the remaining tables of this section for the two intermediate sets of assumptions (alternatives II-A and II-B) only. Similar detailed estimates are also shown on a calendar-year basis for 1984-88.

Data on the actual operations of the OASI Trust Fund for selected years during 1940-83, and estimates of the expected operations of the trust fund during 1984-88 on the basis of the intermediate sets of assumptions, are shown in tables 20 and 21 on a fiscal- and calendar-year basis, respectively. Corresponding figures on the operations of the DI Trust Fund are shown in tables 22 and 23. Operations of both trust funds combined are shown in tables 24 and 25.1

<sup>&</sup>lt;sup>1</sup>Data relating to the operations of the two trust funds for years not shown in tables 20-25 are contained in earlier annual reports.

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TABLE 20.—OPERATIONS OF THE OASI TRUST FUND DURING SELECTED FISCAL YEARS 1940-83 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1984-88 ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS
[In millions]

			Income				Disbursen	nents				Fund at end or period
Fiscal year <sup>1</sup>	Total	Net contri- butions <sup>2</sup>	Income from taxa- tion of benefits	Payments from the general fund of the Treasury <sup>a</sup>	Net interest <sup>4</sup>	Totai	Benefit payments	Adminis- trative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers*	Net increase in fund	
Past experience:												<b>6</b> 4 74
1940	\$592	\$550	_	_	\$42	\$28	\$16	\$12	_	_	\$564	\$1,74
1945	1,434	1,310	_	_	124	267	240	27	_	_	1,167	6,61
1950	2,367	2,106	_	\$4	257	784	727	57	_	_	1,583	12,89
1955	5,525	5,087			436	4,427	4,333	103	-\$10	_	1,098	21,14
1960	10,360	9,843	_	_	517	11,073	10,270	202	600		-713	20,62
1965	16,443	15,857	_	_	586	15,962	15,226	300	436	_	482	20,18
1970	31,746	29,955		442	1,350	27,321	26,268	474	579		4,425	32,61
1975	58,757	56,017	_	447	2,292	56,676	54,847	848	962	_	2,081	39,94
1976	62,327	59,555		425	2,347	64,295	62,148	935	1,212	_	-1,968	37,98
July-Sept. 1976 .	16,186	16,106	· _	<del>-</del>	60	17,111	16,677	234	_		-925	37,05
1977	71,796	68,895	_	614	2,287	73,479	71,278	993	1,208	_	-1,683	35,37
1978	76,811	74,047	_	613	2,152	61,205	78,531	1,086	1,589		-4,394	30,97
1979	86,893	84,358	_	615	1,920	90,126	87,609	1,072	1,448	_	-3,235	27,74
1980	100.051	97,608	_	557	1,886	103,228	100,626	1,160	1,442	_	-3,177	24,5€
1981	121,572	119,016	_	540	2,016	122,304	119,421	1,298	1,585	_	-732	23,83
1982	126,629	124,246	_	675	1,708	137,928	134,661	1,474	1,793	_	-11,299	12,53
	148,434	136,127	_	6.096	6,210	151,827	148,025	1,551	2,251	\$17,519	14,125	26,66
1983 Stimated future	140,434	130,127		0,000	0,2.0	,	,	.,	_,			
experience:												
Alternative II-A:												
1984	159,694	157,499	\$2,159	125	-89	160.521	156,510	1,703	2,308	_	-827	25,83
1985	181,160	177,412	3,213	104	430	171,718	167,689	1,794	2,235	_	9.442	35,27
1986	196.803	191,407	3,680	67	1,628	184,264	160,113	1,891	2,260	-7,000	5,539	40.8
1987	213,602	206,413	4,217	72	2,900	197,908	193,531	1,993	2,384	-5,437	10,257	51,0
			4,813	59	4.660	211,603	207,077	2,099	2,427	-5,081	26,494	77,50
1988	243,178	233,645	4,013	39	4,000	211,000	207,077	2,000	_, ,_,	-,	,	•-
Alternative II-B:	150 460	157,275	2.159	125	-90	160,520	156,509	1,703	2,308	_	-1.052	25,60
1984	159,469		3,220	104	392	172,084	168,048	1,798	2,238	_	8,763	34,3
1985	180,847	177,131		87	1,468	185,815	181,641	1,905	2,270	-5,500	5,691	40,2
1986	197,207	191,940	3,712		2,732	201,299	196,672	2,016	2,411	-6,937	6,654	46,9
1987	214,890	207,795	4,291	72 61	2,732 4.320	201,299 217,151	212,540	2,130	2,481	-5,081	22,979	69,8
1988	245,211	235,890	4,941	- 61	4,320	21/,151	212,340	2,130	2,401	25,001	44,073	

See following page for footnotes.

<sup>1</sup>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.

<sup>8</sup>Beginning in 1983, includes government contributions on deemed wage credits for military service in 1957 and later. The amount shown for 1983 includes, in addition to the annual contributions on 1983 wage credits, a net amount of 55,388 million representing (1) retroactive contributions on deemed wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the coats of such credits.

• \*\*Includes payments (1) in 1947-52 and in 1967 and later, for costs of noncontributory wage credits for military service performed before 1957; (2) in 1972-83, for costs of deemed wage credits for military service performed after 1956, and (3) in 1969 and later, for costs of benefits to certain noninsured persons who attained age 72 before 1968. The amount shown for 1978 also includes \$2,724,000 as a single reimbursement for the estimated total costs of granting noncontributory wage credits to individuals who were interned during World War II at places within the United States operated by the Federal Government for the interument of persons of Jananese ancestry.

'Net interest includes net profits or losses on marketable investments. Beginning in 1967, administrative expenses 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 net interest. For years prior to 1967, a description of the method of accounting for administrative expenses is contained in the 1970 Annual Report. Beginning in 1983, these figures reflect payments from a borrowing trust fund to a lending trust fund for interest on amounts transferred under the interfund borrowing provisions. Also, beginning in 1983, interest paid from the trust fund to the general fund on advances tax transfers is reflected. The amount shown for 1983 includes \$6,677 million in interest on (1) retroactive government contributions on deemed wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

\*Beginning in 1967, includes payments for vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability. Beginning in 1983, amount are reduced by amount of reimbursement for unnegotiated benefit checks. The amount shown for 1983 is reduced by \$288 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

\*Positive figure represents amounts lent to the OASI Trust Fund from the DI and HI Trust Funds. Negative figures represent amounts repaid from the OASI Trust Fund to the DI and HI Trust Funds.

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TABLE 21.—OPERATIONS OF THE OASI TRUST FUND DURING SELECTED CALENDAR YEARS 1940-83 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1984-88 ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS

[In millions]

					[In mill	ions						
			Income				Disbursen	ents				
Calendar year	Total	Net contri- butions <sup>1</sup>	Income from taxa- tion of benefits	Payments from the general fund of the Treasury <sup>3</sup>	Net interest <sup>a</sup>	Total	Benefit payments <sup>4</sup>	Adminis- trative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers*	Net increase in fund	Fund at end of period
Past experience:						•••	\$35	\$26		_	\$306	\$2,031
1940	\$368	\$325	_	-	\$43	\$62				_	1,116	7,121
1945	1,420	1,285	_	_	134	304	274	30	_	=	1.905	13.721
1950	2,928	2,667		\$4	257	1,022	961	61	-\$7		1,087	21,663
1955	6,167	5,713	_	_	454	5,079	4,968	119	-3/ 318	_	184	20,324
1960	11,382	10,866	_	_	516	11,198	10,677	203		_	-890	18,235
1965	16,610	16,017	_	_	593	17,501	16,737	328	436	_		32,454
1970	32,220	30,256		449	1,515	29,848	28,798	471	579	_	2,371 -790	36,987
1975	59,605	56,816	_	425	2,364	60,395	58,517	896	982	_		35,388
1976	66,276	63,362		614	2,301	67,876	65,705	959	1,212	_	-1,600	
1977	72,412	69,572	_	613	2,227	75,309	73,121	981	1,208		-2,897	32,491
1978	78,094	75,471	_	615	2,008	83,064	80,361	1,115	1,589	_	-4,971	27,520
1979	90,274	87,919	_	557	1,797	93,133	90,573	1,113	1,448	_	-2,860	24,660
1980	105.841	103,456	_	540	1,845	107,678	105,083	1,154	1,442	_	-1,837	22,823
1981	125,361	122,627	_	675	2,060	126,695	123,803	1,307	1,585		-1,334	21,490
1000	125,198	123,673	_	680	845	142,119	138,806	1,519	1,793	\$17,519	598	22,088
4000	150,584	138,337	_	5,541	6,706	152,999	149,215	1,534	2,251	_	-2,416	19,672
	150,504	130,557		•,• · ·			•					
Estimated future												
experience:												
Alternative II-A: 1984	167.562	164,422	\$2,899	104	137	163,047	158,966	1,773	2,308	_	4,515	24,187
	184,951	180,652	3,319	87	892	174,682	170,631	1.817	2,235	_	10,268	34,455
1985		195,203	3,804	72	2.057	187,564	183,389	1,915	2,260	-7,000	6,572	41,028
1986	201,136	210,465	4,357	59	3,515	201,306	196,905	2.017	2,384	-5,437	11,652	52,680
1987	218,396		4,968	48	5,861	215,044	210,493	2,124	2,427	-5,081	30,427	83,106
1988	250,552	239,674	4,300	40	0,001	210,011	2.0,.00	-,				
Alternative II-B:	407.005	104 110	2,899	104	120	163,047	158,966	1,774	2,308	_	4,188	23,860
1984	167,235	164,112	3,329	87	818	175,171	171,110	1,823	2.238	_	9,556	33,416
1985	184,727	180,493		72	1.904	189,467	185.267	1,930	2,270	-5,500	6,706	40,122
1986	201,673	195,854	3,843	61	3,241	205,186	200,733	2,042	2,411	-6,937	7,578	47,700
1987	219,702	211,958	4,441		5,496	221,138	216,500	2,157	2,481	-5,081		74,276
1988	252,794	242,138	5,110	50_	5,490	221,130	210,000	2,137	2,401	0,00	20,0.0	

See following page for footnotes.

<sup>1</sup>Beginning in 1983, includes government contributions on deemed wage credits for military service in 1957 and later. The amount shown for 1983 includes, in addition to the annual contributions on 1983 wage credits, a net amount of \$5,388 million representing (1) retroactive contributions on deemed wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

Includes payments (1) in 1947-51 and in 1966 and later, for costs of deemed wage credits for military service performed before 1957; (2) in 1971-82, for costs of deemed wage credits for military service performed after 1956; and (3) in 1968 and later, for costs of bentits to certain noninsured persons who attained age 72 before 1968. The amount shown for 1977 also includes \$2,724,000 as a single reimbursement for the estimated total costs of granting noncontributory wage credits to individuals who were interned during World War II at places within the United States operated by the Federal Government for the internment of persons of Japanese ancestry.

\*Net interest includes net profits or losses on marketable investments. Beginning in 1967, administrative expenses 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 net interest. For years prior to 1967, a description of the

method of accounting for administrative expenses is contained in the 1970 Annual Report. Beginning in 1983, these figures reflect payments from a borrowing trust fund to a lending trust fund for interest on amounts transferred under the interfund borrowing provisions. Also beginning in 1983, interest paid from the trust fund to the general fund on advance tax transfers is reflected. The amount shown for 1983 includes \$6,677 million in interest on (1) retroactive government contributions on deemed wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

Beginning in 1966, includes payments for vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability. Beginning in 1983, amounts are reduced by amount of reimbursement for unnegotiated benefit checks. The amount shown for 1983 is reduced by \$288 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

\*Positive figure represents amounts lent to the OASI Trust Fund from the DI and HI Trust Funds. Negative figures represent amounts repaid from the OASI Trust Fund to the DI and HI Trust Funds

TABLE 22.—OPERATIONS OF THE DI TRUST FUND DURING SELECTED FISCAL YEARS 1960-83 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1984-88 ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS
[In millions]

			Income				Disbursen	ents				
Fiscal year <sup>1</sup>	Total	Net contri- butions <sup>2</sup>	Income from taxa- tion of benefits	Payments from the general fund of the Treasury	Net interest	Total	Benefit payments	Adminis- trative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers*	Net increase in fund	Fund at end of period
Past experience:												
1960	\$1,034	<b>\$9</b> 87		_	\$47	\$533	\$528	\$32	-\$27	_	\$501	\$2,167
1965	1,237	1,175	_	_	82	1,495	1,392	79	24	_	-257	2,007
1970	4,380	4,141	_	\$16	223	2.954	2,795	149	10		1,426	5.104
1975	7,920	7,356	_	52	512	7.982	7,701	253	29	_	-62	8,191
1976	8,355	7,797	_	90	468	9,606	9,314	266	29 26	_	-1,251	6,939
July-Sept. 1976.	2,172	2,159	_		13	2.853	2,582	71		_	-481	6,459
1977	9,374	8,900	_	103	372	11,590	11,212	378	(7)	_	-2,215	4,243
1978	12,784	12,404	_	128	251	12,655	12,298	327	зò́	_	129	4,372
1979	15,196	14,750	_	142	305	13,944	13,507	407	30	_	1.252	5,624
1980	17,376	18,805	-	118	453	15,320	14,998	334	-12	_	2.056	7.680
1981	12,993	12,589	_	130	273	17.280	18,846	405	29	_	-4.288	3,392
1982	21,398	20,866	_	168	363	18,035	17,437	572	26		3,363	8,755
1983	21,846	19,036	_	1,295	1,515	18,231	17,544	859	26 28	-\$5,081	-1,466	5,290
Estimated future	•	•		,-		,				00,007	1,400	5,250
experience:												
Alternative II-A:												
1984	17,602	18,465	\$144	_	993	18,390	17,706	652	32		-788	4,502
1985	18,143	17,040	202	_	901	18,724	17,981	679	64		-581	3,920
1986	19,486	18,405	222	_	859	19.456	18,702	688	66	_	30	3,950
1987	20,962	19,845	245	_	871	20,395	19,817	713	85	_	566	4,517
1988	23,453	22,410	273	_	771	21,472	20,680	748	64	5,081	7,062	11,579
Alternative II-B:						_ ,	,		•	0,00	.,002	,0,0
1984	17,579	16,442	144	_	993	18,389	17,705	652	32		-811	4,479
1985	18,110	17,012	203	_	896	18,762	18,017	680	64		-851	3,827
1986	19,527	18,458	224	_	845	19,609	18,848	894	87		-82	3,745
1987	21,075	19,981	249		844	20,710	19,921	724	66	_	364	4,109
1988	23,648	22,824	279	_	746	21,963	21,134	763	66	5,081	6,787	10,876

See following page for footnotes.

<sup>1</sup>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.

<sup>2</sup>Beginning in 1983, includes government contributions on deemed wage credits for military service in 1957 and later. The amount shown for 1983 includes, in addition to the annual contributions on 1983 wage credits, a net amount of \$402 million representing (1) retroactive contributions on deemed wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

<sup>3</sup>Includes payments (1) in 1967 and later, for costs of noncontributory wage credits for military service performed before 1957; and (2) in 1972-83, for costs of deemed wage credits for military service performed after 1956. The amount shown for 1978 also includes 3,000 as a single reimbursement for the estimated total costs of granting noncontributory wage credits to individuals who were interned during World War II at places within the United States operated by the Federal Government for the internment of persons of Japanese ancestry.

Net interest includes net profits or losses on marketable investments. Beginning in 1967, administrative expenses 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 net interest. For years prior to 1967, a description of the method of accounting for administrative expenses is contained in the 1970 Annual Report. Beginning in 1983, these figures reflect payments from a borrowing trust fund to a lending trust fund for interest on amounts transferred under the interfund borrowing provisions. Also, beginning in 1983, interest paid from the trust fund to the general fund on advance tax transfers is reflected. The amount shown for 1983 includes \$660 million in interest on (1) retroactive government contributions on deemed wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

\*Beginning in 1967, includes payments for vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability. Beginning in 1983, amounts are reduced by amount of reimbursement for unnegotiated benefit checks. The amount shown for 1983 is reduced by \$48 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

\*Negative figure represents amounts lent by the DI Trust Fund to the OASI Trust Fund. Positive figures represent repayment of these amounts.

\*Less than \$500,000 was transferred from the Railroad Retirement Account to the DI Trust Fund.

TABLE 23.—OPERATIONS OF THE DI TRUST FUND DURING SELECTED CALENDAR YEARS 1960-83 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1984-88 ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS

[In millions]

			Income				Disbursen	nents				
Calendar year	Total	Net contri- butions <sup>1</sup>	Income from taxa- tion of benefits	Payments from the general fund of the Treasury <sup>2</sup>	Net interest*	Total	Benefit payments	Adminis- trative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers	Net increase in fund	Fund at end of period
Past experience:												
1960	\$1,063	\$1,010	_	_	\$53	\$600	\$568	\$36	-\$5		\$464	** ***
1965	1,247	1,188	_	_	59	1,687	1,573	90	24	_		\$2,289
1970	4,774	4,481	_	\$16	277	3,259	3,085	164	10	=	-440	1,606
1975	8,035	7,444	_	90	502	8,790	8,505	256	20		1,514	5,614
1976	8,757	8,233	-	103	422	10,366	10,055	285	29 26	_	-754	7,354
1977	9,570	9,138	_	128	304	11,945	11,547	399	20 (4)	_	-1,609	5,745
1978	13,810	13,413	_	142	256	12,954	12,599	325	(*) 30	_	-2,375	3,370
1979	15,590	15,114	_	118	358	14,186	13,786	371		_	856	4,226
1980	13,871	13,255	_	130	485	15,872	15,515	368	30 -12	_	1,404	5,630
1981	17,078	16,738	_	168	172	17,658	17,192	436	-12	_	-2,001	3,629
1982	22,715	21,995	_	174	546	17,992	17,182	590	29 26 28		-580	3,049
1983	20,682	17,991	_	1,121	1,569	18,177	17,485	664	26	-\$5,081	-356	2,691
stimated future				.,	1,500	10,177	17,400	004	28	_	2,505	5,195
experience:												
Alternative II-A:												
1984	17,203	16,045	\$192	_	967	18,476	17 747	607				
1985	18,448	17,370	206	_	872	18,838	17,747 18,093	697	32	_	-1,272	3,923
1986	19,857	18,771	227	_	859	19,685		681	64	_	-390	3,533
1987	21,384	20,234	252	_	898	20,651	18,926	694	66 65	_	172	3,705
1988	24,186	22,972	280		934	21,762	19,864	721	65		733	4,438
Alternative II-B:	,	,	200	_	334	21,702	20,940	757	64	5,081	7,505	11,943
1984	17,171	16.014	192	_	965	10 476	47.747					
1985	18,425	17 355	207	_	863	18,476	17,747	697	32	_	-1,306	3,889
1986	19.904	18,835	230		839	18 .88	18,141	683	64	_	-464	3,426
1987	21,499	20,380	256		863	19,871	19,103	701	67	_	33	3,459
1988	24,425	23,208	287	_	930	21,007	20,208	733	66		492	3,950
See following page for fo		23,200	201		930	22,296	21,458	772	66	5.081	7,210	11,160

<sup>1</sup>Beginning in 1983, includes government contributions on deemed wage credits for military service in 1957 and later. The amount shown for 1983 includes, in addition to the annual contributions on 1983 wage credits, a net amount of \$402 million representing (1) retroactive contributions on deemed wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

\*Includes payments (1) in 1966 and later, for costs of noncontributory wage credits for military service performed before 1957; and (2) in 1971-82, for costs of deemed wage credits for military service performed after 1956. The amount shown for 1977 also includes \$3,000 as a single reimbursement for the estimated total costs of granting noncontributory wage credits to individuals who were interned during World War II at places within the United States operated by the Federal Government for the internment of persons of Japaneses ancestry.

<sup>a</sup>Net interest includes net profits or losses on marketable investments. Beginning in 1967, administrative expenses 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 net interest. For years prior to 1967, a description of the method of accounting for administrative expenses is contained in the 1970 Annual Report.

Beginning in 1983, these figures reflect payments from a borrowing trust fund to a lending trust fund for interest on amounts transferred under the interfund borrowing provisions. Also, beginning in 1983, interest paid from the trust fund to the general fund on advance tax transfers is reflected. The amount shown for 1983 includes \$660 million in interest on (1) retroactive government contributions on deemed wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

<sup>4</sup>Beginning in 1966, includes payments for vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability. Beginning in 1983, amounts are reduced by amount of reimbursement for unnegotiated benefit checks. The amount shown for 1983 is reduced by \$48 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

\*Negative figure represents amounts lent by the DI Trust Fund to the OASI Trust Fund. Positive figures represent represent of these amounts.

\*Less than \$500,000 was transferred from the Railroad Retirement Account to the DI Trust Fund.

TABLE 24.—OPERATIONS OF THE OASI AND DI TRUST FUNDS, COMBINED, DURING SELECTED FISCAL YEARS 1960-83 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1984-88 ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS
[In millions]

		-	Income				Disbursen					
Fiscal year <sup>1</sup>	Total	Net contri- butions <sup>2</sup>	Income from taxa- tion of benefits	Payments from the general fund of the Treasurys	Net interest	Total	Benefit payments	Adminis- trative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers	Net increase in funds	Funds at end of period
Past experience:												
1960	\$11,394	\$10,830	_	_	\$564	\$11,606	\$10,798	\$234	<b>\$</b> 574		-\$212	\$22,996
1965	17,681	17,032	_	_	648	17,456	16,618	379	459	_	224	22,187
1970	36,127	34,096	_	\$458	1,572	30,275	29,063	623	589	_	5,851	37,720
1975	66,677	63,374	_	499	2,804	64,658	62,547	1,101	1,010	_	2,018	48,138
1976	70,682	67,352	_	515	2,815	73,901	71,462	1,200	1,239	_	-3,219	44,919
July-Sept. 1976.	18,359	18,265	_	_	94	19,764	19,460	304	-,	_	-1,405	43,514
1977	81,170	77,794	_	717	2,659	85,068	82,490	1,370	1,208	_	-3,898	39,615
1978	89,595	86,451		741	2,403	93,861	90,829	1,413	1,618	_	-4,265	35,350
1979	102,089	99,108	_	757	2,225	104,072	101,116	1,479	1,477	_	-1,983	33,367
1980	117,427	114,413	_	675	2,339	118,548	115,624	1,494	1,430	_	-1,121	32,246
1981	134,565	131,606	_	670	2,289	139,584	136,267	1,703	1,614	_	-5,019	27,226
1982	148,027	145,113	_	843	2,072	155,963	152,097	2,046	1,820	_	-7,936	19,290
1983	170,280	155,163	_	7,391	7,725	170,058	165,569	2,210	2,279	\$12,437	12,660	31,950
Estimated future				.,		,		_,	-,	V.=,	.2,000	01,000
experience:												
Alternative II-A:												
1984	177,295	173.964	\$2,303	125	904	178,910	174,215	2,355	2,340	_	-1,615	30,335
1985	199,303	194,452	3,415	104	1,331	190,442	185,670	2,473	2,299	_	8.860	39,195
1986	216,289	209,812	3,902	87	2,487	203,720	198,815	2,579	2,326	-7,000	5,569	44,764
1987	234,564	226,258	4,463	72	3,772	218,303	213,148	2,706	2,449	-5,437	10,824	55,588
1988	266,631	256,055	5,086	59	5,431	233,075	227,737	2,847	2,491		33,556	89,144
Alternative II-B:	•						,	_,	-,		,	00,
1984	177.047	173,717	2,303	125	903	178,910	174,215	2,355	2,340	_	-1.863	30.087
1985	198,957	194,143	3,423	104	1,288	190,846	186,065	2,479	2,302		8,112	38,199
1986	216,734	210,398	3,935	87	2,313	205,425	200,489	2,599	2,337	-5,500	5,809	44,008
1987	235,965	227,776	4,540	72	3.576	222,009	216,792	2,740	2,477	-6,937	7.018	51,026
1988	268,860	258,514	5,220	61	5.065	239,114	233,675	2,893	2,547	-0,557	29,745	80,772

See following page for footnotes.

<sup>1</sup>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.

<sup>3</sup>Beginning in 1983, includes government contributions on deemed wage credits for military service in 1957 and later. The amount shown for 1983 includes, in addition to the annual contributions on 1983 wage credits, a net amount of \$5,790 million representing (1) retroactive contributions on deemed wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

\*Includes payments (1) in 1947-52 and in 1967 and later, for costs of noncontributory wage credits for military service performed before 1957; (2) in 1972-83, for costs of deemed wage credits for military service performed after 1956; and (3) in 1969 and later, for costs of benefits to certain noninsured persons who attained age 72 before 1968. The amount shown for 1978 also includes \$2,727,000 as a single reimbursement for the estimated total costs of granting noncontributory wage credits to individuals who were interned during World War II at places within the United States operated by the Federal Government for the internment of persons of Jananese ancestry.

<sup>4</sup>Net interest includes net profits or losses on marketable investments. Beginning in 1967, administrative expenses 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 net interest. For years prior to 1967, a description of the method of accounting for administrative expenses is contained in the 1970 Annual Report. Beginning in 1983, these figures reflect payments from a borrowing trust fund to a lending trust fund for interest on amounts transferred under the interfund borrowing provisions. Also, beginning in 1983, interest paid from the trust funds to the general fund of the Treasury on advance tax transfers is reflected. The amount shown for 1983 includes \$7,337 million in interest on (1) retroactive government contributions on deemed wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

\*Beginning in 1967, includes payments for vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability. Beginning in 1983, amounts are reduced by amount of reimbursement for unnegotiated benefit checks. The amount shown for 1983 is reduced by \$336 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

\*Positive figure represents amounts lent to the OASI Trust Fund from the HI Trust Fund.

Negative figures represent amounts repaid from the OASI Trust Fund to the HI Trust Fund.

TABLE 25.—OPERATIONS OF THE OASI AND DI TRUST FUNDS, COMBINED, DURING SELECTED CALENDAR YEARS 1960-83 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1984-88 ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS
[In millions]

			income				Disbursen					
Calendar year	Total	Net contri- butions <sup>1</sup>	income from taxa- tion of benefits	Payments from the general fund of the Treasury <sup>2</sup>	Net interest <sup>a</sup>	Total	Benefit payments <sup>4</sup>	Adminis- trative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers*	Net increase in funds	Funds at end of period
ast experience:						-1		_				
1960	\$12,445	\$11,876	_	_	<b>\$</b> 569	\$11,798	<b>\$</b> 11,245	\$240	\$314	_	<b>\$</b> 647	\$22,813
1965	17.857	17,205	_	_	651	19,187	18,311	418	459	_	-1,331	19,841
1970	36,993	34,737		<b>\$</b> 465	1,791	33,108	31,884	635	589	_	3,886	38,068
1975	67,640	64,259		515	2,866	69,184	67,022	1,152	1,010	_	-1,544	44,342
1976	75.034	71,595	_	717	2,722	78,242	75,759	1,244	1,239	_	-3,209	41,133
1977	81,982	78,710	_	741	2,531	87,254	84,667	1,379	1,208	_	-5,272	35,861
1978	91,903	88.883		757	2.264	96.018	92,960	1,440	1,618	_	-4,115	31,746
1979	105,864	103,034	_	675	2.155	107,320	104,359	1,483	1,477	_	-1,456	30,291
1980	119,712	116,711		670	2,330	123,550	120,598	1,522	1,430	_	-3,838	26,453
1981	142,438	139,364	_	843	2.231	144,352	140,995	1,743	1.614	_	-1,914	24,539
1982	147,913	145,667	_	854	1,391	160,111	156,182	2,109	1,820	\$12,437	239	24,778
1983	171,266	156,328	_	6,862	8,276	171,177	166,700	2,198	2,279	_	89	24,867
stimated future	,			•	•	•						
experience:												
Alternative II-A:												
1984	184,766	180.467	\$3,091	104	1,103	181,523	176,714	2,470	2,340	_	3,242	28,110
1985	203,399	198.022	3,525	87	1,764	193,521	188,724	2,497	2,299	_	9,878	37,988
1986	220,993	213.974	4,032	72	2,916	207,249	202,315	2,608	2,326	-7,000	6,744	44,732
1987	239,780	230,699	4,608	59	4,413	221,957	216,769	2,739	2,449	-5,437	12,386	57,118
1988	274,737	262,646	5,248	48	6.795	236,806	231,433	2,881	2,491	_	37,932	95,050
Alternative II-B:			-,									
1984	184,406	180,126	3,091	104	1,085	181,524	176,713	2,471	2,340	_	2,882	27,749
1985	203,151	197,848	3,535	87	1,681	194,059	189,251	2,506	2,302	_	9,092	36,842
1986	221,577	214,689	4,073	72	2,743	209,338	204,370	2,631	2,337	-5,500	6.739	43,58
1987	241,201	232,338	4,697	61	4,104	226,193	220,941	2,775	2,477	-6,937	8,070	51,65
1988	277,219	265,346	5,396	50	6,426	243,434	237,958	2,929	2,547		33,785	85,436

See following page for footnotes.

