

1983 ANNUAL REPORT—FEDERAL OLD-AGE AND  
SURVIVORS INSURANCE AND DISABILITY  
INSURANCE TRUST FUND

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COMMUNICATION

FROM

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

TRANSMITTING

THE 1983 ANNUAL REPORT OF THE BOARD, PURUSANT TO  
SECTION 201(c) OF THE SOCIAL SECURITY ACT



JUNE 27, 1983.—Referred to the Committee on Ways and Means  
and ordered to be printed

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LETTER OF TRANSMITTAL

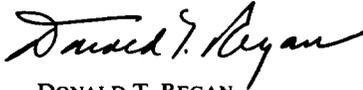
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BOARD OF TRUSTEES OF THE  
FEDERAL OLD-AGE AND SURVIVORS INSURANCE  
AND DISABILITY INSURANCE TRUST FUNDS,  
Washington, D.C., June 24, 1983.

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

SIR: We have the honor to transmit to you the 1983 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 43rd such report), in compliance with the provisions of section 201(c) of the Social Security Act.

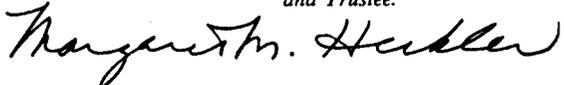
Respectfully,



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,  
and Trustee.*



JOHN A. SVAHN,  
*Commissioner of Social Security,  
and Secretary, Board of Trustees.*



**LETTER OF TRANSMITTAL**

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Washington, D.C., June 24, 1983.**

THE PRESIDENT OF THE SENATE,  
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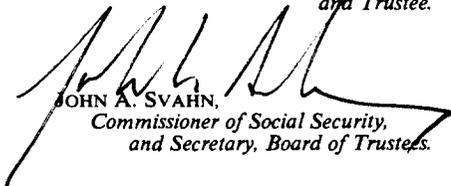
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## CONTENTS

	Page
I. The Board of Trustees.....	1
II. Highlights.....	2
III. National Commission on Social Security Reform.....	7
IV. Social Security Amendments Since the 1982 Report.....	8
V. Nature of the Trust Funds.....	16
VI. Summary of the Operations of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds, Fiscal Year 1982.....	20
A. Old-Age and Survivors Insurance Trust Fund.....	20
B. Disability Insurance Trust Fund.....	28
VII. Actuarial Cost Projections.....	34
A. Economic and Demographic Assumptions.....	36
B. Automatic Adjustments.....	42
C. Estimated Operations and Status of the Trust Funds During the Period October 1, 1982 to December 31, 1987.....	45
D. Actuarial Analysis of Benefit Disbursements from the Federal Old-Age and Survivors Insurance Trust Fund with Respect to Disabled Beneficiaries.....	70
E. Actuarial Status of the Trust Funds.....	72
VIII. Conclusion.....	84
Appendices:	
A. Assumptions and Methods Underlying the Medium- Range and Long-Range Cost Estimates.....	85
B. Sensitivity Analysis.....	99
C. Determination and Announcement of Social Security Benefit Increases.....	102
D. Determination and Announcement of Average of Total Wages for 1981 and Contribution and Benefit Base, Quarter of Coverage Amount, Retirement Test Exempt Amounts, Formulas for Computing Benefits, and Extended Table of Benefit Amounts for 1983.....	105
E. Automatic Adjustments Under Old-Age, Survivors, and Disability Insurance.....	112
F. Actuarial Cost Projections of the OASI, DI, and HI Programs, Combined.....	117
G. Statement of Actuarial Opinion.....	123

# **1983 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND AND THE FEDERAL DISABILITY INSURANCE TRUST FUND**

## **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 43rd such report, is the annual report for 1983.

## II. HIGHLIGHTS

This section summarizes the more important developments since the 1982 Annual Report was issued on April 1, 1982, and describes the major features of this year's report. These topics are discussed in more detail in later sections.

### *Financial status of the trust funds*

As a result of the enactment of the Social Security Amendments of 1983, the estimates in this report indicate that the Old-Age, Survivors, and Disability Insurance program will be able to pay benefits on time for the next 75 years under all but the most pessimistic of the various sets of assumptions for which estimates are shown. Under the pessimistic assumptions, the estimates indicate that OASDI benefits can be paid on time through the second decade of the next century. The financial outlook shown in this report for the OASDI program is therefore dramatically improved as compared to that shown in the last annual report. The 1982 Annual Report indicated that interfund loans to the Old-Age and Survivors Insurance Trust Fund from the Disability Insurance and Hospital Insurance Trust Funds would be required in the second half of 1982, and that by July 1983 OASI benefits could not be paid on time, in the absence of corrective legislation. The 1982 Annual Report also showed a long-range actuarial deficit of 1.82 percent of taxable payroll under the intermediate II-B set of assumptions over 75 years. That average deficit consisted of an average surplus of 0.64 percent of taxable payroll over the first 25-year subperiod, and average deficits of 1.68 and 4.41 percent over the second and third 25-year subperiods, respectively.

In November 1982, the first interfund loan was made to the OASI Trust Fund under the limited authority granted by Public Law 97-123. In December, more interfund loans were made. In total, \$17.5 billion was borrowed—\$5.1 billion from the DI Trust Fund, and \$12.4 billion from the HI Trust Fund. As stated by the Trustees in the 1982 Annual Report, without such loans, OASI benefits could not have been paid on time beginning in November 1982. Even with such loans, benefits could not have been paid on time after June 1983, without corrective legislation.

The National Commission on Social Security Reform, which had been established by the President on December 16, 1981, issued its report on January 20, 1983. The Commission's recommendations formed the basis of two similar bills that were introduced in the Congress as H.R. 1900 in the House of Representatives and S. 1 in the Senate. The Conference Committee agreement on the House and Senate bills was passed by both Houses of the Congress on March 24. President Reagan signed the Social Security Amendments of 1983 into law (Public Law 98-21) on April 20, 1983.

The improved financial status of the OASDI program is achieved through the increases in income and decreases in outgo that will result from the 1983 amendments. For the first time in 3 years, the short-range projections in the annual report indicate that OASI and DI benefits will be paid on time in the short range and for many years thereafter. For the first time in a decade, the current intermediate projections indicate a 75-

year actuarial balance between income and outgo, on the basis of the alternative II-B assumptions. This average balance consists of average surpluses of 1.83 and 0.32 percent of taxable payroll over the first and second 25-year subperiods, respectively, and an average deficit of 2.08 percent over the third 25-year subperiod. Thus, the actuarial balance is a moving average, and continuing review of the financing of the OASDI program is necessary.

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 section entitled "Economic and Demographic Assumptions." As in recent annual reports, one set of assumptions is designated as "optimistic" and another 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, alternative II-A assumes future economic performance resembling that of the more robust recent economic expansions; alternative II-B assumes economic performance resembling less robust economic expansions. 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. Under the "pessimistic" assumptions, the economy is assumed to experience a delayed recovery from the recent recession, and slow but steady growth thereafter. As such, this set of assumptions represents a fairly adverse economic situation but not the worst conditions that could occur.

The operating deficits that began in 1975 reduced the assets of the OASI and DI Trust Funds to very low levels at the beginning of 1983. Certain provisions of the 1983 amendments will result in substantial immediate increases in those assets, but the rate of growth in 1984-87 is expected to be relatively small. As a result, the estimated trust-fund levels shown in this report are relatively low through 1987. Thus, although the OASDI program is estimated to be financially sound for many years into the future based on 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 the effect on OASDI financing) than those assumed under alternative III, 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 (1983-87)—Under the alternative II-A and II-B assumptions, expenditures from the OASI Trust Fund are expected to slightly exceed income in 1983; during 1984-87, income is expected to exceed expenditures in each year. Under the more optimistic alternative I assumptions, income exceeds expenditures in every year. Under the less favorable alternative III assumptions, OASI expenditures would exceed income in both 1983 and 1984; the reverse situation would occur in 1985-87.

The excess of income over expenditures in the mid-1980's is expected to result in a gradual increase in the assets of the OASI Trust Fund. Under the first three alternatives, these increases would be sufficient to trigger the automatic interfund loan repayment provisions included in the 1983 amendments. Thus, during 1984-87 the OASI Trust Fund would begin to repay the amounts borrowed in 1982 from the HI Trust Fund. Only under the optimistic alternative I assumptions would full repayment of such loans be required by the end of 1987 under the automatic provisions; under alternatives II-A and II-B, the repayments to HI would not be required to be completed until 1988. Under the alternative III assumptions, no repayment of the HI loans would be required by law prior to 1988. The alternative III estimates shown in this report, however, assume full repayment in 1987. Without such repayment, as indicated in the concurrent 1983 Annual Report for the Hospital Insurance program, the HI Trust Fund would be depleted in 1987 under the alternative III assumptions.

Under all four sets of assumptions, the OASI Trust Fund would have sufficient assets to permit timely payment of benefits throughout this period. The level of assets relative to annual expenditures, however, would remain relatively low through about 1987, making the fund vulnerable to any severe economic downturn during this period. The short-range financial status of the DI Trust Fund is generally similar to that of the OASI Trust Fund. This represents a marked decline as compared with the status shown for the DI Trust Fund in the 1982 Annual Report. The change is attributable primarily to a reallocation of the OASDI payroll-tax rate between the two trust funds. This reallocation was included in the 1983 amendments in order to place the two funds in a similar financial position.

As noted in the concurrent 1983 Annual Report for the Hospital Insurance Trust Fund, under all but the optimistic set of assumptions, HI assets are expected to continue to decline relative to HI annual expenditures and the trust fund would be depleted by about the end of this decade without corrective legislation. The projection of the HI Trust Fund, and of the OASI, DI, and HI Trust Funds combined, are summarized in Appendix F. While the OASI and DI Trust Funds would have sufficient assets to permit loans to the HI Trust Fund, and prevent the HI fund's depletion within the next 10 years (under all four sets of assumptions), interfund loans are now permitted only through 1987, and any loans outstanding 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 use of the present interfund borrowing provisions.

- (b) Medium range (1983-2007)—Under the four alternative sets of assumptions, average annual costs for the OASDI program during the 25-year projection period range from 9.22 to 11.44 percent of taxable payroll, while average income ranges from

12.45 to 12.53 percent. Thus, the projected medium-range actuarial balance is a surplus varying from 3.23 to 1.08 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 1.37 percent of taxable payroll under alternative II-A and 0.68 percent under alternative II-B.

- (c) **Long range (1983-2057)**—Over the 75-year period, annual costs for the OASDI program are projected to average from 9.81 to 16.56 percent of taxable payroll, depending on the assumptions. During this period, average income ranges from 12.73 to 13.04 percent of taxable payroll. Thus, the projected long-range actuarial balance varies from a surplus of 2.92 percent of taxable payroll under the optimistic alternative I assumptions to a deficit of 3.51 percent of taxable payroll under the pessimistic alternative III assumptions. Under alternatives II-A and II-B, respectively, average surpluses of 0.84 and 0.02 percent of taxable payroll are projected. As shown in Appendix F, the long-range actuarial balance for the combined OASI, DI, and HI programs is a deficit of 3.88 percent of taxable payroll under alternative II-B. This deficit consists of an average surplus of 0.68 percent of taxable payroll over the first 25-year subperiod, and average deficits of 3.86 and 8.47 percent over the second and third 25-year subperiods, respectively.

Such 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 materialize. Despite their inherent uncertainty, these projections, and the patterns of surpluses and deficits that they reveal 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.

*Trust fund operations during fiscal year 1982*

- (a) The total assets of the OASI and DI Trust Funds declined by \$7.9 billion during fiscal year 1982, to \$19.3 billion on September 30, 1982. Income amounted to \$148.0 billion and expenditures totaled \$156.0 billion. Disbursements from the OASI Trust Fund exceeded income by \$11.3 billion, and the assets of the OASI Trust Fund declined to \$12.5 billion by the end of the fiscal year. The assets of the DI Trust Fund increased by \$3.4 billion, to \$6.8 billion on September 30, 1982.
- (b) The total number of persons receiving monthly benefits under the OASDI program was 35.6 million at the end of September 1982. An estimated 115 million workers had earnings in calendar year 1982 that were taxable and creditable toward benefits under the program.
- (c) The trust funds earned interest amounting to \$2.1 billion during fiscal year 1982. The effective annual rate of interest earned by the combined assets of the OASI and DI Trust Funds during the

12 months that ended June 30, 1982 was 10.3 percent. During this same period, the average interest rate on new securities purchased by the trust funds was 13.8 percent.

- (d) Administrative expenses for the OASDI program in fiscal year 1982 were \$2.0 billion, which represented 1.3 percent of total benefit payments made during the year.

*Developments since the last annual report*

- (a) An automatic cost-of-living benefit increase of 7.4 percent became effective for June 1982. (The statement announcing the determination of this increase is shown in Appendix C.) An increase of 3.5 percent will become effective for December 1983, as recently determined and announced.
- (b) Effective for 1983, the contribution and benefit base was increased from \$32,400 to \$35,700. The annual exempt amount under the retirement earnings test was increased from \$6,000 to \$6,600 for beneficiaries aged 65 through 69, and from \$4,440 to \$4,920 for beneficiaries under age 65. Beginning in 1983, the retirement earnings test does not apply to beneficiaries aged 70 and over; prior to 1983, the test was not applicable at ages 72 and over. The amount of annual earnings required for a quarter of coverage was increased from \$340 to \$370. (The statement announcing these changes is shown in Appendix D.)

### **III. NATIONAL COMMISSION ON SOCIAL SECURITY REFORM**

On December 16, 1981, the President established the National Commission on Social Security Reform (by Executive Order 12335). The Commission consisted of 15 members—five selected by the President, five by the Majority Leader of the Senate, and five by the Speaker of the House of Representatives. The Commission presented its final report to the President on January 20, 1983. The report included numerous recommendations designed to alleviate the short-range and long-range financial problems of the OASDI program. The recommendations in the Commission's "consensus package" formed the basis of the Social Security Amendments of 1983 (Public Law 98-21), although several of the proposals were modified somewhat. The key provisions of the new legislation are summarized in the next section.

#### **IV. SOCIAL SECURITY AMENDMENTS SINCE THE 1982 REPORT**

Since the 1982 Annual Report was transmitted on April 1, 1982, several laws affecting the OASDI program have been enacted. The legislative changes having a significant effect on the financial status of the program are described below.

The Tax Equity and Fiscal Responsibility Act of 1982 (Public Law 97-248, enacted into law on September 3, 1982) modified the Medicare program in several significant ways (including the coverage, under the HI program, of the earnings of all Federal civilian employees, beginning January 1, 1983) but made only the following changes in the OASDI program:

1. Some independent contractors, including real estate agents and certain other direct sellers, had been classified as employees for Social Security tax purposes. The new law reclassifies them as self-employed persons.
2. The law improves the reporting of tip income for income tax and Social Security tax purposes.

Public Law 97-455 (enacted January 12, 1983) included the following significant modifications to the OASDI program, most of which involved disability benefits:

1. The law provides for the continued payment of disability benefits during the appeals process, in certain situations following a decision to terminate such benefits. Under previous law, benefits ended with the second month following the month of termination. Under the new law, such benefits can be continued, at the option of the beneficiary, through the earliest of (a) the month preceding the month in which a decision on the appeal is rendered by an Administrative Law Judge, (b) the month preceding the month in which no request for a hearing by an ALJ is pending, or (c) June 1984. If the decision by the ALJ supports the initial decision to terminate the benefits, any payments received under this provision are overpayments and subject to recovery. This temporary provision applies only to termination determinations which are made before October 1, 1983.
2. The Secretary of Health and Human Services is granted authority to waive, on a State-by-State basis, the statutory requirements for periodic reviews of the continued eligibility of disabled beneficiaries.
3. The law requires that an opportunity for a face-to-face hearing be provided, beginning no later than January 1, 1984, at the first appeal stage (the reconsideration level) for appeals of decisions to terminate disability benefits.
4. The law modified and extended the exception to the offset of Social Security auxiliary and survivor benefits for persons who also receive governmental pensions based on noncovered employment (this provision was further modified by subsequent legislation).

The most significant legislation since the issuance of the 1982 Annual Report was the Social Security Amendments of 1983 (Public Law 98-21,

enacted April 20, 1983). From an actuarial cost standpoint, the important provisions of this law are the following:

1. *Coverage of newly hired Federal employees*

Compulsory coverage under the OASDI program will be provided for Federal civilian employees of the executive, legislative, and judicial branches hired after 1983. (Beginning January 1, 1983, coverage under the HI program had already been provided for all Federal civilian employees, including those hired before 1983, under the Tax Equity and Fiscal Responsibility Act of 1982. Military service has been covered under the OASDI program since 1957 and under the HI program since 1966.) Compulsory coverage will also be provided for Federal hires with previous periods of Federal service provided that the break in service exceeded 365 days. Compulsory coverage will be provided for current employees of the legislative branch who are not participating in the Civil Service Retirement System as of December 31, 1983; for all Members of Congress; for the President and the Vice-President; for Federal judges; and for most high-level political appointees in the executive branch. The retirement pay of retired Federal judges is also covered for periods in which judicial duties are performed.

2. *Coverage of employees of nonprofit organizations*

The earnings of all current and future employees of private tax-exempt nonprofit organizations will be covered after 1983. Under prior law, work performed for such organizations was excluded from coverage unless the organization waived its exemption from Social Security taxation. Employees affected by this provision will be deemed to be fully insured for Social Security benefits if the following conditions are met:

- (a) On January 1, 1984, the employee is age 55 or older and is employed by a nonprofit organization to which coverage is extended solely as a result of Public Law 98-21, and
- (b) The employee acquires after December 31, 1983, a specified number of quarters of coverage which depends on the employee's age, as follows:

Age on January 1, 1984	Quarters of coverage required
60 or over.....	6
59.....	8
58.....	12
57.....	16
55 or 56.....	20

In addition, the new law provides that Social Security coverage for employees of nonprofit organizations may not be terminated on or after March 31, 1983.

3. *Prohibited termination of coverage of State and local government employees*

The new law prohibits States from terminating coverage of State and local government entities if the termination had not become effective before the date of enactment (April 20, 1983).

4. *Six-month delay in cost-of-living adjustment*

The effective month for automatic cost-of-living increases in OASDI benefits is changed from June to December of each year, beginning in 1983. The period over which the increase in the Consumer Price Index (CPI) is measured to determine the benefit increase for December 1983 is unchanged from previous law (the period is from the first quarter of 1982 through the first quarter of 1983). However, the benefit increases in 1984 and later years will be based on the CPI increase from the third quarter of the previous year through the third quarter of the year in which the benefit increase becomes effective.

5. *Modification of cost-of-living increases during periods of low trust fund balances (stabilizer provision)*

If the combined assets of the OASI and DI Trust Funds, as a percentage of estimated annual expenditures, fall below a specified level, automatic benefit increases will be limited to the lower of the increases in wages or prices. This specified level is 15 percent for benefit increases in 1984 through 1988, and 20 percent for benefit increases in 1989 and later. If assets, excluding amounts borrowed from the HI Trust Fund, fall below that level, the automatic benefit increase will be the smaller of (1) the increase in prices as measured by the CPI (the same benefit increase that would apply if the level of trust fund assets were not below the specified levels of 15 percent or 20 percent), or (2) the increase in average wages in the previous year as compared with the second preceding year—which is used for purposes of adjustments in the contribution and benefit base and in other wage-indexed program amounts.

The new law also provides for “catch-up” benefit increases for those beneficiaries whose benefit increases were reduced as a result of this provision. Specifically, when the assets of the combined OASI and DI Trust Funds, excluding borrowed amounts, exceed 32 percent of estimated annual expenditures, additional increases in benefits are provided, to the extent that funds are available above the 32-percent trust fund level, until benefits are increased to the level at which they would have been if all increases had been based on CPI increases.

6. *“Normalized” tax transfers*

The new law provides that the estimated amount of Social Security taxes to be received each month shall be transferred from the general fund of the Treasury to the trust funds on the first day of the month, instead of on a daily basis as taxes are collected. This provision, which essentially allows short-term loans by the general fund to the trust funds, requires that the trust funds pay interest on such advance tax transfers. The net effect is to make funds available when needed to pay benefits, which are normally paid on the third of each month. The effects of this provision are discussed in later sections.

7. *Interfund borrowing reinstatement*

The new law reinstates the interfund borrowing authority that

expired at the end of 1982 and extends it through the end of 1987. The new law also adds certain requirements as to when loans can be made, when they must be repaid, and when interest must be paid. The effects of this provision are discussed in later sections.

8. *Elimination of windfall benefits for persons receiving pensions from noncovered employment*

The computation of OASDI benefits will be modified for most workers (with certain exceptions) who first become eligible after 1985 for both a pension based wholly or in part on noncovered employment and a retired- or disabled-worker's benefit under Social Security. The modification replaces the 90-percent factor generally applied to average indexed earnings in the first band of the benefit formula by a factor of 40 percent, after a phase-in period of 5 years (1986-90).

As an exception, the benefits for workers with 30 or more years of coverage (as defined for purposes of the special minimum benefit under the Social Security Act) will not be affected. For workers with 26, 27, 28, or 29 years of coverage, instead of 40 percent, the first factor of the benefit formula will be 50, 60, 70, or 80 percent, respectively.

The reduction in the Social Security benefit which results from this provision may not exceed one-half of the pro-rata portion of the pension which is attributable to noncovered employment after 1956.

Certain groups are exempted from the effects of this provision, as follows:

- (a) Workers who are compulsorily covered on January 1, 1984, as a result of the new law. These include the small number of current Federal employees and all nonprofit employees covered solely because of the new law except those whose past employment for a nonprofit organization had been covered, but whose employment for that organization was not covered on December 31, 1983.
- (b) Employees whose only pension based on noncovered employment is a Railroad Retirement pension.

9. *Increase in normal retirement age*

The normal retirement age (i.e., the earliest age at which unreduced retirement benefits can be received) will be gradually increased from age 65 to age 67. For persons attaining age 62 in 2000, the normal retirement age will be increased by 2 months—to age 65 and 2 months. In each succeeding year, the normal retirement age will be increased by 2 additional months until it reaches age 66 for persons attaining age 62 in 2005. The normal retirement age will then remain at age 66 for persons attaining age 62 through 2016. Beginning with persons attaining age 62 in 2017, the normal retirement age will again increase by 2 months each year, until it reaches age 67 for persons attaining age 62 in 2022 and later.

The minimum age of eligibility for reduced benefits will remain unchanged at age 62 (age 60 for widows and widowers). However, when the normal retirement age begins to increase, there will be corresponding increases in the amount of reduction for early retirement. The amount of reduction will be  $\frac{5}{9}$  of 1 percent for each of the first 36 months of early retirement (as under present law), and  $\frac{5}{12}$  of 1 percent for each month in excess of 36. Thus, for persons attaining age 62 during 2005-2016, for whom the normal retirement age will be 66, the reduced benefit payable at age 62 will be 75 percent of the PIA. For persons attaining age 62 in 2022 and later, for whom the normal retirement age will be 67, the reduced benefit payable at age 62 will be 70 percent of the PIA.

10. *Increase in delayed retirement credits*

Beginning with workers who attain age 65 in 1990, the increment for delaying retirement past the normal retirement age will increase by  $\frac{1}{2}$  of 1 percent every second year, from 3 percent per year of delayed retirement for workers attaining age 65 in 1982-89, until reaching 8 percent per year of delayed retirement for workers attaining normal retirement age (age 66) after 2008.

11. *Reduced withholding rate under the retirement earnings test*

Beginning in 1990, the benefit withholding rate under the retirement earnings test will be reduced from \$1 for each \$2 of earnings over the annual exempt amount to \$1 for each \$3 of excess earnings, for beneficiaries who have reached the normal retirement age (age 65 in 1990-99). When the normal retirement age begins to increase in 2000, the age at which the reduced withholding rate will apply will also increase.

12. *Taxation of Social Security benefits*

Beginning in 1984, as much as one-half of OASDI benefits (and railroad retirement tier 1 benefits) will be included in taxable income for taxpayers with incomes above certain base amounts. The sum of a taxpayer's (1) adjusted gross income, (2) tax-free interest income, and (3) one-half of OASDI benefits will be compared to a base amount of \$25,000 for a single taxpayer, or \$32,000 for a married couple filing a joint tax return. If the sum exceeds the base amount, the amount of benefits to be included in taxable income will be the lesser of:

- (a) one-half of the excess of such sum over the base amount, or
- (b) one-half of the amount of benefits received.

The revenue raised by this taxation of benefits will be automatically transferred to the OASI and DI Trust Funds.

The new law does not provide for indexing of the base amounts of \$25,000 and \$32,000. These amounts are, therefore, scheduled to remain the same in all future years.

13. *Changes in tax rate schedule*

The OASDI tax-rate increase scheduled for 1985 is advanced to 1984, and part of the increase scheduled for 1990 is advanced to

1988. Both the OASDI and HI tax rates on self-employment income are increased by making them equal to the corresponding combined rates for employees and employers, beginning in 1984.

For 1984 only, a tax credit of 0.3 percent of taxable wages (equal to the 1984 tax-rate increase for employees) will be allowed against the taxes paid by employees. Similarly, tax credits of 2.7 percent, 2.3 percent, and 2.0 percent will be allowed against taxes on self-employment income in 1984, 1985, and 1986-89, respectively.

Beginning in 1990, self-employed persons will be allowed to deduct from their net earnings from self-employment an amount equal to such income multiplied by one-half of the Social Security tax rate for the self-employed. The result will be multiplied by the entire tax rate for the self-employed, and that product will be the Social Security tax liability for the year (with the usual limitations imposed by the annual earnings base). Half of the Social Security tax liability will be deductible in computing Federal income taxes for the self-employed. The effect of this procedure will be to place self-employed persons in roughly the same position as employees in regard to their Social Security and Federal income taxes.

The allocation of the total OASDI tax rate between the OASI and DI Trust Funds is also modified by the new law.

14. *Acceleration of State and local tax collections*

The new law requires that, after 1983, the Social Security taxes due on the wages of employees of State and local government entities be deposited semi-monthly, within 15 days after the end of each 15-day period, rather than 30 days after the end of each month, as under previous law.

15. *Increase in benefits for certain surviving, divorced, and disabled spouses*

Four provisions of the new law will increase benefits payable to certain surviving, divorced, and disabled spouses. Most of the affected beneficiaries, present and future, are women.

The first provision will allow the continuation of benefits for disabled and surviving divorced spouses who remarry after becoming eligible for benefits. This provision is effective for benefits payable after 1983.

The second provision will change the indexing procedures used to calculate deferred benefits for surviving spouses of workers who die before attaining age 62. Under previous law, the earnings histories of such workers were indexed by wage increases to the second year preceding the year of death. Beginning with the year of death, benefits were indexed by increases in the CPI. The new law provides for wage indexing through the year in which the worker would have reached age 60, or 2 years before the survivor's eligibility for benefits, if earlier, whenever such indexing produces a larger monthly benefit amount. This provision is effective for newly eligible survivors after 1984.

The third provision will provide entitlement to benefits, after 1984, for divorced spouses when the former spouse is not receiving benefits. Under previous law, the former spouse on whose earnings record the benefits were payable had to claim benefits before his or her divorced spouse could claim benefits. Also, under previous law, if the former spouse claimed benefits but continued to work, the divorced spouse could have benefits withheld because of the retirement earnings test. The new law essentially permits independent entitlement.

The fourth provision will increase the benefits, after 1983, for any person who is or ever was entitled to benefits before age 60 as a disabled widow or widower. Previous law required that the initial benefits of such persons would vary from 50 to 71.5 percent of the primary insurance amount for ages at entitlement ranging from 50 to 60. The new law will provide a 71.5-percent benefit rate for all such beneficiaries.

16. *Modification to financing basis of noncontributory military service wage credits*

The new law changes the financing basis of noncontributory military service wage credits under the Social Security Act. These deemed wage credits generally had been financed through reimbursements by the general fund of the Treasury for the additional benefit payments and administrative expenses attributable to such wage credits, with adjustments for interest.

Under the new law, the additional past and future costs attributable to wage credits for military service before 1957, less the accumulated value of past reimbursements, was paid in a lump-sum transfer on May 20, 1983. For the deemed wage credits based on military service in 1957-83, a similar lump-sum transfer was made on the same date to reflect the differences, accumulated with interest, between what was actually paid in the past and what would have been paid if such deemed wage credits had been taxed at the combined employee-employer rate. For deemed wage credits based on military service after 1983, a transfer will be made on July 1 of each year in an amount equal to what would have been paid if such deemed wages in the year were taxed at the combined employee-employer rate.

17. *Reimbursements for unnegotiated checks*

The new law will provide reimbursement to the Social Security trust funds for all past and future benefit checks that remain uncashed 6 months after being issued. Under previous law, the total amount for all checks issued was deducted from the trust funds, and such unnegotiated checks were never reimbursed.

18. *Modification of public pension offset*

The new law provides that any person becoming eligible after June 1983 for both a pension based on noncovered governmental employment and a Social Security benefit as a spouse or widow(er) will have that Social Security benefit reduced by two-thirds of the amount of the noncovered pension. Previous law provided for offset by the entire pension amount.