<sup>1</sup>Beginning in 1983, includes government contributions on deemed wage credits for military service in 1957 and later. The amount shown for 1983 includes, in addition to the annual contributions on 1983 wage credits, a net amount of 55,790 million representing (1) retroactive contributions on deemed wage credits for military service in 1957-82 less (2) all reimbursements received nrior to 1983 for the costs of such credits.

\*Includes payments (1) in 1947-51 and in 1966 and later, for costs of noncontributory wage credits for military service performed before 1957; (2) in 1971-82, for costs of deemed wage credits for military service performed after 1956; and (3) in 1968 and later, for costs of benefits to certain noninsured persons who attained age 72 before 1968. The amount shown for 1977 also includes \$2,727,000 as a single reimbursement for the estimated total costs of granting noncontributory wage credits to individuals who were interned during World War II at places within the United States operated by the Federal Government for the internment of persons of Japanese ancestry.

aNet interest includes net profits or losses on marketable investments. Beginning in 1967, administrative expenses 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 net interest. For years prior to 1967, a description of the method of accounting for administrative expenses is contained in the 1970 Annual Report Beginning in 1983, these figures reflect payments from a borrowing trust fund to a lending trust fund for interest on amounts transferred under the interfund borrowing provisions. Also, beginning in 1983, interest paid from the trust funds to the general fund of the Trassury on advance tax transfers is reflected. The amount shown for 1983 includes \$7,337 million in interest on (1) retroactive government contributions on deemed wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

<sup>4</sup>Beginning in 1966, includes payments for vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability. Beginning in 1983, amounts are reduced by amount of reimbursement for unnegotiated benefit checks. The amount shown for 1983 is reduced by \$336 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

\*Positive figure represents amounts lent to the OASI Trust Fund from the HI Trust Fund.

Negative figures represent amounts repaid from the OASI Trust Fund to the HI Trust Fund.

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

## (Required by section 201(c) of the Social Security Act)

Effective January 1957, monthly benefits have been payable from the OASI Trust Fund to disabled children aged 18 and over of retired and deceased workers in those cases in which the disability began before age 18. The age before which disability is required to have begun was subsequently changed to age 22. Effective February 1968, reduced monthly benefits have been payable from this trust fund to disabled widows and widowers at ages 50 and above.

On December 31, 1983, about 550,000 persons were receiving monthly benefits from the OASI Trust Fund because of their disability or the disability of a child. This total includes 46,000 mothers and fathers (wives or husbands under age 65 of retired-worker beneficiaries and widows or widowers of deceased insured workers) who met all other qualifying requirements and were receiving unreduced benefits solely because they had a disabled-child beneficiary in their care. Also included, beginning in 1981, are mothers and fathers, as described above, who are eligible to receive benefits solely because they have a disabled child aged 16 or 17 in their care. Benefits paid from this trust fund to the persons described above totaled \$1,691 million in calendar year 1983. Similar figures are presented in table 26 to show the experience in selected calendar years during 1960-83. Figures relating to past experience for years not shown are contained in prior annual reports.

TABLE 26.—BENEFITS PAYABLE FROM THE OASI TRUST FUND WITH RESPECT TO DISABLED BENEFICIARIES, SELECTED CALENDAR 1960-88
[Beneficiaries in thousands: benefit payments in millions]

	Disable	d beneficiarie	s, end of year	Amo	unt of benefit	payments <sup>1</sup>
Calendar year	Total	Children	Widows and widowers	Total	Children*	Widows and widowers
Past experience:						
1960	117	117	_	\$59	\$59	_
1965	214	214	_	134	134	_
1970	316	281	36	301	260	\$4
1975	435	376	59	664	560	10
1976	457	395	62	748	637	ii
1977	480	414	65	868	748	12
1978	494	430	64	950	823	12
1979	507	445	62	1.071	948	12:
1980	519	460	59	1,223	1,097	12
1981	527	473	54	1,421	1,296	12
1982	533	484	49	1.566	1,451	11
1983	550	504	46	1,691	1,581	- 11
stimated future experience:	555		40	1,031	1,501	• • • • • • • • • • • • • • • • • • • •
Alternative II-A:						
1984	562	516	46	1,900	1,747	15
1985	574	529	45	2.062	1.902	16
1986	585	540	45	2,228	2,061	16
1987	597	552	45	2.400	2.225	17
1986	610	565	45	2,580	2,396	18
Alternative II-B:		-	•••	2,000	2,000	,,,
1984	562	516	46	1.902	1,749	15
1985	574	529	45	2.076	1,915	16
1986	585	540	45	2,262	2,092	17
1987	597	552	45	2,458	2,279	17
1986	610	565	45	2,663	2,473	19

<sup>&</sup>lt;sup>1</sup>Beginning in 1966, includes payments for vocational rehabilitation services.

<sup>\*</sup>Reflects the effect of including certain mothers and fathers.

<sup>&</sup>lt;sup>3</sup>In 1983 and prior years, reflects the offsetting effect of lower benefits payable to disabled widows and widowers who continue to receive benefits after attaining 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.

Table 26 also shows the estimated future experience in calendar years 1984-88, based on the alternative II-A and II-B assumptions described in an earlier section. Total benefit payments from the OASI Trust Fund with respect to disabled beneficiaries are estimated to increase from \$1,900 million in calendar year 1984 to \$2,580 million in calendar year 1988, based on the alternative II-A assumptions, and to \$2,663 million in calendar year 1988, based on the alternative II-B assumptions.

In calendar year 1983, benefit payments (including expenditures for vocational rehabilitation services) with respect to disabled persons from the OASI Trust Fund and from the DI Trust Fund (including payments from the latter fund to all children and spouses of disabled-worker beneficiaries) totaled \$19,221 million, of which \$1,691 million, or 8.8 percent, represented payments from the OASI Trust Fund. Similar figures for selected calendar years during 1960-83 and estimates for calendar years 1984-88, based on alternatives II-A and II-B, are presented in table 27. Figures relating to past experience for years not shown in table 27 are contained in prior annual reports.

TABLE 27.—BENEFIT PAYMENTS UNDER THE OASDI PROGRAM WITH RESPECT TO DISABLED BENEFICIARIES, BY TRUST FUND, SELECTED CALENDAR YEARS 1960-88

	[Amounts	in millions)		
		Bene	efit payments <sup>1</sup> f	rom —
			OASI	Trust Fund
Calendar year	Total	Di Trust Funda	Amount <sup>a</sup>	As a percentage of total benefit pay- ments with respect to disabled beneficiaries
Past experience:				
1960	\$627	\$568	\$59	9.4
1965	1,707	1.573	134	7.9
1970	3,388	3.085	301	8.9
1975	9,189	8,505	664	7.2
1976	10,803	10,055	748	8.9
1977	12,415	11.547	868	7.0
1978	13,549	12,599	950	7.0
1979	14,857	13,788	1,071	7.2
1980	18,738	15.515	1,223	7.3
1981	18,821	17,200	1,421	7.6
	18,904	17,338	1,566	8.3
1982	19.221	17,530	1,891	8.6
1983 Estimated future experience:	10,221	17,550	1,001	0.0
Alternative II-A:				
1984	19.642	17,742	1.900	9.7
1985	20,156	18.094	2,062	10.2
1986	21,152	18,924	2,228	10.5
	22,262	19,862	2,400	10.6
1987	23,517	20,937	2,580	11.0
1988 Alternative II-B:	23,517	20,937	2,560	11.0
	19.644	17,742	1,902	9.7
1984	20,218	18,142	2,076	10.3
1985		19,102	2,076	10.8
1986	21,364			10.6
1987	22,664	20,206	2,458 2,663	11.0
1988	24,118	21,455	2,003	11.0

<sup>&</sup>lt;sup>1</sup>Beginning in 1966, includes payments for vocational rehabilitation services.

<sup>&</sup>lt;sup>a</sup>Benefit payments to disabled workers and their children and spouses.

<sup>&</sup>lt;sup>a</sup>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 26).

#### E. ACTUARIAL STATUS OF THE TRUST FUNDS

Historically, the actuarial status of the OASDI program has been measured by the actuarial balance, as described earlier in this section. Recent annual reports have shown both medium-range and long-range actuarial balances, which have been computed, respectively, over the 25-year and 75-year periods beginning with the calendar year of issuance of the report. Accordingly, the medium-range and long-range actuarial balances shown in this report pertain to the periods 1984-2008 and 1984-2058, respectively. Also presented are actuarial balances for the second and third 25-year subperiods of the 75-year projection period.

As described earlier in this section, a single measure of the actuarial balance over a long period may not reveal problems which could occur during that period. Therefore, 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 series of annual balances (that is, the year-by-year differences between the projected total income rates and cost rates), and the other is the series of projected trust fund ratios (assets at the beginning of the year expressed as a percentage of outgo during the year). The significance of these indicators was discussed earlier.

The estimates are sensitive to changes in the underlying economic and demographic assumptions. The degree of sensitivity, however, varies considerably among the various assumptions. For example, variations in projected fertility rates have little effect on the medium-range estimates, because almost all of the projected covered workers and beneficiaries were born prior to the start of the projection period. However, variations in economic factors such as wage and price increases have significant effects on the estimates, even in the medium-range period. In general, the degree of confidence that can be placed in the assumptions and estimates is greater for the medium-range period than for the long-range period. Nonetheless, even for the medium-range period, the projections are only an indication of the trend and general range of future program experience. Appendix B contains a more detailed discussion of the effects on the estimates of varying economic, demographic, and programmatic assumptions.

Table 28 presents a comparison of the estimated cost rates and total income rates of the OASDI program, based on alternatives II-A and II-B. On the basis of alternative II-A, the program is projected to have annual surpluses beginning in 1984 and continuing until about 2020, after which the program is projected to have annual deficits. These deficits are projected to grow steadily to a peak of 1.21 percent of taxable payroll in 2035 and then fluctuate between 1.0 and 1.3 percent during the remainder of the long-range projection period. This pattern of annual surpluses and deficits produces a long-range actuarial surplus of 0.65 percent of taxable payroll, which consists of average surpluses of 2.40 and 0.72 percent of taxable payroll over the first and second 25-year subperiods, respectively, and an average deficit of 1.16 percent over the third 25-year subperiod.

On the basis of alternative II-B, annual surpluses are also projected, beginning in 1984 and continuing until about 2020, after which deficits

are projected for each year. These deficits grow more rapidly than those based on alternative II-A, and temporarily peak around 2035 at 2.16 percent of taxable payroll. Although the annual deficits in the remainder of the long-range period are significantly higher than those based on alternative II-A, they follow a similar pattern, fluctuating between 2.0 and 2.3 percent of taxable payroll. This pattern of annual surpluses and deficits produces a long-range actuarial deficit of 0.06 percent of taxable payroll, which consists of an average surplus of 2.01 percent of taxable payroll over the first 25-year subperiod, and average deficits of 0.05 and 2.14 percent over the second and third 25-year subperiods, respectively.

TABE 28.—COMPARISON OF ESTIMATED COST RATES AND INCOME RATES OF THE OASDI PROGRAM, ON THE BASIS OF ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1984-2060 [As a percentage of taxable payroll]

	(	Cost rate			income rate		
Calendar year	OASI	DI	Total	Payroll tax	Taxation of benefits	Total	Balanc
Alternative II-A:							
1984	10.15	1.15	11.30	11.40	0.19	11.59	0.3
1985	10.03	1.08	11,11	11.40	.20	11.60	.4
1986	9.96	1.05	11.01	11.40	.21	11.61	.6
1987	9.92	1.02	10.93	11,40	.23	11.63	.6
1988	9.87	1.00	10.87	12.12	.24	12.36	1.4
1989	9.80	.98	10.79	12.12	.26	12.38	1.5
1990	9.77	.98	10.75	12.40	.27	12.67	1.9
1991	9.74	.98	10.72	12.40	.29	12.69	1.9
	9.68	.98	10.66	12.40	.31	12.71	2.0
1992	9.63	.98	10.61	12.40	.32	12.72	2.1
1993					.38	12.78	
1994	9.48	.98	10.46	12.40			2.4
1995	9.31	.99	10.30	12.40	.38	12.78	
1996	9.11	.99	10.10	12.40	.37	12.77	2.0
1997	8.89	.99	9.88	12.40	.37	12.77	2.0
1998	8.73	.99	9.72	12.40	.37	12.77	3.0
1999	8.60	1.01	9.61	12.40	.36	12.76	3.
2000	8.48	1.03	9.51	12.40	.36	12.76	3.
2001	8.38	1.06	9.44	12.40	.36	12.76	3.
2002	8.30	1.08	9.38	12.40	.36	12.76	3.
2003	8.23	1,11	9.34	12.40	.36	12.76	3.
2004	8.17	1.15	9.32	12.40	.37	12.77	3.
2005	8.14	1.19	9.33	12.40	.37	12.77	3.
2006	8.13	1,23	9.36	12.40	.37	12.77	3.
	8.16	1.27	9.43	12.40	.38	12.78	3.
2007		1.32			.36	12.78	3.
2008	8.20	1.32	9.52	12.40	.30	12.70	3.
2010	8.38	1.38	9.76	12.40	.40	12.80	3.
2015	9.35	1.48	10.84	12.40	.46	12.86	2.
2020	10.60	1.53	12.14	12.40	.53	12.93	
2025	11.75	1.61	13.36	12.40	.60	13.00	-,;
2030	12.48	1.58	14.05	12.40	.65	13.05	-1.4
2035	12.76	1.53	14.29	12.40	.68	13.08	-1.
2040	12.64	1.55	14.19	12.40	.69	13.09	-1.
2045	12.57	1.60	14.16	12.40	.71	13.11	-13
2050	12.67	1.60	14.28	12.40	.72	13.12	-1.
2055	12.81	1.58	14.38	12.40	.72	13.12	-1.
	12.85	1.56	14.41	12.40	.72	13.12	-1.3
2060	12.03	1.50	14.41	12.40	.12	13.12	- 1.4
25-year averages: 1984-2008	9.07	1.06	10.14	12.22	.32	12.54	2.4
2009-2033	10.69	1.52	12.22	12.40	.54	12.94	
	12.69	1.52	14.27	12.40	.71	13.11	-1.
2034-2058	12.08	1.57	14.2/	12.40	.,,	13.11	-1.1
75-year average:	10.82	1.39	12.21	12.34	.52	12.86	.€
1984-2058	10.02	1.05	12.21	12.34	.52	12.00	

TABE 28.—COMPARISON OF ESTIMATED COST RATES AND INCOME RATES OF THE OASDI PROGRAM, ON THE BASIS OF ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1984-2060 (Cont.)

[As a percentage of taxable payroll]

	C	Cost rate			Income rate		
Calendar year	OASI	DI	Total	Payroll tax	Taxation of benefits	Total	Balanc
Itemative II-B:							
1984	10.17	1.15	11.32	11.40	0.19	11.59	0.2
1985	10.06	1.09	11.15	11.40	.20	11.60	.4
1986	10.03	1.05	11.08	11.40	.22	11.62	.5
1987	10.04	1.03	11.06	11.40	.23	11.63	.5
1988	10.04	1.01	11.06	12.12	.25	12.37	1.3
1989	10.04	1.00	11.00	12.12	.26		
1990						12.38	1.3
	10.02	1.00	11.02	12.40	.28	12.68	1.6
1991	9.99	.99	10.99	12.40	.30	12.70	1.7
1992	9.98	1.00	10.98	12.40	.32	12.72	1.7
1993	9.95	1.00	10.95	12.40	.34	12.74	1.7
1994	9.84	1.01	10.85	12.40	.39	12.79	1.9
1995	9.71	1.02	10.73	12.40	.39	12.79	2.0
1996	9.54	1.02	10.56	12.40	.39	12.79	2.2
1997	9.35	1.02	10.37	12.40	.39	12.79	2.4
1998	9.21	1.03	10.24	12.40	.39	12.79	2.5
1999	9.11	1.05	10.16	12.40	.39	12.79	2.6
2000	9.01	1.07	10.08	12.40	.39	12.79	
2001	8.92	1.10					2.
2002			10.02	12.40	.39	12.79	2.7
	8.85	1.13	9.98	12.40	.39	12.79	2.6
2003	8.79	1.16	9.95	12.40	.39	12.79	2.8
2004	8.74	1.20	9.94	12.40	.39	12.79	2.8
2005	8.70	1.24	9.94	12.40	.39	12.79	2.8
2006	8.70	1.29	9.98	12.40	.40	12.80	2.8
2007	8.72	1.33	10.05	12.40	.40	12.80	2.7
2008	8.77	1.38	10.15	12.40	.41	12.81	2.0
2010	8.95	1,44	10.40	12.40	.43	12.83	2.4
2015	9.99	1.55	11.54	12.40	.49	12.89	1.3
2020	11.31	1.61	12.92	12.40	.56	12.96	). ).
2025	12.55	1.68	14.23	12.40	.64	13.04	
2030	13.36	1.65	15.01	12.40	.69		-1.
2035	13.68	1.61	15.29			13.09	-1.9
				12.40	.73	13.13	-2.
2040	13.59	1.63	15.22	12.40	.74	13.14	-2.0
2045	13.52	1.67	15.19	12.40	.76	13.16	-2.0
2050	13.63	1.68	15.31	12.40	.77	13.17	-2.1
2055	13.77	1.65	15.42	12.40	.77	13.17	-2.2
2060	13.81	1.63	15.45	12.40	.78	13.18	-2.2
25-year averages:						•	
1984-2008	9.45	1.10	10.54	12.22	.34	12.56	2.0
2009-2033	11.42	1.60	13.02	12.40	.57	12.97	0
2034-2056	13.65	1.65	15.29	12.40	.76	13.16	-2.1
75-year average:	10.00	1.00	13.23	12.40	.70	13.10	-2.1
1984-2058	11.51	1.45	12.05	10.04	50	40.00	_
1304-2030	11.51	1.40	12.95	12.34	.56	12.90	0

The estimated average long-range income rates based on alternatives II-A and II-B are about 105.3 and 99.6 percent, respectively, of the estimated average long-range cost rates (of 12.21 and 12.95 percent of taxable payroll). Because the estimated average income rate based on alternative II-B is between 95 and 105 percent of the estimated average cost rate, the program is in close actuarial balance. Based on alternative II-A, the estimated average income rate exceeds 105 percent of the estimated average cost rate. Of course, these balances will shift slowly over time as the valuation period moves forward and near-term years of surplus are replaced by distant years of deficit.

The estimated cost rates increase rapidly after the medium-range period, primarily because the number of beneficiaries is projected to increase more rapidly than is the number of covered workers. This occurs because the relatively large number of persons born during the period of high fertility rates from the end of World War II through the early 1960's will reach retirement age, and begin to receive benefits, while the relatively small number of persons born during the subsequent

periods of low fertility rates will comprise the labor force. During the last years of the projection period, the cost rates generally stabilize at a fairly high level, which reflects the stabilization in the projected ratio of the number of beneficiaries to the number of covered workers. Such stabilization results from the relatively smooth pattern of the assumed fertility rates. A comparison of the numbers of beneficiaries and covered workers, both historically and as projected on the basis of all four alternatives, is shown in table 29.

TABLE 29.—COMPARISON OF OASDI BENEFICIARIES AND COVERED WORKERS BY ALTERNATIVE, CALENDAR YEARS 1945-2060

Calendar year	Covered workers' (in			workers per	Beneficiaries per 100	
145	thousands)	OASI	Di	Total	OASDI beneficiary	covere worker
945	46,390	1,106		1,106	41.9	;
950		2,930	_	2,930	16.5	
955		7,563	_	7,563	6.6	1
960	72,530	13,740	522	14,262	5.1	2
65		18,509	1,648	20,157	4.0	2
970	93,090	22,616	2,568	25,186	3.7	2
975	100,200	26,998	4,125	31,123	3.2	3
980	*114,700	30,385	4,734	35,119	•3.3	*3
981	*114,900	31,074	4,636	35,710	*3.2	*3
982		31,207	4,164	35,391	*3.2	*3
983	*115,600	31,933	3,893	35,726	*3.2	•3
itemative i:				00 007	3.3	3
1984		32,320	3,777	36,097	3.3	2
1985		32,925	3,742	36,667		2
1990		35,654	3,736	39,590	3.5 3.5	2
1995		38,124	3,319	41,443		2
2000		36,913	3,652	42,565	3.6	
2005		40,091	4,259	44,350	3.6	
2010	163,630	42,949	4,998	47,947	3.4	
2015		48,396	5,403	53,799	3.1	Š
2020		54,679	5,593	80,272	2.8	
2025	171,151	80,573	5,895	68,468	2.6	3
2030		64,539	5,842	70,381	2.5	4
2035	180,089	66,464	5,755	72,219	2.5	
2040		86,321	5,910	72,231	2.6 2.6	
2045		66,340	6,205	72,545		3
2050		67,337	6,437	73,774	2.7	3
2055		68,946	6,558	75,504	2.7	3
2060	210,043	70, <del>6</del> 04	6,702	77,306	2.7	•
Utemative II-A:				00.400		:
1984		32,343	3,790	36,133	3.3	3
1965	124,087	32,991	3,785	36,776	3.4	
1990		38,250	3,936	40,188	3.4	
1995		38,718	4,094	42,812	3.3 3.3	
2000		39,915	4,720	44,635	3.3	3
2005		41,388	5,638	47,026	3.3 3.1	3
2010		44,538	6,661	51,199	2.8	
2015		50,325	7,197	57,522		
2020		57,023	7,419	84,442	2.5	
2025	158,451	63,432	7,769	71,201	2.2	
2030		67,994	7,633	75,627	2.1	
2035		70,493	7,442	77,935	2.1	
2040		70,789	7,544	78,333	2.1	
2045		71,106	7,784	78,890	2.0 2.0	
2050	162,428	72,057	7,883	79,940	2.0	
2055		73,130	7,811	80,941	2.0	
2060	164,952	73,864	7,769	<b>81,63</b> 3	2.0	
Alternative II-B:	400 440	00.040	0.700	36,133	3.3	:
1984		32,343	3,790	36,133	3.4	
1985		32,991	3,785	40,185	3.3	
1990		36,248	3,937 4,093	42,812	3.3	
1995	. 140,317	38,719		44,632	3.3	
2000		39,915 41,373	4,717 5,631	44,632 47,004	3.3	
2005		41,3/3	6,650	51,171	3.2	
2010		44,521 50,299	7,183	57,482	2.7	
2015		56,981	7,163	64.363	2.4	
2020		63,389	7,751	71,140	2.2	
2025		67,949	7,613	75.562	2.1	
2030		70,437	7,421	77,858	2.0	
2035		70,437 70,732	7,523	78,255	2.0	,
2040		71,034	7,762	78,796	2.0	
2045		71,034	7,661	79,848	2.0	
2050		73,056	7,789	60.845	2.0	

TABLE 29.—COMPARISON OF OASDI BENEFICIARIES AND COVERED WORKERS BY ALTERNATIVE, CALENDAR YEARS 1945-2060 (Cont.)

	0	Beneficiar	ies" (in thouse	inds)	Covered	Beneficiaries
Calendar year	Covered — workers¹ (in thousands)	OASI	DI	Total	workers per OASDI beneficiary	per 100 covered workers
Alternative II-B: (Cont.)						
2060	161,383	73,784	7,748	81,532	2.0	51
Alternative III:			, -	,		
1984	119.965	32.365	3.805	36,170	3.3	30
1985	121,454	33.049	3.835	36.884	3.3	30
1990	132,080	34,587	4.095	38.682	3.4	29
1995	137,573	39,325	4.639	43,984	3.1	32
2000	142,274	40.915	5,624	46,539	3.1	33
2005	146.570	42.801	6.925	49,726	2.9	34
2010	148,168	46,450	8,254	54,704	2.7	37
2015	146.824	52.864	8.917	81,781	2.4	42
2020	143,751	60,361	9.145	89,506	2.1	48
2025	140,066	67,796	9,503	77,299	1.8	55
2030	136,410	73,583	9.239	82.822	1.6	61
2035	132.946	77,371	8.884	86,255	1.5	65
2040	129,405	78.902	8.845	87,747	1.5	68
2045	125,030	80,245	8.897	89,142	1.4	71
2050	120.811	81,777	8.684	90,481	1.3	75
2055	116.874	82,622	8,233	90,855	1.3	78
2060	113,297	82,454	7.845	90,299	1.3	80

Workers who pay OASDI taxes at some time during the year.

Note: The numbers of beneficiaries do not include certain uninsured persons, most of whom both attained age 72 before 1968 and have less than 3 quarters of coverage, in which cases the costs are reimbursed by the general fund of the Treasury. The number of such uninsured persons was 56,068 as of June 30, 1983, and is estimated to be less than 500 by the turn of the century.

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Table 29 shows that, even on the basis of alternative I, for which high fertility rates and small mortality reductions are assumed, the number of covered workers per beneficiary declines from the current level of 3.3 to an ultimate level of about 2.7. Based on alternative III, for which low fertility rates and substantial mortality reductions are assumed, the decline is much greater, reaching 1.3 workers per beneficiary. Based on alternatives II-A and II-B, the ratio declines to 2.0 workers per beneficiary. The impact of these changes on OASDI financing can be readily assessed by looking at the projected number of beneficiaries per hundred workers. Based on alternatives I, II-A, II-B, and III, this rises by the end of the long-range period to levels of 37, 49, 51, and about 79, respectively. These levels are, respectively, 23, 63, 70, and about 163 percent higher than the current level of 30 beneficiaries per 100 covered workers.

The implication of this demographic shift is a significantly higher cost rate during the last third of the long-range period than during the first two-thirds. Based on all but the most optimistic of the four alternative sets of assumptions used in this report, the OASDI program is estimated to have substantial annual deficits during the last 25 years. Therefore, at some point, either the costs would need to be reduced or the income would need to be raised in order to maintain actuarial balance.

Table 30 shows the OASDI cost rates on the basis of the four alternatives. Based on alternatives I, II-A, and II-B, the cost rates generally decline for the next 20 years. Based on alternative III, the cost rates fluctuate for about a decade before following a similar downward pattern. During the last few years of the medium-range period, the cost rates begin to rise slightly on the basis of all four alternatives.

<sup>&</sup>lt;sup>a</sup>Beneficiaries with monthly benefits in current-payment status as of June 30.

Preliminary.

After the medium-range period, on the basis of each alternative, the cost rates increase rapidly (because of the demographic shift discussed earlier). Based on alternative I, the cost rates peak around 2030, after which they decrease slightly through the end of the projection period. Based on alternatives II-A and II-B, they are fairly constant in 2035-50 before increasing thereafter through the end of the projection period. Based on alternative III, the cost rates continuously increase through the end of the long-range projection period.

The OASDI cost rates based on alternatives I and III differ by about 16 percentage points at the end of the long-range period, although by only 3.70 percentage points at the end of the medium-range period. The average long-range cost rate for the OASDI program varies from 10.01 percent on the basis of alternative I to 17.22 percent on the basis of alternative III, while the average medium-range cost rate varies much less—from 9.36 to 11.63 percent.