19. *Taxation of contributions under certain salary reduction plans*  
The new law requires that employer contributions to salary reduction plans under Internal Revenue Code sections 401(k) and 403(b), and to certain nonqualified deferred compensation arrangements, will be taxable for Social Security purposes. The income-tax treatment of these contributions will not be affected. The provision is effective for contributions made after 1983.
20. *Suspension of benefits to certain nonresident aliens*  
The new law will suspend benefit payments to any nonresident alien receiving benefits or applying to receive them as an auxiliary or survivor beneficiary of an insured worker (whether or not the worker is a U.S. citizen), whenever such alien has been outside the United States for 6 consecutive calendar months. Alien auxiliary or survivor beneficiaries who can prove that they had lived in the United States for a total of at least 5 years during which their relationship with the insured worker was the same as the one on which eligibility for benefits is based would be exempt from this provision. The provision is effective with respect to any individual who becomes eligible for benefits after 1984.
21. *Expanded use of death certificates*  
The new law provides authority for the Secretary of Health and Human Services to contract with the States for death certificate information. This information will be used to prevent the erroneous payment of benefits to deceased individuals.
22. *Other changes*  
The new law includes many other provisions which do not have a significant impact from an actuarial cost standpoint on the OASDI program. Some of these provisions made minor or technical modifications to the Social Security Act, some require studies to be performed, and some affect such a small number of beneficiaries that the cost effect is negligible.

Details of these amendments can be found in documents prepared by and for the Congress. In particular, estimates of the financial effects of the new provisions are available in these documents. The financial projections shown in this report include the effects of these amendments.

## V. 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 and their employers, and by individuals with self-employment 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 employment covered by the program 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 self-employment income.

In general, an individual's contributions are computed on annual wages or self-employment income, or both wages and self-employment income combined, up to a specified maximum annual amount. The contributions are determined first on the wages and then on any self-employment income within 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 amount of benefits to which an individual (or his or her spouse and children) may become entitled under the OASDI program is based on the individual's taxable 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 taxable in a year is also the maximum amount of earnings creditable toward benefits in that year (the contribution and benefit base).

The contribution rates applicable to taxable earnings in each calendar year, and the allocation of the rates between the two trust funds, are shown in table 1. For 1984 and later, the rates shown are those scheduled in present law (including the effects of Public Law 98-21). The contribution and benefit bases are also shown in table 1. The bases for 1975-78 were determined under the automatic-increase 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 1982-83 were again determined under the automatic-increase provisions, as will be the bases in 1984 and later.

TABLE 1.—CONTRIBUTION AND BENEFIT BASE AND CONTRIBUTION RATES

Calendar years	Contribution and benefit base	Contribution rates (percent of taxable earnings)					
		Employees and employers, each			Self-employed		
		OASDI	OASI	DI	OASDI	OASI	DI
1937-49.....	\$3,000	1.000	1.000	—	—	—	—
1950.....	3,000	1.500	1.500	—	—	—	—
1951-53.....	3,600	1,500	1,500	—	2,2500	2,2500	—
1954.....	3,600	2,000	2,000	—	3,0000	3,0000	—
1955-56.....	4,200	2,000	2,000	—	3,0000	3,0000	—
1957-58.....	4,200	2,250	2,000	0.250	3,3750	3,0000	0.3750
1959.....	4,800	2,500	2,250	.250	3,7500	3,3750	.3750
1960-61.....	4,800	3,000	2,750	.250	4,5000	4,1250	.3750
1962.....	4,800	3,125	2,875	.250	4,7000	4,3250	.3750
1963-65.....	4,800	3,625	3,375	.250	5,4000	5,0250	.3750
1966.....	6,600	3,850	3,500	.350	5,8000	5,2750	.5250
1967.....	6,600	3,900	3,550	.350	5,9000	5,3750	.5250
1968.....	7,800	3,800	3,325	.475	5,8000	5,0875	.7125
1969.....	7,800	4,200	3,725	.475	6,3000	5,5875	.7125
1970.....	7,800	4,200	3,650	.550	6,3000	5,4750	.8250
1971.....	7,800	4,600	4,050	.550	6,9000	6,0750	.8250
1972.....	9,000	4,600	4,050	.550	6,9000	6,0750	.8250
1973.....	10,800	4,850	4,300	.550	7,0000	6,2050	.7950
1974.....	13,200	4,950	4,375	.575	7,0000	6,1850	.8150
1975.....	14,100	4,950	4,375	.575	7,0000	6,1850	.8150
1976.....	15,300	4,950	4,375	.575	7,0000	6,1850	.8150
1977.....	16,500	4,950	4,375	.575	7,0000	6,1850	.8150
1978.....	17,700	5,050	4,275	.775	7,1000	6,0100	1,0900
1979.....	22,900	5,080	4,390	.750	7,0500	6,0100	1,0400
1980.....	25,900	5,080	4,520	.560	7,0500	6,2725	.7775
1981.....	29,700	5,350	4,700	.650	8,0000	7,0250	.9750
1982.....	32,400	5,400	4,575	.825	8,0500	6,8125	1,2375
1983.....	35,700	5,400	4,775	.625	8,0500	7,1125	.9375
Rates scheduled in present law:							
1984-87.....	( <sup>1</sup> )	5,700	5,200	.500	11,4000	10,4000	1,0000
1988-89.....	( <sup>1</sup> )	6,060	5,530	.530	12,1200	11,0600	1,0600
1990-99.....	( <sup>1</sup> )	6,200	5,600	.600	12,4000	11,2000	1,2000
2000 and later.....	( <sup>1</sup> )	6,200	5,490	.710	12,4000	10,9800	1,4200

<sup>1</sup>Subject to automatic increase.

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 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. In May 1983 and later, 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 lost because of this provision.

Beginning in 1984, OASDI benefits will be subject to Federal income taxes under certain circumstances. The proceeds from this taxation of benefits will be transferred 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 lost as a result of the advance transfers. Subsequent adjustments will be made based on the actual amounts as shown on annual income tax records. The amounts appropriated from the general fund of the Treasury will be allocated to the OASI and DI Trust Funds on the basis of the additional 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 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 OASDI program. Under these provisions, transfers between the Railroad Retirement Account and the trust funds are made on an annual basis in order to place each trust fund in the same position as it would have been if railroad employment had always been covered under OASDI.

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) payments from the general fund of the Treasury to the OASI and DI Trust Funds for any 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; (2) annual transfers from the general fund of the

Treasury representing the amount of contributions that would have been paid on noncontributory wage credits for military service after 1956, if such credits had been treated as covered earnings; (3) 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 reached age 72 before 1968 and who generally are not eligible for cash benefits under other provisions of the OASDI program; (4) the receipt of unconditional money gifts or bequests made for the benefit of the trust funds or any activity financed through the funds; and (5) amounts charged to private employee benefit plans for providing the plans with detailed earnings information. In addition to the payment of benefits from the trust funds, the following expenditures are authorized: (1) costs of vocational rehabilitation services furnished to disabled persons receiving benefits because of their disability where such services contributed to their successful rehabilitation; (2) expenses incurred by the Department of Health and Human Services and by the Department of the Treasury in carrying out the provisions of title II of the Social Security Act and the provisions of the Internal Revenue Code relating to the collection of contributions; and (3) expenditures for construction, rental and lease, or purchase contract of office buildings and related facilities for the Social Security Administration.

The net worth of facilities and other fixed capital assets is not carried in the statements of the operations of the trust funds presented in this report. This is because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures, and therefore is not viewed as being a consideration in assessing the 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 specifies that interest on a loaned amount 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."

At the end of each year 1983-88, if the assets of the combined OASI and DI Trust Funds (including amounts borrowed) exceed 15 percent of the estimated outgo in the next year, such excess over 15 percent must be used to repay any outstanding loans from 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.

## VI. SUMMARY OF THE OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, FISCAL YEAR 1982

### 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 1982, 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 1981 are also shown in the table.

TABLE 2.—STATEMENT OF OPERATIONS OF THE OASI TRUST FUND DURING FISCAL YEARS 1981 AND 1982  
(In thousands)

	Fiscal year 1981	Fiscal year 1982
Total assets, beginning of year .....	\$24,565,757	\$23,834,020
Receipts:		
Contributions:		
Appropriations .....	107,659,524	112,233,823
Deposits arising from State agreements .....	11,736,537	12,249,227
Gross contributions .....	119,396,061	124,483,050
Less payment into the general fund of the Treasury for contributions subject to refund .....	379,970	236,638
Net contributions .....	119,016,091	124,246,412
Payments from general fund of the Treasury for costs of:		
Noncontributory credits for military service .....	390,127	534,308
Payments to noninsured persons aged 72 before 1968:		
Benefit payments .....	126,850	116,850
Administrative expenses .....	1,343	1,097
Interest .....	21,616	22,460
Total reimbursement for payments to noninsured persons aged 72 before 1968 .....	149,809	140,407
Interest:		
Interest on investments .....	2,018,614	1,708,038
Interest on amounts transferred to or from the general fund account for the Supplemental Security Income program due to adjustment in allocation of administrative expenses <sup>1</sup> .....	302	-811
Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs <sup>1</sup> .....	-2,615	895
Interest on amounts of interfund transfers due to adjustment in allocation of costs of vocational rehabilitation services <sup>1</sup> .....	-48	-8
Total interest .....	2,016,252	1,708,114
Gifts .....	32	33
Total receipts .....	121,572,311	126,629,274
Disbursements:		
Benefit payments:		
Gross benefit payments .....	119,832,055	135,257,381
Less collected overpayments .....	418,587	602,752
Net benefit payments .....	119,413,467	134,654,629
Transfer to Railroad Retirement Account .....	1,584,932	1,793,280
Payment for costs of vocational rehabilitation services for disabled beneficiaries:		
For current fiscal year .....	—	259
For prior fiscal year .....	—	5,466
Transfers to DI Trust Fund due to adjustment in allocation of costs for prior periods .....	7,542	432
Total payment for costs of vocational rehabilitation services .....	7,542	6,158
Administrative expenses:		
Department of Health and Human Services .....	1,203,618	1,284,908
Department of the Treasury .....	71,425	131,289

TABLE 2.—STATEMENT OF OPERATIONS OF THE OASI TRUST FUND DURING FISCAL YEARS  
1981 AND 1982 (Cont.)  
[In thousands]

	Fiscal year 1981	Fiscal year 1982
Disbursements: (Cont.)		
Administrative expenses: (Cont.)		
Construction of facilities for Social Security Administration.....	\$10,059	\$55,974
Expenses of Department of Education for administration of vocational rehabilitation program for disabled beneficiaries .....	—	162
Interfund transfers due to adjustment in allocation of administrative expenses <sup>1</sup> .....	14,128	—
Interfund transfers due to adjustment in allocation of costs of construc- tion <sup>2</sup> .....	-924	2,348
	<hr/>	<hr/>
Gross administrative expenses .....	1,298,307	1,474,680
Less reimbursement from general fund of the Treasury for costs of furnishing information on deferred vested pension benefits.....	131	565
Less receipts from sales of supplies, materials, etc.....	69	112
	<hr/>	<hr/>
Net administrative expenses .....	1,298,107	1,474,003
	<hr/>	<hr/>
Total disbursements .....	122,304,048	137,928,070
	<hr/>	<hr/>
Net increase in assets.....	-731,737	-11,298,796
	<hr/>	<hr/>
Total assets, end of year.....	23,834,020	12,535,224

<sup>1</sup>A positive figure represents a transfer of interest to the OASI Trust Fund from other Social Security trust funds or from the general fund account for the Supplemental Security Income (SSI) program. A negative figure represents a transfer of interest from the OASI Trust Fund to other Social Security trust funds or to the general fund account for the SSI program.

<sup>2</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.

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

The total assets of the OASI Trust Fund amounted to \$23,834 million on September 30, 1981. During fiscal year 1982, total receipts amounted to \$126,629 million and total disbursements were \$137,928 million. The assets of the trust fund thus decreased by \$11,299 million during the year, to a total of \$12,535 million on September 30, 1982. Included in total receipts during fiscal year 1982 were \$112,234 million representing contributions appropriated to the fund and \$12,249 million representing amounts received by the Secretary of the Treasury in accordance with State agreements for coverage of State and local government employees and deposited in the trust fund. As an offset, \$237 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 \$124,246 million, an increase of 4.4 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 two increases in the maximum annual amount of taxable earnings—from \$25,900 to \$29,700 and from \$29,700 to \$32,400—that became effective on January 1, 1981, and January 1, 1982, respectively; and (3) the increase in the OASI contribution rate for employees and employers, each, from 4.52 percent to 4.70 percent that became effective on January 1, 1981, and the decrease from 4.70 percent to 4.575 percent that became effective January 1, 1982. Although the first increase in the maximum annual amount of taxable earnings, from \$25,900 to \$29,700, became effective in 1981, earnings between \$25,900 and \$29,700, which were

taxable during all of fiscal year 1982, were taxable during only part of the preceding fiscal year.

Reference has been made 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 noncontributory wage credits for military service and for the costs of payments to certain noninsured persons who were aged 72 before 1968. As indicated in the section describing the Social Security Amendments of 1983, the financing basis of military service wage credits will be substantially revised beginning in fiscal year 1983. The following comments relate to the fiscal year 1982 military service reimbursements only.

Section 217(g) of the Social Security Act provides for reimbursement of the additional costs attributable to military service performed before 1957 arising from benefit payments that have been made after August 1950 and those that will be made in future years. 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 in 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 1981, the Secretary of Health and Human Services determined that the OASI Trust Fund should receive reimbursement of \$43 million, and the DI Trust Fund should receive reimbursement of \$42 million, for additional costs in fiscal year 1981 attributable to noncontributory wage credits for military service performed after 1956. Thus, reimbursements amounting to \$534 million for the OASI Trust Fund and \$168 million for the DI Trust Fund were received in December 1981.

A reimbursement amounting to \$140 million for the costs of 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 1982. This reimbursement, which was required by section 228 of the Social Security Act, reflected the costs of payments made in fiscal year 1980 and adjustments in the costs of payments made in prior fiscal years.

The OASI Trust Fund received \$33,165 in gifts in fiscal year 1982 under the provisions authorizing the deposit of money gifts or bequests in the OASI and DI Trust Funds.

The remaining \$1,708 million of receipts consisted of interest on the investments of the trust fund and net interest on amounts of interfund transfers arising out of adjustments in the allocation of administrative expenses, construction costs, and the costs of vocational rehabilitation services for prior fiscal years.

Of the \$137,928 million in total disbursements, \$134,655 million was for benefit payments, excluding collected overpayments of \$603 million. This represents an increase of 12.8 percent over the corresponding amount for benefit payments in fiscal year 1981. This increase was due to (1) the automatic cost-of-living benefit increases of 11.2 percent and 7.4 percent, which became effective for June 1981 and June 1982, respec-

tively, 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 11.2 percent became effective in 1981, the resulting higher benefit levels (which were in effect during all of fiscal year 1982) were in effect during only part of the preceding fiscal year. The change in benefit payments from fiscal year 1981 to fiscal year 1982 also reflects the net effect of various provisions in the 1977 and later amendments.

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 \$1,674 million to the Railroad Retirement Account from the OASI Trust Fund would place this trust fund in the same position as of September 30, 1981, as it would have been if railroad employment had always been covered under the Social Security Act. A total amount of \$1,793 million was transferred to the Railroad Retirement Account in June 1982, including interest to the date of transfer amounting to \$119 million.

Expenditures of the OASI program for the costs of vocational rehabilitation services amounted to \$6,158,000. Most of this amount represents reimbursement to the Department of Education for rehabilitation services provided during fiscal year 1981. The balance represents payment for services in fiscal year 1982 (now made directly to the various State vocational rehabilitation agencies) 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 old-age beneficiaries and survivors of deceased insured workers) who were receiving monthly benefits from the OASI Trust Fund because of their disability. Beginning in fiscal year 1982, 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 \$1,474 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 allowances.

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 by it 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 1982 amounted to \$564,681.

Net administrative expenses charged to the OASI and DI Trust Funds in fiscal year 1982 totaled \$2,046 million. 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 1978-82

Fiscal year	Total— Administrative expenses as a percentage of—		OASI Trust Fund— Administrative expenses as a percentage of—		DI Trust Fund— Administrative expenses as a percentage of—	
	Total contribu- tion income	Total benefit payments	Contribution income	Benefit payments	Contribution income	Benefit payments
1978 .....	1.6	1.6	1.5	1.4	2.6	2.7
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

In table 4, the actual amounts of contributions and benefit payments in fiscal year 1982 are compared with the estimated fiscal year 1982 amounts which appeared in the 1981 and 1982 Annual Reports. In each case, the estimates shown are the ones based on the alternative II-B set of assumptions from the report in question. The actual experience for each trust fund was quite close, relatively, to the estimates in the 1982 Annual Report. The estimates used in the 1981 Annual Report exceeded actual experience for both contributions and benefits, reflecting the severe economic slowdown in 1982 and slower growth in inflation than was anticipated. The comparison in table 4 is also affected, to a minor degree, by the various Social Security amendments enacted after the 1981 Annual Report was issued. 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 1982 reflects the aforementioned adjustments to contributions for prior fiscal years. On the other hand, the "actual" amount of contributions in fiscal year 1982 does not reflect adjustments to contributions for fiscal year 1982 that were to be made after September 30, 1982.

TABLE 4.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE OASI AND DI TRUST FUNDS, FISCAL YEAR 1982  
[Amounts in millions]

	OASI Trust Fund		DI Trust Fund	
	Net contributions	Benefit payments	Net contributions	Benefit payments
Actual amount.....	\$124,246	\$134,655	\$20,866	\$17,999
Estimated amount published in 1982 report.....	\$124,742	\$134,986	\$20,828	\$17,612
Actual as percentage of estimate.....	100	100	100	99
Estimated amount published in 1981 report.....	\$128,571	\$137,114	\$21,674	\$18,450
Actual as percentage of estimate.....	97	96	96	94

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

At the end of fiscal year 1982, about 35.6 million persons were receiving monthly benefits under the OASDI program. About 31.5 million of these persons were receiving monthly benefits from the OASI Trust Fund. The distribution of benefit payments in fiscal years 1981 and 1982, by type of beneficiary, is shown in table 5. Approximately 75 percent of the total benefit payments from the OASI Trust Fund in fiscal year 1982 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 8 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 OASI TRUST FUND, BY TYPE OF BENEFICIARY AND PAYMENT, FISCAL YEARS 1981 AND 1982  
[Amounts in millions]

	Fiscal year 1981		Fiscal year 1982	
	Amount	Percent of total	Amount	Percent of total
Total.....	\$119,413	100	\$134,655	100
Monthly benefits.....	119,043	100	134,445	100
Retired workers and their dependents.....	89,032	75	101,290	75
Retired workers.....	80,466	67	91,791	68
Wives and husbands.....	7,280	6	8,230	6
Children.....	1,286	1	1,269	1
Survivors of deceased workers.....	29,899	25	33,053	25
Aged widows and widowers.....	19,666	16	22,472	17
Disabled widows and widowers.....	335	( <sup>1</sup> )	348	( <sup>1</sup> )
Parents.....	58	( <sup>1</sup> )	59	( <sup>1</sup> )
Children.....	8,116	7	8,331	6
Widowed mothers and fathers caring for child beneficiaries.....	1,724	1	1,843	1
Noninsured persons generally aged 72 before 1968.....	113	( <sup>1</sup> )	102	( <sup>1</sup> )
Lump-sum death payments.....	370	( <sup>1</sup> )	210	( <sup>1</sup> )

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

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

In fiscal year 1982, 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 \$102 million, or 0.1 percent of total benefit payments. The costs of 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 1982, lump-sum death payments amounted to \$210 million, or 0.2 percent of total benefit payments.

The assets of the OASI Trust Fund at the end of fiscal year 1982 totaled \$12,535 million, consisting of \$11,922 million in U.S. Government obligations or federally sponsored agency obligations, and an undisbursed balance of \$614 million. Table 6 shows the total assets of the fund and their distribution at the end of fiscal years 1981 and 1982.

TABLE 6.—ASSETS OF THE OASI TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1981 AND 1982

	September 30, 1981		September 30, 1982	
	Par value	Book value <sup>1</sup>	Par value	Book value <sup>1</sup>
Investments in public-debt obligations:				
Public issues:				
Treasury bonds:				
3-percent, 1995 .....	\$70,170,000	\$70,156,348.03	\$70,170,000	\$70,157,371.99
3½-percent, 1978-83 .....	60,200,000	60,101,357.42	60,200,000	60,160,542.62
3½-percent, 1985 ..	25,700,000	25,388,475.83	25,700,000	25,475,412.95
3½-percent, 1990 ..	556,250,000	552,713,967.51	556,250,000	553,138,291.71
3½-percent, 1998 ..	552,037,000	546,763,290.25	552,037,000	547,071,995.41
4½-percent, 1989-94 .....	91,300,000	90,919,653.57	91,300,000	90,949,879.77
4½-percent, 1975-85 .....	78,023,000	77,947,810.82	78,023,000	77,968,794.14
4½-percent, 1987-92 .....	33,000,000	33,620,917.68	33,000,000	33,514,474.68
6½-percent, 1984 ..	31,500,000	31,632,446.49	31,500,000	31,587,036.21
7½-percent, 1988-93 .....	99,934,000	98,987,481.80	99,934,000	99,066,909.92
7½-percent, 2002-07 .....	15,000,000	14,992,501.90	15,000,000	14,992,796.86
7½-percent, 1995-2000 .....	22,180,000	21,620,712.30	22,180,000	21,651,358.14
8-percent, 1996-2001 .....	90,500,000	90,423,177.36	90,500,000	90,427,050.72
8½-percent, 2000-05 .....	22,450,000	22,445,044.50	22,450,000	22,445,243.34
8½-percent, 1995-2000 .....	50,000,000	50,570,707.25	50,000,000	50,540,404.25
8½-percent, 1994-99 .....	6,352,000	6,479,503.84	6,352,000	6,472,286.56
11½-percent, 2010 .....	153,100,000	152,035,784.80	153,100,000	152,073,345.28
Total investments in public issues	1,957,696,000	1,946,799,181.35	1,957,696,000	1,947,693,194.55
Obligations sold only to the trust funds (special issues):				
Certificates of indebtedness:				
14½-percent, 1982 .....	7,764,737,000	7,764,737,000.00	—	—
12½-percent, 1983 .....	—	—	8,209,913,000	8,209,913,000.00
Bonds:				
7½-percent, 1991 ..	125,848,000	125,848,000.00	—	—
7½-percent, 1992 ..	2,014,741,000	2,014,741,000.00	—	—
7½-percent, 1990 ..	547,391,000	547,391,000.00	—	—
7½-percent, 1990 ..	522,029,000	522,029,000.00	—	—
7½-percent, 1991 ..	1,888,893,000	1,888,893,000.00	—	—
8½-percent, 1993 ..	1,555,736,000	1,555,736,000.00	—	—
8½-percent, 1994 ..	1,272,609,000	1,272,609,000.00	—	—
9½-percent, 1994 ..	216,450,000	216,450,000.00	—	—
9½-percent, 1995 ..	1,489,059,000	1,489,059,000.00	—	—
13-percent, 1989 ..	1,442,909,000	1,442,909,000.00	—	—
13-percent, 1990 ..	419,639,000	419,639,000.00	—	—

TABLE 6.—ASSETS OF THE OASI TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1981 AND 1982 (Cont.)

	September 30, 1981		September 30, 1982	
	Par value	Book value <sup>1</sup>	Par value	Book value <sup>1</sup>
Investments in public-debt obligations: (Cont.)				
Obligations sold only to the trust funds (special issues): (Cont.)				
Bonds: (Cont.)				
13-percent, 1996 ..	\$1,482,268,000	\$1,482,268,000.00	\$1,308,977,000	\$1,308,977,000.00
Total obligations sold only to the trust funds (special issues).....	20,742,309,000	20,742,309,000.00	9,518,890,000	9,518,890,000.00
Total investments in public-debt obligations....	22,700,005,000	22,689,108,181.35	11,476,586,000	11,466,583,194.55
Investments in federally sponsored agency obligations:				
Participation certificates:				
Federal Assets Liquidation Trust — Government National Mortgage Association:				
5.10-percent, 1987 .....	50,000,000	50,000,000.00	50,000,000	50,000,000.00
5.20-percent, 1982 .....	100,000,000	100,000,000.00	—	—
Federal Assets Financing Trust — Government National Mortgage Association:				
6.05-percent, 1988 .....	65,000,000	64,922,813.32	65,000,000	64,935,000.88
6.20-percent, 1968 .....	230,000,000	230,000,000.00	230,000,000	230,000,000.00
6.40-percent, 1987 .....	75,000,000	75,000,000.00	75,000,000	75,000,000.00
6.45-percent, 1988 .....	35,000,000	35,000,000.00	35,000,000	35,000,000.00
Total investments in federally sponsored agency obligations.....	555,000,000	554,922,813.32	455,000,000	454,935,000.88
Total investments .....	23,255,005,000	23,244,030,994.67	11,931,586,000	11,921,518,195.43
Undisbursed balances.....	—	589,989,207.52	—	613,705,878.57
Total assets.....	—	23,834,020,202.19	—	12,535,224,074.00

<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 fund during fiscal year 1982 amounted to \$11,323 million. New securities with a total par value of \$137,362 million were acquired during the fiscal year through the investment of receipts and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the fiscal year was \$148,685 million. Included in these amounts are \$127,643 million in certificates of indebtedness that were acquired, and \$127,197 million in certificates of indebtedness that were redeemed, within 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, 1982, was 10.1 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 interest rate on special issues purchased by the trust fund in June 1982 was 13.25 percent, payable semiannually. The special issues purchased then included \$9,719 million in Treasury bonds maturing in 1983. Although the interest rate on bonds is generally limited to 4½ percent by 31 U.S.C. 752, subsequent amendments have authorized 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. On June 30, 1982, however, it was clear that the continuing rapid decline in OASI Trust Fund assets would require redemption of virtually all securities, regardless of maturity, within the next few months. As a result, the certificates of indebtedness and other securities maturing on June 30, 1982, were replaced with new issues having maturity dates in 1983 only.

#### *B. DISABILITY INSURANCE TRUST FUND*

A statement of the income and disbursements of the Federal Disability Insurance Trust Fund during fiscal year 1982 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 1981 are also shown in the table.

TABLE 7.—STATEMENT OF OPERATIONS OF THE DI TRUST FUND DURING FISCAL YEARS  
1981 AND 1982  
[In thousands]

	Fiscal year 1981	Fiscal year 1982
Total assets, beginning of year .....	\$7,680,173	\$3,392,434
Receipts:		
Contributions:		
Appropriations .....	11,387,656	18,887,415
Deposits arising from State agreements.....	1,248,844	2,010,068
Gross contributions .....	12,636,500	20,897,483
Less payment into the general fund of the Treasury for contributions subject to refund.....	47,010	31,027
Net contributions.....	12,589,490	20,866,456
Payments from general fund of the Treasury for costs of:		
Noncontributory credits for military service.....	130,389	168,235
Interest:		
Interest on investments .....	268,454	364,168
Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs <sup>1</sup> .....	4,121	-757
Interest on amounts transferred from OASI Trust Fund due to adjustment in allocation of costs of vocational rehabilitation services.....	48	8
Total interest .....	272,624	363,420
Total receipts <sup>2</sup> .....	12,992,509	21,398,104
Disbursements:		
Benefit payments:		
Gross benefit payments.....	16,915,991	17,471,465
Less collected overpayments .....	82,679	72,060
Net benefit payments.....	16,853,311	17,399,405
Transfer to Railroad Retirement Account.....	29,443	26,354
Payment for costs of vocational rehabilitation services for disabled beneficiaries:		
For current fiscal year .....	—	1,633
For prior fiscal year .....	—	35,945
Less transfer from OASI Trust Fund due to adjustment in allocation of costs for prior periods.....	7,542	432
Total payment for costs of vocational rehabilitation services.....	-7,542	37,146
Administrative expenses:		
Department of Health and Human Services.....	414,314	538,332
Department of the Treasury .....	11,758	22,336
Construction of facilities for Social Security Administration.....	4,243	14,279
Expenses of Department of Education for administration of vocational rehabilitation program for disabled beneficiaries .....	—	978
Interfund transfers due to adjustment in allocation of costs of construc- tion <sup>3</sup> .....	791	-3,479
Gross administrative expenses .....	431,106	572,446
Less interfund transfers due to adjustment in allocation of administrative expenses .....	26,047	—
Less receipts from sales of supplies, materials, etc.....	22	47
Net administrative expenses .....	405,036	572,399
Total disbursements .....	17,280,249	18,035,304
Net increase in assets.....	-4,287,739	3,362,800
Total assets, end of year.....	3,392,434	6,755,234

<sup>1</sup>A positive figure represents a transfer of interest to the DI Trust Fund from other Social Security trust funds. A negative figure represents a transfer of interest from the DI Trust Fund to other Social Security trust funds.

<sup>2</sup>Includes gifts amounting to \$7,005 during fiscal year 1981 and -\$7,000 during fiscal year 1982 (representing the recovery of a prior year gift by the estate of the donor).

<sup>3</sup>A positive figure represents a transfer from the DI Trust Fund to the other Social Security trust funds. A negative figure represents a transfer to the DI Trust Fund from the other Social Security trust funds.

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

The total assets of the DI Trust Fund amounted to \$3,392 million on September 30, 1981. During fiscal year 1982, total receipts amounted to \$21,398 million, and total disbursements were \$18,035 million. The assets of the trust fund thus increased by \$3,363 million during the year, to a total of \$6,755 million on September 30, 1982.

Included in total receipts were \$18,887 million representing contributions appropriated to the fund and \$2,010 million representing amounts received by the Secretary of the Treasury in accordance with State coverage agreements and deposited in the fund. As an offset, \$31 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 \$20,866 million, an increase of 65.7 percent from the amount for the preceding fiscal year. This unusually large increase is primarily attributable to the expiration of the temporary reallocation of tax rates between OASI and DI that was in effect during calendar years 1980-81 as a result of Public Law 96-403. Because the reallocation was enacted after the close of fiscal year 1980, but was made retroactive to January 1, 1980, a significant part of the assets of the DI Trust Fund was transferred to the OASI Trust Fund—and was reflected in contribution income—in fiscal 1981. Thus contribution income to the DI Trust Fund was unusually low in fiscal year 1981. On January 1, 1982, the DI share of the OASDI tax rate reverted to a higher level (as scheduled prior to the temporary reallocation), causing a marked increase in DI tax income for fiscal year 1982 relative to fiscal year 1981. 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 \$168 million in December 1981 from the general fund of the Treasury as reimbursement for the costs of noncontributory credits for military service. Of this amount, \$126 million was reimbursed in accordance with section 217(g) and \$42 million was reimbursed in accordance with section 229(b), as described in the preceding section.

The remaining \$363 million of receipts consisted of interest on the investments of the fund, plus interest on amounts of interfund transfers.

Of the \$18,035 million in total disbursements, \$17,399 million was for benefit payments, excluding collected overpayments of \$72 million. This represents an increase of 3.2 percent over the corresponding amount for benefit payments in fiscal year 1981. This increase reflects the same factors that resulted in the increase in benefit payments from the OASI Trust Fund as described in the preceding section. 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 and the Social Security Disability Amendments of 1980.

Provisions governing the financial interchanges between the Railroad Retirement Account and the DI Trust Fund are similar to those

mentioned in the preceding section relating to the OASI Trust Fund. The determination made as of September 30, 1981, required that a transfer of \$24,600,000 be made from the DI Trust Fund to the Railroad Retirement Account. A total amount of \$26,354,000 was transferred to the Railroad Retirement Account in June 1982, including interest to the date of transfer amounting to \$1,754,000.

The remaining disbursements amounted to \$572 million for net administrative expenses and \$37 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 disability. 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 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 1978-81 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 <sup>1</sup> (in thousands)	Estimated amount of benefit payments in preceding fiscal year to disabled beneficiaries (in thousands)	Payments for costs of rehabilitation services as a percent of preceding year's benefit payments
1978.....	\$94,539	\$9,986,069	.95
1979.....	97,766	10,967,760	.89
1980.....	40,638	12,089,653	.34
1981.....	41,411	13,502,784	.31

<sup>1</sup>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 revision.

At the end of fiscal year 1982, about 4.1 million persons were receiving monthly benefits from the DI Trust Fund. The distribution of benefit payments in fiscal years 1981 and 1982, 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 1981 AND 1982  
[Amounts in millions]

	Fiscal year 1981		Fiscal year 1982	
	Amount	Percent of total	Amount	Percent of total
Total.....	\$16,853	100	\$17,399	100
Disabled workers.....	14,057	83	14,764	85
Wives and husbands.....	678	4	666	4
Children.....	2,118	13	1,969	11

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

The assets of the DI Trust Fund at the end of fiscal year 1982 totaled \$6,755 million, consisting of \$6,751 million in U.S. Government obligations and an undisbursed balance of \$4 million. Table 9 shows the total assets of the fund and their distribution at the end of fiscal years 1981 and 1982.

TABLE 9.—ASSETS OF THE DI TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1981 AND 1982

	September 30, 1981		September 30, 1982	
	Par value	Book value <sup>1</sup>	Par value	Book value <sup>1</sup>
Investments in public-debt obligations:				
Public issues:				
Treasury bonds:				
3½-percent, 1990..	\$10,500,000	\$10,269,438.23	\$10,500,000	\$10,297,105.79
3½-percent, 1998..	5,000,000	4,822,213.55	5,000,000	4,832,620.55
4½-percent, 1989-94.....	68,400,000	67,980,887.43	68,400,000	68,015,194.27
4½-percent, 1975-85.....	20,795,000	20,789,718.98	20,795,000	20,791,192.46
4½-percent, 1987-92.....	80,800,000	80,852,661.36	80,800,000	80,843,633.88
6½-percent, 1984..	15,000,000	15,015,823.36	15,000,000	15,010,398.04
7½-percent, 1988-93.....	26,500,000	26,042,754.92	26,500,000	26,080,125.04
7½-percent, 2002-07.....	10,000,000	9,995,000.90	10,000,000	9,995,197.46
8-percent, 1996-2001.....	26,000,000	25,977,929.26	26,000,000	25,979,042.02
8½-percent, 2000-05.....	3,750,000	3,733,774.01	3,750,000	3,734,459.57
11½-percent, 2010.....	30,250,000	30,039,729.70	30,250,000	30,047,150.38
Total investments in public issues	296,995,000	295,519,931.70	296,995,000	295,626,119.46
Obligations sold only to the trust funds (special issues):				
Certificates of indebtedness:				
12½-percent, 1983	—	—	1,551,812,000	1,551,812,000.00
13½-percent, 1983	—	—	1,844,251,000	1,844,251,000.00
13½-percent, 1983	—	—	1,674,067,000	1,674,067,000.00
14½-percent, 1982	1,282,170,000	1,282,170,000.00	—	—
Bonds:				
7½-percent, 1992..	161,560,000	161,560,000.00	—	—
8½-percent, 1993..	241,389,000	241,389,000.00	162,136,000	162,136,000.00
8½-percent, 1992..	64,425,000	64,425,000.00	—	—
8½-percent, 1993..	97,887,000	97,887,000.00	97,887,000	97,887,000.00
8½-percent, 1994..	339,277,000	339,277,000.00	339,277,000	339,277,000.00
9½-percent, 1992..	142,337,000	142,337,000.00	—	—
9½-percent, 1993..	142,337,000	142,337,000.00	142,337,000	142,337,000.00
9½-percent, 1994..	142,336,000	142,336,000.00	142,336,000	142,336,000.00
9½-percent, 1995..	481,613,000	481,613,000.00	481,613,000	481,613,000.00

TABLE 9.—ASSETS OF THE DI TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1981 AND 1982 (Cont.)

	September 30, 1981		September 30, 1982	
	Par value	Book value <sup>1</sup>	Par value	Book value <sup>1</sup>
Investments in public-debt obligations: (Cont.)				
Obligations sold only to the trust funds (special issues): (Cont.)				
Bonds: (Cont.)				
13½-percent, 1983	—	—	\$19,947,000	\$19,947,000.00
Total obligations sold only to the trust funds (special issues).....	\$3,095,331,000	\$3,095,331,000.00	6,455,663,000	6,455,663,000.00
Total investments in public-debt obligations...	3,392,326,000	3,390,850,931.70	6,752,658,000	6,751,289,119.46
Undisbursed balances.....	—	1,582,891.88	—	3,944,459.84
Total assets.....	—	3,392,433,823.58	—	6,755,233,579.30

<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 trust fund during the fiscal year amounted to \$3,360 million. New securities with a total par value of \$25,833 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 \$22,472 million. Included in these amounts are \$21,565 million in certificates of indebtedness that were acquired, and \$17,777 million in certificates of indebtedness that were redeemed, within the fiscal year.

The effective annual rate of interest earned by the assets of the DI Trust Fund during the 12 months ending on June 30, 1982, was 11.0 percent. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1982 was 13.25 percent, payable semiannually.

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

## VII. 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, 1982, is presented in the preceding section of this report. Estimates of the operations and status of the trust funds during fiscal years 1983-87 are presented in this section. Similar estimates for calendar years 1983-87 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 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, including deemed wages based on military service. The total earnings are adjusted to reflect the lower effective tax rates (in comparison with the combined employee-employer rate) which apply to tips, multiple-employer "excess wages," and self-employment income through 1983. 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 defined to be the income from the taxation of benefits expressed as a percentage of taxable payroll).

With these definitions, 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 exactly 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 as the assets at the beginning of the year 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 under pessimistic assumptions. 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 system 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 duration. 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 of assumptions, alternatives II-A and II-B, share the same demographic assumptions but differ in their economic assumptions. Alternative II-A assumes a more robust economic expansion than alternative II-B. This type of presentation is made to illustrate 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 alternative II-B. Of all four alternatives, alternative I is the most optimistic, and alternative III is the most pessimistic. The range of future short-range economic performance delineated by these alternatives is slightly narrower than in last year's report. This is largely the result of slower assumed growth in alternatives I and II-A.

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 system, but rather, they are intended to be indicators of the trend and range of future income and outgo.

*Economic assumptions*

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

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

Calendar year	Average annual percentage increase in—					Average annual unemployment rate <sup>a</sup> (percent)
	Real GNP <sup>b</sup>	Average wages in covered employment	Consumer price index	Real-wage differential <sup>c</sup> (percent)	Average annual interest rate <sup>d</sup> (percent)	
<b>Past experience:</b>						
1960-64 .....	4.0	3.4	1.3	2.1	3.7	5.7
1965-69 .....	4.4	5.4	3.4	2.0	5.2	3.8
1970 .....	-2	4.9	5.9	-1.0	7.3	4.9
1971 .....	3.4	4.9	4.3	.6	6.0	5.9
1972 .....	5.7	7.3	3.3	4.0	5.9	5.6
1973 .....	5.8	6.9	6.2	.7	6.6	4.9
1974 .....	-6	7.4	11.0	-3.6	7.5	5.6
1975 .....	-1.2	6.6	9.1	-2.5	7.4	8.5
1976 .....	5.4	*8.2	5.7	*2.5	7.1	7.7
1977 .....	5.5	*8.0	6.5	*1.5	7.1	7.1
1978 .....	5.0	*8.2	7.6	*.6	8.2	6.1
1979 .....	2.8	*8.8	11.4	*2.6	9.1	5.8
1980 .....	-4	*8.6	13.5	*4.9	11.0	7.1
1981 .....	1.9	*8.8	10.2	*1.4	13.3	7.6
1982 .....	-1.7	*5.6	6.0	*.4	12.8	9.7
<b>Alternative I:</b>						
1983 .....	3.4	4.3	2.5	1.8	9.6	10.0
1984 .....	5.7	5.2	3.3	1.9	6.7	8.6
1985 .....	5.1	5.3	3.7	1.6	5.8	7.5
1986 .....	4.5	5.6	3.3	2.3	5.4	7.0
1987 .....	4.5	5.7	3.0	2.7	5.3	6.6
1988 .....	4.5	5.4	2.7	2.7	5.2	6.1
1989 .....	4.5	5.2	2.3	2.9	5.1	5.6
1990 .....	4.5	5.1	2.0	3.1	5.1	5.2
1991 .....	4.5	5.3	2.0	3.3	5.1	4.8
1992 .....	4.4	5.2	2.0	3.2	5.1	4.5
1993 .....	3.9	4.9	2.0	2.9	5.1	4.3
1994 .....	3.8	4.7	2.0	2.7	5.1	4.1
1995 .....	3.8	4.5	2.0	2.5	5.1	4.0
2000 & later .....	*3.6	4.5	2.0	2.5	5.1	4.0
<b>Alternative II-A:</b>						
1983 .....	3.1	4.3	2.7	1.6	9.7	10.0
1984 .....	4.8	5.0	3.6	1.4	6.8	8.8
1985 .....	4.1	4.8	4.0	.6	6.0	7.9
1986 .....	4.0	5.1	3.6	1.5	5.6	7.4
1987 .....	4.0	5.2	3.2	2.0	5.6	6.9
1988 .....	4.0	5.0	3.0	2.0	5.6	6.3
1989 .....	4.0	5.3	3.0	2.3	5.6	5.8
1990 .....	3.7	5.5	3.0	2.5	5.6	5.4
1991 .....	3.2	5.4	3.0	2.4	5.6	5.3
1992 .....	3.3	5.3	3.0	2.3	5.6	5.3
1993 .....	3.3	5.2	3.0	2.2	5.6	5.2
1994 .....	3.3	5.0	3.0	2.0	5.6	5.1
1995 .....	3.3	5.0	3.0	2.0	5.6	5.0
2000 & later .....	*3.1	5.0	3.0	2.0	5.6	5.0
<b>Alternative II-B:</b>						
1983 .....	2.4	4.6	3.1	1.5	9.8	10.1
1984 .....	4.1	4.6	4.4	.2	7.3	9.1
1985 .....	3.7	5.5	5.3	.2	6.9	8.3
1986 .....	3.1	5.8	4.8	.8	6.6	7.9
1987 .....	3.0	5.7	4.4	1.3	6.4	7.6
1988 .....	3.0	5.4	4.1	1.3	6.3	7.3
1989 .....	3.0	5.4	4.0	1.4	6.3	6.9
1990 .....	3.0	5.6	4.0	1.6	6.2	6.5
1991 .....	3.0	5.7	4.0	1.7	6.1	6.2
1992 .....	3.0	5.6	4.0	1.6	6.1	5.8
1993 .....	2.5	5.5	4.0	1.5	6.1	5.6
1994 .....	2.5	5.5	4.0	1.5	6.1	5.6
1995 .....	2.6	5.5	4.0	1.5	6.1	5.5
2000 & later .....	*2.6	5.5	4.0	1.5	6.1	5.5

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

Calendar year	Average annual percentage increase in—				Average annual interest rate* (percent)	Average annual unemployment rate* (percent)
	Real GNP <sup>1</sup>	Average wages in covered employment	Consumer price index	Real-wage differential <sup>2</sup> (percent)		
Alternative III:						
1983.....	0.5	3.9	3.3	.6	9.9	10.5
1984.....	1.7	4.6	6.4	-1.8	8.0	10.5
1985.....	3.9	7.4	7.7	-.3	8.4	9.5
1986.....	3.1	7.5	7.3	.1	9.0	8.9
1987.....	2.7	6.7	6.0	.7	8.6	8.6
1988.....	2.7	6.4	5.5	.9	8.2	8.2
1989.....	2.7	6.2	5.1	1.1	7.7	7.8
1990.....	2.7	6.2	5.0	1.2	7.3	7.4
1991.....	2.6	6.3	5.0	1.3	6.6	7.0
1992.....	2.5	6.1	5.0	1.1	6.6	6.8
1993.....	2.3	6.1	5.0	1.1	6.6	6.5
1994.....	2.0	6.0	5.0	1.0	6.6	6.5
1995.....	2.1	6.0	5.0	1.0	6.6	6.5
2000 & later.....	*2.1	6.0	5.0	1.0	6.6	6.5

<sup>1</sup>The real GNP (Gross National Product) is the total output of goods and services expressed in 1972 dollars.

<sup>2</sup>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.

\*The ultimate rates include military personal and are adjusted by age and sex based on the total labor force aged 16 and over as of July 1, 1981. Rates shown for earlier years are crude civilian unemployment rates for those years.

\*Preliminary.

\*This value is for the year 2000. The annual percentage increase in real GNP is assumed to continue to change after 2000 under 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 0.8 for alternatives I, II-A, II-B, and III, respectively.

Alternatives I, II-A, and II-B assume the economic recovery started in the first quarter of 1983, but with the most rapid growth occurring later in 1983. Alternative III assumes that the economy will stagnate for one more year, with the recovery starting in the second quarter of 1984. The more optimistic the alternative, the stronger and longer is the assumed recovery. Specifically, the real GNP in 1983 is assumed to increase above the 1982 level by 3.4 percent, 3.1 percent, 2.4 percent, and 0.5 percent in alternatives I, II-A, II-B, and III, respectively.

After the recovery period, each of the alternatives assumes a steady rate of growth in real GNP during the short-range period. The assumed rates of growth are 4.5 percent, 4.0 percent, 3.0 percent, 2.7 percent for the respective alternatives. In alternatives I and II-A, the steady growth begins during 1985, while in alternatives II-B and III, it begins during 1986.

In alternative II-A, the average annual unemployment rate declines from its peak of 10.0 percent in 1983 to its ultimate level of 5.0 percent in 1995. The annual rate of increase in average wages in covered employment is assumed to fluctuate around 5 percent until 1994 when it becomes steady at that ultimate rate. The annual rate of increase in the average CPI is assumed to rise from 2.7 percent in 1983 to 4.0 percent in 1985 and then to decline to an ultimate rate of 3.0 percent in 1988. The real-wage differential (i.e., the difference between annual rates of increase in the average wage and the average CPI) is assumed to decline from 1.6 percent in 1983 to 0.8 percent in 1985 and then to reach a peak of 2.5 percent in 1990 before declining to its ultimate rate of 2.0 percent

in 1994. The annual interest rate is assumed to reach its ultimate value of 5.6 percent in 1986.

In alternative II-B, the average annual unemployment rate declines from its peak of 10.1 percent in 1983 to its ultimate level of 5.5 percent in 1995. The annual rate of increase in average wages in covered employment is assumed to fluctuate around 5.5 percent until 1993 when it becomes steady at that ultimate rate. The annual rate of increase in the average CPI is assumed to rise from 3.1 percent in 1983 to 5.3 percent in 1985 and then to decline to an ultimate rate of 4.0 percent in 1989. The real-wage differential is assumed to reach an ultimate rate of 1.5 percent per year in 1993. The annual interest rate is assumed to reach its ultimate value of 6.1 percent in 1991.

It is convenient to discuss alternative I in comparison with alternative II-A, the more optimistic of the two intermediate alternatives. In each year, the assumed annual percentage increase in the real GNP in alternative I is higher. Consistent with this higher real GNP is an assumed average annual unemployment rate which in each year is lower, with the ultimate rate of 4.0 percent being 1 percentage point lower. The assumed annual percentage increases in the CPI are also lower, with the ultimate rate of 2.0 percent being 1 percentage point lower. In each year, the assumed real-wage differential is higher, with the ultimate rate of 2.5 percent being 0.5 percentage points higher. The resulting ultimate annual rate of increase in average wages in covered employment is 4.5 percent, which is 0.5 percentage points lower. The ultimate interest rate of 5.1 percent is lower by 0.5 percentage points.

Similarly, it is convenient to discuss alternative III in comparison with alternative II-B, the more pessimistic of the two intermediate alternatives. In each year after 1985, the assumed annual percentage increase in the real GNP in alternative III is lower. Consistent with this lower real GNP is an average annual unemployment rate which in every year is higher, with the ultimate level of 6.5 percent being 1 percentage point higher. The assumed annual percentage increase in the CPI is higher in each year, with the ultimate of 5.0 percent being 1 percentage point higher. In every year, the assumed real-wage differential is lower, with the ultimate of 1.0 percent being 0.5 percentage points lower. The resulting ultimate annual rate of increase in average wages in covered employment is 6.0 percent, which is 0.5 percentage points higher. The ultimate interest rate of 6.6 percent is higher by 0.5 percentage points.

*Demographic assumptions*

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

TABLE 11.—SELECTED DEMOGRAPHIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1960-2060

Calendar year	Total fertility rate <sup>1</sup>	Life expectancy <sup>2</sup>			
		At birth		At age 65	
		Male	Female	Male	Female
<b>Past experience:</b>					
1940.....	2.23	60.9	65.3	11.9	13.4
1945.....	2.42	62.5	68.2	12.6	14.4
1950.....	3.03	65.3	70.9	12.8	15.1
1955.....	3.50	66.6	72.7	13.1	15.6
1960.....	3.61	66.6	73.2	12.9	15.9
1965.....	2.88	66.8	73.8	12.9	16.3
1970.....	2.43	67.1	74.8	13.1	17.1
1975.....	1.77	68.8	76.6	13.7	18.0
1976.....	1.74	69.1	76.8	13.7	18.1
1977.....	1.79	69.4	77.2	13.9	18.3
1978.....	1.76	69.6	77.3	13.9	18.3
1979.....	1.82	69.9	77.8	14.2	18.6
1980.....	1.85	69.8	77.5	14.0	18.3
1981.....	1.85	70.3	77.8	14.2	18.5
<b>Alternative I:</b>					
1982.....	1.85	70.4	77.9	14.3	18.6
1983.....	1.87	70.5	78.0	14.3	18.7
1984.....	1.89	70.6	78.1	14.3	18.8
1985.....	1.91	70.7	78.2	14.4	18.8
1990.....	2.01	71.1	78.7	14.5	19.2
1995.....	2.10	71.5	79.1	14.6	19.4
2000.....	2.18	71.7	79.3	14.8	19.6
2005.....	2.27	71.9	79.5	14.9	19.8
2010.....	2.30	72.0	79.7	15.0	19.9
2020.....	2.30	72.3	80.0	15.2	20.2
2030.....	2.30	72.6	80.3	15.4	20.4
2040.....	2.30	72.9	80.6	15.6	20.7
2050.....	2.30	73.2	80.9	15.8	20.9
2060.....	2.30	73.4	81.2	16.0	21.2
<b>Alternatives II-A and II-B:</b>					
1982.....	1.85	70.6	78.1	14.3	18.7
1983.....	1.86	70.8	78.3	14.4	18.9
1984.....	1.86	71.1	78.5	14.5	19.0
1985.....	1.87	71.3	78.8	14.6	19.2
1990.....	1.90	72.3	79.8	15.1	19.9
1995.....	1.93	73.0	80.6	15.5	20.5
2000.....	1.96	73.4	81.0	15.7	20.8
2005.....	1.99	73.7	81.3	15.9	21.0
2010.....	2.00	73.9	81.6	16.1	21.3
2020.....	2.00	74.4	82.2	16.4	21.7
2030.....	2.00	74.9	82.7	16.8	22.2
2040.....	2.00	75.4	83.3	17.2	22.6
2050.....	2.00	75.8	83.8	17.5	23.1
2060.....	2.00	76.3	84.4	17.9	23.6
<b>Alternative III:</b>					
1982.....	1.85	70.7	78.2	14.4	18.8
1983.....	1.84	71.1	78.6	14.6	19.0
1984.....	1.82	71.5	79.0	14.8	19.3
1985.....	1.81	71.8	79.3	14.9	19.5
1990.....	1.75	73.4	80.9	15.7	20.7
1995.....	1.70	74.5	82.1	16.3	21.5
2000.....	1.66	75.1	82.8	16.8	22.1
2005.....	1.62	75.7	83.4	17.2	22.5
2010.....	1.60	76.2	84.0	17.6	23.0
2020.....	1.60	77.2	85.2	18.4	24.0
2030.....	1.60	78.3	86.4	19.2	24.9
2040.....	1.60	79.3	87.5	20.0	25.8
2050.....	1.60	80.3	88.6	20.9	26.8
2060.....	1.60	81.3	89.7	21.7	27.7

<sup>1</sup>The total fertility rate for any year is the average number of children who would be born to a woman in her lifetime if she were to experience the birth rates by age observed in, or assumed for, the selected year, and if she were to survive the entire child-bearing period.

<sup>2</sup>The life expectancy for any year is the average number of years of life remaining to a person if that person were to experience the death rates by age observed in, or assumed for, the selected year.

The demographic assumptions in 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 2007, after a gradual increase from the estimated 1982 level of 1.85 children per woman. Mortality rates are assumed to decrease gradually during the entire 75-year projection period, with an average reduction from 1979 levels of 39 percent by the year 2060. This reduction results in life expectancies at birth in 2060 of 76.3 years for men and 84.4 years for women, compared to 69.9 and 77.8 years, respectively, observed in 1979. Life expectancies at age 65 in 2060 are projected to be 17.9 years for men and 23.6 years for women, compared to 14.2 and 18.6 years, respectively, observed in 1979.

In alternative I, the total fertility rate is assumed to be higher than in the other alternatives, reaching an ultimate level of 2.3 children per woman, which is attained in 2007. Mortality rates are assumed to decrease more slowly than in alternatives II-A and II-B, with the average reduction from 1979 levels being 23 percent by the year 2060. The resulting life expectancies at birth by 2060 are projected to be 73.4 years for men and 81.2 years for women, while at age 65 they are 16.0 and 21.2 years, respectively.

In alternative III, the total fertility rate is assumed to be lower than in the other alternatives, decreasing from the estimated 1982 level to an ultimate level of 1.6, which is attained in 2007. Mortality rates are assumed to decrease more rapidly than in alternatives II-A and II-B, with the average reduction from 1979 levels being 60 percent by the year 2060. The resulting life expectancies at birth by 2060 are projected to be 81.3 years for men and 89.7 years for women, while at age 65 they are 21.7 and 27.7 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-increase provisions of the law, benefits are generally adjusted once a year to reflect increases in the CPI. Beginning in 1984, these automatic increases may be modified when trust fund balances meet certain conditions. These modifications are permitted under the stabilizer provision of the 1983 amendments, which are described in an earlier section. For persons becoming eligible for benefits in 1979 and later, the automatic cost-of-living benefit increases generally begin with the year a worker reaches age 62, or becomes disabled or dies, if earlier. An automatic cost-of-living benefit increase of 7.4 percent, effective for June 1982, was announced in April 1982, as described in Appendix C. An increase of 3.5 percent will become effective for December 1983, as recently determined and announced.

Except for the amounts specified for 1979-81 in the Social Security Amendments of 1977, the contribution and benefit base automatically increases in the year following a year in which an automatic cost-of-living benefit increase becomes effective. Such automatic increases are proportionate to the increases in average wages. For 1983, the contribution and benefit base was automatically increased to \$35,700.

The 1977 amendments also specified for 1978-82 the exempt amount under the retirement earnings test for beneficiaries aged 65 and over. For 1983 and later, this amount increases automatically by the increase in average wages. Following the cost-of-living benefit increase that became effective for June 1982, an automatic increase in the annual exempt amount for beneficiaries aged 65 and over, from \$6,000 in 1982 to \$6,600 in 1983, was announced in November 1982. Similarly, an automatic increase was announced in the exempt amount for beneficiaries under age 65, from \$4,440 in 1982 to \$4,920 in 1983. Appendix D describes all of 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 1983;
2. The dollar amounts (or "bend points") in the formulas used to compute benefits payable on the earnings of workers who first become eligible for retirement or disability benefits, or who die before becoming eligible for such benefits, in 1983; and
3. The average of total wages reported for calendar year 1981, to be used for indexing earnings of workers who first become eligible for benefits, or who die before such eligibility, in 1983 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, which also shows a projection, through 1988, of the corresponding amounts resulting from the two intermediate sets of assumptions.

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 provisions of the law as in effect before the enactment of the

1977 amendments. This "old-law" base is used in determining special-minimum benefits for certain workers who have many years of low earnings in covered employment. 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. For 1982, the old-law base was \$24,300. The corresponding old-law base for 1983 was determined to be \$26,700.

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 1988 (actual benefit increases and actual contribution and benefit bases for 1982 and 1983 are also shown as a basis for comparison):

Calendar year	General benefit increase <sup>1</sup> (percent) under alternative—				Contribution and benefit base <sup>2</sup> under alternative—			
	I	II-A	II-B	III	I	II-A	II-B	III
1982.....	7.4	7.4	7.4	7.4	\$32,400	\$32,400	\$32,400	\$32,400
1983.....	3.5	3.5	3.5	3.5	35,700	35,700	35,700	35,700
1984.....	3.4	3.7	4.6	4.0	37,500	37,500	37,500	37,500
1985.....	3.7	4.0	5.3	3.9	39,300	39,000	39,300	39,000
1986.....	3.3	3.5	4.7	7.2	41,100	40,500	40,800	40,500
1987.....	3.0	3.2	4.4	5.8	43,200	42,300	42,900	43,500
1988.....	(*)	3.0	4.1	5.4	45,600	44,400	45,300	46,800

<sup>1</sup>Automatic benefit increases prior to 1983 were effective with benefits for June of the year shown. As a result of the Social Security Amendments of 1983, automatic benefit increases in 1983 and later will be effective with benefits for December of the year shown.

<sup>2</sup>The amounts, effective on January 1 of the stated year, are specified in the law for the years 1979-81. After 1981, the amount increases under the automatic provisions.

<sup>3</sup>Under the alternative III assumptions, benefit increases for December of each year 1984-86 would be determined under the benefit increase stabilizer provision of the 1983 amendments. If the benefit increases were calculated without the limitation imposed by the stabilizer provision, they would be 6.6 percent, 7.9 percent, and 7.3 percent, respectively, under these assumptions.