TABLE 30.—ESTIMATED COST RATES OF THE OASDI PROGRAM BY ALTERNATIVE, CALENDAR YEARS 1984-2060
[As a percentage of taxable payroll]

Calendar year	1	II-A	II-B	
1984	11.24	11.30	11.32	11.48
1965	10.94	11.11	11.15	11.66
1986	10.73	11.01	11.08	11.65
1987	10.56	10.93	11.06	11.61
1988	10.42	10.87	11.06	11.63
1989	10.27	10.79	11.01	11.62
1990	10.04	10.75	11.02	11.64
1991	10.16	10.73	10.99	11.65
1000	9.94	10.72	10.98	11.84
1992	9.94			
1993		10.61	10.95	11.88
1994	9.56	10.46	10.85	11.88
1995	9.55	10.30	10.73	11.61
1996	9.31	10.10	10.56	11.70
1997	9.05	9.88	10.37	11.54
1998	8.66	9.72	10.24	11.46
1999	8.70	9.61	10.16	11.44
2000	8.56	9.51	10. <b>08</b>	11.43
2001	8.44	9.44	10.02	11.42
2002	8.35	9.38	9.98	11.43
2003	8.27	9.34	9.95	11.47
2004	8.22	9.32	9.94	11.51
2005	8.19	9.33	9.94	11.57
2006	8.19	9.36	9.98	11.67
2007	8.22	9.43	10.05	11.80
2006	8.27	9.52	10.15	11.97
2010	8.43	9.76	10.40	12.36
2015	9.25	10.84	11.54	13.98
2020	10.21	12.1 <del>4</del>	12.92	16.03
2025	11.01	13.36	14.23	18.24
2030	11.29	14.05	15.01	20.01
2035	11.15	14.29	15.29	21.33
2040	10.74	14.19	15.22	22.24
2045	10.43	14.16	15.19	23.32
2050	10.29	14.28	15.31	24.46
2055	10.22	14.38	15.42	25.43
2060	10.13	14.41	15.45	26.11
25-year averages:		1-1.41	10.40	20.11
1984-2008	9.36	10.14	10.54	11.63
2009-2033	10.15	12.22	13.02	16.48
2034-2058	10.52	14.27	15.29	23.55
	IV.JE	17.27	13.50	23.33
1084.2058	10.01	12 21	12.05	17.22
75-year average: 1984-2058	10.01	12.21	12.95	

Future OASDI cost rates will not necessarily fall within the range defined by the results based on alternatives I and III. Nonetheless, because alternatives I and III define a reasonably wide range of economic and demographic conditions, the resulting estimates delineate a reasonable range for future program costs.

The variations in cost rates based on the four alternative sets of assumptions are also reflected in varying costs as a percentage of Gross National Product (GNP) based on the four alternatives. Table 31 shows a comparison of the OASDI cost as a percentage of GNP on the basis of the four alternatives. Various similarities exist between the patterns of these cost percentages and the cost rates shown in the previous table. Based on all four alternatives, the percentages generally decline slowly until about 2005, after which they begin to rise. Shortly after the end of the medium-range period, based on each alternative, the percentages increase rapidly (because of the demographic shift discussed earlier) and peak around 2030 based on alternative I and 2035 based on alternatives II-A and II-B, while continuing to increase through the end of the long-range projection period based on alternative III.

Another similarity is that the costs as a percentage of GNP on the basis of the four alternatives also differ by a relatively large amount at the end of the long-range period (about 4.6 percentage points between alternative I and III), although differing by a much smaller amount at the end of the medium-range period (1.34 percentage points). In addition, the average long-range cost as a percentage of GNP on the basis of the four alternatives varies by a relatively large amount (from 4.32 percent based on alternative I to 6.63 percent based on alternative III), while the average medium-range cost varies by a much smaller amount (from 4.11 to 4.97 percent).

TABLE 31.—ESTIMATED COST OF THE OASDI PROGRAM AS A PERCENTAGE OF GNP BY ALTERNATIVE, CALENDAR YEARS 1984-2060

Calendar year	1	II-A	II-B	111
1964	4.96	4.99	5.00	5.05
1965	4.81	4.89	4.90	5.13
1986	4.72	4.84	4.86	5.08
	4.65	4.81	4.85	5.05
1987	4.58	4.77	4.84	5.05
1988	4.51	4.73	4.81	5.04
1989		4.69	4.79	5.02
1990	4.36			5.03
1991	4.46	4.67	4.77	
1992	4.33	4.64	4.76	5.11
1993	4.37	4.61	4.74	5.12
1994	4.20	4.55	4.70	5.12
1995	4.18	4.47	4.63	5.08
1996	4.08	4.38	4.55	5.02
1997	3.97	4.28	4.46	4.94
1998	3.98	4.21	4.40	4.89
1999	3.82	4.16	4.36	4.87
	3.75	4.12	4.32	4.85
2000	3.70	4.08	4.28	4.83
2001		4.05	4.25	4.82
2002	3.66 3.63	4.03	4.24	4.82
2003			4.22	4.83
2004	3.61	4.02	4.22 4.21	4.84
2005	3.59	4.01		
2006	3.59	4.02	4.22	4.86
2007	3.60	4.04	4.24	4.90
2006	3.82	. 4.08	4.27	4.96
2010	3.69	4.17	4.36	5.09
2015	4.03	4.59	4.77	5.65
2020	4.43	5.09	5.27	6.35
2025	4.75	5.55	5.72	7.09
	4.85	5.79	5.94	7.63
2030	4.77	5.83	5.97	7.99
2035	4.57	5.73	5.86	8.17
2040		5.73 5.67	5.77	8.41
2045	4.42		5.73	8.65
2050	4.34	5.66		
2055	4.29	5.65	5.69	8.83
2060	4.23	5.60	5.62	8.90
25-year averages:				
1984-2008	4.11	4.41	4.55	4.97
2009-2033	4.40	5.11	5.28	6.48
2034-2058	4.45	5.70	5.79	8.45

TABLE 31.—ESTIMATED COST OF THE OASDI PROGRAM AS A PERCENTAGE OF GNP BY ALTERNATIVE, CALENDAR YEARS 1984-2060 (Cont.)

Calendar year	1	II-A	II-B	III
75-year average: 1984-2058	4.32	5.07	5.20	6.63

Table 32 shows a comparison of the estimated average cost rates and the estimated average total income rates, by trust fund. In the medium range, actuarial surpluses are projected for the OASI program, on the basis of all four alternatives; and for the DI program on the basis of all but alternative III. The combined OASDI medium-range actuarial surplus ranges from 0.97 percent of taxable payroll based on alternative III to 3.15 percent based on alternative I.

In the long range, a large deficit is projected for the OASI program based on alternative III, a minor deficit based on alternative II-B, and surpluses based on alternatives I and II-A. For the DI program, similar patterns are projected. The combined OASDI long-range actuarial balance ranges from a surplus of 2.75 percent of taxable payroll based on alternative I to a deficit of 4.12 percent based on alternative III.

TABLE 32.—COMPARISON OF ESTIMATED AVERAGE COST RATE WITH ESTIMATED AVERAGE TOTAL INCOME RATE BY ALTERNATIVE AND TRUST FUND

[As a percentage of taxable payroll]

	Avera	age cost re	ate	Average 1	total incom	ne rate		Balance	
Calendar years	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
Alternative I:									
1984-2008	8.48	0.88	9.36	11.25	1.26	12.51	+2.77	+0.38	+3.15
2009-2033	9.09	1.06	10.15	11.38	1.47	12.85	+2.29	+.41	+2.69
2034-2056	9.48	1.04	10.52	11.45	1.47	12.92	+1.97	+.43	+2.40
1984-2058	9.02	.99	10.01	11.36	1.40	12.76	+2.34	+.40	+2.75
Alternative II-A:							, 2.5	,	,, 0
1984-2008	9.07	1.06	10.14	11.27	1.27	12.54	+2.20	+.20	+2.40
2009-2033	10.69	1.52	12.22	11.45	1.49	12.94	+.78	04	+.72
2034-2058	12.69	1.57	14.27	11.61	1.50	13.11	-1.08	08	-1.16
1984-2058	10.62	1.39	12.21	11.45	1.42	12.86	+.63	+.03	+.65
Alternative II-B:							,	,	,
1984-2006	9.45	1.10	10.54	11.29	1.27	12.56	+ 1.84	+.17	+ 2.01
2009-2033	11.42	1.60	13.02	11.49	1.49	12.97	+.06	11	- 05
2034-2058	13.65	1.65	15.29	11.66	1.50	13.16	-1.99	15	-2.14
1984-2058	11.51	1.45	12.95	11.48	1.42	12.90	03	03	06
Alternative III:									
1984-2008	10.32	1.31	11.63	11.32	1.28	12.59	+1.00	04	+.97
2009-2033	14.22	2.27	18.48	11.61	1.52	13.13	-2.61	75	3.36
2034-2058	21.03	2.52	23.55	12.02	1.54	13.57	-9.00	98	-9.98
1984-2058	15.19	2.03	17.22	11.65	1.45	13.10	-3.54	59	-4.12

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

Table 33 shows the trust fund ratios for the OASI and DI programs, on the basis of all four alternatives. The OASI and DI ratios are projected to be fairly low for several years before increasing to very high levels thereafter. Based on alternative I, they increase throughout the long-range projection period to extremely high levels, around 1,800 percent for OASI and 2,800 percent for DI. In contrast, based on alternative III, the OASI ratio, after peaking around 250 percent, decreases rapidly until the fund is exhausted in 2027. Similarly, the DI ratio, after peaking at 82 percent, decreases rapidly until the fund is exhausted in 2008.

TABLE 33.—ESTIMATED TRUST FUND RATIOS BY ALTERNATIVE AND TRUST FUND, CALENDAR YEARS 1984-2060

	Ai	ternative	)	Alte	rnative l	I-A	Alte	ernative l	I-B	Alt	emative	HI
Calendar year	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
1984	20	35	21	20	35	21	20	35	21	20	35	21
1985	22	29	23	21	27	22	21	27	21	19	25	20
1986	28	29	28	26	25	26	25	24	25	19	19	19
1987	31	34	31	28	25	27	27	23	27	18	18	18
1988	41	43	41	32	28	32	29	25	29	18	18	18
1989	58	84	61	44	60	46	39	55	41	19	19	19
1990	82	107	84	60	70	51	53	64	54	25	28	25
1991	106	141	109	78	95	80	68	86	69	33	40	34
1992	134	161	138	97	119	99	83	108	85	41	53	42
1993	159	215	164	116	143	119	99	130	101	48	64	49
1994	192	261	198	138	167	140	116	150	119	55	73	57
1995	224	306	231	162	191	165	135	171	138	63	80	65
1996	260	366	270	189	215	191	156	192	159	73	82	74
	301	430	313	220	239	221	180	212	183	84	82	84
1997	345	496	358	252	262	253	205	231	207	97	79	95
1998			404			284	203	244	232	110	74	106
1999	391	547		285	278		258				66	
2000	439	596	453	320	293	317	284	255 280	258 284	124 137	69	117 128
2001	488	666	504	355	323	352						
2002	538	732	557	391	350	386	312	303	311	150	70	139
2003	590	790	610	428	371	421	340	321	338	163	67	150
2004	643	839	663	466	387	456	368	333	364	177	61	161
2005	897	881	716	503	399	490	397	342	390	190	52	170
2006	750	917	768	541	407	523	426	346	415	203	40	179
2007	801	947	817	576	411	554	453	346	439	215	25	187
2008	850	974	864	610	412	583	479	346	481	227	8	193
2010	939	1,032	949	671	413	634	525	341	500	244	(1)	200
2015	1.072	1,167	1.085	749	407	702	580	317	544	241	(2)	180
2020	1.122	1.362	1,147	750	394	705	565	284	530	177	(1)	108
2025	1,140	1,498	1,176	710	362	668	509	234	476	67	(1)	(1)
2030	1,172	1,718	1,224	662	340	826	438	185	411	(1)	(4)	(1)
2035	1,240	1,978	1,308	618	334	588	366	151	343	(1)	(2)	(1)
2040	1,363	2,177	1,441	591	320	562	301	116	281	è	(2)	(1)
2045	1.503	2,325	1.586	567	294	536	238	70	219	è	įή	(1)
2050	1,631	2,495	1,720	534	265	504	170	17	154	(1)	è	(1)
2055	1.747	2,709	1.845	494	242	467	98	(i)	84	(4)	(1)	(-)
2060	1.869	2.920	1,976	454	226	429	22	66	11	(-)	(1)	(4)
Trust fund is	1,505	2,320	1,370	754	220	725	22	٠,		( )	1)	()
projected to												
be exhausted												
	(2)	(2)	(1)	(2)	(2)	40	(2)	2050	(2)	2027	2008	2024
in:	(*)	(2)	(*)	(*)	(*)	(*)	(*)	2000	(7)	2021	2W0	2024

<sup>&</sup>lt;sup>1</sup>The fund is projected to be exhausted.

Note: The OASDI ratios shown for years after the year in which a given fund is projected to be exhausted are theoretical and are shown for informational purposes only.

<sup>\*</sup>The fund is not projected to be exhausted within the projection period.

The actuarial balances shown in this report are similar to those shown in last year's report. Table 34 itemizes the reasons for the slight differences that do exist—together with their estimated cost effects—between the estimates based on alternative II-B in last year's report and those in this report.

TABLE 34.—CHANGE IN ESTIMATED MEDIUM-RANGE AND LONG-RANGE ACTUARIAL BAL-ANCE ON THE BASIS OF ALTERNATIVE II-B BY TRUST FUND AND REASON FOR CHANGE [As a percentage of taxable payroll]

	Me	dium range		Long range		
Item	OASI	DI	Total	OASI	DI	Total
Shown in last year's report:1						
Average total income rate	11.23	1,26	12.50	11.45	1.41	12.87
Average cost rate	9.61	1.06	10.66	11.46	1.36	12.84
Actuanal balance	+1.63	+.20	+1.83	01	+.04	+.02
Changes in actuarial balance due to changes			•			
in:						
Valuation date	+.12	+.00	+.12	02	00	03
Demographic assumptions	+.05	00	+.05	+.04	00	+.04
Disability assumptions	+.00	06	06	+.00	11	11
Unemployment assumptions	01	00	01	03	00	03
Other economic assumptions	+.06	+.00	+.06	+.02	+.00	+.02
Methods	01	+.01	00	+.04	+.03	+.06
All other factors	00	+.02	+.02	06	+.02	03
Total change in actuarial balance	+.21	03	+.18	02	07	08
Shown in this report:						
Actuarial balance	+ 1.84	+.17	+2.01	03	03	06
Average cost rate	9.45	1.10	10.54	11.51	1.45	12.95
Average total income rate	11.29	1.27	12.56	11.48	1.42	12.90

<sup>1</sup>Cost rates, total income rates, and taxable payroll are calculated on the basis of the 1983 alternative II-B, which assumes ultimate annual increases of 5.5 percent in average wages in covered employment and 4.0 percent in the CPI, an ultimate annual unemployment rate of 5.5 percent, and an ultimate total fertility rate of 2.0 children per woman. The averages are computed over projection periods commencing with 1983.

\*Cost rates, total income rates, and taxable payroll are calculated on the basis of the 1984 alternative II-B, which is described in the text. The averages are computed over projection periods commencing with 1984.

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

In changing from the valuation periods of last year's report, which were 1983-2007 and 1983-2057 for the medium-range and long-range periods, respectively, to the valuation periods of this report, 1984-2008 and 1984-2058, the year 1983 is replaced by 2008 in the medium range and by 2058 in the long range. In the medium-range period, the small estimated 1983 deficit shown in last year's report is replaced by the estimated surplus in 2008, thereby increasing the 25-year average surplus. In the long-range period, that 1983 deficit is replaced by the estimated larger deficit in 2058, thereby decreasing the 75-year actuarial balance.

Overall, ultimate mortality rates were lowered slightly, as compared with the ultimate rates used for last year's report, generally resulting in small increases in life expectancies at birth. The overall reduction, however, results from different changes in the specific mortality rates for ten separate groups of causes of death, with increases assumed for some groups and decreases for others. While, overall, mortality rates were lowered, the different changes for the aforementioned ten specific causes resulted in small decreases at younger ages and small increases at older ages, as compared with the corresponding ultimate rates used for last year's report. The lower mortality rates at younger ages result in a relatively larger working-age population than previously projected, while the higher rates at more advanced ages result in relatively fewer OASI beneficiaries. These changes result in increases in the actuarial

balances for the OASI program in both the medium-range and longrange periods. The lower mortality rates at younger ages result in a slightly larger increase in the number of DI beneficiaries than in the number of covered workers and thus decrease (although insignificantly) the DI actuarial balances.

The disability incidence rates assumed in this report were based on the higher average rates experienced in 1979-83 as compared with those in 1980-82, the base period for last year's report. Also, the ultimate rates in this report were assumed to be 25 percent higher than those experienced in the base period, instead of 15 percent higher as in last year's report. The change in the base period and the higher percentage increase over the base-period rates reflect both the increases actually experienced in 1983 and the assumption that future disability incidence rates will be higher than were assumed for last year's report. These two changes reduce both the medium-range and long-range actuarial balances.

The ultimate unemployment rate was changed from 5.5 percent in last year's report to 6.0 percent in this report. The unemployment rates assumed for years through 1991, however, are lower than those assumed in last year's report. These changes result in net reductions in both the medium-range and long-range actuarial balances.

Other economic assumptions were changed to reflect the unexpected strength and duration of the recovery that began in 1983. These changes result in an increase in the OASI actuarial balance over the medium-range period and, to a lesser extent, over the long-range period.

Changes were made in various methods used to estimate the actuarial balance of the OASDI program. These changes result in a minor decrease in the OASI medium-range actuarial balance, a minor increase in the DI medium-range actuarial balance, and small increases in both long-range actuarial balances.

Numerous minor changes were made in other items. These changes result in small decreases in the OASI actuarial balances and small increases in the DI actuarial balances.

#### VII. CONCLUSION

The actuarial estimates indicate that OASDI benefits can be paid on time well into the next century on the basis of all four sets of economic and demographic assumptions shown in this report. Over the next 75 years, the OASDI program is in close actuarial balance, based on the intermediate alternative II-B set of assumptions.

In the short range, the combined assets of the OASI and DI Trust Funds are estimated to increase each year, on the basis of alternatives I, II-A, and II-B. Based on the pessimistic alternative III assumptions, the combined assets, as a percentage of program outgo, are estimated to decline somewhat through the early part of 1988, before beginning to increase.

In the long range, the projections in this report indicate that the program has an average actuarial deficit of 0.06 percent of taxable payroll over the next 75 years, based on the intermediate alternative II-B assumptions. This represents a slight decline from the 0.02-percent surplus shown in the 1983 Annual Report. The program remains in close actuarial balance, however, based on alternative II-B, because the estimated average income rate over the next 75 years equals 99.6 percent of the estimated average cost rate. This is within the range of "close actuarial balance," which requires that, over the long-range period, the average income rate be between 95 and 105 percent of the average cost rate. However, the 25-year subperiods show a pattern of recurring deficits toward the end of the 75-year period. The actuarial deficit of 0.06 percent of taxable payroll consists of an average surplus of 2.01 percent of taxable payroll over the first 25-year subperiod, and average deficits of 0.05 and 2.14 percent over the second and third 25-year subperiods, respectively, of the 75-year projection period. Thus, the long-range actuarial balance will shift slowly over time as the valuation period moves forward and near-term years of surplus are replaced by distant years of deficit.

The estimates shown in this report are similar to those shown in the 1983 Annual Report, which, because of the enactment of the Social Security Amendments of 1983, indicated a substantially improved financial condition for the OASDI program than was indicated in earlier reports. The short-range estimates in this report, on the basis of alternatives I, II-A, and II-B, show somewhat higher levels of combined OASI and DI assets after 1984 than were shown in the 1983 report. This improvement reflects the stronger economic recovery in 1983 and early 1984 than was expected when the 1983 report was prepared.

The effect of the more favorable economic experience was partly offset by somewhat higher disability incidence rates and lower termination rates than had been projected and by somewhat lower trust fund growth in 1983 than had been estimated. The recent disability experience is also reflected in lower estimates of DI assets than were shown in last year's report. The relatively small decline in the OASDI long-range actuarial balance based on alternative II-B, as noted above, is primarily attributable to the assumption of continued higher disability incidence rates. The change in the actuarial balance also reflects the effects of several other factors, including the change in the valuation period—from 1983-2057, as used for last year's report, to 1984-2058.

As in the 1983 report, the trust fund levels are estimated to remain relatively low through 1987. The trust fund levels based on alternative III in this report are lower after 1985 than were estimated in last year's report. Benefits could still be paid on time during the short-range projection period, based on alternative III, but the margins for safety would be very small. Thus, if economic conditions in 1984-87 are worse, in terms of their effects on the trust funds, than those assumed for the pessimistic alternative III set, the OASDI program could again experience financial difficulties in the near future. After 1987, the program's ability to withstand temporary economic downturns is projected to improve steadily.

The estimates based on alternatives I, II-A, and II-B indicate that the growth in the combined assets of the OASI and DI Trust Funds would require the complete repayment, by early 1987, of the \$12.4 billion owed to the HI Trust Fund. Based on alternative III, no repayment of the amounts owed would be required by law prior to 1988, but full repayment is assumed to occur in the first half of 1988—in six equal monthly payments. Without such earlier repayment, the HI Trust Fund would be depleted in 1988, on the basis of the alternative III assumptions.

Based on alternatives I, II-A, and II-B, complete repayment of the \$5.1 billion owed to the DI Trust Fund by the OASI Trust Fund would be made in 1988, before the statutory deadline for repayment of such amounts. On the basis of alternative III, repayments beginning in 1986 would be necessary to enable the continued payment of DI benefits. The repayments are assumed to occur during 1985-89, in such a manner as to keep the two trust funds in a roughly equivalent financial position, based on alternative III.

## APPENDIX A.—ASSUMPTIONS AND METHODS UNDERLYING THE MEDIUM-RANGE AND LONG-RANGE ESTIMATES

This appendix describes the assumptions and methods which underlie the estimates in this report, based on each of the four alternatives unless specifically stated otherwise. The basic assumptions comprising each alternative have been summarized in an earlier subsection entitled "Economic and Demographic Assumptions" and thus will be discussed here only in the context of the methods used. Further details about the assumptions, methods, and cost estimates can be obtained from the Office of the Actuary, Social Security Administration. Projections of the trust fund operations over the long-range period, expressed in dollar amounts, will be published by the Office of the Actuary, shortly after the issuance of this report.

#### TOTAL POPULATION

Projections were made of the population in the Social Security coverage area by age, sex, and marital status for future years through 2060. The starting point was the U.S. population, including armed forces overseas, on July 1, 1982, as estimated by the Bureau of the Census, based on the 1980 Census and adjusting for births, deaths, and net immigration during 1980-82. This population estimate was adjusted for net census undercount and was increased by the estimated populations in the geographic areas covered by the OASDI program but not included in the estimate made by the Bureau of the Census. The population for future years was then projected using assumed rates of birth and death and assumed net immigration.

Historically, fertility rates in the United States have fluctuated widely. The total fertility rate is defined to be the average number of children that would be born to a woman in her lifetime if she were to experience the birth rates by age observed in, or assumed for, the selected year and if she were to survive the entire childbearing period. The total fertility rate decreased from 3.3 after World War I to 2.1 during the Great Depression, rose to about 3.7 in 1957 and then fell to 1.7 in 1976. Since then, it has been about 1.8 children per woman.

The past variations in fertility rates have resulted from changes in social attitudes, economic conditions, and medical knowledge. Future fertility rates may exceed the present low level, because such a low level has never been experienced in the United States over a long period of time, and because such a level is well below that needed to prevent a declining population, in the absence of increased immigration. The recent trends in certain population characteristics, however, are consistent with a continued low fertility rate, such as the rising percentages of women never married, of women who are divorced, and of young women in the labor force. After considering these factors, ultimate total fertility rates of 2.3, 2.0, 2.0, and 1.6 children per woman were selected for alternatives I, II-A, II-B, and III, respectively. For each alternative, the total fertility rate was projected to reach its ultimate level in 2008. These ultimate values can be compared with those used by the Bureau of the Census in its latest series of population projections. The Bureau of

<sup>&</sup>lt;sup>1</sup>U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 922, "Projections of the Population of the United States: 1982-2050 (Advanced Report)," U.S. Government Printing Office, Washington, D.C., October 1982.

the Census used a range of 1.6 to 2.3, with an intermediate assumption of 1.9. A rate of 2.1 would result in a nearly constant population if there were no net immigration and if mortality were constant at levels close to current U.S. experience.

Historically, mortality rates in the United States have declined steadily. The age-adjusted death rate is the crude rate that would occur in the enumerated total population as of April 1, 1970, if that population were to experience the death rates by age for the selected year. The ageadjusted death rate has declined at an average rate of 1.3 percent per year since 1900. The past reductions in mortality rates have resulted from many factors, including increased medical knowledge, increased availability of health-care services, and improvements in personal healthcare practices such as diet and exercise. After considering how these and other factors might affect mortality, three alternative sets of annual percentage reductions in central death rates by sex and cause of death were assumed for the year 2008 and later. Of these three sets of assumptions, the second set, which is used for both alternatives II-A and II-B, is considered most likely to be realized. The average percentage reductions used for alternative I are less than those in alternatives II-A and II-B, while the average annual reductions used for alternative III are greater. Prior to 2008, mortality reductions for alternatives II-A and II-B are assumed to change gradually from the average annual reductions by age, sex, and cause of death observed during 1968-80 to the annual reductions by sex and cause of death assumed for 2008 and later. Alternative I mortality reductions are assumed to change gradually from 50 percent of the average annual reductions observed during 1968-80, while alternative III mortality reductions are assumed to change gradually from 150 percent of the average annual reductions observed during 1968-80.

After adjustment for changes in the age distribution of the population, mortality for alternatives II-A and II-B is projected to decline at an average annual rate of about 0.6 percent per year during 1982-2058. This is about half the average rate of decline observed during 1900-1982.

Net immigration was assumed to be 500,000, 400,000, 400,000, and 300,000 persons per year for alternatives I, II-A, II-B, and III, respectively. The assumed net immigration does not include aliens entering the United States illegally, largely because no reliable estimate of their number exists. No significant emigration is assumed for the same reason. Those illegal aliens who were enumerated in the 1980 Census were automatically included in the starting population.

Table A1 shows the projected population by broad age groups for all four alternatives. Because many categories of OASDI benefits depend upon marital status, the population was projected by marital status as well as by age and sex. Marriage rates and divorce rates were based on recent data from the National Center for Health Statistics.

TABLE A1.—SOCIAL SECURITY AREA POPULATION AS OF JULY 1 AND DEPENDENCY RATIOS, BY ALTERNATIVE AND BROAD AGE GROUP, CALENDAR YEARS 1960-2060

		Population (in t		Dependency ratio		
Calendar year	Under 20	20-64	65 and over	Total	Aged¹	Total <sup>2</sup>
1960		98,689	17,147	188,944	.174	.915
1965		104,121	18,952	203,032	.162	.950
970	80,734	112,809	20,681	214,024	.184	.901
975	78,862	122,591	23,309	224,762	.190	.833
980	75,443	134,608	26,364	238,415	.196	.756
Uternative I:		•	•			
1985	73,969	144,922	29.264	248.155	.202	.712
1990		151,821	32,188	259.980	.212	.712
1995	79.059	157,893	34,053	271.005	.216	.716
2000		164,782	34,695	281,355	.211	.707
2005	83,566	172,796	35,550	291,912	.206	.889
2010	86,005	179,160	38,127	303,292	.213	.693
2015	89,506	181.829	43,501	314.836	.239	.731
2020	93,486	162,671	49,767		.272	
				325,924		.784
2025	97,001	162,601	56,582	336,384	.310	.840
2030	99,779	165,267	61,416	346,462	.331	.870
2035	102,706	190,685	63,042	356,433	.331	.869
2040	106,218	197,496	62,889	366,403	.317	.855
2045	110,089	204,350	62,058	376,497	.304	.842
2050	113.854	210.222	82,936	387,012	.299	.841
2055	117,368	216,461	64,533	398,362	.298	.840
2060	120.879	223,726	66,150	410,755	.296	.836
ternatives II-A and II-B:	120,010	220,720	00,100	410,700	.200	.000
1985	73.691	144,800	29,319	247,610	.202	.711
4000	74,732					
1990		151,510	32,570	258,812	.215	.706
1995	76,358	157,389	34,970	268,717	.222	.707
2000	77,194	164,072	38,184	277,450	.221	.691
2005	76,428	171,740	37,538	285,706	.219	.664
2010	76,231	177,127	40,574	293,932	.229	.859
2015	77,081	178,178	46,445	301,704	.261	.693
2020	78,370	176.841	53,273	308,484	.301	.744
2025	79,191	174,152	60,788	314,111	.349	.804
2030	79,359	173.052	86,340	318,751	.383	.842
2035	79,505	174,428	88,644	322.577	.394	.849
2040	60.055	176,738	88.847			
				325,840	.390	.843
2045	80,674	178,575	88,609	328,058	.364	.837
2050	81,586	176,880	69,668	330,134	.389	.846
2055	82,047	179,376	70,889	332,312	.395	.853
2060	82,425	180,750	71,712	334,887	.397	.853
Itemative III:						
1985	73,361	144.677	29.372	247.410	203	.710
1990	73,151	151,187	32.934	257.272	.218	.702
1995	72,787	158,846	35,824	265,457	.228	.692
2000	71,009	163,293	37,599	271,901	.230	.665
2005	67,097	170,559	39,554			
2010				277,210	.232	.625
	63,706	174,691	43,263	281,660	.246	.812
2015	61,531	173,670	49,950	285,151	.288	.842
2020	59,934	169,582	57,788	287,264	.341	.694
2025	56,077	163,372	86,465	267,934	.407	.762
2030	55,887	157,862	73,452	287,201	.465	.619
2035	53,655	154.337	77,172	285,184	.500	.848
2040	51,774	151,342	76,708	281,824	.520	.662
2045	50.211	147,443	79.618	277,272	.540	.881
2050	48,709	141.578	81,509		.576	
2055	47,133	138.088		271,798		.920
			82,641	265,862	.607	.954
2060	45,556	131.688	82,632	259.87 <b>8</b>	.827	.973

<sup>&</sup>lt;sup>1</sup>Population aged 65 and over, divided by population aged 20-64.