<sup>4</sup>Under the alternative I assumptions, no benefit increase would occur in 1988 because the assumed increase in the Consumer Price Index is less than the 3-percent rate required to trigger a benefit increase.

The automatic benefit increases shown in the above table under alternative III reflect the effects of the benefit increase stabilizer provision in 1984, 1985, and 1986. Based on alternative III, the assets of the OASDI Trust Funds (excluding amounts borrowed from the HI Trust Fund) would represent less than 15 percent of annual expenditures at the end of 1984 and at the beginning of each year 1985-86. In addition, the assumed increases in average annual wages in 1983, 1984, and 1985 are less than the assumed increases in prices (as measured by the third quarter CPI) in 1984, 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 that would normally apply. While not shown in the table, under alternative III the trust funds would increase sufficiently after 1987 to trigger "catch-up" benefit increases in 1990 for those beneficiaries whose benefit increases were reduced at any time during 1984-86 as a result of this provision. The "catch-up" increases would increase each affected individual's benefit to the level at which it would have been if all increases had been based on the CPI.

Under the automatic 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 and over (the amounts for 1982 and 1983 are also shown as a basis for comparison):

ANNUAL EXEMPT AMOUNTS UNDER THE RETIREMENT EARNINGS TEST<sup>1</sup>

Calendar year	Annual exempt amount for beneficiaries under age 65 under alternative—				Annual exempt amount for beneficiaries aged 65 and over <sup>2</sup> under alternative—			
	I	II-A	II-B	III	I	II-A	II-B	III
1982 .....	\$4,440	\$4,440	\$4,440	\$4,440	\$6,000	\$6,000	\$6,000	\$6,000
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	7,320	7,320	7,320	7,200
1986 .....	5,640	5,640	5,640	5,640	7,680	7,680	7,560	7,440
1987 .....	5,880	5,880	6,000	6,000	8,040	8,040	7,920	7,920
1988 .....	6,240	6,120	6,360	6,480	8,520	8,400	8,400	8,520

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

<sup>2</sup>The amounts are specified in the law for the years 1978-82. After 1982, the amount increases automatically. In 1955-82, the retirement earnings test did not apply to beneficiaries aged 72 and over; after 1982, it does not apply to beneficiaries aged 70 and over.

*C. ESTIMATED OPERATIONS AND STATUS OF THE TRUST FUNDS DURING THE PERIOD OCTOBER 1, 1982 TO DECEMBER 31, 1987*

The following statement of the estimated operations and status of the trust funds during the period October 1, 1982, to December 31, 1987, is based on the assumptions described in the preceding sections. As previously stated, it is assumed that present statutory provisions and regulations affecting the program will remain unchanged in the period. The estimates reflect the effects of the Social Security Amendments of 1983 and the other legislative changes described in section IV.

The 1982 Annual Report emphasized the imminent depletion of the OASI Trust Fund and indicated that loans from the DI and HI Trust Funds would be necessary in the second half of 1982 in order to make OASI benefit payments on time. In November and December 1982, in fact, loans were made to the OASI Trust Fund amounting to \$17.5 billion — \$5.1 billion from the DI Trust Fund and \$12.4 billion from the HI Trust Fund. These amounts were intended to be sufficient to enable the timely payment of OASI benefits through June 1983, by which time it was anticipated that corrective legislation could be enacted. As described previously, the Social Security Amendments of 1983 were enacted on April 20, 1983, and have resulted in a substantial improvement in the financial outlook for the OASDI program. The differences between the estimates shown in this report and those shown in the 1982 report also reflect the net effects of (1) actual economic experience in 1982, which was worse than had been anticipated, and (2) changes in assumed economic growth rates in 1983-87.

Under the four alternative sets of assumptions used in this report, the OASI and DI Trust Funds would be able to make benefit payments on time 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 under each set of assumptions.

The 1983 amendments included provisions requiring, under certain conditions, the automatic repayment of some or all of the amounts loaned to the OASI Trust Fund in 1982 (see section V). Under alternatives I, II-A, and II-B, growth in OASI Trust Fund assets would be sufficient to trigger the repayment process during 1984-87. Under alternative I, the amounts loaned to the OASI Trust Fund from the HI Trust Fund would be required by law to be fully repaid within this period. The growth in OASI assets under alternatives II-A and II-B would be sufficient to require partial repayment of the HI loans by the end of 1987, and the balance in 1988. Under alternative III, however, growth in OASI assets would be too slow to trigger the automatic repayment requirements prior to 1988.

In addition to the automatic requirements, 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 standards of the automatic requirements. For purposes of calculating the estimated trust fund operations in this report and the concurrent 1983 Annual Report for the HI Trust Fund, repayment of

interfund loans is assumed to occur according to the automatic requirements only, unless (1) faster 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 faster repayment of interfund loans and the timely payment of OASI benefits.

Under the alternative III assumptions, and in the absence of any repayment of interfund loans, the HI Trust Fund would be depleted in 1987. Consequently, it has been assumed that OASI would repay in 1987 the full \$12.4 billion owed to the HI Trust Fund. (Under alternative III, OASI assets would be sufficient to permit such repayment without affecting the timely payment of OASI benefits.) This repayment would delay the depletion of the HI Trust Fund until 1988.

The 1983 amendments contain a provision to stabilize 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. As indicated in the section on "Automatic Adjustments," this provision would be triggered under alternative III and would limit the benefit increases otherwise payable in December of 1984, 1985, and 1986. In the absence of this provision, the OASI and DI Trust Funds would be unable to pay benefits on time beginning in 1987 under the alternative III assumptions. As a result of the provision, however, the timely payment of benefits would be possible, and subsequent trust fund growth in 1988 and later would allow "catch-up" benefit increases in 1990 for those beneficiaries whose benefit increases had been restricted in 1984-86. Thus, during conditions of slow economic growth and high inflation, as assumed in alternative III, the stabilizer provision could prevent the depletion of the trust funds. Under other types of adverse conditions, however, such as high unemployment and slow growth in both wages and prices, the trust funds could experience serious financial problems in the near future.

At this time the recovery from the 1981-82 recession appears to be well under way. 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 a severe economic downturn.

#### *OASI Trust Fund operations*

Estimates of the operations and status of the OASI Trust Fund during calendar years 1983-87 are shown in table 12 for each of the four alternative sets of assumptions that were described in the preceding sections. Actual data for calendar year 1982 are also shown in the table. Under each alternative, it is assumed that employment and earnings will increase in every year through 1987. The number of persons with taxable earnings under the OASDI program is expected to increase under alternatives I, II-A, II-B, and III, from 115 million during calendar year 1982 to about 131 million, 130 million, 129 million, and 127 million, respectively, by 1987. The total annual amount of taxable earnings is expected to increase from \$1,364 billion in 1982 to \$2,021 billion, \$1,972 billion, \$1,982 billion, and \$2,017 billion, in 1987, under alternatives I, II-A, II-B, and III, respectively. (In 1982 dollars—taking account of

assumed increases in the CPI from 1982 to 1987 under each alternative—the estimated amounts of taxable earnings in 1987 are \$1,730 billion, \$1,667 billion, \$1,598 billion, and \$1,497 billion, under 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 1983-87 under the automatic 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 1982-87 UNDER 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 beginning of year as a percentage of disbursements during year <sup>2</sup>
1982 <sup>3</sup> .....	\$125.2	\$142.1	\$17.5	\$0.6	\$22.1	15
Alternative I:						
1983.....	151.6	151.5	—	.1	22.2	15
1984.....	165.9	162.0	-1.0	2.9	25.1	21
1985.....	183.4	172.7	-1.6	9.1	34.2	22
1986.....	199.3	184.6	-9.1	5.8	39.8	26
1987.....	215.7	195.8	-7	19.2	58.9	28
Alternative II-A:						
1983.....	151.5	151.6	—	-2	21.9	15
1984.....	164.9	162.3	-6	2.0	23.9	20
1985.....	180.6	173.7	—	6.9	30.8	21
1986.....	194.8	186.4	-4.8	3.6	34.4	24
1987.....	209.9	198.3	-6.8	4.8	39.2	25
Alternative II-B:						
1983.....	151.4	151.6	—	-3	21.8	15
1984.....	183.9	162.3	-5	1.0	22.8	20
1985.....	180.4	175.2	—	5.2	28.1	20
1986.....	194.9	190.2	-1.1	3.6	31.7	22
1987.....	210.2	204.6	-2.4	3.2	34.9	23
Alternative III:						
1983.....	150.3	151.7	—	-1.4	20.6	15
1984.....	159.6	162.5	—	-2.9	17.7	19
1985.....	177.5	174.5	—	3.0	20.7	17
1986.....	195.2	187.3	—	7.9	28.6	18
1987.....	213.5	206.3	-12.4	-5.2	23.4	21

<sup>1</sup>Positive figure represents amounts borrowed by the OASI Trust Fund from the DI and HI Trust Funds. Negative figures represent amounts repaid by the OASI Trust Fund to the HI Trust Fund.

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

<sup>3</sup>Figures for 1982 represent actual experience.

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

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

Rising disbursements during calendar years 1983-87 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. As indicated in the previous section, the age at which eligible persons may begin to receive full benefits regardless of earnings was reduced from 72 to 70 beginning in 1983.

Under the two intermediate sets of assumptions, the estimates shown in table 12 indicate that income would exceed disbursements in every year after 1983. Under alternative I, income is estimated to exceed outgo in every year, and under alternative III, in every year after 1984. The assets of the OASI Trust Fund at the beginning of 1982 were equal to about 15 percent of the fund's disbursements in 1982. During 1982, disbursements exceeded income by \$16.9 billion, and \$17.5 billion was borrowed from the DI and HI Trust Funds at the end of the year. The assets of the OASI Trust Fund, including the borrowed amounts, again represented about 15 percent of estimated annual expenditures at the beginning of 1983. By the beginning of 1984, this percentage is estimated to increase to between 19 and 21 percent depending on actual economic conditions during the balance of 1983. This increase may seem contradictory, because expenditures are expected to exceed income during 1983 (except under alternative I). The explanation is that at the beginning of 1984, tax income for the month of January will be transferred to the trust fund on the first day of the month and will thus be available for the payment of benefits. As such, the advance tax transfer is reflected in assets at the beginning of the year. This provision, which was included in the Social Security Amendments of 1983, became effective in May 1983.

Assets are estimated to remain at roughly 20-25 percent of annual expenditures throughout the rest of the short-range projection period. This is a relatively low level, and it could limit the trust fund's ability to act as a contingency reserve during this period in the event of a significant economic downturn. 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 1983-87 under the four sets of assumptions are shown in table 13, together with figures on actual experience in 1982. Income will decrease initially from its level in 1982 as a result of the scheduled reductions in the combined employee-employer contribution rate allocated for DI, and accompanying decreases in contribution rates for self-employed persons. Income will increase after 1984 under each alternative, reflecting the same factors, insofar as they apply to income to the DI Trust Fund, that are reflected in the increase in income to the OASI Trust Fund during the same period.

Disbursements will increase because of automatic benefit increases and because of projected increases in the amounts of average monthly earnings on which benefits are based. These effects are offset, somewhat, by projected decreases in the numbers of beneficiaries. Since about 1978, the number of persons receiving benefits under the DI program has been declining. A continuing decline in the number of beneficiaries is projected for the next several years under all four sets of assumptions, reflecting the combined effects of (1) projected disability incidence rates that are somewhat lower than those of the last decade and (2) projected termination rates that are somewhat higher than those of the last decade. The higher termination rates reflect, in part, the increased reviews of the continuing eligibility of disabled beneficiaries, which are required by the Social Security Disability Amendments of 1980 (Public Law 96-265).

In 1982, \$5.1 billion was loaned from the DI Trust Fund to the OASI Trust Fund. This amount represented somewhat more than the excess of income over outgo experienced by the DI Trust Fund during 1982. The net effect on the assets of the DI fund, as a percentage of annual expenditures, was to cause a decrease from 17 percent at the beginning of 1982 to 15 percent at the beginning of 1983. As a percentage of expenditures, the assets of the DI Trust Fund are projected to recover substantially during 1983, primarily as a result of the lump-sum transfers from the general fund of the Treasury for noncontributory military service wage credits. During 1984-87, assets are projected to remain fairly level in the range of 25-40 percent of annual expenditures depending on the particular assumptions.

TABLE 13.—ESTIMATED OPERATIONS OF THE DI TRUST FUND DURING CALENDAR YEARS 1982-87 UNDER 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 beginning of year as a percentage of disbursements during year <sup>2</sup>
1982 <sup>3</sup> .....	\$22.7	\$18.0	-\$5.1	-\$0.4	\$2.7	17
Alternative I:						
1983.....	20.9	17.8	—	3.0	5.7	15
1984.....	17.3	17.9	—	-.6	5.1	38
1985.....	18.6	18.3	—	.3	5.4	35
1986.....	20.0	18.9	—	1.1	6.5	35
1987.....	21.6	19.6	—	2.0	8.5	40
Alternative II-A:						
1983.....	20.9	17.9	—	3.0	5.7	15
1984.....	17.2	18.0	—	-.8	4.9	38
1985.....	18.3	18.5	—	-.2	4.7	33
1986.....	19.6	19.2	—	.3	5.1	31
1987.....	21.0	20.0	—	1.0	6.0	32
Alternative II-B:						
1983.....	20.9	17.9	—	3.0	5.7	15
1984.....	17.1	18.0	—	-.9	4.8	38
1985.....	18.3	18.6	—	-.4	4.4	32
1986.....	19.6	19.6	—	(*)	4.4	29
1987.....	21.0	20.6	—	.4	4.8	28
Alternative III:						
1983.....	20.7	17.9	—	2.8	5.5	15
1984.....	16.7	18.0	—	-1.4	4.2	37
1985.....	18.0	18.6	—	-.7	3.5	29
1986.....	19.6	19.5	—	.1	3.6	25
1987.....	21.3	21.1	—	.2	3.8	24

<sup>1</sup>Negative figure represents amounts loaned from the DI Trust Fund to the OASI Trust Fund. Repayment of amounts borrowed from the DI Trust Fund is assumed to occur in 1988 under alternative I and in 1989 under alternatives II-A, II-B, and III.

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

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

\*Between \$0 and -\$50 million.

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

### *Combined OASI and DI Trust Fund operations*

The estimated operations and status of the OASI and DI Trust Funds, combined, during calendar years 1983-87 under the four alternatives, are shown in table 14 together with figures on actual experience in 1982. These figures are the sums of the corresponding figures shown in tables 12 and 13.

TABLE 14.—ESTIMATED OPERATIONS OF THE OASI AND DI TRUST FUNDS, COMBINED, DURING CALENDAR YEARS 1982-87 UNDER FOUR ALTERNATIVE SETS OF ASSUMPTIONS  
[Amounts in billions]

Calendar year	Income	Disbursements	Interfund borrowing transfers <sup>1</sup>	Net increase in funds	Funds at end of year	Funds at beginning of year as a percentage of disbursements during year <sup>2</sup>
1982 <sup>3</sup> .....	\$147.9	\$160.1	\$12.4	\$0.2	\$24.8	15
Alternative I:						
1983.....	172.5	169.3	—	3.1	27.9	15
1984.....	183.2	179.9	-1.0	2.3	30.2	22
1985.....	202.0	191.0	-1.6	9.4	39.6	23
1986.....	219.3	203.6	-9.1	8.7	46.2	27
1987.....	237.3	215.4	-7	21.2	67.4	29
Alternative II-A:						
1983.....	172.3	169.5	—	2.8	27.6	15
1984.....	182.1	180.3	-8	1.2	28.8	22
1985.....	198.9	192.2	—	8.8	35.8	22
1986.....	214.3	205.6	-4.8	3.9	39.5	25
1987.....	230.9	218.3	-8.8	5.8	45.3	25
Alternative II-B:						
1983.....	172.2	169.5	—	2.7	27.5	15
1984.....	180.9	180.3	-5	.1	27.6	22
1985.....	198.7	193.8	—	4.9	32.5	21
1986.....	214.5	209.9	-1.1	3.6	36.1	23
1987.....	231.2	225.2	-2.4	3.6	39.7	23
Alternative III:						
1983.....	171.0	169.6	—	1.4	26.2	15
1984.....	176.3	180.5	—	-4.3	21.9	21
1985.....	195.5	193.2	—	2.3	24.2	18
1986.....	214.8	206.8	—	8.0	32.2	19
1987.....	234.8	227.4	-12.4	-5.0	27.2	21

<sup>1</sup>Positive figure represents amounts loaned from the HI Trust Fund to the OASI Trust Fund. Negative figures represent amounts repaid by the OASI Trust Fund to the HI Trust Fund.

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

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

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

At the beginning of 1982, the assets of the combined OASI and DI Trust Funds were equal to 15 percent of the disbursements in 1982, as shown in table 14. During 1982, \$12.4 billion was loaned to the OASI Trust Fund from the HI Trust Fund. This amount approximately offset the combined net shortfall of OASDI outgo over income in 1982. By the beginning of 1983, combined assets again represented 15 percent of the expenditures in 1983 as estimated under each of the four alternatives. The combined funds are projected to be in the range of roughly 20-25 percent of combined expenditures through 1987.

As in last year's report, the amounts loaned 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 interfund loans from the DI and HI Trust Funds are not included in DI or HI assets, since 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 borrowed 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 15 presents (1) the estimated assets of the OASI and DI Trust Funds, as shown elsewhere in this report, (2) the amount of loans outstanding, 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 borrowed. For the DI Trust Fund, the "net value" represents invested assets plus cash balances plus amounts loaned. Figures are shown at the end of each calendar year 1981-87 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 so 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 15, exceeds the level of DI assets as regularly defined. Under certain conditions, however, it would be possible for the DI program to be 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 15.—ESTIMATED ASSETS, INTERFUND LOANS OUTSTANDING, AND "NET VALUES" OF THE OASI AND DI TRUST FUNDS AT THE END OF CALENDAR YEARS 1981-87 UNDER FOUR ALTERNATIVE SETS OF ASSUMPTIONS  
[In billions]

Calendar year	OASI Trust Fund			DI Trust Fund		
	Assets <sup>1</sup>	Outstanding amounts borrowed <sup>2</sup>	"Net value" <sup>3</sup>	Assets <sup>1</sup>	Outstanding amounts loaned <sup>4</sup>	"Net value" <sup>3</sup>
1981 <sup>5</sup> .....	\$21.5	—	\$21.5	\$3.0	—	\$3.0
1982 <sup>5</sup> .....	22.1	\$17.5	4.6	2.7	\$5.1	7.8
Alternative I:						
1983.....	22.2	17.5	4.7	5.7	5.1	10.8
1984.....	25.1	16.5	8.6	5.1	5.1	10.2
1985.....	34.2	14.9	19.3	5.4	5.1	10.4
1986.....	39.8	5.8	33.9	6.5	5.1	11.5
1987.....	58.9	5.1	53.8	8.5	5.1	13.6
Alternative II-A:						
1983.....	21.9	17.5	4.4	5.7	5.1	10.8
1984.....	23.9	16.9	7.0	4.9	5.1	10.0
1985.....	30.8	16.9	13.9	4.7	5.1	9.8
1986.....	34.4	12.1	22.3	5.1	5.1	10.2
1987.....	39.2	5.3	33.9	6.0	5.1	11.1
Alternative II-B:						
1983.....	21.8	17.5	4.3	5.7	5.1	10.8
1984.....	22.8	17.0	5.8	4.8	5.1	9.9
1985.....	28.1	17.0	11.1	4.4	5.1	9.5
1986.....	31.7	15.9	15.8	4.4	5.1	9.5
1987.....	34.9	13.5	21.3	4.8	5.1	9.9

TABLE 15.—ESTIMATED ASSETS, INTERFUND LOANS OUTSTANDING, AND "NET VALUES" OF THE OASI AND DI TRUST FUNDS AT THE END OF CALENDAR YEARS 1981-87 UNDER FOUR ALTERNATIVE SETS OF ASSUMPTIONS (Cont.)  
[In billions]

Calendar year	OASI Trust Fund			DI Trust Fund		
	Assets <sup>1</sup>	Outstanding amounts borrowed <sup>2</sup>	"Net value" <sup>3</sup>	Assets <sup>1</sup>	Outstanding amounts loaned <sup>4</sup>	"Net value" <sup>3</sup>
Alternative III:						
1983.....	\$20.6	\$17.5	\$3.1	\$5.5	\$5.1	\$10.6
1984.....	17.7	17.5	.2	4.2	5.1	9.3
1985.....	20.7	17.5	3.2	3.5	5.1	8.6
1986.....	28.6	17.5	11.1	3.6	5.1	8.7
1987.....	23.4	5.1	18.3	3.8	5.1	8.9

<sup>1</sup>Represents invested assets plus cash balance at end of year.

<sup>2</sup>Represents total amounts borrowed from DI and HI Trust Funds less repayments made by end of calendar year.

<sup>3</sup>See text for description of "net value."

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

\*Figures for 1981 and 1982 represent actual experience.

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

Assets as a percentage of annual expenditures for selected years prior to 1983 are shown in table 16 for both funds combined and for each fund separately.

TABLE 16.—ASSETS AT THE BEGINNING OF THE YEAR AS A PERCENTAGE OF EXPENDITURES DURING THE YEAR, FOR THE OASDI PROGRAM, BY TRUST FUND, FOR SELECTED CALENDAR YEARS 1950-82

Calendar year	OASI and DI Trust Funds, combined	OASI Trust Fund	DI Trust Fund
1950.....	1,156	1,156	—
1955.....	405	405	—
1960.....	186	180	304
1965.....	110	109	121
1970.....	103	101	126
1975.....	66	63	92
1976.....	57	54	71
1977.....	47	47	48
1978.....	37	39	26
1979.....	30	30	30
1980.....	25	23	35
1981.....	18	18	21
1982.....	15	15	17

Expenditures in calendar year 1982 from both trust funds, combined, were 11.94 percent of taxable payroll for the year—1.08 percentage points more than the total income rate of 10.85 percent. The cost rates for both trust funds, combined, are estimated to decrease somewhat in 1983 under each alternative. Most of this initial decrease is attributable to the lump-sum transfer from the general fund of the Treasury in 1983, representing the amounts of payroll taxes that would have been paid on deemed military service wage credits in 1957-83 if such credits had been treated as covered earnings. As described previously, such credits have been included in covered payroll. In 1983, the effect of this procedure is a significant reduction in the ratio of expenditures to taxable payroll, due to the increase in payroll described.

Under alternatives I, II-A, and II-B, cost rates are estimated to decline slowly in 1984-87, reaching 10.68 percent, 11.09 percent, and 11.39 percent, respectively, in 1987. Under alternative III, cost rates would increase slightly from their level in 1983 but then decline to a somewhat lower level by 1987. These percentages are shown in table 17 for both

trust funds, combined, and for each trust fund separately. Table 17 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.

TABLE 17.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI AND DI TRUST FUNDS FOR CALENDAR YEARS 1982-87 UNDER FOUR ALTERNATIVE SETS OF ASSUMPTIONS  
[As a percentage of taxable payroll]

Calendar year	OASI Trust Fund			DI Trust Fund			OASI and DI Trust Funds, combined		
	Cost rate	Total income rate	Balance	Cost rate	Total income rate	Balance	Cost rate	Total income rate	Balance
1982 <sup>1</sup> .....	10.59	9.19	-1.40	1.34	1.66	0.32	11.94	10.85	-1.08
Alternative I:									
1983 .....	10.25	9.92	-.34	1.21	1.33	.12	11.46	11.24	-.22
1984 .....	10.16	10.55	.39	1.12	1.02	-.11	11.28	11.56	.29
1985 .....	9.95	10.56	.61	1.05	1.02	-.04	11.01	11.58	.57
1986 .....	9.86	10.58	.72	1.01	1.02	.01	10.87	11.60	.72
1987 .....	9.71	10.59	.88	.97	1.02	.05	10.68	11.61	.93
Alternative II-A:									
1983 .....	10.28	9.92	-.36	1.21	1.33	.12	11.49	11.24	-.24
1984 .....	10.24	10.55	.31	1.13	1.02	-.12	11.37	11.57	.19
1985 .....	10.15	10.56	.41	1.08	1.02	-.06	11.24	11.58	.35
1986 .....	10.16	10.58	.43	1.05	1.02	-.03	11.20	11.60	.40
1987 .....	10.08	10.60	.53	1.02	1.02	(*)	11.09	11.82	.53
Alternative II-B:									
1983 .....	10.28	9.92	-.36	1.21	1.33	.12	11.49	11.24	-.24
1984 .....	10.30	10.55	.25	1.14	1.02	-.12	11.44	11.57	.12
1985 .....	10.24	10.57	.32	1.09	1.02	-.07	11.33	11.58	.25
1986 .....	10.34	10.59	.25	1.07	1.02	-.05	11.40	11.60	.20
1987 .....	10.35	10.61	.26	1.04	1.02	-.02	11.39	11.63	.24
Alternative III:									
1983 .....	10.39	9.92	-.47	1.22	1.33	.10	11.82	11.25	-.37
1984 .....	10.57	10.55	-.02	1.17	1.02	-.15	11.75	11.57	-.18
1985 .....	10.33	10.57	.24	1.10	1.02	-.09	11.43	11.58	.16
1986 .....	10.13	10.58	.46	1.05	1.02	-.04	11.18	11.60	.42
1987 .....	10.25	10.60	.35	1.05	1.02	-.03	11.30	11.63	.33

<sup>1</sup>Percentages for 1982, though based on actual experience, are preliminary and subject to revision.

\*Between 0 percent and 0.005 percent.

Note: The definitions of alternatives I, II-A, II-B, and III, and the terms cost rate, total income rate, balance, and taxable payroll, are provided in the text.

Cost rates for years prior to 1983 are shown in table 18.

TABLE 18.—COST RATES FOR THE OASI AND DI PROGRAMS FOR SELECTED CALENDAR YEARS 1950-82<sup>1</sup>

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.....	10.75	9.36	1.38
1981.....	11.30	9.92	1.38
1982.....	11.94	10.59	1.34

<sup>1</sup>For 1978-82, 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 1983-87 have been presented in the preceding tables of this section under four different sets of economic assumptions because of the uncertainty of future economic developments. Under the provisions of the Social Security Act, it is required that estimates of the expected operations and status of the trust funds during the next 5 fiscal years be shown in this report. Accordingly, detailed estimates of the expected operations and status of the trust funds during each fiscal year 1983-87 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 1983-87.

Data on the actual operations of the OASI Trust Fund for selected years during 1940-82, and estimates of the expected operations of the trust fund during 1983-87 under the intermediate sets of assumptions, are shown in tables 19 and 20 on a fiscal- and calendar-year basis, respectively. Corresponding figures on the operations of the DI Trust Fund are shown in tables 21 and 22. Operations of both trust funds combined are shown in tables 23 and 24.<sup>1</sup>

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<sup>1</sup>Data relating to the operations of the two trust funds for years not shown in tables 19-24 are contained in earlier annual reports.

TABLE 19.—OPERATIONS OF THE OASI TRUST FUND DURING SELECTED FISCAL YEARS 1940-82 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1983-87 UNDER THE INTERMEDIATE SETS OF ASSUMPTIONS  
[In millions]

Fiscal year <sup>1</sup>	Income				Disbursements						Fund at end of period	
	Total	Net contributions <sup>2</sup>	Income from taxation of benefits	Reimbursements from the general fund of the Treasury <sup>3</sup>	Net interest <sup>4</sup>	Total	Benefit payments <sup>5</sup>	Administrative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers <sup>6</sup>		Net increase in fund
<b>Past experience:</b>												
1940.....	\$592	\$550	—	—	\$42	\$28	\$16	\$12	—	—	\$564	\$1,745
1945.....	1,434	1,310	—	—	124	267	240	27	—	—	1,167	6,813
1950.....	2,367	2,108	—	—	257	784	727	57	—	—	1,583	12,893
1955.....	5,525	5,087	—	—	438	4,427	4,333	103	—	—	1,098	21,141
1960.....	10,360	9,843	—	—	517	11,073	10,270	202	600	—	-713	20,829
1965.....	16,443	15,857	—	—	586	15,962	15,226	300	436	—	482	20,180
1970.....	31,746	29,955	—	442	1,350	27,321	26,268	474	579	—	4,425	32,616
1975.....	58,757	56,017	—	447	2,292	56,676	54,847	848	982	—	2,081	39,948
1976.....	62,327	59,555	—	425	2,347	64,295	62,148	935	1,212	—	-1,968	37,980
July-Sept. 1976..	16,186	16,106	—	—	80	17,111	16,877	234	—	—	-925	37,055
1977.....	71,796	68,895	—	614	2,287	73,479	71,278	993	1,208	—	-1,683	35,372
1978.....	76,811	74,047	—	613	2,152	81,205	78,531	1,086	1,589	—	-4,394	30,676
1979.....	86,893	84,358	—	615	1,920	90,128	87,609	1,072	1,448	—	-3,235	27,743
1980.....	100,051	97,808	—	557	1,888	103,228	100,626	1,160	1,442	—	-3,177	24,566
1981.....	121,572	119,016	—	540	2,016	122,304	119,421	1,298	1,585	—	-732	23,834
1982.....	126,829	124,246	—	875	1,708	137,928	134,661	1,474	1,793	—	-11,299	12,535
<b>Estimated future experience:<sup>7</sup></b>												
<b>Alternative II-A:</b>												
1983.....	149,286	136,500	—	6,096	6,689	151,210	147,352	1,607	2,251	\$17,519	15,594	28,129
1984.....	158,128	156,079	\$1,763	125	162	159,656	155,542	1,724	2,390	-600	-2,128	26,001
1985.....	177,556	174,511	2,688	102	254	170,834	166,581	1,850	2,403	—	6,722	32,723
1986.....	191,478	187,422	3,206	82	768	183,273	178,950	1,924	2,399	-4,800	3,405	36,129
1987.....	205,735	200,390	3,793	68	1,484	195,276	190,791	2,032	2,454	-6,800	3,658	39,787
<b>Alternative II-B:</b>												
1983.....	149,284	136,500	—	6,096	6,688	151,211	147,353	1,607	2,251	17,519	15,592	28,127
1984.....	157,211	155,163	1,763	125	160	159,658	155,546	1,724	2,388	-500	-2,947	25,180
1985.....	177,081	174,108	2,706	103	164	171,944	167,675	1,854	2,415	—	5,137	30,317
1986.....	191,785	187,909	3,265	82	530	186,547	182,168	1,936	2,443	-1,100	4,138	34,455
1987.....	206,114	201,241	3,904	69	900	200,987	196,398	2,053	2,536	-2,400	2,726	37,181

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.

\*Beginning in 1983, includes government contributions on 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 wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

\*Includes reimbursements (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 noncontributory 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 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 by 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 \$6,943 million in interest on (1) retroactive government contributions on 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 \$720 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

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

<sup>2</sup>In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in tables 10 and 11.

TABLE 20.—OPERATIONS OF THE OASI TRUST FUND DURING SELECTED CALENDAR YEARS 1940-82 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1983-87 UNDER THE INTERMEDIATE SETS OF ASSUMPTIONS  
[In millions]

Calendar year	Income					Disbursements						Fund at end of period
	Total	Net contributions <sup>1</sup>	Income from taxation of benefits	Reimbursements from the general fund of the Treasury <sup>2</sup>	Net interest <sup>3</sup>	Total	Benefit payments <sup>4</sup>	Administrative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers <sup>5</sup>	Net increase in fund	
<b>Past experience:</b>												
1940 .....	\$368	\$325	—	—	\$43	\$62	\$35	\$26	—	—	\$306	\$2,031
1945 .....	1,420	1,285	—	—	134	304	274	30	—	—	1,118	7,121
1950 .....	2,928	2,667	—	\$4	257	1,022	961	61	—	—	1,905	13,721
1955 .....	6,167	5,713	—	—	454	5,079	4,968	119	-\$7	—	1,087	21,663
1960 .....	11,382	10,866	—	—	516	11,198	10,677	203	318	—	184	20,324
1965 .....	16,610	16,017	—	—	593	17,501	16,737	328	436	—	—	18,235
1970 .....	32,220	30,256	—	449	1,515	29,848	28,798	471	579	—	2,371	32,454
1975 .....	59,605	56,816	—	425	2,364	60,395	58,517	896	982	—	—	38,987
1976 .....	66,276	63,362	—	614	2,301	67,876	65,705	959	1,212	—	-1,600	32,491
1977 .....	72,412	69,572	—	613	2,227	75,309	73,121	981	1,208	—	-4,971	27,520
1978 .....	78,094	75,471	—	615	2,008	83,064	80,361	1,115	1,589	—	-2,860	24,660
1979 .....	90,274	87,919	—	557	1,797	93,133	90,573	1,113	1,448	—	-1,837	22,823
1980 .....	105,841	103,456	—	540	1,845	107,678	105,083	1,154	1,442	—	-1,334	21,490
1981 .....	125,361	122,627	—	675	2,060	126,695	123,803	1,307	1,585	—	—	22,088
1982 .....	125,198	123,673	—	680	845	142,119	138,806	1,519	1,793	\$17,519	598	
<b>Estimated future experience<sup>6</sup>:</b>												
<b>Alternative II-A:</b>												
1983 .....	151,475	138,889	—	5,541	7,046	151,647	147,759	1,637	2,251	—	-172	21,916
1984 .....	164,890	162,319	\$2,357	102	112	162,321	158,178	1,753	2,390	-600	1,969	23,885
1985 .....	180,637	177,302	2,801	82	453	173,696	169,426	1,867	2,403	—	6,942	30,826
1986 .....	194,782	190,248	3,341	68	1,106	186,378	182,030	1,949	2,399	-4,800	3,584	34,411
1987 .....	209,884	203,961	3,945	56	1,922	198,272	193,761	2,058	2,454	-6,800	4,812	39,222
<b>Alternative II-B:</b>												
1983 .....	151,366	138,769	—	5,541	7,057	151,849	147,761	1,637	2,251	—	-283	21,805
1984 .....	163,864	161,331	2,357	103	73	162,326	158,184	1,754	2,388	-500	1,037	22,842
1985 .....	180,421	177,179	2,625	82	335	175,174	170,886	1,873	2,415	—	5,247	28,090
1986 .....	194,937	190,747	3,410	69	710	190,239	185,833	1,963	2,443	-1,100	3,598	31,688
1987 .....	210,163	204,927	4,071	58	1,107	204,591	199,973	2,082	2,536	-2,400	3,172	34,860

See following page for footnotes.

<sup>1</sup>Beginning in 1983, includes government contributions on 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 wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

<sup>2</sup>Includes reimbursements (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 noncontributory 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 \$2,724,000 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.

<sup>3</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 by 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 \$6,943 million in interest on (1) retroactive government contributions on 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 \$720 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

<sup>5</sup>Positive figure represents amounts borrowed by the OASI Trust Fund from the DI and HI Trust Funds. Negative figures represent amounts repaid by the OASI Trust Fund to the HI Trust Fund.

<sup>6</sup>In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in tables 10 and 11.

TABLE 21.—OPERATIONS OF THE DI TRUST FUND DURING SELECTED FISCAL YEARS 1960-82 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1983-87 UNDER THE INTERMEDIATE SETS OF ASSUMPTIONS  
[In millions]

Fiscal year <sup>1</sup>	Income					Disbursements						
	Total	Net contributions <sup>2</sup>	Income from taxation of benefits	Reimbursements from the general fund of the Treasury <sup>4</sup>	Net interest <sup>5</sup>	Total	Benefit payments <sup>6</sup>	Administrative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers <sup>7</sup>	Net increase in fund	Fund at end of period
<b>Past experience:</b>												
1960 .....	\$1,034	\$987	—	—	\$47	\$533	\$528	\$32	-\$27	—	\$501	\$2,167
1965 .....	1,237	1,175	—	—	62	1,495	1,392	79	24	—	-257	2,007
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	466	9,606	9,314	266	26	—	-1,251	8,939
July-Sept. 1976 .....	2,172	2,159	—	—	13	2,653	2,582	71	—	—	-481	6,459
1977 .....	9,374	8,900	—	103	372	11,590	11,212	378	( <sup>8</sup> )	—	-2,215	4,243
1978 .....	12,784	12,404	—	128	251	12,655	12,298	327	30	—	129	4,372
1979 .....	15,196	14,750	—	142	305	13,944	13,507	407	30	—	1,252	5,624
1980 .....	17,376	16,805	—	118	453	15,320	14,998	334	-12	—	2,056	7,680
1981 .....	12,993	12,589	—	130	273	17,280	16,846	405	29	—	-4,288	3,392
1982 .....	21,398	20,866	—	168	363	18,035	17,437	572	26	—	3,363	6,755
<b>Estimated future experience:<sup>9</sup></b>												
<b>Alternative II-A:</b>												
1983 .....	21,835	19,155	—	1,295	1,385	18,015	17,322	665	28	-\$5,081	-1,262	5,493
1984 .....	17,605	16,375	\$204	—	1,025	17,905	17,129	697	79	—	-300	5,193
1985 .....	18,043	16,781	299	—	963	18,323	17,480	729	114	—	-280	4,913
1986 .....	19,299	18,025	340	—	934	19,045	18,178	766	101	—	254	5,168
1987 .....	20,605	19,270	388	—	947	19,816	18,904	810	102	—	788	5,956
<b>Alternative II-B:</b>												
1983 .....	21,837	19,157	—	1,295	1,384	18,015	17,322	665	28	-5,081	-1,260	5,496
1984 .....	17,512	16,280	204	—	1,027	17,911	17,134	697	79	—	-399	5,096
1985 .....	17,997	16,741	301	—	954	18,448	17,602	732	114	—	-451	4,846
1986 .....	19,327	18,070	346	—	911	19,372	18,496	773	103	—	-45	4,601
1987 .....	20,649	19,351	399	—	899	20,337	19,408	822	107	—	311	4,912

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 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 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 reimbursements (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 noncontributory 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.

<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 by 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 \$690 million in interest on (1) retroactive government contributions on wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

<sup>5</sup>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 \$80 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

<sup>6</sup>Negative figure represents amounts loaned by the DI Trust Fund to the OASI Trust Fund. It is assumed that repayment of these loans would not occur until 1989.

<sup>7</sup>Less than \$500,000 was transferred from the Railroad Retirement Account to the DI Trust Fund.

<sup>8</sup>In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in tables 10 and 11.

TABLE 22.—OPERATIONS OF THE DI TRUST FUND DURING SELECTED CALENDAR YEARS 1960-82 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1983-87 UNDER THE INTERMEDIATE SETS OF ASSUMPTIONS  
 (In millions)

Calendar year	Income					Disbursements						Fund at end of period
	Total	Net contributions <sup>1</sup>	Income from taxation of benefits	Reimbursements from the general fund of the Treasury <sup>2</sup>	Net interest <sup>3</sup>	Total	Benefit payments <sup>4</sup>	Administrative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers <sup>5</sup>	Net increase in fund	
<b>Past experience:</b>												
1960 .....	\$1,063	\$1,010	—	—	\$53	\$600	\$568	\$36	-\$5	—	\$464	\$2,289
1965 .....	1,247	1,188	—	—	59	1,687	1,573	90	24	—	-440	1,606
1970 .....	4,774	4,481	—	\$16	277	3,259	3,085	164	10	—	1,514	5,614
1975 .....	8,035	7,444	—	90	502	8,790	8,505	256	29	—	-754	7,354
1976 .....	8,757	8,233	—	103	422	10,366	10,055	285	26	—	-1,609	5,745
1977 .....	9,570	9,138	—	128	304	11,945	11,547	399	(9)	—	-2,375	3,370
1978 .....	13,810	13,413	—	142	256	12,954	12,599	325	30	—	856	4,226
1979 .....	15,590	15,114	—	118	358	14,186	13,786	371	30	—	1,404	5,630
1980 .....	13,871	13,255	—	130	485	15,872	15,515	368	-12	—	-2,001	3,629
1981 .....	17,078	16,738	—	168	172	17,658	17,192	436	29	—	-580	3,049
1982 .....	22,715	21,995	—	174	546	17,992	17,376	590	26	-\$5,081	-358	2,691
<b>Estimated future experience:<sup>7</sup></b>												
<b>Alternative II-A:</b>												
1983 .....	20,874	16,146	—	1,121	1,607	17,852	17,144	681	28	—	3,022	5,712
1984 .....	17,172	15,894	\$273	—	1,004	17,984	17,180	705	79	—	-792	4,920
1985 .....	18,302	17,050	308	—	944	18,486	17,635	737	114	—	-184	4,736
1986 .....	19,580	18,295	350	—	934	19,239	18,362	776	101	—	341	5,077
1987 .....	20,983	19,613	401	—	969	20,025	19,102	821	102	—	958	6,035
<b>Alternative II-B:</b>												
1983 .....	20,861	18,131	—	1,121	1,609	17,852	17,144	681	28	—	3,009	5,699
1984 .....	17,072	15,797	273	—	1,002	17,972	17,187	705	79	—	-900	4,800
1985 .....	18,277	17,037	311	—	929	18,649	17,794	741	114	—	-372	4,427
1986 .....	19,600	18,341	358	—	901	19,616	18,729	784	103	—	-16	4,411
1987 .....	21,023	19,705	413	—	905	20,590	19,649	834	107	—	433	4,845

See following page for footnotes.

\*Beginning in 1983, includes government contributions on 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 wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

\*Includes reimbursements (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 noncontributory 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 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 by 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 \$690 million in interest on (1) retroactive government contributions on 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 \$80 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

\*Negative figure represents amounts loaned by the DI Trust Fund to the OASI Trust Fund. It is assumed that repayment of these loans would not occur until 1989.

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

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

TABLE 23.—OPERATIONS OF THE OASI AND DI TRUST FUNDS, COMBINED, DURING SELECTED FISCAL YEARS 1960-82 AND ESTIMATED FUTURE OPERATIONS DURING FISCAL YEARS 1983-87 UNDER THE INTERMEDIATE SETS OF ASSUMPTIONS

[In millions]

Fiscal year <sup>1</sup>	Income				Disbursements							
	Total	Net contributions <sup>2</sup>	Income from taxation of benefits	Reimbursements from the general fund of the Treasury <sup>3</sup>	Net interest <sup>4</sup>	Total	Benefit payments <sup>5</sup>	Administrative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers <sup>6</sup>	Net increase in funds	Funds at end of period
<b>Past experience:</b>												
1960.....	\$11,394	\$10,830	—	—	\$564	\$11,606	\$10,798	\$234	\$574	—	-\$212	\$22,996
1965.....	17,681	17,032	—	—	648	17,456	16,618	379	459	—	224	22,187
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
<b>Estimated future experience<sup>7</sup>:</b>												
<b>Alternative II-A:</b>												
1983.....	171,120	155,655	—	7,391	8,074	169,226	164,674	2,272	2,279	\$12,437	14,332	33,622
1984.....	175,733	172,454	\$1,967	125	1,187	177,561	172,670	2,422	2,469	-600	-2,428	31,194
1985.....	195,599	191,292	2,988	102	1,217	189,157	184,061	2,579	2,517	—	6,442	37,636
1986.....	210,778	205,447	3,546	82	1,703	202,318	197,128	2,690	2,500	-4,800	3,660	41,296
1987.....	226,339	219,660	4,181	68	2,431	215,093	209,695	2,842	2,556	-6,800	4,446	45,742
<b>Alternative II-B:</b>												
1983.....	171,121	155,657	—	7,391	8,073	169,226	164,674	2,272	2,279	12,437	14,332	33,623
1984.....	174,722	171,443	1,967	125	1,188	177,569	172,680	2,422	2,467	-500	-3,347	30,276
1985.....	195,078	190,849	3,008	103	1,118	190,391	185,277	2,586	2,529	—	4,686	34,963
1986.....	211,113	205,979	3,611	82	1,441	205,919	200,664	2,709	2,546	-1,100	4,093	39,056
1987.....	226,762	220,592	4,303	69	1,798	221,325	215,807	2,875	2,643	-2,400	3,038	42,094

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 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 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 reimbursements, (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 noncontributory 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 Japanese 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 by 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 \$7,633 million in interest on (1) retroactive government contributions on wage credits for military service in 1957-82 and (2) unnegotiated benefit checks issued before 1983.

<sup>5</sup>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 \$800 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

<sup>6</sup>Positive figure represents amounts borrowed by the OASI Trust Fund from the HI Trust Fund. Negative figures represent amounts repaid by the OASI Trust Fund to the HI Trust Fund.

<sup>7</sup>In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in tables 10 and 11.

TABLE 24.—OPERATIONS OF THE OASI AND DI TRUST FUNDS, COMBINED, DURING SELECTED CALENDAR YEARS 1960-82 AND ESTIMATED FUTURE OPERATIONS DURING CALENDAR YEARS 1983-87 UNDER THE INTERMEDIATE SETS OF ASSUMPTIONS  
[In millions]

Calendar year	Income					Disbursements						Funds at end of period
	Total	Net contributions <sup>1</sup>	Income from taxation of benefits	Reimbursements from the general fund of the Treasury <sup>2</sup>	Net interest <sup>3</sup>	Total	Benefit payments <sup>4</sup>	Administrative expenses	Transfers to Railroad Retirement Account	Interfund borrowing transfers <sup>5</sup>	Net increase in funds	
<b>Past experience:</b>												
1960 .....	\$12,445	\$11,876	—	—	\$569	\$11,798	\$11,245	\$240	\$314	—	\$647	\$22,613
1965 .....	17,857	17,205	—	—	651	19,187	18,311	418	459	—	-1,331	19,841
1970 .....	36,993	34,737	—	\$465	1,791	33,108	31,884	635	589	—	3,888	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
<b>Estimated future experience<sup>6</sup>:</b>												
<b>Alternative II-A:</b>												
1983 .....	172,349	157,035	—	6,662	8,653	169,500	164,903	2,318	2,279	—	2,850	27,628
1984 .....	182,062	178,213	\$2,630	102	1,116	180,285	175,358	2,458	2,469	-600	1,177	28,805
1985 .....	198,940	194,352	3,109	82	1,397	192,182	187,061	2,604	2,517	—	6,757	35,582
1986 .....	214,342	208,543	3,692	68	2,040	205,617	200,393	2,725	2,500	-4,800	3,925	39,487
1987 .....	230,867	223,574	4,346	56	2,891	218,297	212,862	2,879	2,558	-6,800	5,770	45,257
<b>Alternative II-B:</b>												
1983 .....	172,227	156,900	—	6,662	8,666	169,501	164,904	2,318	2,279	—	2,726	27,504
1984 .....	180,936	177,128	2,630	103	1,075	180,298	175,372	2,459	2,467	-500	138	27,642
1985 .....	198,698	194,216	3,136	82	1,264	193,823	188,680	2,614	2,529	—	4,875	32,517
1986 .....	214,537	209,088	3,768	69	1,612	209,855	204,562	2,747	2,546	-1,100	3,582	36,089
1987 .....	231,187	224,632	4,484	58	2,012	225,181	219,622	2,916	2,643	-2,400	3,606	39,705

See following page for footnotes.

<sup>1</sup>Beginning in 1983, includes government contributions on 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 wage credits for military service in 1957-82 less (2) all reimbursements received prior to 1983 for the costs of such credits.

<sup>2</sup>Includes reimbursements, (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 noncontributory 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.

<sup>3</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 by 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 \$7,633 million in interest on (1) retroactive government contributions on 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 \$800 million for all unnegotiated checks issued before 1983; reductions in subsequent years are relatively small.

<sup>5</sup>Positive figure represents amounts borrowed by the OASI Trust Fund from the HI Trust Fund. Negative figures represent amounts repaid by the OASI Trust Fund to the HI Trust Fund.

<sup>6</sup>In interpreting the estimates, reference should be made to the underlying assumptions described in the preceding section and shown in tables 10 and 11.

**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 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, 1982, about 533,000 persons were receiving monthly benefits from the OASI Trust Fund because of their disability or the disability of a child. This total includes 42,000 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 age 16 or 17 in their care. Benefits paid from this trust fund to the persons described above totaled \$1,566 million in calendar year 1982. Similar figures are presented in table 25 to show the experience in selected calendar years during 1960-82. Figures relating to past experience for years not shown are contained in prior annual reports.

TABLE 25.—BENEFITS PAYABLE FROM THE OASI TRUST FUND WITH RESPECT TO DISABLED BENEFICIARIES, SELECTED CALENDAR YEARS 1960-87  
[Beneficiaries in thousands; benefit payments in millions]

Calendar year	Disabled beneficiaries, end of year			Amount of benefit payments <sup>1</sup>		
	Total	Children <sup>2</sup>	Widows and widowers	Total	Children <sup>2</sup>	Widows and widowers <sup>2</sup>
<b>Past experience:</b>						
1960.....	117	117	—	\$59	\$59	—
1965.....	214	214	—	134	134	—
1970.....	316	281	36	301	260	\$41
1975.....	435	376	59	664	560	104
1976.....	457	395	62	748	637	111
1977.....	480	414	65	868	748	120
1978.....	494	430	64	950	823	127
1979.....	507	445	62	1,071	946	125
1980.....	519	460	59	1,223	1,097	126
1981.....	527	473	54	1,421	1,296	125
1982.....	533	484	49	1,566	1,451	115
<b>Estimated future experience:<sup>4</sup></b>						
<b>Alternative II-A:</b>						
1983.....	545	500	45	1,749	1,643	106
1984.....	555	511	44	1,912	1,765	147
1985.....	565	523	42	2,058	1,911	147
1986.....	574	533	41	2,207	2,059	148
1987.....	585	545	40	2,350	2,199	151
<b>Alternative II-B:</b>						
1983.....	545	500	45	1,749	1,643	106
1984.....	555	511	44	1,921	1,773	148
1985.....	565	523	42	2,089	1,940	149
1986.....	574	533	41	2,267	2,114	153
1987.....	585	545	40	2,439	2,282	157

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

<sup>2</sup>Reflects the effect of including certain mothers and fathers. (See text.)

<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.

<sup>4</sup>The estimates are based on alternatives II-A and II-B and reflect the assumed changes under the automatic increase provisions, as described in an earlier section.

Table 25 also shows the estimated future experience in calendar years 1983-87, under 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 \$1,749 million in calendar year 1983 to \$2,350 million in calendar year 1987 under the alternative II-A assumptions, and to \$2,439 million in calendar year 1987 under the alternative II-B assumptions.

In calendar year 1982, 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 \$18,904 million, of which \$1,566 million, or 8.3 percent, represented payments from the OASI Trust Fund. Similar figures for selected calendar years during 1960-82 and estimates for calendar years 1983-87, under alternatives II-A and II-B, are presented in table 26. Figures relating to past experience for years not shown in table 26 are contained in prior annual reports.

TABLE 26.—BENEFIT PAYMENTS UNDER THE OASDI PROGRAM WITH RESPECT TO DISABLED BENEFICIARIES, BY TRUST FUND, SELECTED CALENDAR YEARS 1960-87  
(Amounts in millions)

Calendar year	Total <sup>1</sup>	DI Trust Fund <sup>2</sup>	Benefit payments <sup>3</sup> from —	
			OASI Trust Fund	As a percentage of total benefit payments with respect to disabled beneficiaries
<b>Past experience:</b>				
1960 .....	\$627	\$568	\$59	9.4
1965 .....	1,707	1,573	134	7.9
1970 .....	3,386	3,085	301	8.9
1975 .....	9,169	8,505	664	7.2
1976 .....	10,803	10,055	748	6.9
1977 .....	12,415	11,547	868	7.0
1978 .....	13,549	12,599	950	7.0
1979 .....	14,857	13,786	1,071	7.2
1980 .....	16,738	15,515	1,223	7.3
1981 .....	18,621	17,200	1,421	7.6
1982 .....	18,904	17,338	1,566	8.3
<b>Estimated future experience:<sup>4</sup></b>				
<b>Alternative II-A:</b>				
1983 .....	18,835	17,086	1,749	9.3
1984 .....	19,095	17,183	1,912	10.0
1985 .....	19,692	17,634	2,058	10.5
1986 .....	20,567	18,360	2,207	10.7
1987 .....	21,449	19,099	2,350	11.0
<b>Alternative II-B:</b>				
1983 .....	18,835	17,086	1,749	9.3
1984 .....	19,112	17,191	1,921	10.1
1985 .....	19,882	17,793	2,089	10.5
1986 .....	20,994	18,727	2,267	10.8
1987 .....	22,086	19,647	2,439	11.0

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

<sup>2</sup>Benefit payments to disabled workers and their children and spouses.

<sup>3</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 25).

<sup>4</sup>The estimates are based on the alternative II-A and II-B assumptions and reflect the resulting assumed changes under the automatic increase provisions, as described in an earlier section.

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

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 1983-2007 and 1983-2057, respectively. Also presented are actuarial balances for the second and third 25-year periods within the 75-year 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 cost 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 cost 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 cost projections are only an indication of the trend and general range of future program costs. Appendix B contains a more detailed discussion of the effects on the cost estimates of varying two major economic assumptions.

Table 27 presents a comparison, on the basis of alternatives II-A and II-B, of the estimated cost rates and total income rates of the OASDI program. Under alternative II-A, the program is projected to have annual surpluses beginning in 1984 and continuing until about 2025, after which the program is projected to have annual deficits. These deficits are projected to grow steadily to a peak of 1.00 percent of taxable payroll in 2035 and then fluctuate between 0.9 and 1.2 percent during the remainder of the long-range projection period. This pattern of annual surpluses and deficits produces a medium-range actuarial surplus of 2.38 percent of taxable payroll and a long-range actuarial surplus of 0.84 percent.

Under 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 under alternative II-A, and temporarily peak around 2035 at 2.04 percent

of taxable payroll. Although the annual deficits in the remainder of the long-range period are significantly higher than those under 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 medium-range actuarial surplus of 1.83 percent of taxable payroll and a long-range surplus of 0.02 percent.

TABLE 27.—COMPARISON OF ESTIMATED COST RATES AND INCOME RATES OF THE OASDI PROGRAM UNDER ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1983-2060  
[As a percentage of taxable payroll]

Calendar year	Cost rate			Income rate			Balance
	OASI	DI	Total	Payroll tax	Taxation of benefits	Total	
<b>Alternative II-A:</b>							
1983.....	10.28	1.21	11.49	10.80	0.44	11.24	-0.24
1984.....	10.24	1.13	11.37	11.40	.17	11.57	.19
1985.....	10.15	1.08	11.24	11.40	.18	11.58	.35
1986.....	10.16	1.05	11.20	11.40	.20	11.60	.40
1987.....	10.08	1.02	11.09	11.40	.22	11.62	.53
1988.....	9.98	.99	10.98	12.12	.24	12.36	1.38
1989.....	9.84	.97	10.81	12.12	.26	12.38	1.57
1990.....	9.74	.97	10.70	12.40	.29	12.69	1.99
1991.....	9.64	.96	10.60	12.40	.32	12.72	2.12
1992.....	9.55	.96	10.51	12.40	.35	12.75	2.24
1993.....	9.34	.95	10.29	12.40	.36	12.76	2.47
1994.....	9.18	.94	10.12	12.40	.36	12.76	2.64
1995.....	9.03	.93	9.96	12.40	.37	12.77	2.81
1996.....	8.87	.92	9.80	12.40	.36	12.76	2.97
1997.....	8.73	.92	9.64	12.40	.36	12.76	3.12
1998.....	8.60	.93	9.53	12.40	.36	12.76	3.23
1999.....	8.47	.95	9.42	12.40	.36	12.76	3.33
2000.....	8.35	.97	9.32	12.40	.35	12.75	3.43
2001.....	8.25	1.00	9.25	12.40	.35	12.75	3.50
2002.....	8.17	1.02	9.20	12.40	.36	12.76	3.56
2003.....	8.11	1.06	9.16	12.40	.36	12.76	3.59
2004.....	8.06	1.09	9.15	12.40	.36	12.76	3.61
2005.....	8.02	1.13	9.15	12.40	.36	12.76	3.61
2006.....	8.02	1.16	9.18	12.40	.36	12.76	3.58
2007.....	8.04	1.20	9.24	12.40	.37	12.77	3.53
2010.....	8.26	1.31	9.57	12.40	.39	12.79	3.22
2015.....	9.22	1.43	10.64	12.40	.45	12.85	2.21
2020.....	10.43	1.48	11.91	12.40	.52	12.92	1.01
2025.....	11.53	1.49	13.02	12.40	.58	12.98	-0.03
2030.....	12.26	1.45	13.71	12.40	.63	13.03	-0.67
2035.....	12.60	1.46	14.07	12.40	.67	13.07	-1.00
2040.....	12.55	1.50	14.05	12.40	.68	13.08	-0.96
2045.....	12.50	1.54	14.03	12.40	.70	13.10	-0.93
2050.....	12.59	1.54	14.13	12.40	.71	13.11	-1.02
2055.....	12.72	1.53	14.25	12.40	.71	13.11	-1.14
2060.....	12.78	1.52	14.30	12.40	.72	13.12	-1.18
<b>25-year averages:</b>							
1983-2007.....	9.08	1.02	10.10	12.15	.32	12.48	2.38
2008-2032.....	10.34	1.43	11.77	12.40	.51	12.91	1.15
2033-2057.....	12.59	1.51	14.10	12.40	.69	13.09	-1.01
<b>75-year average:</b>							
1983-2057.....	10.67	1.32	11.99	12.32	.51	12.83	.84

TABLE 27.—COMPARISON OF ESTIMATED COST RATES AND INCOME RATES OF THE OASDI PROGRAM UNDER ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1983-2060 (Cont.)  
[As a percentage of taxable payroll]

Calendar year	Cost rate			Income rate			
	OASI	DI	Total	Payroll tax	Taxation of benefits	Total	Balance
<b>Alternative II-B:</b>							
1983	10.28	1.21	11.49	10.80	10.44	11.24	-0.24
1984	10.30	1.14	11.44	11.40	.17	11.57	.12
1985	10.24	1.09	11.33	11.40	.18	11.58	.25
1986	10.34	1.07	11.40	11.40	.20	11.60	.20
1987	10.35	1.04	11.39	11.40	.23	11.63	.24
1988	10.35	1.02	11.37	12.12	.25	12.37	1.00
1989	10.29	1.01	11.30	12.12	.28	12.40	1.09
1990	10.26	1.01	11.27	12.40	.31	12.71	1.44
1991	10.18	1.00	11.19	12.40	.34	12.74	1.55
1992	10.10	1.00	11.10	12.40	.37	12.77	1.67
1993	9.94	.99	10.93	12.40	.38	12.78	1.85
1994	9.81	.98	10.79	12.40	.39	12.79	2.00
1995	9.68	.97	10.65	12.40	.39	12.79	2.14
1996	9.54	.97	10.51	12.40	.39	12.79	2.28
1997	9.40	.96	10.36	12.40	.39	12.79	2.42
1998	9.29	.98	10.27	12.40	.39	12.79	2.52
1999	9.17	1.00	10.17	12.40	.38	12.78	2.62
2000	9.06	1.02	10.08	12.40	.38	12.78	2.71
2001	8.96	1.05	10.01	12.40	.38	12.78	2.78
2002	8.88	1.07	9.95	12.40	.38	12.78	2.83
2003	8.81	1.11	9.92	12.40	.39	12.79	2.87
2004	8.75	1.14	9.90	12.40	.39	12.79	2.89
2005	8.72	1.18	9.90	12.40	.39	12.79	2.89
2006	8.71	1.22	9.93	12.40	.39	12.79	2.87
2007	8.73	1.26	9.98	12.40	.40	12.80	2.81
2010	8.95	1.37	10.31	12.40	.42	12.82	2.51
2015	9.93	1.49	11.43	12.40	.48	12.88	1.45
2020	11.21	1.55	12.76	12.40	.55	12.95	-.19
2025	12.40	1.56	13.96	12.40	.63	13.03	-.93
2030	13.22	1.51	14.73	12.40	.68	13.08	-1.65
2035	13.62	1.53	15.16	12.40	.72	13.12	-2.04
2040	13.60	1.57	15.17	12.40	.74	13.14	-2.03
2045	13.56	1.61	15.17	12.40	.76	13.16	-2.01
2050	13.66	1.61	15.27	12.40	.76	13.16	-2.11
2055	13.79	1.60	15.40	12.40	.77	13.17	-2.23
2060	13.85	1.59	15.44	12.40	.77	13.17	-2.27
<b>25-year averages:</b>							
1983-2007	9.61	1.06	10.66	12.15	.34	12.50	1.83
2008-2032	11.14	1.49	12.64	12.40	.55	12.95	.32
2033-2057	13.65	1.58	15.23	12.40	.75	13.15	-2.08
<b>75-year average:</b>							
1983-2057	11.46	1.38	12.84	12.32	.55	12.87	.02

\*This figure represents the amount, expressed as a percentage of taxable payroll, transferred in 1983 from the general fund of the Treasury to the OASI and DI Trust Funds on account of military service wage credits attributable to service before 1957.