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

<sup>\*</sup>Population aged 65 and over plus population under age 20, divided by population aged 20-64.

## COVERED POPULATION

The number of covered workers in a year is defined as the number of persons who work in covered employment at any time during that year. Projections of the number of covered workers were made by applying projected coverage rates to the estimated total population. The coverage rates—i.e., the number of workers with covered earnings in the year as a percentage of the total population—were projected by age and sex using projected labor force participation rates and unemployment rates, and their historical relationships to coverage rates. In addition, the coverage rates were adjusted to reflect the increases in covered employment in the nonprofit and Federal government sectors of the economy that will result from the 1983 amendments.

Labor force participation rates were projected by age and sex, taking into account projections of the percentage of the population that is married, the percentage of the population that is disabled, the number of children in the population, and the state of the economy. In addition, recent trends in the labor force participation rates that cannot be fully explained by the above factors (such as much of the recent increase in the rate for women) were assumed to continue through the year 2003. All of these factors vary by alternative. For men, the projected age-adjusted labor force participation rates for alternatives I, II-A, and II-B for 2060 are, respectively, 2.0, 0.8, and 0.2 percentage points higher than the 1983 level of 76.5 percent, while the rate for alternative III is 1.2 percentage points lower. For women, the projected age-adjusted labor force participation rates increase for all of the alternatives. The assumed rates for 2060 are 9.0, 8.1, 6.3, and 5.6 percentage points, respectively, above the 1983 level of 53.1 percent.

The total age-sex-adjusted unemployment rate has averaged 5.8 percent over the 30 years 1954-83 and 7.2 percent over the 10 years 1974-83. The ultimate total age-sex-adjusted unemployment rate was assumed to be 5.0, 5.5, 6.0, and 7.0 percent for alternatives I, II-A, II-B, and III, respectively. In each case, the unemployment rate was assumed to decline gradually, reaching its ultimate level by the year 2000.

The projected age-adjusted coverage rate for men increases from its 1983 level of 73.7 percent to 78.2, 76.7, 76.0, and 74.1 percent in 2060 on the basis of alternatives I, II-A, II-B, and III, respectively. Correspondingly, for women, it increases from its 1983 level of 53.3 percent to 66.2, 64.9, 63.0, and 61.1 percent, respectively.

## TAXABLE PAYROLL

The taxable payroll is that amount which, when multiplied by the combined employee-employer tax rate, yields the total amount of taxes paid by employees, employers, and the self-employed. Taxes paid by employers include, in 1983 and later, government contributions for deemed wage credits for military service. The taxable payroll is important not just in projecting OASDI income but also in defining cost rate, income rate, and actuarial balance. The cost rate is the cost of the OASDI program, including net transfers to the Railroad Retirement Account, expressed as a percentage of taxable payroll. The income rate is the combined OASDI employee-employer tax rate, plus the income from the taxation of benefits, expressed as a percentage of taxable

payroll. When both the cost rate and the income rate are defined in this way, they can be compared directly to determine whether the actuarial balance is positive or negative.

In practice, the taxable payroll is calculated as a weighted average of the earnings on which employees, employers, and self-employed persons are taxed. The weighting takes into account the lower tax rates on tips, multiple-employer "excess wages," and net earnings from self-employment through 1983, as compared with the combined employee-employer rate. For 1984-93, the amounts of earnings for employees, employers, and the self-employed were projected separately. For 1994 and later, the amounts of taxable earnings for employees, employers, and the self-employed were each assumed to increase at the compounded growth rates for numbers of covered workers and average wages in covered employment.

The cost of the OASDI program can also be expressed as a percentage of the Gross National Product (GNP). Such percentages (which are shown in table 30) are based on the estimated cost rates and on the assumed ratios of taxable payroll to GNP, which are presented in table A2. The projections of GNP were developed by applying a series of factors to the assumed ratio of total employee compensation in the economy to GNP, which was used as the starting point because it is a measure of the share of output going to workers. This ratio is also a convenient starting point because it has changed slowly over time and can be expected to remain fairly constant. Total employee compensation in the economy was related to taxable payroll by means of factors which adjust for various differences in the two measures. The factors adjust total employee compensation by removing supplements to wages and salaries: removing wages and salaries earned in noncovered employment; removing wages, salaries, and net earnings from self-employment above the taxable earnings base; and adjusting for the lower tax rates on tips. multiple-employer "excess wages," and net earnings from selfemployment through 1983.

The ratio of taxable payroll to GNP has risen since 1960, in part, because of ad hoc increases in the contribution and benefit base. The increase in the ratio for 1983 is largely the result of reflecting in the taxable payroll the lump-sum transfers made on May 20, 1983, related to noncontributory military-service wage credits. The ratio is projected to increase significantly in 1984, as compared to the value shown for 1982, as a result of the expanded coverage provided by the 1983 amendments. The long-range trend, however, is more likely to be downward because of a continuation of increases in the ratio of non-wage employee compensation to total compensation. The ratio of wages to total employee compensation is assumed to decline ultimately by 0.1, 0.2, 0.3, and 0.4 percent per year for alternatives I, II-A, II-B, and III, respectively. This ratio has declined at average annual rates of 0.42 percent over the 30-year period 1953-83 and 0.48 percent over the 10-year period 1973-83.

TABLE A2.—RATIO OF TAXABLE PAYROLL TO GNP BY ALTERNATIVE, CALENDAR YEARS 1960-2060

		Pas	nt .	
Calendar year		experienc		
960		0.39	1	
965		.34	3	
970		.41	7	
975		.41	9	
980		.43	3	
981		.43		
982		.43		
983		.44		
		Projected, by alter	native	
	· · · · · · · · · · · · · · · · · · ·	II-A	II-B	HI
1984	.441	.442	.441	.441
985	.440	.440	.439	.440
990	434	.436	.435	.432
995	.438	.434	.432	.430
2000	.439	.433	.428	.424
2005	.439	.430	.424	.418
010	.438	.427	419	.411
2015	.436	.424	.413	.404
2020	434	.420	.408	.396
2025	.432	.416	.402	.389
2030	.430	.412	.396	.382
2035	.428	.408	.390	.374
	.426	.404	.385	.367
2040	.426	.400	.379	.360
2045			.374	.354
2050	.422	.396		
2055	.420	.393	.369	.347
2060	.418	.389	.364	.341

## 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 eligibility for a primary retirement benefit and for the eligibility of other persons to auxiliary benefits based on the worker's earnings. Fully insured status is also required of a deceased worker for survivors' eligibility for benefits (with the exception of child survivors and parents of eligible child survivors, in which cases the deceased worker is required to have had either currently insured status or fully insured status). Disability insured status, which is more restrictive than fully insured status, is required of a disabled worker for eligibility for a primary benefit and for the eligibility of other persons to auxiliary benefits based on the disabled worker's earnings.

Projections of the percentage of the population that is fully insured were made by age and sex based on past and projected coverage rates, the requirement for fully insured status, and the historical relationship between these factors. Currently insured status was disregarded in the cost projection, because the number of cases in which eligibility for benefits is based solely on currently insured status is relatively small. Projections of the percentage of the population that is disability insured were developed from the percentages of those who are fully insured by using projections of historical trends relating the two. Finally, the fully insured and disability insured populations were developed from the projected total population by applying the appropriate percentages.

The fully insured population by age and sex was further subdivided by marital status, in a manner consistent with the division of the total population by marital status. Married men were assumed to be more likely to be fully insured than were widowers who, in turn, were

assumed to be more likely to be fully insured than were single and divorced men. By contrast, single and divorced women were assumed to be more likely to be fully insured than were widows who, in turn, were assumed to be more likely to be fully insured than were married women. The relative difference between a widowed woman's probability of being fully insured and a married woman's was assumed to decrease through time, reflecting the projected large increase in labor-force participation among married women.

## OLD-AGE AND SURVIVORS INSURANCE BENEFICIARIES

Several types of benefits, at different benefit levels, are payable under the OASI program. Hence, the numbers of beneficiaries were projected by type of benefit.

The projected numbers of retired-worker beneficiaries were based on the projected aged fully insured population. The numbers of beneficiaries, by age and sex, as percentages of the insured population, were projected to increase slightly until 1990 on the basis of past trends. In 1990 the percentages for ages 65 through 69 increase because of the change in the retirement earnings test included in the 1983 amendments. Beginning in the year 2000, the percentages decline for ages 62 through 69 because of the change in the normal retirement age included in the 1983 amendments. Ultimate percentages are reached in the year 2030.

The number of wife beneficiaries aged 62 and over of retired-worker beneficiaries was estimated from the population projection by marital and insured status. All uninsured wives aged 62 and over—excluding those whose husbands do not receive retired-worker benefits, those whose benefits are withheld according to the retirement earnings test, and those affected by eligibility for a governmental pension from earnings in noncovered employment—were assumed to receive benefits. Beginning in 1985, an increase in the number of aged wife beneficiaries is projected because, as a result of the 1983 amendments, eligible divorced wives will no longer be required to wait to receive benefits until their former husbands are receiving benefits. The number of husband beneficiaries aged 62 and over of retired-worker beneficiaries was estimated in an analogous manner.

The projected numbers of eligible children (including disabled adult children and certain students aged 18 or over) of retired-worker beneficiaries were based on projected ratios of the number of such child beneficiaries to the number of retired workers by sex of worker, adjusted to reflect the fertility assumptions.

The number of young-wife beneficiaries was estimated by extrapolating the historial ratios of the number of such beneficiaries to the estimated number of child beneficiaries who are children of male retired-worker beneficiaries and are either under age 16 or disabled with onset of disability before age 22. The estimating procedure takes into account projected changes in fertility and female labor-force participation. The number of young-husband beneficiaries was not projected because of the negligible cost attributable to them.

The number of widow beneficiaries aged 60 and over was estimated from the population by marital and insured status. Virtually all uninsured widows aged 60 and over—excluding those whose deceased husbands

were not fully insured, those whose benefits are withheld according to the retirement earnings test, and those affected by eligibility for a governmental pension from earnings in noncovered employment—were assumed to receive benefits. In addition, some insured widows who had not applied for retired-worker benefits were assumed to receive widow benefits. The number of widower beneficiaries was estimated in an analogous manner.

The numbers of paternal, maternal, and full orphans under age 18 in the Social Security coverage area were estimated from the projected population by applying age-specific probabilities of being an orphan. These probabilities were derived by using distributions of the age of the mother crossed with the age of the father at the birth of the child and the death rates used in the population projections. To estimate the number of child-survivor beneficiaries, the number of orphans was adjusted to include eligible disabled orphans and certain students aged 18 and over, and to eliminate orphans of uninsured deceased parents.

The number of mother beneficiaries was estimated by a method similar to the one used to estimate the number of young-wife beneficiaries—i.e., extrapolating the present ratio of such beneficiaries to child-survivor beneficiaries who are either under age 16 or disabled with onset of disability before age 22. The number of father beneficiaries was estimated in an analogous manner.

The number of parent beneficiaries (of deceased workers) was projected on the basis of the past trend in the number of such beneficiaries. A decrease was assumed from the actual figure of 12,000 in the middle of 1983 to an ultimate level of 7,000 in 1995.

Table A3 shows the estimated numbers of beneficiaries under the OASI program. Included among the beneficiaries who receive retired-worker benefits are some persons who also receive residual benefits consisting of the excess of any potential auxiliary benefits over their retired-worker benefits. Estimates of the number of such residual payments were made separately for wives, widows, husbands, and widowers. Residual payments to other beneficiaries were not taken into account, because of the negligible cost involved.

TABLE A3.—OASI BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS AS OF JUNE 30 BY ALTERNATIVE, CALENDAR YEARS 1960-2060 [In thousands]

	Retired wo	orkers and auxi	lianes		Survivors				
Calendar year	Worker	Wife- husband	Child	Widow- widower	Mother- father	Child	Parent	Total	
1960	7,813	2,224	260	1,471	368	1,549	35	13,740	
1965	10.843	2,601	429	2,228	472	1,900	36	18,509	
1970	13.066	2,651	535	3,151	514	2,673	29	22,618	
1975	16,210	2,836	633	3,823	568	2.905	22	26,998	
1976	16.789	2.867	638	3.939	576	2.911	21	27,740	
1977	17.380	2.899	670	4.042	573	2.843	19	28,428	
1978	17,924	2,942	662	4,147	569	2.800	18	29.062	
1979	18.590	2.966	651	4.260	567	2.739	17	29,789	
1980	19.167	2.987	633	4.354	560	2.668	15	30,385	
1981	19,792	3.010	639	4,446	549	2.624	14	31.074	
1982	20,392	3.019	522	4,540	520	2.201	13	31,207	
1983	21,060	3,051	491	4,632	494	2.093	12	31,833	
Alternative I:				.,		-,		.,	
1984	21.648	3,027	482	4.725	398	2.029	11	32,320	
1985	22,271	3.047	474	4.798	394	1.993	10	32.925	
1990	24,935	3.019	492	5.024	394	1.885	7	35.854	
1995	26,791	3,232	476	5,128	465	2.025	7	36,124	
2000	27,690	3.073	481	5.045	495	2.122	Ź	38,913	

TABLE A3.—OASI BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS AS OF JUNE 30 BY ALTERNATIVE, CALENDAR YEARS 1960-2060 (Cont.) [In thousands]

[In thousands]								
-	Retired wo	orkers and aux	iliaries		Survivors			
Calendar year	Worker	Wife- husband	Child	Widow- widower	Mother- father	Child	Parent	Total
Alternative I:								
(Cont.)	00.070	0.045	504	4 000	540	2 225	7	40,091
2005	28,970	2,915	504	4,930 4,839	538	2,225 2,320	7	42,949
2010	31,781	2,893 3,026	571 <b>686</b>	4,792	548	2,320	7	48,396
2015	36,943 42,879	3,149	789	4,846	548	2,461	7	54,879
2020	48,490	3,192	867	4,955	542	2,520	7	60,573
2025 2030	52,354	3,128	883	5,054	543	2,570	7	64,539
2035	54,326	2.971	871	5,105	557	2,627		66,464
2040	54,326	2.793	841	5,079	578	2,697	7 7	66,321
2045	54,416	2.899	849	5,009	593	2,767	7	66,340
2050	55,338	2,725	886	4,932	606	2,845	7	67,337
2055	56,761	2,817	927	4.887	623	2,924	7	68,946
2060	56,206	2,906	947	4,899	840	2,999	7	70,604
Alternative II-A:	,	_,		•		•		
1984	21,673	3,029	481	4,726	397	2,026	11	32,343
1985	22,277	3,056	472	4,800	392	1,984	10	32,991
1990	25,322	3,099	488	5,126	382	1,828	7	36,250
1995	27,476	3,363	483	5,166	418	1,805	7	38,718
2000	28,819	3,272	484	5,112	425	1,796	7	39,915
2005	30,495	3,166	502	5,016	427	1,773	7	41,388
2010	33,663	3,166	556	4,939	425	1,762	7	44,538
2015	39,222	3,356	854	4,904	427	1,753	7 7 7 7	50,325
2020	45,641	3,524	748	4,943	417	1,743	7	57,023
2025	51,814	3,616	814	5,043	406	1,732	7	63,432
2030	56,325	3,578	825	5,149	395	1,715	7	67,994
2035	58,912	3,443	814	5,225	394	1,898	7	70,493
2040	59,429	3,262	784	5,226	397	1,684	7	70,789
2045	59,918	3,151	788	5,170	395	1,677	7	71,106
2050	80,928	3,160	817	5,087	389	1,669	7	72,057
2055	82,025	3,219	837	4,995	387	1,660	7	73,130
2060	62,771	3,271	840	4,939	366	1,650	7	73,864
Alternative II-B:	04.070		404	4 700	007	0.000		00 040
1984	21,673	3,029	481	4,726	397	2,026	11	32,343
1985	22,277	3,056	472 486	4,800	392 382	1,984 1.828	10 7	32,991 36,248
1990	25,319	3,100	483	5,126 5,169	418	1.805	7	38,719
1995	27,465	3,372			425	1,795	7	39,915
2000	28,803	3,282	484 502	5,119 5,027	425	1,783	7	41.373
2005	30,460	3,181 3,210	556	4,954	425 425	1.759	4	44,521
2010	33,810	3,210 3,397	654	4,926	427	1,750	7 7 7 7 7	50,299
2015	39,138	3,583	747	4,975	417	1,741	, <u>,</u>	56,981
2020	45,511	3,563 3,689	812	5,089	406	1.732	, <del>,</del>	63,389
2025	51,654		825	5,203	395	1,715	, <del>,</del>	67,949
2030	56,143 58.693	3,661 3,536	814	5,203 5,297	394	1,696	7	70,437
2035	59,196	3,536 3,361	783	5.305	397	1,683	7	70,732
2040 2045	59,652	3,257	787	5,260	395	1,676	7	71,034
2050	60,635	3,283	817	5,188	389	1,668	7	71,987
2055	61,718	3,203	637	5.103	387	1.658	7	73,056
2060	62,450	3,403	840	5,052	386	1,646	7	73,784
Alternative III:	02,400	0,700	0.10	0,002	555	1,040	•	
1984	21,685	3,031	480	4.727	397	2.024	11	32,365
1985	22,337	3 065	471	4,800	391	1.975	10	33,049
1990	25,654	3,176	479	5,126	372	1,773	7	34,587
1995	28,098	3,498	490	5,202	387	1,643	7	39,325
2000	29,863	3,463	487	5,173	372	1,530	7	40,915
2005	31,995	3,454	492	5,098	352	1,403	7	42,601
2010	35,676	3,554	532	5,038	338	1,305	7 7 7 7 7 7	46,450
2015	41,661	3,829	605	5,011	328	1,223	7	52,864
2020	49,068	4,111	676	5,043	308	1,148	7	60,361
2025	56,255	4,313	723	5,127	290	1,081	7	67,796
2030	61,944	4,379	738	5,226	273	1,016	7	73,583
2035	65,781	4,324	727	5,319	260	953	7	77,371
2040	67,490	4,197	704	5,361	249	894	7	78,902
2045	68,994	4,111	705	5,350	234	844	7	80,245
2050	70,638	4,126	722	5,269	220	795	7	81,777
2055	71,618	4,164	725	5,153	205	750	7	82,622
2060	71,656	4,182	709	5,023	194	703	7_	82,454

Note: The numbers of beneficiaries do not included certain uninsured persons, most of whom both attained age 72 before 1968 and have less than 3 quarters of coverage, in which cases the costs are reimbursed by the general fund of the Treasury. The number of such uninsured persons was 56,068 as of June 30, 1983, and is estimated to be less than 500 by the turn of the century. Totals do not necessarily equal the sum of rounded components.

## DISABILITY INSURANCE BENEFICIARIES

The number of disabled-worker beneficiaries was projected from the population exposed to disability, which was developed from the disability insured population by removing those persons already entitled to disabled-worker benefits. The number of newly entitled beneficiaries was developed from the exposed population by applying assumed disability incidence rates by age and sex. The number of currently entitled beneficiaries was projected forward each year by adding the newly entitled beneficiaries to the previous year's currently entitled and subtracting the terminations, which were determined by applying assumed termination rates to the currently entitled disabled-worker population below the normal retirement age (currently, age 65). At the normal retirement age, disabled-worker benefits are automatically converted to retired-worker benefits.

The disability incidence rates, which declined during 1975-82, are assumed to increase steadily from 1983 through 2000, when they reach ultimate levels which, for alternatives II-A and II-B, are about 25 percent higher than the corresponding average rates for 1979-83. For alternatives I and III, the disability incidence rates follow patterns similar to the one in alternatives II-A and II-B except that the ultimate levels are the same as the average for 1979-83 and 50 percent higher, respectively.

The termination rates were estimated by age, sex, and duration of entitlement. For alternatives II-A and II-B, the mortality rates used throughout the projection period were assumed to be the same as those experienced by disabled-worker beneficiaries during 1977-80, while the recovery rates were assumed to be 20 percent higher than those of the same period, thereby allowing for the assumed effect of the periodic reviews required by the Social Security Disability Amendments of 1980. For alternative I, the termination rates were assumed to be 20 percent higher than the rates used for alternatives II-A and II-B, while for alternative III, the rates were assumed to be 20 percent lower.

The number of eligible children (including disabled adult children and certain students aged 18 or over) was projected as a proportion of the number of disabled-worker beneficiaries, by sex, based on recent experience and allowing for projected changes in fertility.

The number of young-wife beneficiaries was estimated by extrapolating the historical ratios of the number of such beneficiaries to the estimated number of child beneficiaries who are children of male disabled-worker beneficiaries and are either under age 16 or disabled with onset of disability before age 22. The estimating procedure takes into account projected changes in fertility and female labor force participation. The number of young-husband beneficiaries was projected in an analogous manner.

The number of aged-wife beneficiaries was projected as a proportion of the number of male disabled-worker beneficiaries. The number of aged-husband beneficiaries was projected in an analogous manner.

Table A4 shows the projected number of beneficiaries under the DI program.

TABLE A4.—DI BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS AS OF JUNE 30 BY ALTERNATIVE, CALENDAR YEARS 1960-2060 [In thousands]

Auxiliaries Disabled Wives and husbands Calendar year workers Children Total 371 522 56 944 1,436 2,363 2,602 1965..... 187 518 648 271 429 2 568 1970 ..... 861 1.333 1975 ..... 4 125 468 ,462 1976..... 4,533 2,755 482 496 4,733 1978 ..... 2,858 491 512 4,861 2,877 483 466 1979 ..... 4,826 1960 ..... 2.863 403 4,734 468 2,835 450 350 4,636 1981 ..... 1982 ..... 2,713 2,591 071 4,184 3,893 399 1983 357 944 Alternative I: 3,777 3,742 3,736 3,319 1984 ..... 2,555 311 911 2,531 2,553 2,287 311 313 255 900 870 777 1985 1990 1995 ..... 3,652 2000 ..... 960 2005 ..... 2,985 314 4,259 3,518 3,782 384 1.117 4.99A 395 226 5,403 3,876 303 2020 ..... 2025 ..... 444 408 5.895 3.992 442 409 2030 ..... 5.842 434 1.387 3 934 2035 ..... 5 755 445 5,910 2040 ..... 4,043 1,422 2045 ..... 4,241 468 495 2050 ..... 4.394 486 1.557 6,437 2055 ..... 4 475 496 6.558 1.587 2060 .... 505 1.618 6.702 4.578 Alternative II-A: 3,790 3,785 3,938 2.582 915 1984 ..... 313 2,555 2,677 914 926 1985 ..... 316 335 1990 ..... 2,843 312 940 4,094 1995 ..... 3,318 349 ,053 2005 ..... 4.036 401 ,201 ,379 5.638 483 2010 ..... 4.819 6.661 2015 ..... 5,208 498 491 7,197 5,339 5,556 517 582 7,419 7,769 2020 ..... 547 538 2025 ..... REE 5,449 5,323 646 2030 ..... 7.633 2035 ..... 522 597 7.442 2040 ..... 5,405 528 611 7,784 2045 ..... 5,577 545 662 554 549 2050 5,637 5,581 692 7.863 2055 ..... 660 7.611 2060 1,668 7.769 Alternative II-B: 3,790 3,785 3,937 1984 2,562 2,555 313 915 1985 316 914 1990 2,676 335 926 2,842 312 4,093 1995 2000 3,316 349 401 ,052 4,717 5,631 2005 4 030 200 377 2010 ..... 4,810 463 6,650 2015 ..... 498 5,196 489 7,183 5,325 2020 517 560 7.402 2025 5 541 546 664 7,751 7,613 5,432 2030 ..... 536 643 2035 5,305 522 594 528 545 553 2040 2045 5,388 5,558 608 7,523 7,762 659 2050 5,619 689 7,861 7,789 7,748 2055 5.563 549 677

5.539

545

664

2060

TABLE A4.—DI BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS AS OF JUNE 30 BY ALTERNATIVE, CALENDAR YEARS 1960-2060 (Cont.) [In thousands]

Calendar year	Disabled workers	Wives and husbands	Children	Total
Alternative III:			**	
1984	2,570	315	920	3,805
1985	2,583	323	929	3,835
1990	2,774	352	969	4,095
1995	3,255	348	1,035	4,639
2000	4,031	404	1,189	5,624
2005	5,104	469	1,351	6,925
2010	6,204	536	1,514	8,254
2015	6,754	568	1,595	8,917
2020	6.936	579	1.630	9,145
2025	7,200	602	1.700	9,503
2030	7.009	584	1.647	9,239
2035	6.767	556	1,560	8,884
2040	6.762	549	1,534	8,845
2045	6.807	552	1,538	8,897
2050	6,629	541	1,513	8,684
2055	6,276	515	1,442	8,233
2060	5,982	490	1,373	7,845

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

## AVERAGE WAGES AND INFLATION

Future increases in the Consumer Price Index and in average wages will directly affect the OASDI program. In addition to the direct effect of higher wages on taxable payroll and on benefits subsequently based on that higher payroll, the automatic-adjustment provisions in the law require that the benefit formula, the taxable earnings base, the exempt amounts under the retirement earnings test, and the amount of earnings required for a quarter of coverage be adjusted to reflect increases in average wages, and that benefit payments be adjusted to reflect increases in the CPI or, under certain circumstances, to reflect increases in average wages.

The assumed ultimate real-wage differentials were based primarily on projections of historical trends. Both the analysis of these trends and the projections took into account productivity gains and the factors linking productivity gains with the real-wage differential. Over the 30 years 1953-83, annual increases in productivity have averaged 2.1 percent, the result of average increases of 0.9, 2.7, and 2.8 percent in each of the 10year periods 1973-83, 1963-73, and 1953-63, respectively. Meanwhile, the real-wage differential has averaged 1.1 percent over the 30 years 1954-83, the result of an average decrease of 0.8 percent and average increases of 1.8 and 2.2 percent, respectively, in the aforementioned periods. The change in the linkage between annual increases in productivity and the real-wage differential has averaged 1.0 percent over the 30 years 1954-83 and 1.8 percent over the 10 years 1974-83. The change in the linkage reflects changes in such factors as the average number of hours worked per year, the extent to which employees share in the returns of production, and the proportion of employee compensation paid as wages.

The ultimate annual increases in productivity are assumed to be 2.7, 2.4, 2.1, and 1.8 percent for alternatives I, II-A, II-B, and III, respectively. The corresponding ultimate annual declines in the linkage were assumed to be 0.2, 0.4, 0.6, and 0.8 percent. The resulting ultimate real-wage differentials were 2.5, 2.0, 1.5, and 1.0 percent.