Note: The definitions of alternatives II-A and II-B, the income rates, cost rate, balance, and taxable payroll are presented in the text.

The estimated average long-range income rates under alternatives II-A and II-B are about 107 and 100.2 percent, respectively, of the estimated average long-range cost rates (of 11.99 and 12.84 percent of taxable payroll). Because the estimated average income rate under alternative II-B is between 95 and 105 percent of the estimated average cost rate, the program is in close actuarial balance. Under alternative II-A, the estimated average income rate exceeds 105 percent of the estimated average cost rate.

The estimated cost rates increase rapidly after the medium-range period primarily because the number of beneficiaries is projected to increase at a faster rate than 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 under all four alternatives, is shown in table 28.

TABLE 28.—COMPARISON OF OASDI BENEFICIARIES AND COVERED WORKERS BY ALTERNATIVE, CALENDAR YEARS 1945-2060

Calendar year	Covered workers <sup>1</sup> (in thousands)	Beneficiaries <sup>2</sup> (in thousands)			Covered workers per OASDI beneficiary	Beneficiaries per 100 covered workers
		OASI	DI	Total		
1945	46,390	1,106	—	1,106	41.9	2
1950	48,280	2,930	—	2,930	16.5	6
1955	65,200	7,563	—	7,563	8.6	12
1960	72,530	13,740	522	14,262	5.1	20
1965	80,680	18,509	1,648	20,157	4.0	25
1970	93,090	22,618	2,568	25,186	3.7	27
1975	100,200	26,998	4,125	31,123	3.2	31
1980	*114,300	30,385	4,734	35,119	*3.3	*31
1981	*115,800	31,074	4,636	35,710	*3.2	*31
1982	*115,000	31,207	4,184	35,391	*3.2	*31
Alternative I:						
1983	115,539	31,856	3,928	35,784	3.2	31
1985	125,507	33,142	3,754	36,896	3.4	29
1990	137,696	36,230	3,743	39,973	3.4	29
1995	146,036	38,072	3,705	41,777	3.5	29
2000	154,315	38,908	4,149	43,057	3.6	28
2005	160,921	40,048	5,371	45,419	3.5	28
2010	185,218	42,894	5,725	48,619	3.4	29
2015	167,644	48,249	6,148	54,397	3.1	32
2020	169,618	54,424	6,370	60,794	2.8	36
2025	172,610	80,163	6,595	66,758	2.6	39
2030	176,631	64,127	6,551	70,678	2.5	40
2035	181,355	66,101	6,473	72,574	2.5	40
2040	186,302	65,996	6,656	72,652	2.6	39
2045	191,560	65,985	6,939	72,924	2.6	38
2050	197,336	66,886	7,100	73,986	2.7	37
2055	203,619	68,383	7,291	75,674	2.7	37
2060	210,141	69,970	7,437	77,407	2.7	37
Alternative II-A:						
1983	115,432	31,882	3,929	35,811	3.2	31
1985	124,555	33,222	3,773	36,995	3.4	30
1990	136,513	36,572	3,883	40,455	3.4	30
1995	143,175	38,930	4,008	42,938	3.3	30
2000	150,835	40,153	4,559	44,712	3.4	30
2005	156,696	41,636	5,884	47,520	3.3	30
2010	159,744	44,803	6,305	51,108	3.1	32
2015	160,464	50,527	6,743	57,270	2.8	36
2020	160,290	57,154	6,960	64,114	2.5	40
2025	160,457	63,471	7,132	70,603	2.3	44
2030	161,109	68,101	7,020	75,121	2.1	47
2035	162,035	70,763	6,879	77,642	2.1	48
2040	162,827	71,211	6,996	78,207	2.1	48
2045	163,588	71,608	7,173	78,781	2.1	48
2050	164,505	72,588	7,172	79,760	2.1	48
2055	165,679	73,653	7,191	80,844	2.0	49
2060	166,967	74,402	7,173	81,575	2.0	49
Alternative II-B:						
1983	115,220	31,882	3,929	35,811	3.2	31
1985	123,865	33,222	3,773	36,995	3.3	30
1990	134,485	36,571	3,881	40,452	3.3	30
1995	141,308	38,927	4,006	42,933	3.3	30
2000	147,917	40,144	4,555	44,699	3.3	30
2005	153,326	41,620	5,878	47,498	3.2	31
2010	156,199	44,770	6,297	51,067	2.7	33
2015	156,831	50,483	6,741	57,224	2.7	33
2020	156,612	57,093	6,947	64,040	2.4	41
2025	156,727	63,395	7,117	70,512	2.2	45
2030	157,341	68,024	7,003	75,027	2.1	48
2035	158,234	70,671	6,862	77,533	2.0	49
2040	159,006	71,130	6,980	78,110	2.0	49
2045	159,717	71,527	7,156	78,683	2.0	49
2050	160,586	72,508	7,153	79,661	2.0	50

TABLE 28.—COMPARISON OF OASDI BENEFICIARIES AND COVERED WORKERS BY ALTERNATIVE, CALENDAR YEARS 1945-2060 (Cont.)

Calendar year	Covered workers <sup>1</sup> (in thousands)	Beneficiaries <sup>2</sup> (in thousands)			Covered workers per OASDI beneficiary	Beneficiaries per 100 covered workers
		OASI	DI	Total		
<b>Alternative II-B: (Cont.)</b>						
2055.....	161,715	73,560	7,174	80,734	2.0	50
2060.....	162,960	74,308	7,155	81,463	2.0	51
<b>Alternative III:</b>						
1983.....	114,572	31,902	3,931	35,833	3.2	31
1985.....	121,246	33,290	3,786	37,076	3.3	31
1990.....	132,156	36,889	4,002	40,890	3.2	31
1995.....	138,070	39,722	4,284	44,006	3.1	32
2000.....	144,472	41,362	4,917	46,279	3.1	32
2005.....	149,250	43,288	6,307	49,595	3.0	33
2010.....	150,780	46,972	6,757	53,729	2.8	38
2015.....	149,298	53,372	7,195	60,567	2.5	41
2020.....	146,368	60,856	7,358	68,214	2.1	47
2025.....	143,071	68,254	7,455	75,709	1.9	53
2030.....	139,717	74,205	7,258	81,463	1.7	58
2035.....	136,256	78,287	7,027	85,314	1.6	63
2040.....	132,420	80,120	7,028	87,149	1.5	66
2045.....	128,340	81,721	7,026	88,747	1.4	69
2050.....	124,299	83,419	6,779	90,198	1.4	73
2055.....	120,549	84,379	6,558	90,937	1.3	75
2060.....	117,067	84,334	6,313	90,647	1.3	77

<sup>1</sup>Workers who pay Social Security taxes at some time during the year.

<sup>2</sup>Beneficiaries with monthly benefits in current-payment status as of June 30.

\*Preliminary.

Note: The definitions of alternatives I, II-A, II-B, and III are presented in the text. The numbers of beneficiaries do not include certain noninsured persons, most of whom attained age 72 before 1968 and have less than 3 quarters of coverage, and for whom the costs are reimbursed by the general fund of the Treasury. The number of such noninsured persons was 68,923 as of June 30, 1982, and is estimated to be less than 500 by the turn of the century.

Table 28 shows that, even under alternative I, which includes high fertility rates and little mortality improvement, the number of covered workers per beneficiary declines from the current level of 3.2 to an ultimate level of about 2.7. Under alternative III, which includes low fertility rates and substantial mortality improvement, the decline is far more dramatic, reaching 1.3 workers per beneficiary. Under 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. Under alternatives I, II-A, II-B, and III, this rises by the end of the long-range period to levels of 37, 49, 50, and about 76, respectively. These levels are, respectively, 19, 58, 61, and about 145 percent higher than the current level of 31 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. Under 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, although these deficits are not so large that they exceed the accumulated surpluses of earlier years (as discussed later). Eventually, however, either the costs would need to be reduced or the income would need to be raised in order to maintain actuarial balance.

Table 29 shows the OASDI cost rates on the basis of the four alternatives. Under alternatives I and II-A, the cost rates generally decline slowly for the next 20 years. Under alternative II-B, the cost rates follow a similar pattern, except that the steady decline begins after

1986. Under 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 under all four alternatives.

After the medium-range period, under each alternative, the cost rates increase rapidly (because of the demographic shift discussed earlier). Under alternative I, the cost rates peak around 2030 after which they decrease slightly to the end of the projection period. Under alternatives II-A and II-B, they are fairly constant in 2035-45 before increasing thereafter through the end of the projection period. Under alternative III, the cost rates continuously increase through the end of the long-range projection period.

The OASDI cost rates under alternatives I and III differ by about 15 percentage points at the end of the long-range period, although by only 3.46 percentage points at the end of the medium-range period. The average long-range cost rate for the OASDI program varies from 9.81 percent under alternative I to 16.56 percent under alternative III, while the average medium-range cost rate varies much less—from 9.22 to 11.44 percent.

TABLE 29.—ESTIMATED COST RATES OF THE OASDI PROGRAM BY ALTERNATIVE, CALENDAR YEARS 1983-2060  
[As a percentage of taxable payroll]

Calendar year	Cost rate by alternative			
	I	II-A	II-B	III
1983	11.46	11.49	11.49	11.62
1984	11.28	11.37	11.44	11.75
1985	11.01	11.24	11.33	11.43
1986	10.87	11.20	11.40	11.18
1987	10.68	11.09	11.39	11.30
1988	10.50	10.98	11.37	11.34
1989	10.15	10.81	11.30	11.34
1990	10.15	10.70	11.27	11.38
1991	9.82	10.60	11.19	11.93
1992	9.72	10.51	11.10	11.90
1993	9.25	10.29	10.93	11.79
1994	9.03	10.12	10.79	11.72
1995	8.84	9.96	10.65	11.65
1996	8.66	9.80	10.51	11.54
1997	8.49	9.64	10.36	11.45
1998	8.37	9.53	10.27	11.38
1999	8.25	9.42	10.17	11.31
2000	8.14	9.32	10.08	11.25
2001	8.06	9.25	10.01	11.21
2002	7.99	9.20	9.95	11.20
2003	7.95	9.16	9.92	11.19
2004	7.92	9.15	9.90	11.21
2005	7.91	9.15	9.90	11.25
2006	7.93	9.18	9.93	11.32
2007	7.97	9.24	9.98	11.43
2010	8.22	9.57	10.31	11.93
2015	9.07	10.64	11.43	13.48
2020	10.02	11.91	12.76	15.43
2025	10.73	13.02	13.96	17.44
2030	11.00	13.71	14.73	19.17
2035	10.94	14.07	15.16	20.65
2040	10.80	14.05	15.17	21.71
2045	10.30	14.03	15.17	22.74
2050	10.16	14.13	15.27	23.82
2055	10.10	14.25	15.40	24.78
2060	10.03	14.30	15.44	25.46

TABLE 29.—ESTIMATED COST RATES OF THE OASDI PROGRAM BY ALTERNATIVE, CALENDAR YEARS 1983-2060 (Cont.)  
[As a percentage of taxable payroll]

Calendar year	Cost rate by alternative			
	I	II-A	II-B	III
<b>25-year averages:</b>				
1983-2007.....	9.22	10.10	10.66	11.44
2008-2032.....	9.80	11.77	12.64	15.50
2033-2057.....	10.42	14.10	15.23	22.73
<b>75-year average:</b>				
1983-2057.....	9.81	11.99	12.84	16.56

Note: The definitions of alternatives I, II-A, II-B, and III, cost rate and taxable payroll are presented in the text.

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

Table 30 shows a comparison of the OASDI cost as a percentage of Gross National Product (GNP) on the basis of the four alternatives. There are various similarities between the patterns of these cost percentages and the cost rates shown in the previous table. Under all four alternatives, the percentages generally decline slowly to 2005, after which they begin to rise. Shortly after the medium-range period, under each alternative, the percentages increase rapidly (because of the demographic shift discussed earlier) and peak around 2030 under alternative I and 2035 under alternatives II-A and II-B, while continuing to increase through the end of the long-range projection period under alternative III.

Another similarity is that the costs as percentages of GNP projected under the four alternatives differ by a relatively large amount at the end of the long-range period (about 4.3 percentage points), although differing by a much smaller amount at the end of the medium-range period (1.21 percentage points). In addition, the average long-range cost as a percentage of GNP projected under the various alternatives varies by a relatively large amount (from 4.27 percent under alternative I to 6.38 percent under alternative III), while the average medium-range cost varies by a much smaller amount (from 4.07 to 4.90 percent).

TABLE 30.—ESTIMATED COST OF THE OASDI PROGRAM AS A PERCENTAGE OF GNP BY ALTERNATIVE, CALENDAR YEARS 1983-2060

Calendar year	I	II-A	II-B	III
1983.....	5.18	5.19	5.19	5.28
1984.....	5.00	5.05	5.08	5.21
1985.....	4.86	4.95	5.00	5.00
1986.....	4.80	4.92	5.01	4.84
1987.....	4.72	4.87	5.00	4.90
1988.....	4.63	4.81	4.99	4.82
1989.....	4.44	4.74	4.96	4.92
1990.....	4.47	4.68	4.92	4.92
1991.....	4.30	4.64	4.88	5.15
1992.....	4.29	4.60	4.84	5.13
1993.....	4.08	4.49	4.75	5.07
1994.....	3.99	4.42	4.69	5.03
1995.....	3.90	4.34	4.62	4.99
1996.....	3.82	4.27	4.55	4.93
1997.....	3.75	4.20	4.48	4.87
1998.....	3.70	4.15	4.43	4.83
1999.....	3.64	4.10	4.38	4.79
2000.....	3.60	4.05	4.33	4.75
2001.....	3.56	4.02	4.29	4.72
2002.....	3.53	3.99	4.26	4.70
2003.....	3.51	3.97	4.24	4.69

TABLE 30.—ESTIMATED COST OF THE OASDI PROGRAM AS A PERCENTAGE OF GNP BY ALTERNATIVE, CALENDAR YEARS 1983-2060 (Cont.)

Calendar year	I	II-A	II-B	III
2004.....	3.50	3.96	4.22	4.68
2005.....	3.49	3.95	4.21	4.68
2006.....	3.50	3.96	4.22	4.70
2007.....	3.52	3.98	4.23	4.73
2010.....	3.62	4.11	4.34	4.89
2015.....	3.98	4.53	4.74	5.42
2020.....	4.38	5.02	5.22	6.09
2025.....	4.66	5.43	5.63	6.75
2030.....	4.76	5.67	5.86	7.29
2035.....	4.71	5.76	5.94	7.70
2040.....	4.54	5.70	5.87	7.94
2045.....	4.40	5.64	5.78	8.17
2050.....	4.31	5.63	5.74	8.39
2055.....	4.27	5.62	5.71	8.57
2060.....	4.22	5.59	5.64	8.64
25-year averages:				
1983-2007.....	4.07	4.41	4.63	4.90
2008-2032.....	4.28	4.95	5.16	6.09
2033-2057.....	4.45	5.67	5.81	8.15
75-year average:				
1983-2057.....	4.27	5.01	5.20	6.38

Note: The definitions of alternatives I, II-A, II-B, and III are presented in the text.

Table 31 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 both the OASI and DI programs under all four alternatives; the combined OASDI medium-range actuarial surplus ranges from 1.08 percent of taxable payroll under alternative III to 3.23 percent under alternative I.

In the long range, a large deficit is projected for the OASI program under alternative III, an insignificant deficit under alternative II-B, and surpluses under alternatives I and II-A. For the DI program, a deficit is projected under alternative III and surpluses under the other three alternatives. The combined OASDI long-range actuarial balance ranges from a surplus of 2.92 percent of taxable payroll under alternative I to a deficit of 3.51 percent under alternative III.

TABLE 31.—COMPARISON OF ESTIMATED AVERAGE COST RATE WITH ESTIMATED AVERAGE TOTAL INCOME RATE BY ALTERNATIVE AND TRUST FUND  
(As a percentage of taxable payroll)

Calendar years	Average cost rate			Average total income rate			Balance		
	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
Alternative I:									
1983-2007.....	8.31	0.91	9.22	11.19	1.26	12.45	+2.88	+0.35	+3.23
2008-2032.....	8.65	1.16	9.80	11.36	1.47	12.83	+2.71	+31	+3.03
2033-2037.....	9.25	1.17	10.42	11.44	1.48	12.91	+2.19	+30	+2.49
1983-2057.....	8.73	1.08	9.81	11.33	1.40	12.73	+2.59	+32	+2.92
Alternative II-A:									
1983-2007.....	9.08	1.02	10.10	11.21	1.26	12.48	+2.14	+24	+2.38
2008-2032.....	10.34	1.43	11.77	11.43	1.48	12.91	+1.10	+05	+1.15
2033-2057.....	12.59	1.51	14.10	11.60	1.49	13.09	-.99	-.02	-1.01
1983-2057.....	10.67	1.32	11.99	11.42	1.41	12.83	+75	+09	+84
Alternative II-B:									
1983-2007.....	9.61	1.06	10.66	11.23	1.26	12.50	+1.63	+20	+1.83
2008-2032.....	11.14	1.49	12.64	11.47	1.48	12.95	+33	-.01	+32
2033-2057.....	13.65	1.58	15.23	11.65	1.50	13.15	-1.99	-.09	-2.08
1983-2057.....	11.46	1.38	12.84	11.45	1.41	12.87	-.01	+04	+02

TABLE 31.—COMPARISON OF ESTIMATED AVERAGE COST RATE WITH ESTIMATED AVERAGE TOTAL INCOME RATE BY ALTERNATIVE AND TRUST FUND (Cont.)  
[As a percentage of taxable payroll]

Calendar years	Average cost rate			Average total income rate			Balance		
	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
Alternative III:									
1983-2007.....	10.28	1.16	11.44	11.26	1.27	12.53	+.98	+.11	+1.08
2008-2032.....	13.68	1.81	15.50	11.58	1.50	13.08	-2.10	-.32	-2.42
2033-2057.....	20.68	2.05	22.73	12.00	1.52	13.52	-8.67	-.53	-9.21
1983-2057.....	14.88	1.68	16.56	11.61	1.43	13.04	-3.27	-.25	-3.51

Note: The definitions of alternatives I, II-A, II-B, and III, cost rate, total income rate, balance, and taxable payroll are presented in the text. Totals do not necessarily equal the sum of rounded components.

Table 32 shows the trust fund ratios for the OASI and DI programs under all four alternatives. The OASI and DI ratios are projected to be at fairly low levels for several years before increasing to very high levels thereafter. Under alternative I, they increase throughout the long-range projection period to extremely high levels around 2,000 percent. By contrast, under alternative III, the OASI ratio, after peaking around 260 percent, decreases rapidly until the fund is exhausted in 2028. Similarly, the DI ratio, after peaking at 220 percent, decreases rapidly until the fund is exhausted in 2021.

TABLE 32.—ESTIMATED TRUST FUND RATIOS BY ALTERNATIVE AND TRUST FUND, CALENDAR YEARS 1983-2060

Calendar year	Alternative I			Alternative II-A			Alternative II-B			Alternative III		
	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
1983.....	15	15	15	15	15	15	15	15	15	15	15	15
1984.....	21	38	22	20	38	22	20	38	22	19	37	21
1985.....	22	35	23	21	33	22	20	32	21	17	29	18
1986.....	26	35	27	24	31	25	22	29	23	18	25	19
1987.....	29	40	29	25	32	25	23	28	23	21	24	21
1988.....	37	50	38	26	36	27	23	30	24	18	24	19
1989.....	53	94	57	39	48	40	28	38	29	26	30	27
1990.....	73	113	77	51	84	54	35	69	38	34	56	36
1991.....	99	152	104	69	109	72	47	89	51	42	70	45
1992.....	126	188	131	88	135	92	59	111	64	48	83	51
1993.....	162	237	169	110	165	115	75	136	80	56	97	60
1994.....	201	287	209	135	195	140	91	161	98	64	111	68
1995.....	244	340	253	161	226	168	110	186	117	73	124	78
1996.....	290	394	300	191	258	197	130	213	137	83	136	88
1997.....	340	450	350	222	291	229	152	240	160	93	149	99
1998.....	393	495	402	256	317	262	175	262	183	105	158	110
1999.....	448	535	457	291	340	296	200	280	208	118	164	123
2000.....	506	574	513	329	360	332	227	297	234	132	169	136
2001.....	564	631	571	366	397	370	253	329	261	145	187	149
2002.....	624	683	630	405	429	408	281	357	289	158	202	163
2003.....	685	725	689	445	454	446	309	379	317	172	212	177
2004.....	746	761	748	485	475	484	338	396	345	187	218	190
2005.....	807	792	805	525	491	521	367	409	372	201	220	203
2006.....	867	819	861	565	503	557	397	419	399	215	220	216
2007.....	925	842	915	603	512	591	425	425	425	229	217	227
2010.....	1,079	897	1,055	704	526	680	501	431	491	260	193	251
2015.....	1,227	983	1,195	792	532	757	563	421	544	263	127	245
2020.....	1,286	1,088	1,262	800	535	767	556	405	538	204	38	184
2025.....	1,316	1,216	1,305	766	544	741	507	390	494	99	( <sup>1</sup> )	81
2030.....	1,363	1,400	1,366	723	577	708	442	393	437	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
2035.....	1,448	1,542	1,458	684	595	675	372	388	374	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
2040.....	1,594	1,652	1,601	662	596	655	308	369	314	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
2045.....	1,761	1,743	1,759	642	587	636	245	339	255	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
2050.....	1,913	1,853	1,906	615	585	611	178	311	192	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
2055.....	2,050	1,965	2,040	580	585	580	106	284	125	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
2060.....	2,193	2,086	2,180	544	590	549	31	260	54	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )

TABLE 32.—ESTIMATED TRUST FUND RATIOS BY ALTERNATIVE AND TRUST FUND, CALENDAR YEARS 1983-2060 (Cont.)

Calendar year	Alternative I			Alternative II-A			Alternative II-B			Alternative III		
	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
Trust fund is projected to be first exhausted in:.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2028	2021	2027

\*The fund is projected to be exhausted and not to recover before the end of the projection period.

\*The fund is not projected to be exhausted within the projection period.

Note: The definitions of alternatives I, II-A, II-B, and III, and trust fund ratio are presented in the text. The OASDI ratios shown after the year a given fund is projected to be exhausted are theoretical and are shown for informational purposes only.

The actuarial balances shown in this report are substantially improved from those in last year's report. Table 33 itemizes the reasons for the differences—together with their estimated cost effects—between the estimates under alternative II-B in last year's report and those in this report.

TABLE 33.—CHANGE IN ESTIMATED MEDIUM-RANGE AND LONG-RANGE ACTUARIAL BALANCE UNDER ALTERNATIVE II-B BY TRUST FUND AND REASON FOR CHANGE [As a percentage of taxable payroll]

Item	Medium range			Long range		
	OASI	DI	Total	OASI	DI	Total
Shown in last year's report: <sup>1</sup>						
Average tax rate .....	9.93	2.07	12.01	10.11	2.16	12.27
Average cost rate .....	10.14	1.23	11.37	12.59	1.50	14.09
Actuarial balance .....	-21	+85	+64	-2.48	+66	-1.82
Changes in actuarial balance due to changes in: <sup>2</sup>						
June 1982 benefit increase below estimate	+0.01	+0.00	+0.01	+0.00	+0.00	+0.00
Public Law 97-248 (TEFRA) .....	+0.00	+0.00	+0.01	+0.01	+0.00	+0.01
Valuation date .....	+0.08	+0.01	+0.09	-0.05	+0.00	-0.05
Demographic assumptions .....	+0.07	+0.02	+0.09	-0.15	-0.01	-0.16
Preliminary economic assumptions .....	-0.20	-0.02	-0.22	-0.09	-0.01	-0.10
Disability assumptions .....	+0.00	+0.11	+0.11	+0.00	+0.20	+0.20
Withdrawal assumptions .....	-0.13	-0.01	-0.14	-0.12	-0.01	-0.13
All other factors .....	-0.04	+0.01	-0.03	-0.04	+0.00	-0.04
Public Law 98-21 (the 1983 amendments) ...	+2.03	-0.77	+1.26	+2.89	-0.80	+2.09
Final economic assumptions .....	+0.02	+0.01	+0.02	+0.02	+0.01	+0.02
Total change in actuarial balance .....	+1.83	-0.64	+1.19	+2.46	-0.63	+1.84
Shown in this report: <sup>3</sup>						
Actuarial balance .....	+1.63	+2.00	+1.83	-0.01	+0.04	+0.02
Average cost rate .....	9.61	1.06	10.66	11.46	1.38	12.84
Average total income rate .....	11.23	1.26	12.50	11.45	1.41	12.87

<sup>1</sup>Cost rates and taxable payroll are calculated on the basis of the 1982 alternative II-B, which assumes ultimate annual increases of 5.5 percent in average wages in covered employment and 4 percent in the CPI, an ultimate annual unemployment rate of 5 percent, and an ultimate total fertility rate of 2.1 children per woman. The averages are computed over projection periods commencing with 1982. The average tax rate represents both the average payroll tax rate and the average total income rate because there was no tax concept other than the payroll tax prior to the 1983 amendments.

<sup>2</sup>See the text for a discussion of the items shown.

<sup>3</sup>Cost rates, total income rates, and taxable payroll are calculated on the basis of the 1983 alternative II-B, which is described in the text. The averages are computed over projection periods commencing with 1983.

Note: The definitions of cost rate, total income rate, taxable payroll, actuarial balance, and projection period are presented in the text. Totals do not necessarily equal the sum of rounded components.

The estimates shown in last year's report assumed an automatic benefit increase for June 1982 of 7.6 percent. When the CPI for March 1982 was announced about a month after the 1982 report was issued, the actual increase was calculated to be 7.4 percent.

The enactment of Public Law 97-248, the provisions of which are described in an earlier section, results in a minor change in the taxable payroll and, therefore, in the cost rates.

During the legislative development of the Social Security Amendments of 1983, revised estimates of the operations of the OASDI program were prepared for use by the Congress in the legislative decision-making process. The following five changes were made at that time and, except as noted, form the basis for the estimates in this report.