For alternative II-A, the CPI was assumed to increase ultimately at an annual rate of 3.0 percent. For alternative II-B, the CPI was assumed to increase ultimately at an annual rate of 4.0 percent, which is slightly lower than the average annual increase of 4.4 percent experienced over the 30 years 1953-83. The ultimate increases in the average annual CPI for alternatives I and III of 2.0 percent and 5.0 percent, respectively, were chosen to include a reasonable range of possible values.

The ultimate increases in average annual wages in covered employment were assumed to be 4.5, 5.0, 5.5, and 6.0 percent, for alternatives I, II-A, II-B, and III, respectively. These were obtained by adding the corresponding annual percentage increases in the CPI to the assumed real-wage differentials for each alternative.

#### **AVERAGE BENEFITS**

Future increases in the average primary insurance amount (PIA) for newly awarded benefits were projected by simulating the automatic-adjustment provisions and calculating future PIA's for workers, by sex, at various earnings levels. Separate projections by sex of worker were made for retired-worker and disabled-worker beneficiaries and auxiliaries and for young, aged, and disabled survivor beneficiaries.

Future increases in the average PIA for beneficiaries in currentpayment status were projected by sex of worker and type of benefit on the basis of the distribution of current beneficiaries by year of award, their average awarded PIA, and the increase in their average PIA since the year of award.

For several types of benefits, the percentage of PIA that is payable depends upon the age at which entitlement to benefits began. Included are retired-worker, aged-spouse, and aged-widow(er) benefits. Projected changes in the average benefit level as a percentage of PIA for each of these beneficiary types were based on projections of the age distribution at initial entitlement.

#### BENEFIT PAYMENTS

For each category of beneficiary, monthly benefit payments were calculated as the product of the number of beneficiaries and the corresponding average benefit. These amounts were then adjusted to include retroactive payments to newly awarded beneficiaries.

Lump-sum death payments were calculated as the product of (1) the number of such payments, which was projected on the basis of the assumed mortality rates, the projected fully insured population, and the estimated percentage of the fully insured population that would qualify for benefits, and (2) the amount of the lump-sum death payment, which is \$255 in all cases.

#### ADMINISTRATIVE EXPENSES

The projection of administrative expenses through 1993 was based on assumed increases in average wages, increases in the CPI, and increases in the number of beneficiaries. For years after 1993, administrative expenses were assumed to increase at approximately the compounded rates of increase in the number of beneficiaries and in average wages in covered employment.

## RAILROAD RETIREMENT FINANCIAL INTERCHANGE

The effect of the financial interchange with the Railroad Retirement program was evaluated on the basis of trends similar to those used in estimating the cost of OASDI benefits. The resulting effect was an average annual long-range cost to the OASDI program of 0.01 percent of taxable payroll.

## BENEFITS TO UNINSURED PERSONS

The law provides for monthly benefit payments to certain uninsured persons who attained age 72 before 1968 or who have 3 quarters of coverage for each year after 1966 and before the year of attainment of age 72. These benefits are paid from the OASI Trust Fund, which is then reimbursed in full (including interest and administrative expenses) from the general fund of the Treasury for the costs associated with providing benefits to those persons with fewer than 3 quarters of coverage. Neither the benefit payments nor the reimbursements are reflected in the cost rates or the income rates. However, these amounts are reflected in tables which show trust fund operations.

## APPENDIX B.—SENSITIVITY ANALYSIS

This appendix illustrates the sensitivity of the medium-range and long-range estimates to changes in selected individual assumptions. Although the estimates based on the four alternative sets of assumptions illustrate the variations in the projected actuarial balances resulting from different combinations of assumptions, they do not show the variations resulting from changes in any single assumption. In this sensitivity analysis, alternative II-B is used as the reference point, and one assumption at a time within that alternative is varied. Similar variations in the selected assumptions within the other alternatives would result in similar variations in the actuarial balances.

Each table which follows shows the effects of changing the particular assumption under consideration on the average OASDI cost rates, total income rates, and balances. Because the total income rates consist mostly of the tax rates, which are specified in the law, the total income rates themselves vary only slightly with changes in assumptions. Consequently, they are not considered in the discussion of the tables. The change in each of the balances is approximately equal to the change in the corresponding cost rate—but in the opposite direction.

#### TOTAL FERTILITY RATE

Table B1 shows the estimated average OASDI cost rates, total income rates, and balances, on the basis of alternative II-B with various assumed ultimate total fertility rates. These assumptions are that the ultimate total fertility rates will be 1.6 children per woman (as assumed for alternative III), 2.0 (as assumed for alternatives II-A and II-B), and 2.3 (as assumed for alternative I). The rates are assumed to change gradually from their current levels and to reach their ultimate values in 2008.

TABLE B1.—ESTIMATED AVERAGE OASDI COST RATES, TOTAL INCOME RATES, AND BALANCES, BASED ON ALTERNATIVE II-BUILT VIOLES FERTILITY ASSUMPTIONS

[As a percentage of taxable payron]							
	Ultimate						
Calendar years	1.6	2.0	2.3				
Average cost rate:							
1984-2008	10.53	10.54	10.58				
2009-2033	13.62	13.02	12.72				
2034-2058	18.14	15.29	13.75				
1984-2058	14.10	12.95	12.35				
Average total income rate:							
1984-2008	12.56	12.56	12.56				
2009-2033	13.00	12.97	12.96				
2034-2058	13.30	13.16	13.08				
1984-2058	12.95	12.90	12.87				
Balance:			.2.07				
1984-2008	+ 2.02	+ 2.01	+ 1.98				
2009-2033	62	05	+.24				
2034-2058	-4.84	-2.14	67				
1984-2058	-1.15	06	+.51				

'The total fertility rate for any year is the average number of children who would be born to a woman in her lifetime if she were to experience the birth rates by age observed in, or assumed for, the selected year, and if she were to survive the entire child-bearing period. The ultimate total fertility rate is assumed to be reached in 2008.

Over the first 25 years, the average cost rate for the three fertility assumptions varies by only 0.05 percent of taxable payroll. In contrast, the average long-range cost rate varies over a wide range, decreasing from 14.10 to 12.35 percent as the assumed ultimate total fertility rates are increased from 1.6 to 2.3. Similarly, while the medium-range

actuarial balance varies by only 0.04 percent of taxable payroll, the long-range actuarial balance varies over a much wider range, from -1.15 to +0.51 percent.

During the medium-range period, changes in fertility affect the working population only slightly and result in relatively minor changes in the number of child beneficiaries. Hence, the program cost is affected only slightly. Later in the 75-year period, however, changes in fertility have a relatively greater impact on the labor force than on the beneficiary population, thereby resulting in significant changes in cost. Each increase of 0.1 in the ultimate total fertility rate increases the long-range actuarial balance by about 0.20 percent of taxable payroll.

#### MORTALITY

Table B2 shows the estimated average OASDI cost rates, total income rates, and balances, on the basis of alternative II-B with various assumptions about future reductions in mortality rates. The analysis was developed by varying the percentage decreases assumed to occur in the age-sex-adjusted death rates during 1982-2060. The decreases assumed over this period are about 22 percent (as assumed for alternative I), 39 percent (as assumed for alternative II-A and II-B), and 60 percent (as assumed for alternative III).

TABLE B2.—ESTIMATED AVERAGE OASDI COST RATES, TOTAL INCOME RATES, AND BALANCES, BASED ON ALTERNATIVE II-B WITH VARIOUS MORTALITY ASSUMPTIONS
[As a percentage of taxable payroll]

	Reduct	es,	
Calendar years	22 percent	39 percent	60 percent
Average cost rate:			
1984-2008	10.34	10.54	10.76
2009-2033	12.43	13.02	13.92
2034-2058	14.14	15.29	17.36
1984-2058	12.30	12.95	14.01
Average total income rate:		12.00	701
1984-2008	12.55	12.56	12.56
2009-2033	12.95	12.97	13.01
2034-2058	13.10	13.16	13.26
1984-2058	12.87	12.90	12.95
Balance:		, 2.00	,2.00
1984-2008	+2.20	+2.01	+1.81
2009-2033	+.52	05	91
2034-2058	-1.04	-2.14	-4.10
1984-2058	+.56	06	-1.07

<sup>&#</sup>x27;The measure of the reduction in mortality rates is the percentage decrease from 1982 to 2060 in the age-sex-adjusted death rate.

Because the decreases in death rates for the three mortality assumptions are assumed to occur gradually, the variation in program cost over the medium-range period is less pronounced than the variation over the long-range period. The medium-range cost rate increases from 10.34 (for 22-percent lower ultimate mortality rates) to 10.76 percent (for 60-percent lower ultimate rates). The long-range cost rate increases from 12.30 to 14.01 percent. The actuarial balance decreases from +2.20 to +1.81 percent over the medium-range period and from +0.56 to -1.07 percent over the long-range period.

Lower mortality rates cause both the income and outgo of the OASDI system to increase. However, the outgo will increase at a faster rate than the income over the medium- and long-range periods. Reductions in the mortality rates for people over age 65 (whose mortality rates are the

highest) extend the length of time that retirement benefits are paid. Although lower mortality rates at ages 50-64 result in an increase in taxable payroll, this is more than offset by the resulting additional benefits payable to the additional retirees at age 65. At ages 20-49, mortality rates are so low that even substantial reductions would not result in significant increases in the numbers of covered workers or beneficiaries. Lower mortality rates at ages below 20 have relatively little long-term effect on the relationship between outgo and taxable payroll. Consequently, the net effect of lower mortality rates is to cause outgo to increase at a rate greater than the rate of growth in payrolls, thereby resulting in higher cost rates. Each additional 10-percent reduction in the age-sex-adjusted mortality rate assumed to occur in 1982-2060, relative to the 39-percent reduction assumed for alternative II-B, decreases the long-range actuarial balance by about 0.45 percent of taxable payroll.

#### DISABILITY INCIDENCE RATES

Table B3 shows the estimated average OASDI cost rates, total income rates, and balances, on the basis of alternative II-B with various assumptions about future disability incidence rates. These assumptions are that the ultimate annual age-sex-adjusted disability incidence rate will be about the same as the average of the corresponding rates experienced during 1979-83 (as assumed for alternative I), about 25 percent higher than the 1979-83 experience (as assumed for alternatives II-A and II-B), and about 50 percent higher than the 1979-83 experience (as assumed for alternative III). The rates are assumed to change gradually from their current levels and to reach their ultimate values in the year 2000.

TABLE B3.—ESTIMATED AVERAGE OASDI COST RATES, TOTAL INCOME RATES, AND BALANCES, BASED ON ALTERNATIVE II-B WITH VARIOUS DISABILITY INCIDENCE ASSUMPTIONS
[As a percentage of taxable payroll]

	Increase in disability incidence rates:				
Calendar years	None	25 percent	50 percent		
Average cost rate:					
1984-2008	10.42	10.54	10.64		
2009-2033	12.72	13.02	13.31		
2034-2058	14.98	15.29	15.60		
1984-2058	12.71	12.95	13.18		
Average total income rate:		12.00	10.10		
1984-2008	12.55	12.56	12.58		
2009-2033	12.96	12.97	12.99		
2034-2058	13.14	13.18	13.17		
1984-2058	12.88	12.90	12.91		
Balance:	12.00	12.00	12.01		
1984-2008	+2.14	+2.01	+ 1.92		
2009-2033	+ .24	05	32		
2034-2058	1.84	-2.14	-2.42		
1984-2058	+ 18	06	28		

<sup>1</sup>The increase in disability incidence rates is based on the ratio of the ultimate annual age-sex-adjusted incidence rate (reached in the year 2000) to the average of the corresponding annual rates experienced during 1979-83.

Over the medium-range period, the average cost rate increases with increasing disability incidence rates from 10.42 (for no increase) to 10.64 percent (for 50-percent increase). Over the long-range period, it increases from 12.71 to 13.18 percent. The actuarial balance decreases from +2.14 to +1.92 percent over the medium-range period and from +0.18 to -0.28 percent over the long-range period. Each 10-percent increase in the assumed ultimate disability incidence rates decreases the

# long-range actuarial balance by about 0.10 percent of taxable payroll. DISABILITY TERMINATION RATES

Table B4 shows the estimated average OASDI cost rates, total income rates, and balances, on the basis of alternative II-B with various assumptions about future disability termination rates. The death-termination assumptions are that the ultimate rates by age and sex will be about 20 percent lower than the average rates by age and sex experienced during 1977-80 (as assumed for alternative III), about the same as the 1977-80 experience (as assumed for alternatives II-A and II-B), and about 20 percent higher than the 1977-80 experience (as assumed for alternative I).

The recovery assumptions are that the ultimate rates by age and sex will be about 4 percent lower than the average rates by age and sex experienced during 1977-80 (as assumed for alternative III), about 20 percent higher than the 1977-80 experience (as assumed for alternatives II-A and II-B), and about 44 percent higher than the 1977-80 experience (as assumed for alternative I). Recovery rates under the alternative II-B assumptions are 20 percent higher than the 1977-80 base-period rates in order to reflect the effects of the 1980 amendments. The recovery rates assumed for alternatives I and III are 20 percent above and 20 percent below the alternative II-B rates, respectively.

TABLE B4.—ESTIMATED AVERAGE OASDI COST RATES, TOTAL INCOME RATES, AND BALANCES, BASED ON ALTERNATIVE II-B WITH VARIOUS DISABILITY TERMINATION ASSUMPTIONS

[As a percentage of taxable payroli]

Ultimate disability termination rates<sup>1</sup> 20 percent 20 percent less than Same as more than Calendar years standard standard standard Average cost rate: 1984-2008..... 10.63 10.47 2009-2033 13.02 12.88 15.15 13.18 2034-2058 ..... 15.46 1984-2058. 13.09 12.95 12.83 Average total income rate: 1984-2008..... 12.56 12.56 12 55 12.98 12.97 12.97 2034-2058 ..... 13.15 1984-2058 ..... 12.90 12.90 12.89 Balance: 1984-2008 ..... +1.93 +2.01+2.08

<sup>1</sup>The standard disability termination rates are the death-termination and recovery rates assumed for alternative II-B.

- 05

-.06

-2 29

-.19

2009-2033

.....

2034-2058

Over the medium-range period, the average cost rate decreases with increasing disability termination rates from 10.63 (for rates which are 20 percent less than standard) to 10.47 percent (for rates which are 20 percent more than standard). Over the long-range period, it decreases from 13.09 to 12.83 percent. The actuarial balance increases from +1.93 to +2.08 percent over the medium-range period and from -0.19 percent to +0.06 percent over the long-range period. Each 10-percent increase in the disability termination rates increases the long-range actuarial balance by about 0.06 percent of taxable payroll.

#### CONSUMER PRICE INDEX

Table B5 shows the estimated average OASDI cost rates, total income rates, and balances, on the basis of alternative II-B with various assumptions about the rate of increase for the CPI. These assumptions are that the ultimate annual increase in the CPI will be 2.0 percent (as assumed for alternative I), 3.0 percent (as assumed for alternative II-A), 4.0 percent (as assumed for alternative III-B), 5.0 percent (as assumed for alternative III), and 6.0 percent. In each case, the ultimate real-wage differential is assumed to be 1.5 percentage points (as assumed for alternative II-B), yielding ultimate percentage increases in average annual wages in covered employment of 3.5, 4.5, 5.5, 6.5, and 7.5 percent, respectively.

TABLE B5.—ESTIMATED AVERAGE OASDI COST RATES, TOTAL INCOME RATES, AND BALANCES, BASED ON ALTERNATIVE II-B WITH VARIOUS CPI-INCREASE ASSUMPTIONS

[As a percentage of tayable payoril]

	[As a percentage of taxable payroll]								
	Ultimate percentage increases in wages-CPI <sup>1</sup>								
Calendar years	3.5-2.0	4.5-3.0	5.5-4.0	6.5-5.0	7.5-6.0				
Average cost rate:									
1984-2008	10.76	10.65	10.54	10.44	10.34				
2009-2033	13.46	13.24	13.02	12.81	12.61				
2034-2058	15.82	15.55	15.29	15.04	14.80				
1984-2058	13.35	13.15	12.95	12.77	12.58				
Average total income rate:					12.00				
1984-2008	12.56	12.56	12.56	12.55	12.55				
2009-2033	12.99	12.98	12.97	12.96	12.96				
2034-2058	13.18	13.17	13.16	13.14	13.13				
1984-2058	12.91	12.90	12.90	12.89	12.88				
Balance:									
1984-2008	+1.80	+ 1.91	+2.01	+2.11	+ 2.21				
2009-2033	47	25	05	+.15	+.35				
2034-2058	-2.64	-2.38	-2.14	-1.90	-1.67				
1984-2058	44	24	06	+.12	+.30				

'The first value in each pair is the assumed ultimate annual percentage increase in average wages in covered employment. The second value is the assumed ultimate annual percentage increase in the CPI.

Over both the medium-range and long-range periods, the average cost rate decreases as the assumed rate of change in the CPI increases. Over the medium range, the average cost rate decreases from 10.76 (for CPI increases of 2.0 percent) to 10.34 percent (for CPI increases of 6.0 percent). Over the long range, it decreases from 13.35 to 12.58 percent. The actuarial balance increases from +1.80 to +2.21 percent over the medium-range period and from -0.44 to +0.30 percent over the long-range period.

The patterns described above result primarily from the time lag between the effects of the CPI changes on taxable payroll and on benefit payments. When assuming a higher rate of increase in the CPI (in conjunction with a constant real-wage differential), the effect on taxable payroll of the implied higher rate of increase in average wages is experienced immediately, while the effect on benefits of the higher rate of increase in the CPI is experienced with a lag of about one year. In addition, the effect on benefits of the higher rate of increase in average wages is experienced no earlier than 2 years later. Thus, the higher taxable payrolls have a stronger effect than the higher benefits, thereby resulting in lower cost rates. The effect of each 1.0-percentage-point increase in the rate of change assumed for the CPI is an increase in the long-range actuarial balance of about 0.18 percent of taxable payroll.

#### REAL-WAGE DIFFERENTIAL

Table B6 shows the estimated average OASDI cost rates, total income rates, and balances, on the basis of alternative II-B with various real-wage assumptions. These assumptions are that the ultimate real-wage differential will be 1.0 percentage point (as assumed for alternative III), 1.5 percentage points (as assumed for alternative II-A), and 2.5 percentage points (as assumed for alternative I). In each case, the ultimate annual increase in the CPI is assumed to be 4.0 percent (as assumed for alternative II-B), yielding ultimate percentage increases in average annual wages in covered employment of 5.0, 5.5, 6.0, and 6.5 percent, respectively.

TABLE B6.—ESTIMATED AVERAGE OASDI COST RATES, TOTAL INCOME RATES, AND BAL-ANCES, BASED ON ALTERNATIVE II-B WITH VARIOUS REAL-WAGE ASSUMPTIONS [As a percentage of taxable payroll]

( to a point	remage or ababie	payton			
	Ultimate percentage increase in wages-CPI <sup>1</sup>				
Calendar years	5.0-4.0	5.5-4.0	6.0-4.0	6.5-4.0	
Average cost rate:		•			
1984-2008	10.91	10.54	10.20	9.88	
2009-2033	13.87	13.02	12.24	11.53	
2034-2058	16.40	15.29	14.28	13.37	
1984-2058	13.72	12.95	12.24	11.59	
Average total income rate:					
1984-2008	12.57	12.56	12.54	12.53	
2009-2033	13.01	12.97	12.94	12.91	
2034-2058	13.21	13.16	13.11	13.06	
1984-2058	12.93	12.90	12.86	12.83	
Balance:					
1984-2008	+1.66	+ 2.01	+2.34	+ 2.66	
2009-2033	86	05	+.70	+ 1.38	
2034-2058	-3.18	-2.14	-1.17	31	
1984-2058	79	06	+ .62	+1.24	

'The first value in each pair is the assumed ultimate annual percentage increase in average wages in covered employment. The second value is the assumed ultimate annual percentage increase in the CPI. The difference between the two values is the real-wage differential.

Over the medium-range period, the average cost rate decreases from 10.91 (for a real-wage differential of 1.0 percent) to 9.88 percent (for a differential of 2.5 percent). Over the long-range period, it decreases from 13.72 to 11.59 percent. The actuarial balance increases from +1.66 to +2.66 percent over the medium-range period and from -0.79 to +1.24 percent over the long-range period.

The average cost rate decreases with increasing real-wage differentials, because the higher real-wage levels increase the taxable payroll, while benefit increases are not affected. Although the initial benefit levels are higher because of the higher earnings, these increases are more than offset by the increases in the taxable payroll of future workers. Each 0.5-percentage-point increase in the assumed real-wage differential increases the long-range actuarial balance by about 0.70 percent of taxable payroll.

#### APPENDIX C

Federal Register / Vol. 48, No. 114 / Monday, June 13, 1983

## Office of the Secretary

Social Security Benefit Increases; Cost-of-Living Increase in Benefits Under Titles II and XVI of the Social Security Act and Income Limitations for Beneficiaries Under the Supplemental Security Income Program

I hereby determine and announce a cost-of-living increase of 3.5 percent in benefits under titles II and XVI of the Social Security Act.

Under title II, old-age, survivors, and disability insurance benefits will increase by 3.5 percent beginning with the December 1983 benefits which are payable on January 3, 1984. This increase is based on the authority contained in section 215(i) of the Social Security Act (42 U.S.C. 415(i)), as amended by section 201 of Pub. L. 95–216 enacted December 20, 1977, and as further amended by sections 111 and 112 of Pub. L. 98–21 enacted April 20, 1983.

Under title XVI, supplemental security income payment levels will increase by 3.5 percent effective for payments made for the month of January 1984 but paid on December 30, 1983. This is based on the authority contained in section 1617 of the Social Security Act (42 U.S.C. 1382f), as amended by section 182 of Pub. L. 97–248 enacted September 3, 1982, and as further amended by section 401 of Pub. L. 98–21.

#### Title II Benefits

Title II benefits are payable under the Federal old-age, survivors, and disability insurance program. The kinds of benefits payable to individuals entitled under this program are old-age, disability, wife's, husband's, child's, widow's, widower's, mother's, father's, and parent's insurance benefits.

In accordance with section 215(i)(4) of the Social Security Act (the Act), the primary insurance amounts and the maximum family benefits shown in columns IV and V of the revised benefit table (table 1) set forth below were obtained by increasing by 3.5 percent the corresponding amounts established by: (1) The last cost-of-living increase: and (2) the extension of the benefit table made under section 215(i)(4) and published on November 10, 1982 at 47 FR 51006. The table applies only to those persons who attained age 62, became disabled or died before January 1979 and is deemed to appear in section 215(a) of the Act. Note that this table does not apply to those individuals who become eligible (i.e., reach age 62, or become disabled) or die after 1978; their benefits will generally be determined by a benefit formula provided by the Social Security Amendments of 1977 (Pub. L. 95-216). For persons who first become eligible for benefits or who die before age 62 in the period 1979-1983, the 3.5 percent increase will apply beginning with benefits for December 1983 and will be included in checks received in January 1984; but the 3.5 percent increase will not apply for persons who first become eligible for benefits or die after 1983.

Section 215(i)(2)(D) of the Act also requires that, when the Secretary determines a cost-of-living increase in Social Security benefits, the Secretary shall publish in the Federal Register a revision of the range of the primary insurance amounts and corresponding maximum family benefits based on the dollar amount and other provisions described in section 215(a)(1)(C)(i). These benefits are referred to as "special minimum benefits" and are payable to certain individuals with long periods of relatively low earnings. In accordance with section 215(a)(1)(C)(i), the attached table 2 shows the revised range of primary insurance amounts and corresponding maximum family benefit amounts after the 3.5 percent benefit increase.

Section 227 of the Act as amended by section 304 Pub. L. 98-21 provides flatrate benefits to a worker who became age 72 before 1969 and was not insured under the usual requirements, and to his or her spouse or surviving spouse.

Section 228 of the Act provides similar benefits at age 72 for certain uninsured persons. The current monthly benefit amount of \$125.60 for an individual under sections 227 and 228 of the Act is increased by 3.5 percent to obtain the new amount of \$129.90. The present montly benefit amount of \$63 for a spouse under section 227 is increased by 3.5 percent to \$65.20.

### Title XVI Benefits

Section 1617 of the Act provides that whenever title II benefits are increased 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 Act and in section 211(a)(1)(A) of Pub. L. 93–66 shall be increased. The new amounts are effective for months after the month in which the title II increase is effective. The percentage increase effective January 1984 is the same as the title II benefit increase and the annual payment amount is rounded, when not a multiple of \$12, to the next lower multiple of \$12.

In accordance with section 1617 of the Act, as amended by section 401 of Pub. L. 98-21, Federal supplemental security income (SSI) benefit rates for the aged. blind, and disabled are increased effective with July 1983 by \$20 a month for an eligible individual, by \$30 a month for an eligible individual with an eligible spouse, and by \$10 a month for an essential person. The Federal SSI guarantees are further increased effective January 1984 by 3.5 percent. Therefore, the new yearly Federal SSI rates of \$3,651.60 for an eligible individual, \$5,476.80 for an eligible individual with an eligible spouse and \$1,830.00 for an essential person, which are effective July 1983, are increased, effective with January 1984, to \$3,768.00 \$5,664.00, and \$1,884.00 respectively after rounding. The monthly payment amount is determined by dividing the yearly guarantee by 12, and subtracting monthly countable income. In the case of an eligible individual with an eligible spouse, the amount payable is further divided equally between the two spouses.

#### Automatic Benefit Increase Determination

Section 111 of Pub. L. 98–21 provides that the first calendar quarter of 1983 shall be a cost-of-living computation quarter for all the purposes of the Social Security Act, as amended by Pub. L. 98-21. The Secretary is therefore required to increase benefits, effective with December 1983, for individuals entitled under section 227 or 228 of the Act, to increase primary insurance amounts of all other individuals entitled under title II of the Act, and to increase maximum benefits payable to a family. The benefit increase is the percentage increase in the Consumer Price Index for Urban Wage Earners and Clercial Workers for the first quarter of 1983 over the index for the first quarter of 1982, which is the most recent cost-of-living computation quarter. Section 1617 of the Act requires that SSI benefits be increased by the same percentage increase as title II benefits, whenever title II benefits are increased under section 215(i).

Section 215(i)(1) of the Act provides that the Consumer Price Index for a cost-of-living computation quarter shall be the arithmetical mean of this index for the 3 months in that quarter. The Department of Labor's revised Consumer Price Index for Urban Wage Earners and Clerical Workers for each month in the quarter ending March 31, 1982, was: for January 1982, 282.1; for February 1982, 282.9; and for March 1982, 282.5. The arithmetical mean for this calendar quarter is 282.5. The corresponding Consumer Price Index for each month in the quarter ending March 31, 1983, was for January 1983, 292.1; for February 1983, 292.3; and for March 1983, 293.0. The arithmetical mean for this calendar quarter is 292.5. Thus, since the Consumer Price Index for the calendar quarter ending March 31, 1983 exceeds that for the calendar quarter ending March 31, 1982 by 3.5 percent, a cost-of-living benefit increase of 3.5 percent is effective for benefits under title II of the Act beginning December 1983.

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

Dated: June 6, 1983.

Margaret M. Heckler,

Secretary of Health and Human Services.

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY
BENEFITS BEGINNING DECEMBER 1983

I (primary insurance benefit under 1939 act, as modified)—if an individual's primary insurance benefit (as determined under subsec. (d))		If (primary insurance amount effective for June	or his average (as determined	III (average monthly wage)— or his average monthly wage (as determined under subsec. (b)) is— lower insurar amount re-		V (maximum fai benefits)and maximum amo of benefits payable (as
At least—		1982)—or his primary insurance amount (as determined under subsec. (c)) is—	At locat—	But not more then—	amount referred to in the preceding paragraphs of this subsection shall be	provided in se 203(a)) on th basis of his way and self- employment income shall be
	16.20	182.90		76	189.30	284
16.21	16.84	185.80	77	78	192.30	288
16.85	17.80	190.20	79	80	196.80 200.20	295 300
17.61	18.40	193.50	81	81 83	200.20	305
18.41	19.24	196.90 201.10	82 84	85 85	203.70	312
19.25	20.00		86	87	206.10	318
20.01 20.65	20.64 21.28	205.00 208.10	88	89	215.30	323
21.29	21.28	212.30	90	90	219.70	328
21.89	22.28	215.90	91	92	223.40	335
22.29	22.68	219.40	93	94	227.00	340
22.69	23.08	223.00	95	96	230.60	346
23.09	23 44	227.00	97	97	234.90	354
23.45	23.76	230.80	96	99	238.80	358
23.77	24.20	235.30	100	101	243.50	365
24.21	24.80	238.50	102	102	246.60	370
24.61	25.00	242.50	103	104	250.90	37€
25.01	25.48	247.00	105	108	255.60	383
25.49	25.92	251.10	107	107	259.80	389
25.93	26.40	254.90	108	109	263.60	395
26.41	26.94	258.90	110	113	267.90	40
26.95	27.46	<b>262</b> .50	114	118	271.80	40
27.47	28.00	<b>266</b> .50	119	122	275.80	413
26.01	28.68	270.70	123	127	280.10	420
28.69	29.25	274.70	128	132	284.30	43
29.26	29.68	276.40	133	136	288.10	434
29.69	30.36	262.20	137 142	141 148	292.00 296.30	444
30.37	30.92	286.30	147	150	300.70	45
30.93 31.37	31.36 32.00	290.60 293.90	151	155	304.10	45
32.01	32.60	298.20	156	160	308.60	46
33.21	33.88	305.90	165	169	316.60	47
32.61	33.20	302.20	161	164	312.70	48
33.69	34.50	310,10	170	174	320.90	48
34,51	35.00	313.90	175	178	324.80	48
35.01	35.60	316.10	179	163	329.20	493
35.81	36.40	321.80	184	188	333.00	499
36.41	37.08	326.00	189	193	337.40	500
37.09	37.60	330.00	194	197	341.50	51:
37.61	38.20	333.90	198	202	345.50	510
38.21	39.12	336.30	203	207	350.10	525 53
39.13	39.68	342.10	208	211 216	354.00 357.20	53
39.69	40.33	345.20	212 217	216	357.20 361.80	54
40.34 41.13	41.12 41.76	349.60 353.60	217	225	365.90	541
41.13	41.76	357.90 357.90	228	230	370.40	55
42.45	43.20	361.60	231	235	374.40	56
43.21	43.78	366.20	236	239	379.00	560
43.77	44.44	369.60	240	244	382.50	570
44.45	44.88	373.20	245	249	386.20	580
44.89	45.60	377.90	250	253	391.10	597

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

under 19 modified)—if primary insura Jetermined un	aurance benefit 1939 act, as l'an individual's ance benefit (as inder subsec. (d))	II (primary insurance amount effective for June 1982)—or his	(as determined	onthly wage)— monthly wage under subsec. is—	IV (primary insurance amount)—the	V (maximum family benefits)—and the maximum amount of benefits payable (as
At least-		primary insurance amount (as determined under subsec. (c)) is—	At least—	But not more than—	amount referred to in the preceding peragraphs of this subsection shall be—	provided in sec 203(a)) on the basis of his wag and self- employment income shall be
		381.50	254	258	394.80	609.
	İ	384.90	259	<b>26</b> 3	398.30	621.
		389.70 393.20	264 268	267 272	403.30	630.
		397.50	273	277	406.90 411.40	642. 654.
	·	401.30	278	261	415.30	663
		405.30 409.60	282	266	419.40	675.
	1	412.90	287 292	291 295	423.90 427.30	687. 696.
		417.40	296	300	432.00	708.
		421.30	301	305	436.00	720.
		424.90	306	309	439.70	729.
		429.20 432.70	310 315	314 319	444.20 447.80	741. 753.
	j l	436.70	320	323	451.90	762.
	1	440.80	324	328	456.20	774.
		444.50	329	<b>3</b> 33	480.00	786
		449.20 452.30	334 338	337 342	464.90	795.
		456.60	343	347	468.10 472.50	807. 819.
		460.90	348	351	477.00	828
		646.30	352	356	480.50	840
	1	468.90 472.50	357	361	485.30	852
		472.50 476.20	362 366	365 370	489.00 492.80	861 873
		480.50	371	375	497.30	885
		484.50	376	379	501.40	894.
		468.60	380	384	505.70	906.
	1	492.20 496.00	385 390	369 393	509.40 513.30	918
		500.40	394	398	517.90	927 939
		504.20	399	403	521.80	951
		508.50	404	407	526.20	960
	1	511.90 515.50	408 413	412 417	529.80	972
	1 1	519.10	418	421	533.50 537.20	984. 993
		523.30	422	426	541.60	1,005
		526.90	427	431	545.30	1,017
		530.10 534.50	432 437	436 440	548.60	1,029
		537.80	441	445	553.20 556.80	1,033 1,040
		541.50	446	450	560.40	1,045
	1	545.40	451	454	564.40	1,050.
		549.10 552.60	455 460	459 484	568.30	1,056.
		556.10	465	468	571.90 575.50	1,061. 1,066.
		560.50	489	473	<b>58</b> 0.10	1,072
	1	563.80	474	478	583.30	1,078
	1	567.20 571.20	479 483	482 487	587.00 591.10	1,083
	1	575.00	488	492	591.10 595.10	1,0 <b>6</b> 9. 1,095.
		578.40	493	496	598.60	1,100.
		582.80 585.90	497	501	602.90	1,105.
		589.50	502 507	506 510	606.40 610.10	1,111.
		593.20	511	515	813.90	1,116. 1,122.
	<u> </u>	597.30	516	520	818.20	1,128.
		600.70	521	524	621.70	1,132.
	[ ]	604.20 608.06	525 530	529 534	625.30	1,138.
	1	611.70	535 535	538	629.90 633.10	1,144. 1,149.

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

under 19 modified)—if primary ineurs stermined un	urance benefit 139 act, as an individual's ince benefit (as ider subsec. (d))	If (primery insurance amount effective for June 1982)—or his	III (average m or his average (as determined (b))	monthly wage under subsec	IV (primery insurance amount)—the	V (maximum family benefits)—and the maximum amount of benefits payable (as
At least—	But not more than—	primary insurance amount (as determined under subsec. (c)) is—	At least—	But not more then—	amount referred to in the preceding peragraphs of this subsection shall be	provided in sec. 203(a)) on the besis of his wage and self-employment income shall be-
		615.60	539	534	637.10	1,155.4
		619.30	544	548	640.90	1,161.
		623.20	549	553	645.00	1,167.
	ļ	626.60 629.60	554 557	556 560	648.50 651.60	1,170.0
	ł	633.10	561	563	655.20	1,175.4 1,179.0
		636.30	564	567	658.50	1,183.
		640.10	568	570	662.50	1,187.
	1	643.10	571	574	665.80	1,191.
	Ì	646.30	575	577	668.90	1,195.
		649.30 652.70	578 582	581 584	672.00	1,200.
		655.50	585	588	675.50 678.40	1,203. 1,208.
	ĺ	659 50	589	591	682.50	1,211.
		662 70	592	595	685.80	1,216.
		665.90	596	596	689.20	1,219.
		<b>669.2</b> 0	599	802	692.60	1,225.
		672.40	603	805	695.90	1,226.
		675.60 679.10	606 610	609 612	699.20 702.60	1,232.
		682.30	613	616	702.80	1,236. 1,241.
	1	685.50	617	620	709.40	1,246.
	1	688 90	621	623	713.00	1,249.
	1	691 90	624	627	716.10	1,254.
		695 40	626	630	719.70	1,258.
	1	698 60 702 00	631 635	634 637	723.00 726.50	1,265.
	[	705.40	638	641	720.00	1,271. 1,277.
		708.50	642	644	733,20	1,262.
		711.80	645	646	736.70	1,288.
		714 90	649	652	739.90	1,294.
		717.10	653	656	742.10	1,298.
		719.10	657	660	744.20	1,301.
	l	721.80 724.10	661 666	<b>66</b> 5 870	748.60	1,306.
	i i	726.60	671	675	749.40 752.20	1,311. 1,315.
	l	729.50	678	680	755.00	1,320
		731.90	681	685	757.50	1,325
		734.80	686	690	760.50	1,329.
		737.10	691	695	762.80	1,334.
		739.50	696	700	765.30	1,339.
		742.30	701	705	768.20	1,344.
		744.90 747.70	706 711	710 715	770.90	1,348.
		750.10	716	720	773.80 776.30	1,353. 1,358.
	İ	752.70	721	725	779.00	1,362
	l i	755.40	726	730	781.80	1,367.
		757.90	731	735	784.40	1,372.
		780.80	736	740	787.20	1,376.
		763.00	741	745	789.70	1,381.
		765.30 767.90	748 751	750	792.00	1,386.
		770.00	751 756	755 780	794.70 797.00	1,390. 1,394.
		770.00	761	765	799.30	1,394. 1,396.
		774.10	766	770	801.10	1,402
		776.50	771	775	803.60	1,405.
		778.60	776	780	805.60	1,409.
		760.90	761	785	808.20	1,413.
		782.80	786	790	810,10	1,417.

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

under 11 modified)—if	surance benefit 939 act, as I an individual's ance benefit (as	II (primary insurance amount effective for June	III (average more his average (as determined (b))	monthly wage under subsec.	IV (primary insurance	V (maximum family benefits)—and the maximum amount of benefits
determined ur	But not more than—	1962)—or his primary insurance amount (as determined under subsec. (c)) is—	At least—	But not more than—	amount)—the amount referred to in the preceding paragraphs of this subsection shall be—	payable (as provided in sec 203(a)) on the basis of his wage and self- employment income shall be-
		787.20	798	800	814.70	1,425.
	Į	789.40 791.60	801 806	805 810	817.00	1,429.
	į	793.70	811	815	819.30 821.40	1,433. 1,437.
		795.90	816	820	823.70	1,441.
		798.00	821	825	825.90	1,445.
		800.20 802.30	826 831	830 835	626.20	1,448.
		804.40	836	840	830.30 832.50	1,453. 1,456.
		806.60	841	845	834.80	1,460.
		808.60	846	850	836.90	1,464.
		811.00	851 856	855	639.30	1,468.
		813.10 815.20	856	960 865	841.50 843.70	1,472. 1,476.
		B17.50	866	870	846.10	1,480.
		819.60	871	875	848.20	1,484.
		821.70	876	880	850.40	1,487.
		823.90 825.90	881 886	885 890	852.70 854.80	1,492. 1,495.
		828.10	891	895	857.00	1,500
		830.30	896	900	859.30	1,503
		832.60	901	905	861.70	1,507
		834.70	906	910	863.90	1,511.
		836.90 839.30	911 916	915 920	866.10 868.60	1,515 1,519
	i	841.10	921	925	870.50	1,523
	i	843.10	926	930	872.60	1,527
		845.30	931	935	874.80	1,531
		847.80 849.70	936 941	940 945	877.20 879.40	1,534
	!	851.60	946	950	881.60	1,538 1,542
		854.20	951	955	884.00	1,546
		856.60	956	960	886.50	1,550
		858.70 860.30	961 966	965 970	868.70 890.40	1,554
		862.60	971	975	892.70	1,558 1,562
		864.70	976	960	894.90	1,566
		867.20	961	985	897.50	1,570
		869.10	966	990	899.50	1,574
		871.30 873.60	991	1,000	901.70 904.10	1,578 1,581
		875.60	1,001	1,005	906.20	1,585
		877.10	1,006	1,010	907.70	1,588
		879.30	1,011	1,015	910.00	1,592
		881.40 883.20	1,016 1,021	1,020 1,025	912.20 914.10	1,596
		864.80	1,026	1,030	915.70	1,599 1,602
		887.10	1,031	1,035	918.10	1,606
		888.90	1,036	1,040	920.00	1,609
		890.90 893.10	1,041 1,046	1,045 1,050	922.00	1,613
		894.60	1,046	1,055	924.30 925.90	1,616 1,620
		896.60	1.056	1.060	927.90	1,624
		898.80	1,061	1,065	930.20	1,627
		900.70 902.60	1,086	1,070	932.20	1,631
	j l	904.50	1,071 1,076	1,075 1,080	934.10 936.10	1,634 1,638
		906.60	1,061	1,085	938.30	1,841
		908.30	1,086	1,090	940.00	1,845
		910.40	1,091	1,095	942.20	1,848
		912.50 914.10	1,096	1,100	944.40	1,652
		914.10 916.20	1,101 1,106	1,105 1,110	946.00 946.20	1,655 1,659
	1	918.20	1,111	1,115	950.30	1,862
	1	920.00	1,116	1,120	952.20	1,866

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

under 11 modified)—if primary insuri	surance benefit 939 act, as I an individual's ance benefit (as	If (primary insurance amount effective for June	(as determined	onthly wage)— monthly wage I under subsectis—	IV (primary insurance amount)—the	V (maximum fam benefits)—and the maximum amount of benefits
	But not more than—	1982)—or his primary insurance amount (as determined under subsec. (c)) is—	At least—	But not more than—	amount referred to in the preceding paragraphs of this subsection shall be—	payable (as provided in sec. 203(a)) on the basis of his wager and self-employment income shall be-
		922.10	1,121	1,125	954.30	1,669.0
		923.90	1,126	1,130	956.20	1,673.
		925.80	1,131	1,135	956.20	1,676.
		927.90 930.00	1,136 1,141	1,140 1,145	960.30 962.50	1,680.4 1,683.1
		931.90	1,146	1,150	964.50	1,687.
		933.50	1,151	1,155	966.10	1,690.
		935.70	1,156	1,160	968.40	1,694.
		937.70	1,161	1,165	970.50	1,697.
		939.60	1,166	1,170	972.40 974.50	1,701. 1,705.
		941.60 943.40	1,171 1,176	1,175 1,180	976.40	1,708
		945.10	1,181	1,185	978.10	1,711.
		947.00	1,186	1,190	980.10	1,714.
	1	948.60	1,191	1,195	981.80	1,718.
		950.50	1,196	1,200	983.70 985.70	1,721. 1,724.
		952.40 954.20	1,201 1,206	1,205 1,210	987.50	1,724
		955.90	1,211	1,215	989.30	1,731
	1	957.70	1,216	1,220	991.20	1,734
		959.60	1,221	1,225	993.10	1,737
		961.50	1,226	1,230	995.10	1,741.
		963.10	1,231	1,235 1,240	996.80 998.50	1,744 1,747
		964.80 966.80	1,236 1,241	1,245	1,000.60	1,750
	1	968.60	1,246	1,250	1,002.50	1,754
		970.30	1,251	1,255	1,004.20	1,757
	Ì	972.10	1,256	1,260	1,006.10	1,760
	1	974.10	1,261	1,265	1,008.10	1,763
		975.80 977.40	1,266 1,271	1,270 1,275	1,009.90 1,011.60	1,767 1,770
		979.30	1,276	1,280	1,013.50	1,773
	1	980.80	1,281	1,285	1,015.10	1,776
		982.70	1,286	1,290	1,017.00	1,779
		984.50	1,291	1,295	1,018.90	1,782 1,785
		986.00 987.70	1,296 1,301	1,300 1,305	1,020.50	1,788
		989.30	1,306	1,310	1,023.90	1,791
	ŀ	991.10	1,311	1,315	1,025.70	1,794
		993.00	1,316	1,320	1,027.70	1,798
	1	994.50 996.30	1,321 1,326	1,325 1,330	1,029.30 1,031.10	1,800 1,804
		997.80	1,320	1,335	1,031.70	1,807
	ı	999.60	1,336	1,340	1,034.50	1,810
	}	1,001.30	1,341	1,345	1,036.30	1,813
		1,002.90	1,346	1,350	1,038.00	1,816
		1,004.70	1,351	1,355	1,039.80	1,819
		1,006.30 1,008.20	1,356 1,361	1,360 1,365	1,041.50 1,043.40	1,822 1,825
		1,009.60	1,366	1,370	1,044.90	1,628
		1,011.40	1,371	1,375	1,046.70	1,831
		1,013.20	1,376	1,380	1,048.60	1,834
	1	1,014.60	1,381	1,385	1,050.10	1,837
	1	1,016.30 1,017.80	1,366 1,391	1,390	1,051.60 1,053.40	1,840 1,843
		1,017.80	1,396	1,400	1,054.90	1,846
		1,021.00	1,401	1,405	1,056.70	1,849
	İ	1,022.50	1,406	1,410	1,058.20	1,852
		1,024.10	1,411	1,415	1,059.90	1,854
		1,025.70 1,027.30	1,416 1,421	1,420 1,425	1,081.50 1,063.20	1,857 1,860
		1,027.30	1,426	1,425	1,063.20	1,863
		1,030.70	1,431	1,435	1,066.70	1,866
		1,032.30	1,436	1,440	1,068.40	1,869
		1,033.80	1,441	1,445	1,069.90	1,872
	1	1,035.50	1,446	1,450	1,071.70	1,875

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

under 19	urance benefit 39 act, as	II (primary	III (average me or his average	monthly wage	IV (primary	V (maximum family benefits)—and the maximum amount of benefits
	an individual's ince benefit (as	insurance amount	(as determined (b))	under subsec.	insurance	
<b>Jetermined</b> un	der subsec. (d))	effective for June 1982)—or his primary insurance	82)—or his ary insurance		amount)—the amount referred to in the preceding paragraphs of this	psyable (as provided in sec. 203(a)) on the
At least—	But not more than—	amount (as determined under subsec. (c)) is—	At least-	But not more than	subsection shall be—	basis of his wag and self- employment income shall be
		1,037.00	1,451	1,455	1,073.20	1,878
	ì	1,038.50	1,456	1,460	1,074.60	1,681
	1	1,040.20	1,461	1,465	1,076.60	1,883
		1.041.70 1,043.30	1,466 1,471	1,470 1,475	1,078.10 1,079.80	1,886 1,889
	1	1,044.80	1,476	1,480	1,081.30	1,892
	1	1,046.50	1,481	1,485	1,083.10	1,895
	1	1,047.90	1,486	1,490	1,084.50	1,897
		1,049.50	1,491	1,495	1,086.20	1,900
	1	1,050.90	1,496	1,500	1,087.80	1,903
		1,052.40	1,501	1,505	1,069.20	1,900
	1	1,053.90	1,506	1,510	1,090.70	1,906
	j	1,055.40 1,057.00	1,511 1,516	1,515 1,520	1,092.30 1,093.90	1,91 1,91
	1	1,058.40	1,521	1,525	1,095.40	1,91
		1,059.90	1,526	1,530	1,096.90	1 911
		1,081.40	1,531	1,535	1,098.50	1,922
		1,062.90	1,536	1,540	1,100.10	1,92
		1,064.40	1,541	1,545	1,101.80	1,927
		1,065.90	1,546	1,550	1,103.20	1,930
		1,067.50	1,551 1,556	1,555 1,560	1,104.80 1,106.30	1,93 1,93
		1,068.90 1,070.40	1,556	1,565	1,107.80	1,93
		1,071.90	1,566	1,570	1,109.40	1,94
		1,073.40	1,571	1,575	1,110.90	1,94
		1,074.80	1,576	1,580	1,112.40	1,94
		1,076.40	1,581	1,585	1,114.00	1,94
	İ	1,077.90	1,586	1,590	1,115.60	1,95
		1,079.40	1,591	1,595	1,117.10	1,95
	1	1,080.90 1,082.40	1,596 1,601	1,600 1,605	1,118.70 1,120.20	1,95 1,96
	1	1,082.40	1,606	1,610	1,212.80	1,96
		1,085.30	1,611	1,615	1,123.20	1,96
		1,086.90	1,816	1,620	1,124.90	1,96
		1,088.40	1,621	1,625	1,126.40	1,97
		1,090.00	1,626	1,630	1,128.10	1,97
		1,091.50	1,631	1,635	1,129.70	1,97
		1,092.90 1,094.50	1,636 1,641	1,640 1,645	1,131.10	1,97
	ļ	1,096.00	1,646	1,650	1,132.60 1,134.30	1,98 1,98
		1,097.50	1.651	1,655	1,135.90	1,98
	1	1,099.00	1,656	1,660	1,137.40	1,99
		1,100.40	1,661	1,665	1,138.90	1,99
		1,102.00	1,666	1,670	1,140.50	1,99
		1,103.40	1,671	1,675	1,142.00	1,99
		1,105.00 1,106.50	1,676 1,681	1,680	1,143.60	2,00
		1,108.00	1,686	1,685 1,690	1,145.20 1,146.70	2,000
		1,109.50	1,691	1,695	1,148.30	2,00
		1,110.80	1,696	1,700	1,149.60	2,01
		1,112.40	1,701	1,705	1,151.30	2,01
		1,113.80	1,706	1,710	1,152.70	2,01
		1,115.30 1,116.80	1,711 1,716	1,715	1,154.30	2020
		1,118.30	1,716	1,720 1,725	1,155.60 1,157.40	202
		1,119.90	1,726	1,725	1,157.40	2.02
	1	1,121.30	1,731	1,735	1,160.50	203
		1,122.90	1,736	1,740	1,162.20	203
		1,124.30	1,741	1,745	1,163.60	2036
		1,125.80	1,746	1,750	1,165.20	203
		1,127.30 1,126.80	1,751 1,756	1,755 1,7 <del>6</del> 0	1,166.70 1,168.30	204° 204
		1,120.60	1,756	1,760	1,168.30	2,04
		1,131.60	1,766	1,770	1,171.40	2,049
	1	1,133.30	1,771	1,775	1,172.90	2,052

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

under 19 modified)—if primery insura	urance benefit 139 act, as an individual's ince benefit (as ider subsec. (d))	If (primary insurance amount effective for June	iti (average m or his average (as determined (b))	monthly wage under subsec.	IV (primary ineurance amount)—the	V (maximum far benefits)—and maximum amou of benefits payable (as
	But not more than—	1982)or his primary insurance amount (as determined under subsec. (c)) is	At loast-	But not more then—	amount referred to in the preceding paragraphs of this subsection shall be—	provided in se 203(a)) on the basis of his way and self- employment income shall be
		1,134.80	1,776	1,780	1.174.50	2,055
		1,136.30	1,761	1,785	1,176.00	2,058
		1,137.90 1,139.40	1,786 1,791	1,790 1,795	1,177.70 1,179.20	2,060 2,063
		1,140.90	1,796	1,800	1,180.80	2,086
		1,142.40	1,601	1,805	1,182.30	2,069
		1,143.90	1,806	1,810	1,183.90	2,071
		1,145.40	1,611	1,815	1,185.40	2,074
		1,146.90 1,146.30	1,816 1,621	1,820 1,825	1,187.00 1,188.40	2,077 2,080
		1,149.90	1,826	1,830	1,190.10	2,082
		1,151.40	1,831	1,835	1,191.60	2.08
		1,152.90	1,836	1,840	1,193.20	2,086
		1,154.40	1,841	1,845	1,194.80	2,09
		1,155.80	1,846	1,850 1,855	1,196.20	2,093
		1,157.40 1,158.80	1,851 1,858	1,850	1,197.90 1,199.30	2,09 2,09
		1,160.40	1,861	1,865	1,201.00	2,10
	i	1,161.90	1,866	1,870	1,202.50	2,10
	1	1,163.30	1,871	1,875	1,204.00	2,10
		1,164.90	1,876	1,680	1,205.80	2,10
	Į.	1,166.30 1,167.90	1,881 1,886	1,885 1,890	1,207.10 1,208.70	2,11 2,11
		1,169.30	1,891	1,895	1,210.20	2,11
	1	1,170.90	1,896	1,900	1,211.80	2,12
		1,172.40	1,901	1,905	1,213.40	2,12
		1,173.60	1,906	1,910	1,214.80	2,12
		1,175.30	1,911	1,915	1,216.40	2,12
		1,176.60 1,177.90	1,916 1,921	1,920 1,925	1,217.70 1,219.10	2,13 2,13
		1,179.30	1,926	1,930	1,220.50	2,13
		1,180.70	1,931	1,935	1,222.00	2,13
		1,182.10	1,936	1,940	1,223.40	2,14
	1	1,183.40	1,941	1,945	1,224.80	2,14
		1,184.90	1,946	1,950	1,226.30	2,14
		1,186.20 1,187.50	1,951 1,956	1,955 1,960	1,227.70 1,229.00	2,14 2,15
		1,188.90	1,961	1,965	1,230.50	2,15
		1,190.30	1,966	1,970	1,231.90	2,15
		1,191.70	1,971	1,975	1,233.40	2,15
		1,192.90	1,976	1,960	1,234.60	2,18
	1	1,194.50	1,981	1,985	1,236.30	2,16
		1,195.70 1,197.00	1,986 1,991	1,990 1,995	1,237.50 1,238.60	2,16 2,16
		1,196.40	1,996	2,000	1,240.30	2,17
		1,199.80	2,001	2,005	1,241.70	2,17
		1,201.20	2,006	2,010	1,243.20	2,17
		1,202.50	2,011	2,015	1,244.50	2,17
		1,204.00 1,205.30	2,016 2,021	2,020 2,025	1,246.10 1,247.40	2,18 2,18
		1,206.60	2,021	2,025	1,248.80	2,18
		1,208.00	2,031	2,035	1,250.20	2,18
	]	1,209.40	2,036	2,040	1,245.70	2,29
	]	1,210.80	2,041	2,045	1,253.10	2,19
		1,212.10 1,213.80	2,046 2,051	2,050 2,055	1,254.50 1,256.00	2,29 2,19
		1,214.90	2,056	2,080	1,257.40	2,19
		1,216.10	2,061	2,065	1,258.60	2,20
	; l	1,217.50	2,066	2,070	1,260.10	2,20
	; l	1,218.90	2,071	2,075	1,261.50	2,20
		1,220.30	2,076	2,080	1,263.00	2,210
		1,221.80 1,223.00	2,081 2,086	2,085 2,090	1,264.30 1,265.80	2,212 2,215
		1,224.40	2,091	2,095	1,267.20	2,217
	1	1,225.70	2,096	2,100	1,268.50	2,220

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY
BENEFITS BEGINNING DECEMBER 1983—Continued

under 19 modified)—if primary insura	surance benefit 939 act, as I an individual's ance benefit (as inder subsec. (d))	If (primary insurance amount effective for June	III (average m or his average (as determined (b))	monthly wage under subsec.	IV (primary insurance amount)—the	V (maximum family benefits)—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—
	But not more then—	1982)—or his primary insurance amount (as determined under subsec. (c)) is—	At least—	But not more than—	amount referred to in the preceding peragraphs of this subsection shall be—	
		1,227.10	2,101	2,105	1,270.00	2,222
		1,228.50	2,106	2,110	1,271.40	2,225
		1,229.90	2,111	2,115	1,272.90	2,227
		1,231.20 1,232.60	2,116 2,121	2,120 2,125	1,274.20 1,275.70	2,230 2,232
		1,234.00	2,126	2,130	1,277.10	2,235
		1,235.40	2,131	2,135	1,278.60	2,237
		1,236.70	2,136	2,140	1,279.90	2,240
		1,237.90	2,141	2,145	1,281.20	2,242
		1,239.50	2,146	2,150	1,282.80	2,245
		1,240.70 1,242.10	2,151 2,156	2,155 2,160	1,284.10 1,285.50	2,247 2,249
		1,243.40	2,150	2,160	1,285.50	2,249
		1,244.60	2,166	2,170	1,288.10	2,254
	1	1,245.80	2,171	2,175	1,289.40	2,256
		1,247.00	2,176	2,180	1,290.60	2,258
		1,248.20	2,181	2,185	1,291.80	2,260
		1,249.30	2,166	2,190	1,293.00	2,262
	1	1,250.50 1,251.70	2,191 2,196	2,195 2,200	1,294.20 1,295.50	2,265 2,287
		1,252.90	2,201	2,205	1,296.70	2,269
		1,254.20	2,206	2,210	1,298.00	2,271
		1,255.30	2,211	2,215	1,299.20	2,273
	1	1,256.50	2,216	2,220	1,300.40	2,275
		1,257.70	2,221	2,225	1,301.70	2,278
		1,258.90 1,260.10	2,226	2,230	1,302.90	2,280
		1,261.30	2,231 2,236	2,235 2,240	1,304.20 1,305.40	2,282
		1,262.40	2,241	2,245	1,306.50	2,284 2,286
	}	1,263.70	2,246	2,250	1,307.90	2,288
		1,264.90	2,251	2,255	1,309.10	2,291
	1	1,266.10	2,256	2,260	1,310.40	2,293
		1,267.30 1,268.50	2,261	2,265	1,311.60	2,295
		1,269.60	2,266 2,271	2,270 2,275	1,312.80 1,314.00	2,297
		1,270.80	2,276	2,280	1,315.20	2,295
		1,272.00	2,281	2,285	1,316.50	2,304
		1,273.30	2,286	2,290	1,317.80	2,306
		1,274.50	2,291	2,295	1,319.10	2,308
		1,275.60	2,296	2,300	1,320.20	2,310
		1,276.80	2,301	2,305	1,321.40	2,312
		1,278.00 1,279.20	2,306 2,311	2,310	1,322.70	2,314
		1,280.40	2,311	2,315 2,320	1,323.90 1,325.20	2,317
		1,281.60	2,321	2,325	1,326.40	2,31
		1,282.70	2,326	2,330	1,327.50	2,323
		1,284.00	2,331	2,335	1,328.90	2,325
	1 1	1,285.20	2,336	2,340	1,330.10	2,327
		1,286.40	2,341	2,345	1,331.40	2,330
		1,287.60 1,288.80	2,346 2,351	2,350 2,355	1,332.60	2,332
		1,289.90	2,356	2,355 2,360	1,333.90 1,335.00	2,334 2,336
		1,291.10	2,361	2,365	1,336.20	2,336
		1,292.30	2,366	2,370	1,337.50	2,340
		1,293.60	2,371	2,375	1,338.80	2,342
		1,294.60	2,376	2,360	1,340.10	2,345
		1,295.90	2,361	2,385	1,341.20	2,347
		1,297.10 1,298.30	2,386	2,390	1,342.40	2,349
		1,298.30	2,391 2,396	2,395 2,400	1,343.70 i 1,344.90	2,351
		1,300.70	2,401	2,405	1,346.20	2,353 2,355
	1	1,301.90	2,406	2,410	1,347.40	2,358
	1	1,303.10	2,411	2,415	1,348.70	2,360
		1,304.30	2,416	2,420	1,349.90	2,362
	t	1,305.50	2.421	2,425	1,351.10	2,364