In changing from the valuation periods of last year's report, which were 1982-2006 and 1982-2056 for the medium-range and long-range periods, respectively, to the valuation periods of this report, 1983-2007 and 1983-2057, the year 1982 is replaced by 2007 in the medium range and by 2057 in the long range. In the medium-range period, the OASDI estimated balance in the replacement year is higher than that in the year being replaced, thereby increasing the actuarial balance. In the long-range period, the opposite situation exists.

The ultimate total fertility rate was lowered from 2.1 to 2.0 to reflect the continuing low level of fertility in the United States. This change results in a significant decrease in the long-range actuarial balance but has no significant effect on the medium-range actuarial balance. The demographic assumptions for this year's report also include the results of the 1980 Census, which were not available in time for the 1982 report. The 1980 Census shows a significantly larger population, and in particular, a larger working population, for 1980 than had been estimated before the census. This change results in a significant increase in both the medium-range and long-range actuarial balances. However, in the long range, because of the large opposite effect of the change in the fertility assumption, the net effect of the changes in the demographic assumptions is to lower the actuarial balance.

The ultimate economic assumptions in alternative II-B are the same as in last year's report with the exception of the unemployment rate which was changed from 5.0 to 5.5 percent. However, the economic assumptions in the short-range period were revised to reflect the depth and duration of the 1981-82 recession, the rise in unemployment, and the significant drop in inflation. This results in a moderate decrease in the medium-range actuarial balance and a smaller decrease in the long-range actuarial balance. After the enactment of the 1983 amendments, these short range assumptions were revised slightly, as described later.

Changes in the assumed disability incidence and termination rates were made to reflect more recent experience. These changes result in increases in both the medium-range and long-range actuarial balances.

The estimates in last year's report reflect an implicit assumption that no State and local government entities would withdraw from the OASDI system. Prior to the enactment of the 1983 amendments, which prohibit such withdrawal (as described earlier), the cost estimates were revised to reflect an explicit assumption regarding the cost effect of such withdrawals.

Numerous minor changes have been made in other factors and in the methods used to project the OASDI cost rates. The net effect of these changes is a minor decrease in the OASI actuarial balances and a minor increase in the DI actuarial balances.

The enactment of the Social Security Amendments of 1983 has resulted in major increases in the actuarial balances of the OASDI system. The provisions of this law are discussed in significant detail earlier in this report.

After the enactment of the Social Security Amendments of 1983, the short-range economic assumptions were changed to reflect the significant turn-around in economic activity which began early this year and which was not anticipated in the preliminary economic assumptions that were made last fall.

## VIII. CONCLUSION

The Social Security Amendments of 1983 have restored the financial soundness of the OASDI program for many years into the future. This is the case in the short range, on the basis of all four alternative sets of assumptions shown in this report, and in the long range, on the basis of all but the most pessimistic of the four sets.

The short-range projections shown in this report are in marked contrast to those shown in the last three annual reports, all of which indicated that the assets of the OASI Trust Fund would soon become insufficient to permit the timely payment of benefits. As discussed in earlier sections of this report, the assets of the OASI Trust Fund were sufficient to permit benefits to be paid on time through June 1983 only because of temporary legislative changes, including the interfund borrowing authority under which loans were made from the DI and HI Trust Funds to the OASI Trust Fund in the latter part of 1982. On the basis of the economic and demographic assumptions presented in this report, the 1983 amendments would enable OASI and DI benefits to be paid on time in the short range and for many years thereafter.

The long-range projections shown in this report are in marked contrast to those of the last decade, which indicated substantial deficits over the 75-year projection period. On the basis of the intermediate alternative II-B assumptions, the program is currently in long-range actuarial balance. This actuarial balance consists of average surpluses of 1.83 and 0.32 percent of taxable payroll over the first and second 25-year subperiods, respectively, and an average deficit of 2.08 percent over the third 25-year subperiod of the 75-year projection period. Thus, the actuarial balance is a moving average, and continuing review of the financing of the OASDI program is necessary.

While the OASDI program is expected to be able to pay benefits on time for many years into the future, the trust-fund levels are estimated to be relatively low through 1987. If economic conditions in 1984-87 are worse than those assumed under the pessimistic alternative III assumptions, the OASDI program could again experience financial difficulties in the near future. After 1987, the program's ability to withstand economic downturns is projected to steadily improve.

The assets of the OASI Trust Fund are estimated to increase enough to allow for the complete repayment, before 1989, of the \$12.4 billion borrowed from the HI Trust Fund and, before 1990, of the \$5.1 billion borrowed from the DI Trust Fund. The repayments to the HI Trust Fund are expected to be completed before the projected depletion of that fund in the late 1980's or early 1990's. As shown in the concurrent annual report for the HI Trust Fund, prompt repayment will be essential considering that fund's impending depletion. Repayment to the DI Trust Fund is assumed to occur slightly later, because for DI such repayment is not expected to be necessary to meet ongoing benefit payments.

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

This appendix describes the assumptions and methods which underlie the medium-range and long-range cost estimates in this report. The descriptions pertain to the estimates under all of the four alternatives unless specifically stated otherwise. The basic assumptions comprising each alternative have been summarized in an earlier section 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 will be published by the Office of the Actuary, Social Security Administration, shortly after the issuance of this report.

##### *TOTAL POPULATION*

Projections were made of the population in the Social Security 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, 1981, as estimated by the Bureau of the Census, based on the 1980 Census and adjusting for births, deaths, and net immigration during 1980-81. 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 in 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 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 childbearing period. It 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 that time, the total fertility rate has been around 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 maintain a stable population, in the absence of increased immigration. There are, however, forces consistent with a continued low trend, 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 2007. These ultimate values can be compared with those used by the Bureau of the Census in its latest series of population

projections.<sup>1</sup> The Bureau of 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 migration and if mortality were constant at levels close to current U.S. levels.

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. It has declined at an average rate of 1.2 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 health-care 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 2007 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 assumed in alternative I are less than those in alternatives II-A and II-B, while the average annual reductions assumed in alternative III are greater. Prior to 2007, mortality reductions under alternatives II-A and II-B are assumed to change gradually from the average annual reductions by age group, sex, and cause of death observed during 1968-78 to the annual reductions by sex and cause of death assumed for 2007 and later. Alternative I mortality reductions are assumed to change gradually from 50 percent of the average annual reductions observed during 1968-78, while alternative III mortality improvement is assumed to change gradually from 150 percent of the average annual improvement observed during 1968-78.

After adjustment for changes in the age distribution of the population, mortality under alternatives II-A and II-B is projected to decline at an average annual rate of about 0.6 percent per year during 1981-2057. This is about half the average rate of decline observed during 1900-1981.

Net immigration was assumed to be 450,000, 400,000, 400,000, and 350,000 persons per year in 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. However, 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 under 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.

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<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.

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

Calendar year	Population (in thousands)			Total	Dependency ratio	
	Under 20	20-64	65 and over		Aged <sup>1</sup>	Total <sup>2</sup>
1960	73,108	98,689	17,147	188,943	0.174	0.915
1965	79,959	104,121	18,952	203,032	.182	.950
1970	60,737	112,606	20,881	214,024	.184	.901
1975	79,041	122,615	23,300	224,956	.190	.835
1980	75,620	134,475	26,321	236,417	.196	.756
Alternative I:						
1985	74,011	144,516	29,147	247,674	.202	.714
1990	75,779	151,308	32,052	259,139	.212	.713
1995	78,775	157,229	33,919	269,922	.216	.717
2000	81,542	163,875	34,610	280,028	.211	.709
2005	83,227	171,593	35,455	290,275	.207	.692
2010	85,537	177,677	37,992	301,206	.214	.695
2015	88,770	180,152	43,278	312,201	.240	.733
2020	92,479	180,872	49,413	322,765	.273	.784
2025	95,761	180,926	56,050	332,737	.310	.839
2030	98,378	183,078	60,872	342,328	.332	.870
2035	101,158	188,057	62,553	351,768	.333	.871
2040	104,444	194,484	62,225	361,153	.320	.857
2045	108,047	200,994	61,562	370,604	.306	.844
2050	111,559	206,559	62,312	380,430	.302	.842
2055	114,854	212,401	63,773	391,029	.300	.841
2060	118,153	219,163	65,305	402,620	.298	.837
Alternatives II-A and II-B:						
1985	73,811	144,510	29,406	247,727	.203	.714
1990	74,747	151,265	32,659	258,670	.216	.710
1995	76,336	157,178	35,077	268,590	.223	.709
2000	77,192	163,823	36,338	277,353	.222	.693
2005	76,486	171,436	37,681	285,603	.220	.666
2010	76,311	176,767	40,687	293,765	.230	.662
2015	77,108	177,840	46,492	301,440	.261	.695
2020	78,325	176,605	53,222	308,152	.301	.745
2025	79,097	174,079	60,584	313,759	.348	.802
2030	79,257	172,948	66,215	318,420	.383	.841
2035	79,410	174,193	68,673	322,275	.394	.850
2040	79,937	176,402	69,014	325,354	.391	.844
2045	80,711	178,177	68,860	327,748	.388	.839
2050	81,381	178,466	69,919	329,766	.392	.848
2055	81,817	178,929	71,100	331,846	.397	.855
2060	82,179	180,213	71,913	334,305	.399	.855
Alternative III:						
1985	73,526	144,489	29,615	247,630	.205	.714
1990	73,294	151,197	33,215	257,705	.220	.704
1995	72,956	157,073	36,153	266,183	.230	.695
2000	71,232	163,690	38,001	272,923	.232	.667
2005	67,402	171,117	39,976	278,495	.234	.628
2010	64,115	175,397	43,695	283,208	.249	.615
2015	62,023	174,605	50,366	286,994	.288	.644
2020	60,497	170,809	58,142	289,448	.340	.695
2025	58,736	164,932	66,794	290,462	.405	.761
2030	56,638	159,587	73,914	290,140	.463	.818
2035	54,476	156,158	77,918	288,552	.499	.848
2040	52,663	153,262	79,747	285,673	.520	.864
2045	51,167	149,480	80,909	281,556	.541	.884
2050	49,734	143,785	82,955	276,473	.577	.923
2055	48,223	138,484	84,172	270,879	.608	.956
2060	46,705	134,234	84,260	265,199	.628	.976

<sup>1</sup>Population aged 65 and over as ratio to population aged 20-64.

<sup>2</sup>Population aged 65 and over plus population under age 20 as ratio to population aged 20-64.

Note: The definitions of alternatives I, II-A, II-B, and III are presented in the text. Totals do not necessarily equal the sum of rounded components.

### 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 number of people in the 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 non-profit 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 2000. All of these factors vary by alternative. For men, the projected age-adjusted labor force participation rates under alternatives I, II-A, and II-B for 2060 are, respectively, 3.3, 1.7, and 0.6 percentage points higher than the 1982 level of 76.7 percent, while the rate for alternative III is 0.9 percentage points lower. For women, the projected age-adjusted labor force participation rates increase under all of the alternatives. The assumed rates for 2060 are 10.4, 9.2, 7.4, and 6.5 percentage points, respectively, above the 1982 level of 52.7 percent.

The total age-sex-adjusted unemployment rate has averaged 5.2 percent over the 30 years 1953-82 and 6.8 percent over the 10 years 1973-82. The ultimate total age-sex-adjusted unemployment rates were assumed to be 4.0, 5.0, 5.5, and 6.5 percent in alternatives I, II-A, II-B, and III, respectively. In each alternative the unemployment rates are assumed to decline gradually, reaching their ultimate levels by the mid-1990's.

The projected age-adjusted coverage rate for men increases from its 1982 level of 73.8 percent to 80.0, 78.2, 77.1, and 75.3 percent in 2060 under alternatives I, II-A, II-B, and III, respectively. Correspondingly, for women, it increases from its 1982 level of 52.7 percent to 68.0, 66.2, 64.3, and 62.8 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 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 self-employment income through 1983, as compared with the combined employee-employer rate. For 1983-92, the amounts of earnings for employees, employers, and the self-employed were projected separately. For 1993 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 self-employment income earned above the taxable base; and adjusting for the lower tax rates on tips, multiple-employer "excess wages," and self-employment income 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. It will increase further beginning in 1984 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 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 under alternatives I, II-A, II-B, and III, respectively. This ratio has declined at average annual rates of 0.40 percent over the 30 years 1953-82 and 0.49 percent over the 10 years 1973-82.

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

Calendar year	Past experience			
1960 .....	0.391			
1965 .....	.343			
1970 .....	.417			
1975 .....	.419			
1980 .....	.433			
	Projected, by alternative			
	I	II-A	II-B	III
1983 .....	0.451	0.451	0.452	0.454
1985 .....	.442	.441	.441	.437
1990 .....	.441	.437	.437	.432
1995 .....	.441	.436	.433	.428
2000 .....	.442	.434	.430	.422
2005 .....	.442	.432	.426	.416
2010 .....	.441	.429	.421	.409
2015 .....	.439	.426	.415	.402
2020 .....	.437	.422	.409	.395
2025 .....	.435	.418	.404	.387
2030 .....	.433	.414	.398	.380
2035 .....	.431	.410	.392	.373
2040 .....	.429	.406	.387	.366
2045 .....	.427	.402	.381	.359
2050 .....	.425	.398	.376	.352
2055 .....	.423	.394	.371	.346
2060 .....	.421	.391	.365	.339

Note: The definitions of alternatives I, II-A, II-B, and III and taxable payroll are presented in the text.

#### INSURED POPULATION

There are three types of insured statuses 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 only currently 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 more likely to be fully insured than were widowers who, in turn, were assumed more likely to be fully insured than were single and divorced men. By

contrast, single and divorced women were assumed more likely to be fully insured than were widows who, in turn, were assumed 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 to 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 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 historical 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 United States were estimated from the projected population at those ages by applying age-specific probabilities of being an orphan. These probabilities were derived by using distributions of age of parent at birth of child and death rates consistent with the population projections. 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 was projected on the basis of the past trend in the number of such beneficiaries. A decrease was assumed from the actual figure of 13,000 in the middle of 1982 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]

Calendar year	Retired workers and auxiliaries			Survivors			Total	
	Worker	Wife-husband	Child	Widow-widower	Mother-father	Child		Parent
1960.....	7,813	2,224	260	1,471	388	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
Alternative I:								
1983.....	20,964	3,028	536	4,615	492	2,210	12	31,856
1985.....	22,351	3,104	506	4,749	460	1,962	10	33,142
1990.....	25,162	3,264	508	5,047	439	1,803	8	36,230
1995.....	26,642	3,294	520	5,161	463	1,985	7	38,072
2000.....	27,515	3,166	523	5,100	500	2,097	7	38,908
2005.....	28,742	3,029	548	5,000	526	2,196	7	40,048
2010.....	31,472	3,022	621	4,941	542	2,289	7	42,894
2015.....	36,494	3,163	747	4,915	555	2,368	7	48,249

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

Calendar year	Retired workers and auxiliaries			Survivors				Total
	Worker	Wife-husband	Child	Widow-widower	Mother-father	Child	Parent	
Alternative I:								
(Cont.)								
2020	42,295	3,289	863	4,981	555	2,434	7	54,424
2025	47,737	3,336	936	5,103	550	2,494	7	60,163
2030	51,621	3,255	949	5,199	551	2,545	7	64,127
2035	53,652	3,090	932	5,252	566	2,602	7	66,101
2040	53,739	2,886	897	5,209	586	2,672	7	65,996
2045	53,833	2,768	905	5,129	602	2,741	7	65,985
2050	54,692	2,775	943	5,032	616	2,821	7	66,886
2055	56,048	2,847	983	4,969	631	2,898	7	68,383
2060	57,450	2,926	1,005	4,961	650	2,971	7	69,970
Alternative II-A:								
1983	20,977	3,030	536	4,625	492	2,210	12	31,882
1985	22,401	3,113	506	4,772	460	1,960	10	33,222
1990	25,436	3,308	506	5,113	432	1,770	8	36,572
1995	27,512	3,459	528	5,216	421	1,787	7	38,930
2000	28,833	3,390	525	5,174	434	1,790	7	40,153
2005	30,457	3,300	551	5,101	438	1,782	7	41,636
2010	33,570	3,330	612	5,052	443	1,789	7	44,803
2015	39,027	3,508	721	5,027	446	1,791	7	50,527
2020	45,328	3,687	821	5,084	438	1,789	7	57,154
2025	51,391	3,782	887	5,192	427	1,785	7	63,471
2030	55,963	3,744	897	5,302	418	1,770	7	68,101
2035	58,711	3,599	883	5,380	419	1,764	7	70,763
2040	59,387	3,404	852	5,379	424	1,758	7	71,211
2045	59,961	3,277	856	5,328	423	1,756	7	71,608
2050	61,015	3,273	889	5,231	420	1,753	7	72,588
2055	62,116	3,318	911	5,131	419	1,751	7	73,653
2060	62,895	3,364	913	5,056	419	1,748	7	74,402
Alternative II-B:								
1983	20,977	3,030	536	4,625	492	2,210	12	31,882
1985	22,401	3,113	506	4,772	460	1,960	10	33,222
1990	25,435	3,308	506	5,113	432	1,770	8	36,571
1995	27,504	3,462	528	5,218	421	1,787	7	38,927
2000	28,814	3,398	524	5,180	434	1,787	7	40,144
2005	30,422	3,312	550	5,109	438	1,782	7	41,620
2010	33,509	3,352	611	5,063	442	1,786	7	44,770
2015	38,929	3,543	719	5,050	446	1,789	7	50,483
2020	45,193	3,735	819	5,114	438	1,787	7	57,093
2025	51,214	3,852	885	5,230	426	1,781	7	63,395
2030	55,750	3,829	896	5,354	418	1,770	7	68,024
2035	58,462	3,694	882	5,447	419	1,760	7	70,671
2040	59,131	3,503	850	5,459	423	1,757	7	71,130
2045	59,686	3,382	855	5,420	422	1,753	7	71,527
2050	60,727	3,384	887	5,332	420	1,751	7	72,508
2055	61,807	3,431	909	5,239	418	1,749	7	73,560
2060	62,582	3,480	911	5,162	419	1,747	7	74,308
Alternative III:								
1983	20,988	3,032	536	4,632	492	2,210	12	31,902
1985	22,444	3,121	505	4,798	458	1,955	10	33,290
1990	25,689	3,348	502	5,191	422	1,728	8	36,888
1995	28,309	3,615	537	5,261	383	1,610	7	39,722
2000	30,068	3,627	529	5,249	373	1,509	7	41,362
2005	32,180	3,610	539	5,195	358	1,399	7	43,288
2010	35,836	3,717	579	5,163	348	1,322	7	46,972
2015	41,958	4,004	663	5,151	340	1,249	7	53,372
2020	49,115	4,292	736	5,197	325	1,184	7	60,856
2025	56,227	4,505	790	5,294	308	1,123	7	68,254
2030	62,055	4,589	803	5,390	292	1,069	7	74,205
2035	66,152	4,548	792	5,495	281	1,012	7	78,287
2040	68,151	4,411	765	5,557	271	958	7	80,120
2045	69,908	4,314	769	5,553	256	914	7	81,721
2050	71,711	4,313	788	5,487	243	870	7	83,419
2055	72,827	4,332	789	5,363	232	829	7	84,379
2060	72,990	4,318	776	5,228	221	794	7	84,334

Note: The definitions of alternatives I, II-A, II-B, and III are presented in the text. The numbers of beneficiaries do not include certain uninsured persons, most of whom attained age 72 before 1968 and have less than 3 quarters of coverage, and for whom the costs are reimbursed by the general fund of the Treasury. The number of such uninsured persons was 68,923 as of June 30, 1982, and is estimated to be less than 500 by the turn of the century. Totals do not necessarily equal the sum of the rounded components.

*DISABILITY INSURANCE BENEFICIARIES*

The number of disabled-worker beneficiaries was projected from the exposed population, 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. To obtain the number of currently entitled beneficiaries, assumed termination rates were applied to the currently entitled disabled-worker population.

The disability incidence rates, which declined during 1978-82, are assumed to increase steadily from 1983 through 2002, when they reach an ultimate level which, under alternatives II-A and II-B, is about 15 percent higher than the average level for 1980-82. In 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 1980-82 and 30 percent higher, respectively.

The termination rates were estimated by age, sex, and duration of entitlement. The mortality rates used throughout the projection period were assumed to be the same as those experienced by disabled-worker beneficiaries during 1977-80. 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. All disabled-worker benefits are automatically converted to old-age benefits at normal retirement age.

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 in 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]

Calendar year	Dependents of disabled workers			Total
	Disabled workers	Wives and husbands	Children	
1960	371	56	94	522
1965	944	187	518	1,648
1970	1,436	271	861	2,568
1975	2,363	429	1,333	4,125
1976	2,602	468	1,482	4,533
1977	2,755	482	1,496	4,733
1978	2,858	491	1,512	4,861
1979	2,877	483	1,466	4,826
1980	2,863	468	1,403	4,734
1981	2,835	450	1,350	4,636
1982	2,713	399	1,071	4,184
<b>Alternative I:</b>				
1983	2,570	362	996	3,928
1985	2,484	318	952	3,754
1990	2,495	312	936	3,743
1995	2,531	301	873	3,705
2000	2,851	332	967	4,149
2005	3,908	378	1,087	5,371
2010	4,092	423	1,211	5,725
2015	4,378	455	1,315	6,148
2020	4,505	477	1,388	6,370
2025	4,713	483	1,399	6,595
2030	4,709	475	1,367	6,551
2035	4,634	472	1,367	6,473
2040	4,755	486	1,416	6,656
2045	4,945	509	1,485	6,939
2050	5,043	524	1,532	7,100
2055	5,196	535	1,560	7,291
2060	5,294	546	1,597	7,437
<b>Alternative II-A:</b>				
1983	2,571	362	996	3,929
1985	2,497	319	957	3,773
1990	2,589	324	971	3,883
1995	2,762	321	924	4,008
2000	3,182	355	1,023	4,559
2005	4,349	401	1,134	5,884
2010	4,612	444	1,240	6,305
2015	4,955	472	1,326	6,743
2020	5,092	489	1,379	6,960
2025	5,271	490	1,371	7,132
2030	5,220	477	1,324	7,020
2035	5,108	468	1,303	6,879
2040	5,193	475	1,328	6,996
2045	5,319	489	1,366	7,173
2050	5,305	491	1,375	7,172
2055	5,332	489	1,365	7,191
2060	5,324	487	1,362	7,173
<b>Alternative II-B:</b>				
1983	2,571	362	996	3,929
1985	2,496	319	957	3,773
1990	2,588	323	970	3,881
1995	2,761	321	924	4,006
2000	3,178	355	1,022	4,555
2005	4,344	401	1,133	5,878
2010	4,614	444	1,239	6,297
2015	4,945	472	1,324	6,741
2020	5,080	489	1,378	6,947
2025	5,258	490	1,369	7,117
2030	5,206	476	1,321	7,003
2035	5,094	467	1,301	6,862
2040	5,179	475	1,326	6,980
2045	5,304	489	1,363	7,156
2050	5,290	491	1,373	7,153
2055	5,323	489	1,362	7,174
2060	5,309	487	1,359	7,155

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	Dependents of disabled workers			Total
	Disabled workers	Wives and husbands	Children	
Alternative III:				
1983	2,572	362	997	3,931
1985	2,505	320	961	3,786
1990	2,668	333	1,001	4,002
1995	2,990	336	958	4,284
2000	3,506	369	1,042	4,917
2005	4,781	408	1,118	6,307
2010	5,137	442	1,179	6,757
2015	5,513	461	1,222	7,195
2020	5,653	468	1,237	7,358
2025	5,792	461	1,202	7,455
2030	5,679	441	1,137	7,258
2035	5,508	425	1,094	7,027
2040	5,521	422	1,086	7,029
2045	5,521	423	1,082	7,026
2050	5,319	409	1,050	6,779
2055	5,163	393	1,002	6,558
2060	4,974	377	962	6,313

Note: The definitions of alternatives I, II-A, II-B, and III are presented in the text. 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.

The 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 1952-82, annual increases in productivity have averaged 2.1 percent, the result of average increases of 0.9, 2.8, and 2.7 percent in each of the 10-year periods 1972-82, 1962-72, and 1952-62, respectively. Meanwhile, the real-wage differential has averaged 1.1 percent over the 30 years 1953-82, the result of an average decrease of 0.9 percent and average increases of 1.8 and 2.5 percent, respectively, in the previously mentioned periods. The linkage between annual increases in productivity and the real-wage differential has averaged 1.0 percent over the 30 years 1953-82 and 1.8 percent over the 10 years 1973-82. 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.

In alternative II-A, the CPI was assumed to increase ultimately at an annual rate of 3 percent. In alternative II-B, the CPI was assumed to increase ultimately at an annual rate of 4 percent, which is slightly lower than the average of 4.3 percent experienced over the 30 years 1952-82. The ultimate increases in the average annual CPI under alternatives I and III of 2 percent and 5 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 benefit adjustment provisions and calculating future PIA's for workers, by sex, at various earnings levels. Separate projections of average PIA were made based on the earnings of male and female workers and in each case for four separate benefit-type categories: retired workers and their families, young survivors, aged survivors, and disabled workers and their families.

Future increases in the average PIA for beneficiaries in current-payment 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 begins. Included are retired worker, aged spouse, aged widow(er), and disabled 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. The average percentage of PIA payable is projected to change significantly in future years because of several provisions included in the 1983 amendments, foremost of which is the provision to change the normal retirement age starting in the year 2000.

#### *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. Retroactive payments are made for months of entitlement between the date of application for benefits and the date of first payment and for as many as 6 months (or 12 months for disabled widow(er)s and for all DI beneficiaries) prior to the date of filing during which eligibility requirements are satisfied, but only if benefits are not thereby permanently reduced for early entitlement (widow(er)s are permitted one month of retroactive benefits in such cases, as a result of the 1983 amendments).

Lump-sum death payments were calculated as the product of the number of such payments, which was projected based on the assumed

mortality rates, the projected fully insured population, the estimated percentage of the fully insured population that would qualify for benefits, and the amount of the lump-sum death payment, which is \$255.00 in all cases.

*ADMINISTRATIVE EXPENSES*

The projection of administrative expenses through 1992 was based on assumed increases in average wages, increases in the CPI, and increases in the number of beneficiaries. For years after 1992, 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 system of 0.01 percent of taxable payroll.

*BENEFITS TO UNINSURED PERSONS*

The law provides for benefit payments to certain uninsured persons who attained age 72 before 1968. 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. 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 OASDI estimates to changes in certain assumptions. Although the estimates under the four alternatives 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 starting set of assumptions, 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 relative variations in actuarial balances.

Recent reports have illustrated the sensitivity of the estimates to changes in economic and demographic assumptions. Because of time constraints, this report shows only the sensitivity to economic assumptions.

#### CONSUMER PRICE INDEX

Table B1 shows the estimated average annual OASDI cost rate, total income rate, and balance on the basis of alternative II-B with various CPI assumptions. These assumptions are that the ultimate annual CPI increase will be 2 percent (as in alternative I), 3 percent (as in alternative II-A), 4 percent (as in alternative II-B), 5 percent (as in alternative III), and 6 percent. In each case the ultimate real-wage differential is assumed to be 1.5 percent (as under the unmodified alternative II-B), yielding ultimate percentage increases in average annual wages of 3.5, 4.5, 5.5, 6.5, and 7.5 percent, respectively. The annual CPI increase is assumed to gradually reach its ultimate value in 1989.

TABLE B1.—ESTIMATED AVERAGE ANNUAL OASDI COST RATE, TOTAL INCOME RATE, AND BALANCE UNDER ALTERNATIVE II-B WITH VARIOUS CONSUMER PRICE INDEX ASSUMPTIONS  
[As a percentage of taxable payroll]

Calendar years	Ultimate percentage increase in wages-CPI <sup>1</sup>				
	3.5-2	4.5-3	5.5-4	6.5-5	7.5-6
<b>Average cost rate:</b>					
1983-2007.....	10.88	10.77	10.66	10.56	10.46
2008-2032.....	13.04	12.83	12.64	12.44	12.26
2033-2057.....	15.73	15.47	15.23	14.98	14.76
1983-2057.....	13.22	13.02	12.84	12.66	12.49
<b>Average total income rate:</b>					
1983-2007.....	12.50	12.50	12.50	12.49	12.49
2008-2032.....	12.97	12.96	12.95	12.94	12.94
2033-2057.....	13.18	13.16	13.15	13.14	13.13
1983-2057.....	12.88	12.87	12.87	12.86	12.85
<b>Balance:</b>					
1983-2007.....	+1.62	+1.73	+1.83	+1.93	+2.03
2008-2032.....	-.07	+.13	+.32	+.50	+.68
2033-2057.....	-2.56	-2.31	-2.08	-1.85	-1.64
1983-2057.....	-.33	-.15	+.02	+.20	+.36

<sup>1</sup>The first value in each pair is the assumed annual percentage increase in average wages in 1993 and later years. The second value is the assumed annual percentage increase in CPI in 1989 and later years. The assumptions used in earlier years gradually merge into the ultimate values.