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

I (primary insurance benefit under 1939 act, as modified)—if an individual's primary insurance benefit (as determined under subsec. (d)) is—		II (primary insurance amount effective for June 1982)—or his primary insurance	Ill (average monthly wage)— or his average monthly wage (as determined under subsec. (b)) is—		IV (primary insurance amount)—the amount referred to in the preceding	V (maximum family benefits)—and the maximum amount of benefits payable (as provided in sec.
At least—	But not more than—	amount (as determined under subsec. (c)) is—	At least—	But not more then	pergraphs of this subsection shall be—	203(a)) on the basis of his wages and self- employment income shall be-
		1,306.70	2,426	2,430	1,352.40	2,366.
		1,307.90	2,431	2,435	1,353.60	2,369.
	1	1,309.00 1,310.20	2,436 2,441	2,440 2,445	1,354.80 1,356.00	2,371. 2,373.
	-	1,311.40	2.446	2,450	1,357.20	2,375.
	1	1,312.60	2,451	2,455	1,358.50	2,377.
	1	1,313.90	2,456	2,460	1,359.80	2,379.
	İ	1,315.10	2,461	2,465	1,361.10	2,381.
	]	1,316.20	2,466	2,470	1,362.20	2,384
	1	1,317.40 1,318.50	2,471 2,476	2,475 2,480	1,363.50 1,364.60	2,386. 2,388.
	1	1,319.60	2,481	2,485	1,365.70	2,390.
		1,320.60	2,486	2,490	1,366.80	2.392
		1,321.70	2,491	2,495	1,367.90	2,394
		1,322.80	2,496	2,500	1,369.00	2,396
	1	1,323.90	2,501	2,505	1,370.20	2,397
		1,324.90 1,326.00	2,506 2,511	2,510 2,515	1,371.20 1,372.40	2,39 <del>9</del> 2,401
		1,327.10	2,516	2,520	1,373.50	2,403
		1,328.20	2,521	2,525	1,374.80	2,405
		1,329.20	2,526	2,530	1,375.70	2,407
		1,330.30	2,531	2,535	1,376.80	2,409
		1,331.40	2,536	2,540	1,377.90	2,411.
		1,332.50 1,333.50	2,541 2,548	2,545 2,550	1,379.10 1,380.10	2,413. 2,415.
		1,334,60	2,551	2,555	1,381.30	2,417
		1,335.70	2,556	2,560	1,382.40	2,419
		1,336.80	2,561	2,565	1,383.50	2,421.
		1,337.80	2,566	2,570	1,384.60	2,423
		1,338.90 1,340.00	2,571 2,576	2,575 2,560	1,385.70 1,386.90	2,425
		1,341.10	2,581	2,585 2,585	1,386.90	2,427. 2,429
	1	1,342.10	2,586	2,590	1,389.00	2,431
		1,343.20	2,591	2,595	1,390.20	2,432
		1,344.30	2,596	2,600	1,391.30	2,434.
		1,345.30	2,601	2,805	1,392.30	2,436
		1,346.40	2,606	2,610	1,393.50	2,438
	1	1,347.50 1,346.60	2,611 2,616	2,615 2,620	1,394.60 1,395.80	2,440. 2,442.
		1,349.60	2,621	2,625	1,398.80	2,444
		1,350.70	2,626	2,630	1,397.90	2,446
		1,351.80	2,631	2,635	1,399.10	2,448
		1,352.90	2,636	2,640	1,400.20	2,450.
		1,353.90	2,641	2,645	1,401.20	2,452.
		1,355.00 1,356.10	2,646 2,651	2,650 2,655	1,402.40 1,403.50	2,454. 2,456.
		1,357.20	2,656	2,660	1,404.70	2,456. 2,456.
	1	1,358.20	2,661	2,665	1,405.70	2,460
		1,359.30	2,666	2,670	1,406.80	2,462
		1,360.40	2,671	2,675	1,408.00	2,464
		1,361.50	2,676	2,680	1,409.10	2,465
		1,362.50 1,363.60	2,681 2,686	2,685 2,690	1,410.10 1,411.30	2,468. 2,469.
		1,364.70	2,691	2,695	1,412.40	2,471
	ļ į	1,365.80	2,696	2,700	1,413.60	2,473
		1,366.80	2,701	2,705	1,414.60	2,475.
		1,367.80	2,706	2,710	1,415.80	2,477
	[	1,368.80	2,711 2,716	2,715 2,720	1,416.70 1,417.70	2,479 2,480
		1,369.80 1,370.80	2,716	2,720 2,725	1,417.70	2,480
	j i	1,371.60	2,726	2,730	1,419.80	2,484.
		1,372.80	2,731	2,735	1,420.80	2,486.
	]	1,373.80	2,736	2,740	1,421.80	2,488.
	]	1,374.80	2,741	2,745	1,422.90	2,490.
	1	1,375.80	2,746	2,750	1,423.90	2,491.

TABLE 1.—TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING DECEMBER 1983—Continued

I (primary insurance benefit under 1939 act, as modified)—if an individual's primary insurance benefit (as determined under subsec. (di))		Il (primary insurance amount effective for June	III (average monthly wage)— or his average monthly wage (as determined under subsec (b)) is—		IV (primary insurance amount)—the	V (maximum family benefits)—and the maximum amount of benefits
	But not more than—	1982)—or his primary insurance amount (as determined under subsec (c)) is—	At least—	But not more than	amount referred to in the preceding paragraphs of this subsection shall be—	payable (as provided in sec. 203(a)) on the basis of his wages and self-employment income shall be-
	i	1,377.80	2.756	2.780	1,426.00	2,495,4
		1,378.80	2,761	2,765	1,427.00	2,497,30
		1,379.80	2,766	2,770	1,428.00	2,499.10
		1,380,80	2,771	2,775	1,429.10	2,500.90
	1	1,381.80	2.776	2,780	1,430.10	2,502.70
		1,382.80	2,770	2,785	1,431.10	2,504.50
	1	1,383.80	2,786	2,790	1,432.20	2,504.50
	1	1,384.80	2,791	2,795	1,433.20	2,506.30
	1	1,385.80	2,796	2,785	1,434.30	
	1	1,386.80	2,790	2,805	1,435.30	2,509.90 2,511.80
		1,387,80	2,806	2,803	.,	
	}	1,368.80	2,811	2,815	1,436.30 1,437.40	2,513.8
		1,389.80	2,816	2.820		2,515.4
		1,390.80	2,821	2,825	1,436.40	2,517.2
	-				1,439.40	2,519.0
	1	1,391.80	2,826	2,830	1,440.50	2,520.8
		1,392.80	2,831	2,835	1,441.50	2,522.7
	i	1,393.80	2,836	2,840	1,442.50	2,524.4
		1,394.80	2,841	2,845	1,443.80	2,526.3
		1,395.80	2,846	2,850	1,444.60	2,528.0
		1,396.80	2,851	2,855	1,445.80	2,529.9
		1,397.80	2,856	2,860	1,446.70	2,531.7
	ĺ	1,398.80	2,861	2,865	1,454.70	2,533.5
		1,399.80	2,866	2,870	1,448.70	2,535.3
		1,400.80	2,871	2,875	1,449.80	2,537.1
		1,401.80	2,876	2,880	1,450.80	2,536.9
	1	1,402.80	2,881	2, <b>8</b> 85	1,451.80	2,540.8
		1,403.80	2,886	2,890	1,452.90	2,542.5
		1,404.80	2,891	2,895	1,453.90	2,544.4
		1,405.80	2,896	2,900	1,455.00	2,546.2
		1,406.80	2,901	2,905	1,456.00	2,548.0
	1	1,407.80	2,906	2,910	1,457.00	2,549.8
		1,408.80	2,911	2,915	1,458.10	2,551.8
	1	1,409.80	2,916	2,920	1,459.10	2,553.4
	•	1,410.80	2,921	2,925	1,460.10	2,555.3
		1,411.80	2,926	2,930	1,461.20	2,557.0
		1,412.80	2,931	2,935	1,462.20	2,558.9
		1,413.80	2,936	2,940	1,463.20	2,560.6
		1,414.80	2,941	2,945	1,464.30	2,582.5
		1,415.80	2,946	2,950	1,465.30	2,584.3
		1,416.80	2,951	2,955	1,466.30	2,586.1
		1,417.80	2,956	2,960	1,487.40	2,567.9
		1,418.80	2,961	2,961	1,468.40	2,569.8
		. 1,419.80	2,966	2,970	1,469.40	2,571.5
	1	1,420.80	2,971	2,975	1,470,50	2,573.44

TABLE 2.—SPECIAL MINIMUM PRIMARY INSUR-ANCE AMOUNTS AND MAXIMUM FAMILY BENE-FITS

Special minumum primary insurance amount payable for June 1982	No. of years required minimum earnings level	Special minumum primary insurance amount payable for Dec. 1982	Special maximum family benefit payable for Dec. 1983
17.50	11	18.10	27.20
34.80	12	35.80	53.80
51.90	13	53.70	80.70
69.10	14	71.50	107.46
86.30	15	89.30	134.10
103.70	16	107.30	161.0
120.90	17	125.10	187.60
138.20	18	143.00	214.5
155.40	19	160.80	241.20
172.50	20	178.50	267.9
189.90	21	196.50	294.9
207.10	22	214.30	321.8
224.50	23	232.30	348.6
241.70	24	250.10	375.2
258.90	25	267.90	401.9
276.30	26	265.90	429.0
293.50	27	303.70	455.7
310.70	28	321.50	482.4
327.90	29	339.30	509.1
345.10	30	357.10	535.8

#### APPENDIX D

Federal Register / Vol. 48, No. 212 / Tuesday, November 1, 1983

# DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### Office of the Secretary

Average of the Total Wages for 1982, Contribution and Benefit Base, Quarter of Coverage Amount, Retirement Test Exempt Amounts, Formulas for Computing Benefits, and Extended Table of Benefit Amounts for 1984

**AGENCY:** Social Security Administration, HHS.

ACTION: Social Security: Notice of Average of the Total Wages for 1982. Contribution and Benefit Base. Quarter of Coverage Amounts. Retirement Test Exempt Amounts, Formulas for Computing Benefits, and Extended Table of Benefit Amounts for 1984.

**SUMMARY:** The Secretary has determined—

- (1) The average of the total wages for 1982 to be \$14,531.34;
- (2) The Social Security contribution and benefit base to be \$37,800 for remuneration paid in 1984 and selfemployment income earned in taxable years beginning in 1984;
- (3) The amount of earnings a person must have to be credited with a quarter of coverage in 1984 to be \$390; and
- (4) The monthly exempt amount under the Social Security retirement test for taxable years ending in calendar year 1984 to be \$580 for beneficiaries age 65 and over and \$430 for beneficiaries under age 65.

The formulas we use to compute the benefits for a worker and his or her family who first become eligible for benefits in 1984 are also described below.

Finally, a table reflecting the new higher average monthly wage and related benefit amounts made possible by the higher contribution and benefit base is also published. The table will be used primarily to compute the retirement benefits of workers who reached age 62 before 1979.

### FOR FURTHER INFORMATION CONTACT:

Eli Donkar. Office of the Actuary. Social Security Administration, 6401 Security Boulevard. Baltimore, Maryland 21235, telephone (301) 594–3365.

**SUPPLEMENTARY INFORMATION: Sections** 203(f)(8), 213(d) and 230(a) of the Social Security Act (42 U.S.C. 403(f)(8), 413(d) and 430(a)) require the Secretary of Health and Human Services to publish in the FEDERAL REGISTER on or before November 1, 1983, the contribution and benefit base, the amount of earnings required for a quarter of coverage, and the retirement test exempt amounts, for calendar year 1984. In addition, section 215(a)(1)(D) requires that the Secretary publish by November 1, 1983, the formula for computing a primary insurance amount for workers who first become eligible for benefits or die in 1984, and section 203(a)(2)(c) requires that the Secretary publish by November 1, 1983, the formula for computing a family's maximum benefits for families of workers who first become eligible for old-age benefits or die in 1984.

# Average of the Total Wages for 1982

The determination of the average wage figure for 1982 is based on the 1981 average wage figure of \$13,773.10 announced in the Federal Register on November 10, 1982 (47 FR 51003) along with the percentage increase in average wages from 1981 to 1982 measured by annual wage data tabulated by the Internal Revenue Service (IRS). The average amounts of wages calculated directly from IRS data were \$14,144.50 and \$14,923.19 for 1981 and 1982, respectively. To determine an average wage figure for 1982 at a level that is consistent with the series of average wages for 1951-1977 (published December 29, 1978 at 43 FR 61016), we multiplied the 1981 average wage figure of \$13,773.10 by the percentage increase in average wages from 1981 to 1982 (based on IRS data) as follows (with the result rounded to the nearest cent): Average wage for 1982 =  $$13,773.10 \times$  $$14.923.19 \div $14.144.50 = $14.531.34.$ Therefore, the average wage for 1982 is determined to be \$14,531.34.

#### **Contribution and Benefit Base**

General. The 1984 contribution and benefit base is \$37,800.

The contribution and benefit base serves two purposes:

- (1) It is the maximum annual amount of earnings on which Social Security taxes are paid.
- (2) It is the maximum annual amount used in figuring a person's Social Security benefits.

Computation. Section 230(c) of the Social Security Act provides a table with the contribution and benefit base for each year 1978, 1979, 1980, and 1981. For years after 1981, section 230(b) of the Social Security Act contains a formula for determining the contribution and benefit base. Under the prescribed formula, the contribution and benefit base for 1984 shall be equal to the 1983 base of \$35,700 multiplied by the ratio of (1) the average amount, per employee, of total wages for the calendar year 1982 to (2) the average amount of those wages for the calendar year 1981. Section 230(b) further provides that if the amount so determined is not a multiple of \$300, it shall be rounded to the nearest multiple of \$300.

Average Wages. The average wage for calendar year 1981 was previously determined to be \$13,773.10. The average wage for calendar year 1982 has been determined to be \$14,531.34, as stated herein.

Amount. The ratio of the average wage for 1982, \$14,531.34, compared to that for 1981, \$13,773.10, is 1.055052. Multiplying the 1983 contribution and benefit base of \$35,700 by the ratio 1.055052 produces the amount of \$37,665.36 which must then be rounded to \$37,800. accordingly, the contibution and benefit base for 1984 is \$37,800.

#### Quarter of Coverage Amount

General. The 1984 amount of earnings required for a quarter of coverage is \$390. A quarter of coverage is the basic unit for determining whether a worker is insured under the Social Security program. For years before 1978, an individual generally was credited with a quarter of coverage for each quarter in which wages of \$50 or more were paid, or for which \$100 or more of self-

employment income were credited, to the individual. Beginning in 1978, wages generally are no longer reported on a quarterly basis; instead, annual reports are made. With the change to annual reporting, section 352(b) of the Social Security Amendments of 1977 (Pub. L. 95-216) amended section 213(d) of the Social Security Act to provide that a quarter of coverage would be credited for each \$250 of an individual's total wages and self-employment income for calendar year 1978 (up to a maximum of 4 quarters of coverage for the year). Section 213(d) also provides that this amount shall be redetermined each year and many change published in the Federal Register no later than November 1 of the year preceding the year for which the change is effective.

Computation. Under the prescribed formula, the quarter of coverage amount for 1984 shall be equal to the 1978 amount of \$250 multiplied by the ratio of (1) the average amount, per employee, of total wages for calendar year 1982 to (2) the average amount of those wages reported for calendar year 1976. 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.

Average Wages. The average wage for calendar year 1976 was previously determined to be \$9,226.48. This was published in the Federal Register on December 29, 1978, at 43 FR 61016. The average wage for calendar year 1982 has been determined to be \$14,531.34 as stated herein.

Quarter of Coverage Amount. The ratio of the average wage for 1982, \$14.531.34, compared to that for 1976, \$9,226.48, is 1.57496. Multiplying the 1978 quarter of coverage amount of \$250 by the ratio of 1.57496 produces the amount ot \$393.74 which must then be rounded to \$390. Accordingly, the quarter of coverage amount for 1984 is \$390.

#### Retirement Test Exempt Amounts

(a) Beneficiaries Aged 70 or Over.
Beginning with months after December 1982, there is no limit on the amount an individual aged 70 or over may earn and still receive Social Security benefits. The age at which the retirement test ceases to apply is reduced from age 72 to age 70

by Public Law 97–35, which amended section 203(c)(1) of the Social Security Act.

(b) Beneficiaries Aged 65 through 69. The retirement test monthly exempt amount for beneficiaries over age 65 is stated in the Social Security Act at section 203(f)(8)(D) for years 1978 through 1982. A formula is provided in section 203(f)(8)(B) for computing the exempt amount applicable for years after 1982. The monthly exempt amount of 1983 was determined by this formula to be \$550. Under the formula, the exempt amount for 1984 shall be the 1983 exempt amount multiplied by the ratio of (1) the average amount, per employee, of the total wages for calendar year 1982 to (2) the average amount of those wages for calendar year 1981. 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.

Average Wages. Average wages for this purpose are determined in the same way as for the contribution and benefit base. Therefore, the ratio of the average wages for 1982, \$14,531.34 compared to that for 1981, \$13,773.10 is 1.055052.

Exempt Amount for Beneficiaries Aged 65 through 69. Multiplying the 1983 retirement test montly exempt amount of \$550 by the ratio of 1.055052 produces the amount of \$580.28. This must then be rounded to \$580. The retirement test monthly exempt amount for beneficiaries aged 65 through 69 is determined to be \$580 for 1984. The corresponding annual retirement test exempt amount for these beneficiaries is \$6.960.

(c) Beneficiaries Under Age 65.
Section 203 of the Social Security Act provides that beneficiaries aged 65 and over have a higher retirement test monthly exempt amount than those beneficiaries under age 65. The exempt amount for beneficiaries under age 65 is determined by a formula provided in section 203(f)(8)(B) of the Social Security Act. Under the formula, the monthly exempt amount for beneficiaries under age 65 is \$410 for 1983. The formula provides that the exempt amount for 1984 shall be the 1983 exempt amount

for beneficiaries under age 65 multiplied by the ratio of (1) the average amount, per employee, of the total wages for calendar year 1982 to (2) the average amount of those wages for calendar year 1981. 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.

Average Wages. Average wages for this purpose are determined in the same way as for the contribution and benefit base. Therefore, the ratio of the average wages for 1982, \$14,531.34 compared to that of 1981, \$13,773.10 is 1.055052.

Exempt Amount for Beneficiaries Under Age 65. Multiplying the 1983 retirement test monthly exempt amount of \$410 by the ratio 1.055052 produces the amount of \$432.57. This must then be rounded to \$430. The retirement test monthly exempt amount for beneficiaries under age 65 is determined to be \$430 for 1984. The corresponding annual retirement test exempt amount for these beneficiaries is \$5,160.

#### Computing Benefits After 1978

The Social Security Amendments of 1977 changed the formula for determining an individual's primary insurance amount after 1978. This basic new formula is based on "wage indexing" and was fully explained with interim regulations published in the Federal Register on December 29, 1978 at 43 FR 60877. It generally applies when a worker after 1978 attains age 62, becomes disabled, or dies before age 62. This formula uses the worker's earnings after they have been adjusted, or "indexed," in proportion to the increase in average wages of all workers. Using this method, we determine the worker's "average indexed monthly earnings." We then compute the primary insurance amount, using the worker's "average indexed monthly earnings" and also adjust the computation formula to reflect changes in general wage levels.

Average Indexed Monthly Earnings.
To assure that a worker's future benefits reflect the general rise in the standard of living that occurs during their working lifetime, we adjust or "index" the worker's past earnings to take into

account the change in general wage levels that has occurred during the worker's years of employment. These adjusted earnings are then used to compute the worker's primary insurance amount.

For example, to compute the average indexed monthly earnings for a worker attaining age 62, becoming disabled, or dying before attaining age 62, in 1984. we divide the average of the total wages for 1982, \$14,531.34, by the average of the total wages for each year prior to 1982 in which the worker had earnings. We then multiply the actual wages and self-employment income credited for those years by this ratio to obtain the worker's adjusted earnings for that year. After determining the number of years we must use to compute the primary insurance amount, we pick those years with highest indexed earnings, total those indexed earnings and divide by the total number of months in those years. This figure is rounded down to the next lower dollar amount, and becomes the average indexed monthly earnings figure to be used in computing the worker's primary insurance amount for 1984.

Computing the Primary Insurance An ount. The primary insurance amount is the sum of three separate percentages of portions of the average indexed monthly earnings. In 1979 (the first year the formula was in effect), these portions were the first \$180, the amount between \$180 and \$1,085, and the amount over \$1,085. The amounts for 1984 are obtained by multiplying the 1979 amounts by the ratio between the average of the total wages for 1982, \$14.531.34, and for 1977, \$9,779.44. These results are then rounded to the nearest dollar. For 1984, the ratio is 1.48591. Multiplying the 1979 amounts of \$180 and \$1.085 by 1.48591 produces the amounts of \$267.46 and \$1,612.21. These must then be rounded to \$267 and \$1,612. Accordingly, the portions of the average indexed monthly earnings to be used in 1984 are determined to be the first \$267. the amount between \$267 and \$1,612, and the amount over \$1.612.

Consequently, for individuals who first become eligible for old-age insurance benefits or disability

insurance benefits in 1984 or who die in 1984 before becoming eligible for benefits, we will compute their primary insurance amount by adding the following:

- (a) 90 percent of the first \$267 of their average indexed monthly earnings, plus
- (b) 32 percent of the average indexed monthly earnings over \$267 and through \$1,612, plus
- (c) 15 percent of the average indexed monthly earnings over \$1,612.

This amount is then rounded to the next lower multiple of \$.10 if it is not already a multiple of \$.10. This formula and the adjustments we have described are contained in section 215(a) of the Social Security Act (42 U.S.C. 415(a)) as amended by Public Law 97-35.

#### Maximum Benefits Payable to a Family

The 1977 Amendments continued the long established policy of limiting the total monthly benefits which a worker's family may receive based on his or her primary insurance amount. Those amendments also continued the then existing relationship between maximum family benefits and primary insurance amounts but did change the method of computing the maximum amount of benefits which may be paid to a worker's family. The 1980 Amendments (Pub. L. 96-265) established a new formula for computing the maximum benefits payable to the family of a disabled worker. This new formula is applied to the family benefits of workers who first become entitled to disability insurance benefits after June 30, 1980 and who first become eligible for these benefits after 1978. The new formula was explained in a Final Rule published in the National Federal Register on May 8. 1981 at 46 FR 25601. For disabled workers initially entitled to disability benefits before July 1980, or whose disability began before 1979, the family maximum payable is computed the same as the old-age and survivor family maximum.

Computing the Old-Age and Survivor Family Maximum. The formula used to compute the family maximum is similar to that used to compute the primary insurance amount. It involves computing the sum of four separate percentages of

portions of the worker's primary insurance amount. In 1979, these portions were the first \$230, the amount between \$230 and \$332, the amount between \$332 and \$433, and the amount over \$433. The amounts for 1984 are obtained by multiplying the 1979 amounts by the ratio between the average of the total wages for 1982. \$14.531.34, and the average for 1977, \$9,779.44. This amount is then rounded to the nearest dollar. For 1984, the ratio is 1.48591. Multiplying the amounts of \$230, \$332, and \$433 by 1.48591 produces the amounts of \$341.76, \$493.32, and \$643.40. These amounts are then rounded to \$342, \$493, and \$643. Accordingly, the portions of the primary insurance amounts to be used in 1984 are determined to be the first \$342, the amount between \$342 and \$493, the amount between \$493 and \$643, and the amount over \$643.

Consequently, for the family of a worker who becomes age 62 or dies in 1984, the total amount of benefits payable to them will be computed so that it does not exceed:

- (a) 150 percent of the first \$342 of the worker's primary insurance amount, plus
- (b) 272 percent of the worker's primary insurance amount over \$342 through \$493, plus
  - (c) 134 percent of the worker's primary

insurance amount over \$493 through \$643, plus

(d) 175 percent of the worker's primary insurance amount over \$643.

This amount is then rounded to the next lower multiple of \$.10 if it is not already a multiple of \$.10. This formula and the adjustments we have described are contained in section 203(a) of the Social Security Act (42 U.S.C. 403(a)) as amended by Pub. L. 97–35.

### Extension of Benefit Table Effective January 1984

The following is an extension of the Table for Determining Primary Insurance Amount and Maximum Family Benefits provided in section 215(a)(5) of the Social Security Act. This extension reflects the higher average monthly wage and related benefit amounts now possible under the increased contribution and benefit base published by this Notice effective lanuary 1984 in accordance with section 215(i) of the Social Security Act. The extended portion of the benefit table shown here will apply primarily to benefits based on earnings of workers who reached age 62 before 1979.

(Catalog of Federal Domestic Assistance Programs Nos. 13.802–13.805, and 13.807 Social Security Programs)

Dated: October 27, 1983.

#### Margaret M. Heckler,

Secretary of Health and Human Services.

TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS

BEGINNING JANUARY 1984

i (Primary insurance benefit under 1939 act, as modified)—If an individual's primary insurnace benefit (as		II (primary insurance amount effective for	III (average monthly wage)— or his average monthly wage (as determined under subsec (b)) is—		(V (primary insurance amount)—the	V (maximum family benefits) and the maximum amount of benefits
	But not more than—	December 1983)— or his primary insurance amount (as determined under subsec (c))	At least	But not more than	amount referred to in the preceding paragraphs of this subsection shall be—	payable (as provided in sec 203 (a)) on the basis of his wages and self- employment income shall be—
			2976	2980	1471.50	2575.10
	1		2981	2985	1472.50	2576.80
	ļ		2986	2990	1473.50	2578 60
			2991	2995	1474 50	2580 30
			2996	3000	1475 50	2582 10
	i	!	3001	3005	1476 50	2583 80
		1	3006	3010	1477 50	2585.60
	1		3011	3015	1478.50	2587.30
			3016	3020	1479.50	2589.10
			3021	3025	1480.50	2590.80
		İ	3026	3030	1481.50	2592.60

# TAGLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING JANUARY 1984—Continued

I (Primary insurance benefit under 1939 act, as modified)—If an individual's primary insurance benefit (as determined under subsec (d))		II (primary insurance amount effective for December 1983)—	(as determined	monthly wage	IV (primary insurance amount)—the	V (maximum family benefits) and the maximum amount of benefits	
	But not more than—	or his primary insurance amount (as determined under subsec (c)) is—	At least	But not more than—	amount referred to in the preceding paragraphs of this subsection shall be	payable (as provided in sec 203 (a)) on the basis of his wages and self-employment income shall be—	
	1	1	3031	3035	1482 50	2594 30	
			3036	3040	1483 50	2596.10	
	1		3041	3045	1484.50	2597.80	
			3046	3050	1485.50	2599 60	
	*	1	3051	3055	1486 50	2601 30	
		!	3056	3060	1487.50	2603 10	
		İ	3061	3065	1488 50	2604.80	
			3066	3070	1489.50	2606 60	
	1		3071	3075	1490.50	2608 30	
	!	i 1	3076	3080	1491.50	2610.10	
			3081	3085	1492 50	2611.80	
	i .	}	3086	3090	1493 50	2613 60	
			3091	3095	1494.50	2615.30	
			3096	3100	1495 50	2617 10	
	•	İ	3101	3105	1496 50	2618.80	
		1	3106	3110	1497 50	2620 60	
	1	! !	3111	3115	1498 50	2622 30	
	1	i	3116	3120	1499 50	2624 10	
	1		3121	3125	1500 50	2625 80	
			3126	3130	1501 50	2627 60	
			3131	3135	1502 50	2629 30	
	+		3136	3140	1503 50	2631.10	
			3141	3145	1504 50	2632.80	
			3146	3150	1505 50	2634.60	

# APPENDIX E.—AUTOMATIC ADJUSTMENTS UNDER OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE

The Social Security Act specifies that certain program amounts affecting the determination of OASDI benefits are to be adjusted annually to reflect changes in the general economy. The law prescribes specific formulas which, when applied to reported statistics, produce "automatic" revisions in these program amounts and hence in the benefit-computation procedures.

In this appendix, values are shown for the program amounts which are subject to automatic adjustment from the time that such adjustments became effective through 1984. Projected values for future years through 1989, based on the two intermediate sets of assumptions (alternatives II-A and II-B), are also shown. These assumptions are described in the subsection of this report entitled "Economic and Demographic Assumptions" and are shown in tables 10 and 11. The subsection entitled "Automatic Adjustments," and Appendices C and D, provide a more complete description of the program amounts affected by the automatic-adjustment procedures.

Under section 215(b)(3) of the Social Security Act, the average amount of total wages for each year after 1950 is used to index the earnings of most workers first becoming eligible for benefits in 1979 or later. This procedure converts a worker's past earnings to approximately their equivalent values near the time of the worker's retirement or other eligibility, and these values are used to calculate the worker's Average Indexed Monthly Earnings (AIME). The average amount of total wages for each year is also used to adjust most of the program amounts that are subject to the automatic-adjustment provisions. The announcement of the average wage determination for 1982, including a brief description of its derivation, is shown in Appendix D, which also describes the determinations of other program amounts that are in effect for 1984. Table E1 shows the average amount of total wages as announced for each year 1951 through 1982, together with projected values for 1983 through 1989 based on the two intermediate sets of assumptions.

TABLE E1.—AVERAGE AMOUNT OF TOTAL WAGES FOR 1951-82 AND PROJECTED FUTURE AMOUNTS FOR 1983-89, ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS

Calendar year	Actual amounts	
1951	\$2,799,16	
952	2.973.32	
953	3,139,44	
954	3.155.64	
1965	3,301.44	
956	3,532.36	
1957	3,641.72	
1958	3,673.80	
1959	3,855.80	
1960	4,007.12	
1961	4,086,76	
1962	4,291,40	
1963	4,396.64	
1964	4,576.32	
1965	4,658.72	
966	4,938.36	
967	5,213,44	
968	5,571.76	
969	5,693.76	
970	6,186.24	
1971	6.497.08	
972	7.133.80	
973	7,580,16	
	8,030.76	
1974		
1975	8,630.92	
1976	9,226.48	
1977	9.779.44	
978	10,556.03	
979	11,479,48	
1980	12,513.48	
961	13,773.10	
<u> </u>	14,531.34	
	Projected future amount by alterna	ative-
	II-A	H-B
983	\$15,140.93	\$15,140.93
984	16,035.05	16,018.68
985	16,916.96	16,946.16
986	17.863.22	17,998.06
987	16.865.64	19,114,59
988	19,915.63	20,253.02
989	20,999.09	21,410.42

The provisions for automatic cost-of-living increases in OASDI benefits were enacted in 1972 and first became effective with the benefit increase for June 1975. The notice announcing the December 1983 benefit increase is shown in Appendix C. (As a result of the Social Security Amendments of 1983, automatic benefit increases for 1983 and later are effective for December of each year.) Table E2 shows the automatic benefit increases determined for each year 1975-83 and the benefit increases for each year 1984-89 on the basis of the two intermediate sets of assumptions.

TABLE E2.—OASDI PROGRAM AMOUNTS DETERMINED UNDER THE AUTOMATIC-ADJUSTMENT PROVISIONS FOR 1975-84 AND PROJECTED FUTURE AMOUNTS FOR 1985-89, ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS

	Donatia	"Old-law"		Retirement earnings test exempt amounts		Amount of earnings required for	AIME "bend points" in PIA formula		PIA "bend points" in maximum-family- benefit formula		
Calendar year	Benefit increase <sup>1</sup> (percent)	Contribution and benefit base	contribution - and benefit base <sup>2</sup>	Under age 65	Ages 65 and overs	quarter of coverages	First	Second	First	Second	Third
Actual experience:							-				
1975	8.0	\$14,100	(*)	\$2,520	<b>\$2,520</b>	(*)	(*)	(*)	(*)	(*)	(9)
1976	6.4	15,300	(*)	2,760	2,760	(*)	(*)	(*)	(*)	(*)	(*)
1977	5.9	16,500	(*)	3,000	3,000	(*)	(*)	(*)	(*)	(*)	(*)
1978	6.5	17,700	(*)	3,240	74,000	<b>*\$250</b>	(*)	(*)	(*)	. (*)	(*)
1979	9.9	122,900	\$18,900	3,480	74,500	260	<b>*\$</b> 180	<b>•\$</b> 1,085	<b>*\$230</b>	<b>\$3</b> 32	<b>*\$</b> 433
1980	14.3	125,900	20,400	3,720	75,000	290	194	1,171	248	358	467
1981	11.2	729,700	22,200	4,080	75,500	310	211	1,274	270	390	508
1982	7.4	32,400	24,300	4,440	76,000	340	230	1,388	294	425	554
1983	3.5	35,700	28,700	4,920	6,600	370	254	1,528	324	468	610
1984	•4.7	37,800	28,200	5,160	6,960	390	267	1,612	342	493	643
Projected future											
expenence:											
Alternative II-A:											
1985	4.6	39,300	29,400	5,400	7,200	410	279	1,680	3 <b>56</b>	514	670
1986	4.5	41,700	31,200	5,760	7,680	430	. 295	1,779	377	544	710
1987	4.2	44,100	33,000	6,120	8,160	460	311	1,877	398	574	749
1988	3.9	46,500	34,800	6,480	8,640	480	329	1,982	420	606	791
1989	3.6	49,200	36,900	6,840	9,120	510	347	2,093	444	640	835
Alternative II-B:											
1985	5.4	39,300	29,400	5,400	7,200	410	279	1,680	356	514	870
1986	5.5	41,700	31,200	5,760	7,560	430	295	1,777	377	544	709
1987	5.2	44,100	33,000	6,120	8,040	460	312	1,680	399	575	750
1988	4.6	46,800	35,100	6,480	8,520	490	331	1,997	423	611	797
1989	4.3	49,800	37,200	6,840	9,000	520	352	2,121	450	649	846

<sup>&</sup>lt;sup>1</sup>Effective with benefits payable for June in each year 1975-82, and for December in each year after 1982.

<sup>\*</sup>Contribution and benefit base that would have been determined automatically under the law in effect prior to enactment of the Social Security Amendments of 1977.

<sup>&</sup>lt;sup>3</sup>In 1955-82, retirement earnings test did not apply at ages 72 and over; beginning in 1983, it does not apply at ages 70 and over.

<sup>\*</sup>See Appendix D for a description of quarter-of-coverage requirements prior to 1978.

<sup>\*</sup>No provision in law for this amount in this year.

<sup>\*</sup>Amount not subject to automatic-adjustment provisions in this year.

<sup>&</sup>lt;sup>7</sup>Amount specified by Social Security Amendments of 1977.

<sup>&</sup>lt;sup>a</sup>Amount specified for first year by Social Security Amendments of 1977; amounts for subsequent years subject to automatic-adjustment provisions.

<sup>&</sup>lt;sup>a</sup>Estimated on basis of alternative II-B assumptions. Corresponding estimate based on alternative II-A is 4.4 percent.

The law provides for an automatic increase in the contribution and benefit base for the year following a year in which an automatic benefit increase became effective. The base for 1975 was the first one determined on this basis. (Amendments enacted in December 1973 provided that the 11-percent general benefit increase that became effective in 1974 would be considered an automatic cost-of-living benefit increase for purposes of the automatic-adjustment provisions.) The bases for 1979-81 were specified by the 1977 amendments at levels above those which were expected to occur under the automatic-adjustment provisions (and which, in fact, as the experience developed, were above such levels). Starting again in 1982, the bases have been determined automatically on the basis of increases in average wages. Table E2 shows actual past and projected future amounts for the contribution and benefit base.

The law provides for the determination of the contribution and benefit bases that would have been in effect in each year after 1978 under the automatic-adjustment provisions as in effect before the enactment of the 1977 amendments. This "old-law" base is used in determining special-minimum benefits for certain workers who have many years of low earnings in covered employment. Beginning in 1986, the old-law base will be used in the calculation of benefits for certain workers who have pensions based on noncovered employment. It is also used for certain purposes under the Railroad Retirement program and the Employee Retirement Income Security Act of 1974. Table E2 shows the old-law bases for 1979-84, together with projections for 1985-89 on the basis of the two intermediate sets of assumptions.

The 1972 amendments specified that the amount of earnings exempted from the withholding of benefits under the retirement earnings test would increase automatically in the year following a year in which an automatic cost-of-living benefit increase became effective. The 1977 amendments modified this procedure by establishing different exempt amounts for those under age 65 and for those aged 65 and over. The former amounts continued to increase automatically, while the latter amounts were specified for 1978-82, after which they again increase automatically. The announcement of the exempt amounts for 1984 is shown in Appendix D, and table E2 shows the amounts for 1975-89.

The 1977 amendments specified the amount of earnings to be used in 1978 to credit a "quarter of coverage" and provided for automatic adjustment of this amount for future years. Appendix D describes the determination of the amount for 1984, and table E2 shows the amounts for 1978-89.

As mentioned previously, the 1977 amendments substantially revised the method of computing benefits for most workers first becoming eligible for benefits in 1979 and later. The formula used to compute the Primary Insurance Amount (PIA) for workers who first become eligible for benefits, or who died before becoming eligible, in 1979 is:

90 percent of the first \$180 of AIME, plus 32 percent of AIME in excess of \$180 but not in excess of \$1,085, plus 15 percent of AIME in excess of \$1,085.

The amounts separating the individual's AIME into intervals—the "bend points"—are adjusted automatically by the changes in average wages as specified in section 215(a)(1)(B) of the Social Security Act. (A regular-minimum benefit of \$122 and a special-minimum benefit varying by "years of coverage" are also provided, although for most workers first becoming eligible for benefits in 1982 and later, the regular-minimum benefit of \$122 has been eliminated.) The determination of the bend points for the 1984 PIA formula is described in Appendix D. The bend points for 1979-84, and the values projected for 1985-89, are shown in table E2.

A similar formula is used to compute the maximum total amount of monthly benefits payable on the basis of the earnings of a retired or deceased individual. This formula is a function of the individual's PIA, and is shown below for workers who first became eligible for benefits, or who died before becoming eligible, in 1979:

150 percent of the first \$230 of PIA, plus
272 percent of the PIA in excess of \$230 but not in excess of \$332, plus
134 percent of the PIA in excess of \$332 but not in excess of \$433, plus
175 percent of the PIA in excess of \$433.

These PIA-interval bend points are adjusted automatically in accordance with section 203(a)(2) of the Act. Appendix D contains the announcement of the maximum-family-benefit bend points for 1984, and the values for 1975-89 are shown in table E2.

## APPENDIX F.—ACTUARIAL COST PROJECTIONS FOR THE OASI, DI, AND HI PROGRAMS, COMBINED

In this appendix, cost projections for the OASI, DI, and Hospital Insurance (HI) Trust Funds are summarized to facilitate analysis of the adequacy of the combined income and assets of these three trust funds relative to their combined expenditures. These projections represent the combination of projections shown in this report and in the concurrent report for the HI Trust Fund.

Public Law 97-123 granted limited authority for borrowing among the OASI, DI, and HI Trust Funds; this authority expired on December 31, 1982. The Social Security Amendments of 1983 reauthorized interfund borrowing through the end of 1987. In addition, the current provisions of the law (1) prohibit new loans from a trust fund if its assets are below specified levels, and (2) set forth minimum standards for the repayment of interfund loans (including a requirement for the complete repayment of all such loans before 1990). Throughout this report and the concurrent HI Annual Report, the effects of these provisions are included in the estimated trust fund operations. The projections shown in this appendix for the combined trust funds are theoretical after 1987 because, under present law, no authority exists for transferring assets from one trust fund to another after 1987 except to repay prior loans. Thus, the emphasis in this appendix on combined operations should not obscure the financial status of the individual trust funds.

Table F1 shows estimated assets of the three funds, separate and combined, as a percentage of annual expenditures for calendar years 1984-93, based on the four alternative sets of assumptions used in this report. These estimates indicate that no further interfund loans would be necessary during 1984-87. The estimates also indicate that, except on the basis of alternative III, the \$12.4 billion owed to the HI Trust Fund by the OASI Trust Fund would be repaid by early 1987 using the minimum standard in the law for repayment of such loans. Based on alternative III, the minimum standard would need to be exceeded to ensure the repayment of funds owed to HI before that fund would be depleted. Based on alternatives I, II-A, and II-B, the \$5.1 billion owed to the DI Trust Fund by the OASI Trust Fund is assumed to be repaid in 1988. Based on alternative III, earlier repayment would be required to enable the continued timely payment of DI benefits.

Based on alternatives I, II-A, and II-B, the combined assets of the OASI and DI Trust Funds would begin to grow as a percentage of outgo after about 1984. Based on alternative III, assets would decline relative to outgo through the first half of 1988, after which significant growth would occur. The assets of the HI Trust Fund, as a percentage of annual expenditures, are projected to decline steadily based on all four sets of assumptions, except in years when repayments of prior interfund loans are received. As described in the concurrent HI Annual Report, the HI Trust Fund would be exhausted in 1995 based on alternative I, in 1991 based on alternatives II-A and II-B, and in 1989 based on alternative III. Table F1 indicates that the combined assets of the OASI, DI, and HI Trust Funds would be sufficient to meet combined obligations through the end of 1993 based on each of the four alternative sets

of assumptions. (Combined assets would be insufficient to allow the timely payment of combined benefits beginning in 1994, based on the alternative III assumptions.) These projections suggest that a reallocation of tax rates among the OASI, DI, and HI programs, or the extension of interfund-borrowing authority beyond 1987, could be sufficient to prevent the HI Trust Fund's short-range financing problems for a number of years. Under adverse economic conditions, however, the margin for safety would be small throughout the short-range projection period. If actual economic conditions were somewhat worse than those assumed for alternative III, for example, the assets of the three trust funds, if combined, could be depleted in the relatively near future.

TABLE F1.—PROJECTED ASSETS: OF THE OASI, DI, AND HI TRUST FUNDS, SEPARATE AND COMBINED, AT BEGINNING OF YEAR, AS A PERCENTAGE OF ANNUAL EXPENDITURES DURING YEAR ON THE BASIS OF THE FOUR ALTERNATIVE SETS OF ASSUMPTIONS, CALENDAR YEARS 1984-93

Calendar year	OASI	DI	OASDI	н	Total OASDI and HI
			<u> </u>		
Alternative I:	20	35	· 1 21	28	23
1984	20				23
1985	22	29	23	26	
1986	28	29	28	26	28
1987	31	34	31	48	35
1988	41	43	41	51	44
1989	58	84	81	50	58
1990	82	107	84	48	78
1991	106	141	109	43	93
1992	134	181	138	37	113
	159	215	164	29	130
1993	108	213	10-4	20	,00
Alternative II-A:		05	04	28	23
1984	20	35	21		
1985	21	27	22	25	22
1986	28	25	28	22	25
1987	28	25	27	34	29
1988	. 32	28	32	38	33
1989	44	60	48	31	42
1990	60	70	81	21	5°
1991	78	95	80	8	82
1992	97	119	99	(*)	7
	118	143	119	8	80
1993	110	143	118	(7)	•
Alternative II-B:		0.5		20	01
1984	20	35	21	28	23
1985	21	27	21	25	22
1988	25	24	25	22	24
1987	27	23	27	31	27
1988	29	25	29	36	31
1989	39	55	41	28	38
1990	53	64	54	17	45
1991	68	86	69	· A	53
	83	108	85	(3)	60
1992	99	130	101	57	66
1993	99	130	101	(*)	•
Alternative III:			••	••	
1984	20	35	21	28	23
1985	19	25	20	24	2.
1986	19	19	19	19	19
1987	18	18	18	15	17
1988	18	18	18	6	15
1969	19	19	19	ā	16
1990	25	28	25	(2)	16
1991	33	40	34	}₂(	16
	41		42	\ <del>\</del> \	15
1992		53		$\Omega$	
1993	48	64	49	(*)	11

<sup>&#</sup>x27;Assets of the OASI and DI Trust Funds, but not of the HI Trust Fund, include advance tax transfers for January. Assets are defined differently for the OASDI and HI programs because of their different cash flows. These differences do not affect the interpretation of the estimates shown in this table.

<sup>&</sup>lt;sup>2</sup>Assets are projected to be negative, and are projected not to recover before the end of the long-range projection period.

Note: The assumptions underlying the projections of the HI Trust Fund are described in Appendix A of the HI Annual Report. The combined OASDI and HI Trust Fund ratios are theoretical in years after the HI Trust Fund is depleted.

Table F2 shows projected cost rates for the OASI, DI, and HI programs during the period 1984-2008 based on alternatives II-A and II-B. This table also shows a comparison of total cost rates and total income rates for the three trust funds combined. As previously discussed, cost rates represent program expenditures as a percentage of effective taxable payroll. The total income rate represents the employee-employer tax rate for the combined OASI, DI, and HI Trust Funds, plus the OASDI income rate attributable to income from the taxation of OASDI benefits, as described earlier in this report. The definition of effective taxable payroll is slightly different for OASDI and HI, because of the different coverage provisions for Federal civilian employees and Railroad employees under the two programs. This difference does not materially affect the comparisons. In addition, the cost rates shown for the HI program exclude the cost associated with rebuilding and maintaining the HI Trust Fund at a level suitable for a contingency reserve. Table 8 of the HI Annual Report presents these additional costs.

TABLE F2.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BASED ON ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1984-2008
[As a percentage of taxable payroli\*]

		Cost rate				
Calendar year	OASI	DI	HI*	Total	Total income rate	Balance*
Alternative II-A:						
1984	10.15	1.15	2.71	14.01	14.19	0.19
1985	10.03	1.08	2.83	13.94	14.30	.36
1986	9.96	1.05	2.94	13.95	14.51	.57
1987	9.92	1.02	3.04	13.98	14.53	.55
		1.02	3.18	14.03	15.26	1.23
1986	9.87					1.23
1989	9.60	.98	3.27	14.06	15.26	
1990	9.77	.98	3.40	14.18	15.57	1.41
1991	9.74	.96	3.54	14.25	15.59	1.33
1992	9.66	.98	3.67	14.33	15.81	1.28
1993	9.83	.98	3.60	14.41	15.62	1.22
1994	9.48	.98	3.91	14.37	15. <b>66</b>	1.30
1995	9.31	.99	4.03	14.33	15. <b>68</b>	1.35
1996	9.11	.99	4.14	14.25	15.67	1.43
1997	8.89	.99	4.24	14.12	15.67	1.55
1998	8.73	.99	4.34	14.06	15.67	1.60
1999	8.60	1.01	4.44	14.05	15.66	1.81
2000	8.48	1.03	4.52	14.04	15.66	1.63
2001	8.38	1.08	4.62	14.05	15.66	1.81
2001	8.30	1.08	4.69	14.07	15.66	1.59
2002						
2003	8.23	1.11	4.78	14.12	15.66	1.55
2004	8.17	1.15	4.86	14.18	15.87	1.48
2005	8.14	1.19	4.94	14.26	15.87	1.41
2006	8.13	1.23	5.03	14.39	15.87	1.28
2007	8.18	1.27	5.11	14.54	15.86	1.14
2008	8.20	1.32	5.24	14.76	15.68	.92
25-vear average:						
1984-2008	9.07	1.06	4.05	14.19	15.42	1.23
Alternative II-B:						
1984	10.17	1.15	2.71	14.03	14.19	.16
1985	10.06	1.09	2.83	13.96	14.30	.32
1986	10.03	1.05	2.95	14.03	14.52	.48
1987	10.03	1.03	3.07	14.03	14.53	.40
	10.04	1.03	3.19	14.13	15.27	1.02
1988		1.00		14.25	15.27	
1989	10.01		3.31			.96
1990	10.02	1.00	3.45	14.47	15.58	1.11
1991	9.99	.99	3.59	14.57	15.60	1.02
1992	9.98	1.00	3.73	14.71	15.62	.91
1993	9.95	1.00	3.87	14.82	15.84	.81
1994	9.84	1.01	4.00	14.85	15.69	.84
1995	9.71	1.02	4.13	14.86	15.69	.84
1996	9.54	1.02	4.26	14.62	15.69	.87
1997	9.35	1.02	4.37	14.74	15.89	.95
1998	9.21	1.03	4.48	14.72	15.69	.96
1999	9.11	1.05	4.60	14.75	15.89	.93
2000	9.01	1.07	4.70	14.78	15.69	.91
2001	8.92	1.10	4.80	14.82	15.69	.86
	8.85	1.13	4.89	14.87	15.69	.82
2002						

TABLE F2.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BASED ON ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1984-2008 (Cont.)

[As a percentage of taxable payroli<sup>1</sup>]

V = posterior posterior posterior production									
		Cost rate	)	-	Total income	Balance			
Calendar year	OASI	Di	HIP	Total	rate				
Alternative II-B: (Cont.)									
2004	8.74	1.20	5.09	15.03	15.69	.66			
2005	8.70	1.24	5.18	15.13	15.69	.57			
2006	8.70	1.29	5.29	15.27	15.70	.43			
2007	8.72	1.33	5.38	15.43	15.70	.27			
2006	8.77	1.38	5.52	15.67	15.71	.04			
25-year average:									
1984-2008	9.45	1.10	4.18	14.72	15.44	.71			

<sup>&</sup>lt;sup>1</sup>Effective taxable payroll is slightly different for OASDI and HI, because of different coverage provisions for Federal civilian employees and Railroad employees under the respective programs. The difference does not materially affect the comparison.

The pattern of projected OASI and DI cost rates for the balance of this century has already been discussed in this report. The HI costs as a percentage of taxable payroll are projected to continue increasing throughout this period based on both alternatives II-A and II-B, for reasons described in the HI Annual Report. Based on alternative II-A, total OASDI and HI costs would fluctuate around their 25-year average level, of 14.19 percent of taxable payroll through the year 2000, before rising steadily to 14.76 percent in 2008. Based on alternative II-B, combined cost rates would increase gradually during 1984-93, remain fairly stable until 2001, and then begin increasing, reaching 15.67 percent in 2008.

Based on both alternatives, total cost rates for OASDI and HI combined would be less than the combined total income rates in each of the 25 years 1984 through 2008. On average, over the 25-year period, total OASDI-HI income would exceed total OASDI-HI costs by 1.23 percent and 0.71 percent of taxable payroll, respectively, on the basis of alternatives II-A and II-B.

Table F3 presents corresponding cost and income rate comparisons on the basis of alternative II-B for the next 75 years, along with averages for the three 25-year periods comprising the long-range projection period.

<sup>\*</sup>Cost rates exclude amounts required for trust fund building and maintenance.

<sup>&</sup>quot;The balance is the total income rate minus the OASDI-HI cost rate. Positive balances are surpluses, and negative balances are deficits.

TABLE F3.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BASED ON ALTERNATIVE II-B, CALENDAR YEARS 1984-2058
[As a percentage of taxable payroli\*]

		Cost rate	9		Total income	Balance
Calendar year	OASI	DI	HIP	Total	rate	
1984	10.17	1,15	2.71	14.03	14,19	0.16
1985	10.06	1.09	2.83	13.98	14.30	.32
1990	10.02	1.00	3.45	14.47	15.58	1,11
1995	9.71	1.02	4.13	14.66	15.69	.84
2000	9.01	1.07	4.70	14.76	15.69	.91
2005	6.70	1.24	5.16	15.13	15.69	.57
2010	8.95	1.44	5.65	16.05	15.73	32
2015	9.99	1.55	6.23	17.77	15.79	-1.99
2020	11.31	1.61	6.99	19.91	15.66	-4.05
2025	12.55	1.66	7.67	22.10	15.94	-6.16
2030	13.36	1.65	6.65	23.66	15.99	-7.66
2035	13.68	1.61	9.14	24.43	16.03	-6.40
2040	13.59	1.63	9.37	24.58	16.04	-6.54
2045	13.52	1.67	9.42	24.62	16.06	-8.56
2050	13.63	1.68	9.45	24.76	16.07	-6.69
2055	13.77	1.65	9.46	24.69	16.07	-8.81
25-year averages:						
1984-2008	9.45	1.10	4.16	14.72	15.44	.71
2009-2033	11.42	1.60	7.22	20.24	15.67	-4.36
2034-2058	13.65	1.65	9.36	24.68	16.06	-8.62
75-year average:						0.02
1984-2058	11.51	1.45	6.92	19.88	15.79	-4.09

<sup>&#</sup>x27;Effective taxable payroll is slightly different for OASDI and HI, because of different coverage provisions for Federal civilian employees and Railroad employees under the respective programs. The difference does not materially affect the comparisons.

A description of the trend in long-range OASDI cost rates has already been given in this report. The HI cost rates are projected to increase substantially based on the alternative II-B assumptions, from their current level of 2.71 percent to about 9.40 percent by the end of the long-range projection period. Combined OASDI and HI cost rates would also increase substantially after the turn of the century, reaching 24.89 percent of taxable payroll by 2055 on the basis of the intermediate II-B assumptions. Beginning in about 2010, combined cost rates would exceed combined total income rates, with the difference growing over time. The average actuarial balances would be an average surplus of 0.71 percent of taxable payroll over the first 25-year subperiod, followed by average deficits of 4.36 and 8.62 percent over the second and third 25-year subperiods, respectively. Over the 75-year period, the combined actuarial deficit would average 4.09 percent of taxable payroll on the basis of the alternative II-B assumptions.

As noted previously, in this report and in the HI Annual Report, longrange projections such as these are subject to considerable uncertainty and should be interpreted carefully. On the basis of the alternative II-B assumptions, however, which are designed to represent intermediate economic and demographic conditions, the combined cost of the OASDI and HI programs would significantly exceed the combined income of those programs after the turn of the century.

<sup>&</sup>lt;sup>2</sup>HI cost rates exclude amounts required for trust fund building and maintenance.

<sup>\*</sup>The balance is the total income rate minus the OASDI-HI cost rate. Positive balances are surpluses, and negative balances are deficits.

#### APPENDIX G.—STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the techniques and methodology used herein in evaluating the actuarial status of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds are generally accepted within the actuarial profession; and (2) the assumptions used and the resulting cost estimates are, in the aggregate, reasonable for the purpose of evaluating the financial and actuarial status of the trust funds, taking into consideration the experience and expectations of the program.

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Harry C. Ballantyne,

Associate of the Society of Actuaries, Member of the American Academy of Actuaries, Chief Actuary, Social Security Administration