Note: The definitions of alternative II-B, cost rate, total income rate, balance, and taxable payroll are presented in the text.

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 10.88 (for CPI increases of 2 percent) to 10.46 percent (for CPI increases of 6 percent). Over the long range, it varies from 13.22 to 12.49 percent.

The relationship described above results primarily from the time lag between the effect on income and on benefit outgo. When assuming a higher rate of increase in the CPI (in conjunction with a constant real-wage differential), the effect on income of the implied higher rate of increase in wages is experienced immediately, while the effect on benefits of the higher rate of increase in the CPI is experienced with about a half-year lag. In addition, the effect on benefits of the higher rate of increase in wages is experienced no earlier than 2 years later.

The average total income rate varies only slightly with changes in the CPI because most of the total income rate consists of the average payroll-tax rate, which is scheduled in the law and, therefore, not affected by economic assumptions. Thus, the actuarial balances vary by amounts similar in magnitude to the changes in the average cost rates, but in the opposite direction. The medium-range actuarial balance increases from 1.62 (for CPI increases of 2 percent) to 2.03 percent of taxable payroll (for CPI increases of 6 percent). The long-range balance increases from -0.33 to 0.36 percent.

#### REAL-WAGE DIFFERENTIAL

Table B2 shows the estimated average annual OASDI cost rate, total income rate, and balance, on the basis of alternative II-B with various real-wage assumptions. These assumptions are that the ultimate real-wage differential will be 1 percent (as in alternative III), 1.5 percent (as in alternative II-B), 2 percent (as in alternative II-A), and 2.5 percent (as in alternative I). In each case the ultimate annual CPI increase is assumed to be 4 percent (as under the unmodified alternative II-B), yielding ultimate percentage increases in average annual wages of 5, 5.5, 6, and 6.5 percent, respectively. The real-wage differential is assumed to gradually reach its ultimate value in 1993.

TABLE B2.—ESTIMATED AVERAGE ANNUAL OASDI COST RATE, TOTAL INCOME RATE, AND BALANCE UNDER ALTERNATIVE II-B WITH VARIOUS REAL-WAGE ASSUMPTIONS  
[As a percentage of taxable payroll]

Calendar years	Ultimate percentage increase in wages-CPI <sup>1</sup>			
	5-4	5.5-4	6-4	6.5-4
<b>Average cost rate:</b>				
1983-2007 .....	11.04	10.66	10.31	9.98
2008-2032 .....	13.51	12.64	11.84	11.11
2033-2057 .....	16.39	15.23	14.16	13.21
1983-2057 .....	13.65	12.84	12.10	11.43
<b>Average total income rate:</b>				
1983-2007 .....	12.51	12.50	12.48	12.47
2008-2032 .....	12.99	12.95	12.92	12.88
2033-2057 .....	13.21	13.15	13.10	13.05
1983-2057 .....	12.90	12.87	12.83	12.80
<b>Balance:</b>				
1983-2007 .....	+1.47	+1.83	+2.17	+2.50
2008-2032 .....	.52	+.32	+1.08	+1.78
2033-2057 .....	-3.18	-2.08	-1.07	-.16
1983-2057 .....	-.74	+.02	+.73	+1.37

<sup>1</sup>The first value in each pair is the assumed annual percentage increase in average wages in 1993 and later years. The second value is the assumed annual percentage increase in CPI in 1989 and later years. The difference between the two values is the real-wage differential. The assumptions used in earlier years gradually merge into the ultimate values.

Note: The definitions of alternative II-B, cost rate, total income rate, balance, and taxable payroll are presented in the text.

Over the medium-range period, the average cost rate varies from 11.04 (for real-wage differentials of 1 percent) to 9.98 percent (for differentials

of 2.5 percent). Over the long-range period, it varies from 13.65 to 11.43 percent.

The average cost rate decreases with increasing real-wage differentials for two reasons. One is that there is a lag between the time when workers pay taxes based on the higher earnings and the time when they draw benefits based on those earnings. The other is that the benefits to those already eligible—benefits which generally increase with the CPI, not wages—are smaller relative to the payrolls based on the higher real-wage differentials.

Because of the relatively constant average total income rate, the actuarial balances vary by amounts similar in magnitude to the changes in the average cost rates, but in the opposite direction. (See the preceding discussion in regard to changes in the CPI assumptions.) The medium-range actuarial balance increases from 1.47 (for real-wage differentials of 1 percent) to 2.50 percent of taxable payroll (for real-wage differentials of 2.5 percent). The long-range actuarial balance increases from -0.74 to 1.37 percent.

**APPENDIX C.—DETERMINATION AND ANNOUNCEMENT OF SOCIAL SECURITY BENEFIT INCREASES<sup>1</sup>**

I hereby determine and announce a cost-of-living increase of 7.4 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 7.4 percent beginning with the June 1982 benefits which are payable on July 2, 1982. 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.

Under title XVI, supplemental security income payment levels will increase by 7.4 percent effective for payments made on July 1, 1982. This is based on the authority contained in section 1617 of the Social Security Act (42 U.S.C. 1382f).

*TITLE II BENEFITS*

Title II benefits are payable under the Federal Old-Age, Survivors, and Disability Insurance program. Individuals entitled under this program include insured workers, wives, husbands, children, widows, widowers, mothers, fathers, and parents.

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 7.4 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 October 30, 1981 at 46 FR 53791. 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 reach age 62, become disabled, or die after 1978; their benefits will generally be determined by a new benefit formula provided by the Social Security Amendments of 1977 (Pub. L. 95-216). For persons first eligible for benefits in the period 1979-1982, the 7.4 percent increase will apply beginning June 1982; but the 7.4 percent increase will not apply for persons first becoming eligible for benefits after 1982.

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)(II). 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)(II), the attached table 2 shows the revised range of primary insurance amounts and corresponding maximum family benefit amounts after the 7.4 percent benefit increase.

Section 227 of the Act provides limited benefits to a worker who became age 72 before 1969 and was not insured under the usual requirements, and to his wife or widow. Section 228 of the Act provides

<sup>1</sup>This statement, edited for presentation here, was published in the Federal Register for May 14, 1982 (Vol. 47, No. 94, pp. 20863-64).

similar benefits at age 72 for certain uninsured persons. The current monthly benefit amounts of \$117.00 for an individual and \$58.70 for a wife established under sections 227 and 228 of the Act are increased by 7.4 percent to obtain the new amounts of \$125.60 and \$63.00, respectively.

#### *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 is the same as the title II benefit increase and the annual payment amount is rounded, when not a multiple of \$1.20, to the next higher multiple of \$1.20.

In accordance with section 1617, Federal Supplemental Security Income (SSI) guarantees for the aged, blind, and disabled are increased effective with July 1982 by 7.4 percent. The current yearly Federal SSI guarantees of \$3,176.40 for an eligible individual and \$4,764.00 for an eligible individual with an eligible spouse are thereby increased to \$3,411.60 and \$5,116.80, respectively. The monthly payment is determined by dividing the yearly guarantee by 12 and then subtracting the 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. The amount by which the Federal SSI guarantee amount is increased because of the presence of an essential person in the home, currently \$1,591.20 per year for each essential person under section 211(a)(1)(A) of Pub. L. 93-66, is also increased by 7.4 percent to obtain a new amount of \$1,710.00.

#### *AUTOMATIC BENEFIT INCREASE DETERMINATION*

Section 215(i) of the Act requires that when certain conditions are met in the first calendar quarter of a year, the Secretary shall determine that a cost-of-living increase in benefits is due. Section 215(i) of the Act also specifies the formula for determining the amount of any cost-of-living increase in benefits. This formula utilizes the Consumer Price Index for urban wage earners and clerical workers reported by the Department of Labor.

Section 215(i)(2)(A) of the Act requires the Secretary to determine each year whether there is a cost-of-living computation quarter in that year. If the Secretary so determines, the Secretary shall, effective with June of that year, increase benefits for individuals entitled under section 227 or 228 of the Act, shall increase the primary insurance amounts of all other individuals entitled under title II of the Act, and shall also increase the maximum benefits payable to a family. 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). The percentage increase is equal to the percentage increase in the Consumer Price Index for the cost-of-living computation quarter over the index for the most recent cost-of-living computation quarter.

Section 215(i)(1) of the Act defines a base quarter as a calendar quarter ending on March 31 in each year after 1974, or any other

calendar quarter in which occurs the effective month of a general benefit increase. Section 215(i)(1) also defines a cost-of-living computation quarter as a base quarter in which the Consumer Price Index prepared by the Department of Labor exceeds by not less than 3 percent the index in the later of (1) the last prior cost-of-living computation quarter or (2) the most recent calendar quarter in which a general benefit increase was effective. However, there shall be no cost-of-living computation quarter in any calendar year if in the prior year a general benefit increase was enacted or became effective. Section 215(i)(1) of the Act also 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, 1981 was: For January 1981, 260.7; for February 1981, 263.5; and for March 1981, 265.2. The arithmetical mean for this calendar quarter is 263.1. The corresponding Consumer Price Index 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 increase for the calendar quarter ending March 31, 1982 is 7.4 percent. Thus, since the percentage of increase in the Consumer Price Index from the calendar quarter ending March 31, 1981 to the calendar quarter ending March 31, 1982 is not less than 3 percent, the quarter ending March 31, 1982 is a cost-of-living computation quarter. Consequently, a cost-of-living benefit increase of 7.4 percent is effective for benefits under title II of the Act beginning June 1982.

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

Dated: May 10, 1982.

Richard S. Schweiker,  
*Secretary of Health and Human Services*

(The revised tables of benefits which were published at the end of the above announcement in the Federal Register are not reproduced here because of their length.)

**APPENDIX D.—DETERMINATION AND ANNOUNCEMENT OF  
AVERAGE OF TOTAL WAGES FOR 1981 AND CONTRIBUTION AND  
BENEFIT BASE, QUARTER OF COVERAGE AMOUNT, RETIREMENT  
TEST EXEMPT AMOUNTS, FORMULAS FOR COMPUTING BENEFITS,  
AND EXTENDED TABLE OF BENEFIT AMOUNTS FOR 1983<sup>1</sup>**

*Summary*

The Secretary has determined—

- (1) The average of the total wages for 1981 to be \$13,773.10;
- (2) The Social Security contribution and benefit base to be \$35,700 for remuneration paid in 1983 and self-employment income earned in taxable years beginning in 1983;
- (3) The amount of earnings a person must have to be credited with a quarter of coverage in 1983 to be \$370; and
- (4) The monthly exempt amount under the Social Security retirement test for taxable years ending in calendar year 1983 to be \$550 for beneficiaries age 65 and over and \$410 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 1983 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.

*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, 1982, the contribution and benefit base, the amount of earnings required for a quarter of coverage, and the retirement test exempt amounts, for calendar year 1983. In addition, section 215(a)(1)(D) requires that the Secretary publish by November 1, 1982 the formula for computing a primary insurance amount for workers who first become eligible for benefits or die in 1983, and section 203(a)(2)(C) requires that the Secretary publish by November 1, 1982 the formula for computing a family's maximum benefits for families of workers who first become eligible for old-age benefits or die in 1983.

*AVERAGE OF THE TOTAL WAGES FOR 1981*

The determination of the average wage figure for 1981 is based on the 1980 average wage figure of \$12,513.46 announced in the Federal Register on October 30, 1981 (46 FR 53791) along with the percentage increase in average wages from 1980 to 1981 measured by annual wage data tabulated by the Internal Revenue Service (IRS). The average amounts of wages calculated directly from IRS data were \$12,850.89 and \$14,144.50 for 1980 and 1981, respectively. To determine an average wage figure for 1981 at a level that is consistent with the series of average wages for 1951-1977 (published December 29, 1978 at 43 FR

<sup>1</sup>This statement, edited for presentation here, was published in the Federal Register for November 10, 1982 (Vol. 47, No. 218, pp. 51003-06).

61016), we multiplied the 1980 average wage figure of \$12,513.46 by the percentage increase in average wages from 1980 to 1981 (based on IRS data) as follows (with the result rounded to the nearest cent):

$$\text{Average wage for 1981} = \$12,513.46 \times \$14,144.50 / \$12,850.89 = \$13,773.10.$$

Therefore, the average wage for 1981 is determined to be \$13,773.10.

#### *CONTRIBUTION AND BENEFIT BASE*

##### *General.*

The 1983 contribution and benefit base is \$35,700.

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 1983 shall be equal to the 1982 base of \$32,400 multiplied by the ratio of (1) the average amount, per employee, of total wages for the calendar year 1981 to (2) the average amount of those wages for the calendar year 1980. 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 1980 was previously determined to be \$12,513.46. The average wage for calendar year 1981 has been determined to be \$13,773.10, as stated herein.

##### *Amount.*

The ratio of the average wage for 1981, \$13,773.10, compared to that for 1980, \$12,513.46, is 1.1006628. Multiplying the 1982 contribution and benefit base of \$32,400 by the ratio 1.1006628 produces the amount of \$35,661.47 which must then be rounded to \$35,700. Accordingly, the contribution and benefit base for 1983 is \$35,700.

#### *QUARTER OF COVERAGE AMOUNT*

##### *General.*

The 1983 amount of earnings required for a quarter of coverage is \$370. 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 any 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 1983 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 1981 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 1981 has been determined to be \$13,773.10 as stated herein.

*Quarter of coverage amount.*

The ratio of the average wage for 1981, \$13,773.10, compared to that for 1976, \$9,226.48, is 1.492779. Multiplying the 1978 quarter of coverage amount of \$250 by the ratio of 1.492779 produces the amount of \$373.19 which must then be rounded to \$370. Accordingly, the quarter of coverage amount for 1983 is \$370.

**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 Pub. L. 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. The stated monthly exempt amount for 1982 is \$500. A formula is provided in section 203(f)(8)(B) for computing the exempt amount applicable for years after 1982. Under the formula, the exempt amount for 1983 shall be the 1982 exempt amount multiplied by the ratio of (1) the average amount, per employee, of the total wages for calendar year 1981 to (2) the average amount of those wages for calendar year 1980. 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 1981, \$13,773.10 compared to that for 1980, \$12,513.46, is 1.1006628.

*Exempt amount for beneficiaries aged 65 through 69.* Multiplying the 1982 retirement test monthly exempt amount of \$500 by the ratio of 1.1006628 produces the amount of \$550.33. This must then be rounded to \$550. The retirement test monthly exempt amount for beneficiaries ages 65 through 69 is determined to be \$550 for 1983. The corresponding annual retirement test exempt amount for these beneficiaries is \$6,600.

*(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 \$370 for 1982. The formula provides that the exempt amount for 1983 shall be the 1982 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 1981 to (2) the average amount of those wages for calendar year 1980. 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 1981, \$13,773.10 compared to that of 1980, \$12,513.46 is 1.1006628.

*Exempt amount for beneficiaries under age 65.* Multiplying the 1982 retirement test monthly exempt amount of \$370 by the ratio 1.1006628 produces the amount of \$407.25. This must then be rounded to \$410. The retirement test monthly exempt amount for beneficiaries under age 65 is determined to be \$410 for 1983. The corresponding annual retirement test exempt amount for these beneficiaries is \$4,920.

*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 1983, we divide the average of the total wages for 1981, \$13,773.10, by the average of the total wages for each year prior to 1981 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 1983.

*Computing the primary insurance amount.*

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 1983 are obtained by multiplying the 1979 amounts by the ratio between the average of the total wages for 1981, \$13,773.10, and for 1977, \$9,779.44. These results are then rounded to the nearest dollar. For 1983 the ratio is 1.408373. Multiplying the 1979 amounts of \$180 and \$1,085 by 1.408373 produces the amounts of \$253.51 and \$1,528.08. These must then be rounded to \$254 and \$1,528. Accordingly, the portions of the average indexed monthly earnings to be used in 1983 are determined to be the first \$254, the amount between \$254 and \$1,528, and the amount over \$1,528.

Consequently, for individuals who first become eligible for old-age insurance benefits or disability insurance benefits in 1983 or who die in 1983 before becoming eligible for benefits, we will compute their primary insurance amount by adding the following:

- (a) 90 percent of the first \$254 of their average indexed monthly earnings, plus
- (b) 32 percent of the average indexed monthly earnings over \$254 and through \$1,528, plus
- (c) 15 percent of the average indexed monthly earnings over \$1,528.

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 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 1983 are obtained by multiplying the 1979 amounts by the ratio between the average of the total wages for 1981, \$13,773.10, and the average for 1977, \$9,779.44. This amount is then rounded to the nearest dollar. For 1983, the ratio is 1.408373. Multiplying the amounts of \$230, \$332, and \$433 by 1.408373 produces the amounts of \$323.93, \$467.58, and \$609.83. These amounts are then rounded to \$324, \$468, and \$610. Accordingly, the portions of the primary insurance amounts to be used in 1983 are determined to be the first \$324, the amount between \$324 and \$468, the amount between \$468 and \$610, and the amount over \$610.

Consequently, for the family of a worker who becomes age 62 or dies in 1983, the total amount of benefits payable to them will be computed so that it does not exceed:

- (a) 150 percent of the first \$324 of the worker's primary insurance amount, plus
- (b) 272 percent of the worker's primary insurance amount over \$324<sup>1</sup> through \$468, plus
- (c) 134 percent of the worker's primary insurance amount over \$468 through \$610, plus
- (d) 175 percent of the worker's primary insurance amount over \$610.

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 Public Law 97-35.

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<sup>1</sup>In the Federal Register announcement, this amount was misprinted as \$234.

***EXTENSION OF BENEFIT TABLE EFFECTIVE JANUARY 1983***

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 January 1983 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: November 4, 1982.

Richard S. Schweiker,  
*Secretary of Health and Human Services*

(The extended benefit table which was published at the end of the above announcement in the Federal Register is not reproduced here because of its length.)

#### **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. Specific formulas are prescribed by the law 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 1983. Projected values for future years through 1988, based on the two intermediate sets of assumptions (alternatives II-A and II-B), are also shown. These assumptions are described in the section of this report entitled "Economic and Demographic Assumptions" and are shown in tables 10 and 11. The section 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 newly 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 provisions. The announcement of the average wage determination for 1981, including a brief description of its derivation, is shown in Appendix D. Appendix D also describes the determinations of other program amounts that are in effect for 1983. Table E1 shows the average amount of total wages as announced for 1951 through 1981, together with projected values for 1982 through 1988 based on the two intermediate sets of assumptions.

TABLE E1.—AVERAGE AMOUNT OF TOTAL WAGES FOR 1951-81 AND PROJECTED FUTURE AMOUNTS FOR 1982-88, UNDER THE TWO INTERMEDIATE SETS OF ASSUMPTIONS

Calendar year	Actual amounts	
1951		\$2,799.16
1952		2,973.32
1953		3,139.44
1954		3,155.64
1955		3,301.44
1956		3,532.36
1957		3,641.72
1958		3,673.80
1959		3,855.80
1960		4,007.12
1961		4,086.78
1962		4,291.40
1963		4,396.64
1964		4,576.32
1965		4,656.72
1966		4,938.36
1967		5,213.44
1968		5,571.76
1969		5,893.76
1970		6,186.24
1971		6,497.08
1972		7,133.80
1973		7,580.18
1974		8,030.76
1975		8,630.92
1976		9,226.46
1977		9,779.44
1978		10,556.03
1979		11,479.46
1980		12,513.46
1981		13,773.10
	Projected future amounts by alternative—	
	II-A	II-B
1982	\$14,496.16	\$14,498.18
1983	15,134.15	15,166.21
1984	15,760.63	15,741.45
1985	16,519.41	16,596.15
1986	17,356.42	17,527.25
1987	18,257.93	18,520.90
1988	19,180.56	19,524.63

Note: The assumptions underlying the projections are described in the section entitled "Economic and Demographic Assumptions" and are shown in table 10.

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 June 1982 benefit increase is shown in Appendix C. As a result of the Social Security Amendments of 1983, automatic benefit increases projected for 1983 and later will be 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 1984-88 on the basis of the two intermediate sets of assumptions.

TABLE E2.—BENEFIT INCREASE AND OTHER OASDI PROGRAM AMOUNTS DETERMINED UNDER THE AUTOMATIC PROVISIONS FOR 1975-83 AND PROJECTED FUTURE AMOUNTS FOR 1984-88, UNDER THE TWO INTERMEDIATE SETS OF ASSUMPTIONS

Calendar year	Benefit increase <sup>1</sup> (percent)	Contribution and benefit base	"Old-law" contribution and benefit base <sup>2</sup>	Retirement test exempt amount		Amount of earnings required for quarter of coverage <sup>4</sup>	AIME "bend points" in PIA formula		PIA "bend points" in maximum family benefit formula		
				Under age 65	Age 65 and over <sup>3</sup>		First	Second	First	Second	Third
<b>Actual experience:</b>											
1975.....	8.0	\$14,100	(*)	\$2,520	\$2,520	(*)	(*)	(*)	(*)	(*)	(*)
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	4,000	*\$250	(*)	(*)	(*)	(*)	(*)
1979.....	9.9	*22,900	\$18,900	3,480	4,500	260	*\$160	*\$1,085	*\$230	*\$332	*\$433
1980.....	14.3	*25,900	20,400	3,720	5,000	290	194	1,171	248	358	467
1981.....	11.2	*29,700	22,200	4,080	5,500	310	211	1,274	270	390	508
1982.....	7.4	32,400	24,300	4,440	6,000	340	230	1,388	294	425	554
1983.....	3.5	35,700	26,700	4,920	6,600	370	254	1,528	324	468	610
<b>Projected future experience:</b>											
<b>Alternative II-A:</b>											
1984.....	3.7	37,500	28,200	5,160	6,960	390	267	1,609	341	492	642
1985.....	4.0	39,000	29,400	5,400	7,320	410	279	1,679	356	514	670
1986.....	3.5	40,500	30,600	5,640	7,680	430	290	1,749	371	535	698
1987.....	3.2	42,300	32,100	5,880	8,040	450	304	1,833	389	561	731
1988.....	3.0	44,400	33,600	6,120	8,400	470	319	1,926	408	589	769
<b>Alternative II-B:</b>											
1984.....	4.8	37,500	28,200	5,160	6,960	390	267	1,609	341	492	642
1985.....	5.3	39,300	29,400	5,400	7,320	410	279	1,683	357	515	672
1986.....	4.7	40,800	30,600	5,640	7,560	430	290	1,746	370	534	697
1987.....	4.4	42,900	32,400	6,000	7,920	450	305	1,841	390	563	735
1988.....	4.1	45,300	34,200	6,360	8,400	470	323	1,945	412	595	778

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

<sup>2</sup>Contribution and benefit base that would have been determined automatically under the law in effect prior to the Social Security Amendments of 1977.

<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>4</sup>See Appendix D for a description of quarter-of-coverage requirements prior to 1978.

<sup>5</sup>No provision in law for this amount in this year.

\*Amount not subject to automatic provisions in this year.

\*Amount specified by Social Security Amendments of 1977.

\*Amount specified for first year by Social Security Amendments of 1977; amounts for subsequent years subject to automatic provisions.

Note: The assumptions underlying the projections are described in the section entitled "Economic and Demographic Assumptions" and are shown in table 10.

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 provisions.) The bases for 1979-81 were specified by the 1977 amendments at levels above those which were expected to occur under the automatic provisions (and which, in fact, as the experience developed, were above such levels). Starting again in 1982, the bases are determined automatically on the basis of increases in average wages. Table E2 shows past and projected future amounts for the contribution and benefit base.

As described in the section "Automatic Adjustments," the Social Security Act also provides for the determination of the contribution and benefit base that would have been in effect in each year after 1978 under the law as in effect prior to the enactment of the 1977 amendments. Table E2 presents such amounts as determined for 1979-83, together with projections for 1984-88 under the two intermediate sets of assumptions.

The 1972 amendments also 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 continue 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 1983 is shown in Appendix D, and table E2 shows the amounts for 1975-88.

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 1983, and table E2 shows the amounts for 1978-88.

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 a worker newly 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 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 1983 PIA formula is described in Appendix D. The bend points for 1979-83, and the amounts projected for 1984-88, are shown in table E2.

A similar formula is used to compute the maximum amount of total 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 persons newly 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). Appendix D contains the announcement of the 1983 family maximum formula bend points, and the amounts for 1975-88 are shown in table E2.

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

In this appendix, cost projections for the OASI, DI, and Hospital Insurance 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 similar 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. As described earlier in this report, 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 the fund's 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 new provisions are included in the estimated trust fund operations. The projections shown in this appendix for the combined trust funds are theoretical after 1987 since, under present law, no authority exists beyond 1987 for transferring assets from one trust fund to another 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 combined funds as a percentage of combined annual expenditures for calendar years 1983-92, based on the four alternative sets of assumptions used in this report. Under all four alternative sets of assumptions used in this report and the concurrent HI Annual Report, it is estimated that no further interfund loans would be necessary during 1983-87. In addition, the estimates indicate that all loans made to the OASI Trust Fund in calendar year 1982 could be repaid before the deadline established in the law. In tables 12-14 of this report, estimated amounts of repayments under each set of alternative assumptions are shown through 1987 (projections in that part of the report are presented for 1983-87 only). The estimates extended through 1992 indicate that, except under alternative III, the total loan of \$12.4 billion made from the HI Trust Fund to the OASI Trust Fund in calendar year 1982 could be repaid by the end of 1988 using the minimum standard in the law for repayment of such loans. Under 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 in 1988. Under alternative I, the \$5.1 billion loan from the DI Trust Fund to the OASI Trust Fund is assumed to be repaid in 1988. Under the other three alternatives, the loan from DI is assumed to be repaid in 1989.

As shown in table F1, under alternatives I, II-A, and II-B the assets of the OASI and DI Trust Funds would grow as a percentage of outgo throughout the period shown. Under alternative III, significant growth would not occur until 1988 and later. Under alternative I, assets of the HI Trust Fund would grow through about 1987, relative to HI

expenditures, before beginning to decline. Under the remaining alternative sets of assumptions, the assets of the HI Trust Fund are projected to begin declining in 1984, leading to exhaustion of the trust fund in 1991, 1990, and 1988 under alternatives II-A, II-B, and III, respectively. Table F1 indicates that the combined assets of the OASI, DI, and HI Trust Funds would be sufficient to meet their combined obligations through the end of 1992, under the four alternatives. In particular, this suggests that a reallocation of tax rates among the OASI, DI, and HI programs, or the extension of authority for interfund borrowing beyond 1987, could be sufficient to prevent the HI Trust Fund's short-range financing problems, at least through 1992. Under adverse economic conditions, however, such as those assumed in alternative III, the margin for safety would be small during this period.

TABLE F1.—PROJECTED ASSETS<sup>1</sup> OF THE OASI, DI, AND HI TRUST FUNDS, SEPARATE AND COMBINED, AT BEGINNING OF YEAR AS A PERCENTAGE OF ANNUAL EXPENDITURES DURING YEAR UNDER THE FOUR ALTERNATIVE SETS OF ASSUMPTIONS, CALENDAR YEARS 1983-92

Calendar year	OASI	DI	OASDI	HI	Total OASDI and HI
<b>Alternative I:</b>					
1983	15	15	15	20	16
1984	21	38	22	26	23
1985	22	35	23	25	23
1986	26	35	27	27	27
1987	28	40	29	46	33
1988	37	50	38	48	40
1989	53	94	57	47	54
1990	73	113	77	45	69
1991	99	152	104	42	89
1992	126	188	131	37	108
<b>Alternative II-A:</b>					
1983	15	15	15	20	16
1984	20	38	22	25	23
1985	21	33	22	22	22
1986	24	31	25	20	23
1987	25	32	25	27	26
1988	28	36	27	34	29
1989	39	48	40	27	36
1990	51	84	54	17	45
1991	69	109	72	5	55
1992	88	135	92	( <sup>o</sup> )	66
<b>Alternative II-B:</b>					
1983	15	15	15	20	16
1984	20	38	22	25	23
1985	20	32	21	21	21
1986	22	29	23	18	22
1987	23	28	23	18	22
1988	23	30	24	18	23
1989	28	38	29	21	27
1990	35	69	38	9	31
1991	47	89	51	( <sup>o</sup> )	37
1992	59	111	64	( <sup>o</sup> )	42

TABLE F1.—PROJECTED ASSETS<sup>1</sup> OF THE OASI, DI, AND HI TRUST FUNDS, SEPARATE AND COMBINED, AT BEGINNING OF YEAR AS A PERCENTAGE OF ANNUAL EXPENDITURES DURING YEAR UNDER THE FOUR ALTERNATIVE SETS OF ASSUMPTIONS, CALENDAR YEARS 1983-92 (Cont.)

Calendar year	OASI	DI	OASDI	HI	Total OASDI and HI
Alternative III:					
1983	15	15	15	20	16
1984	19	37	21	24	22
1985	17	29	18	17	18
1986	18	25	19	9	17
1987	21	24	21	3	17
1988	18	24	19	8	16
1989	26	30	27	(*)	18
1990	34	56	36	(*)	19
1991	42	70	45	(*)	20
1992	48	83	51	(*)	17

<sup>1</sup>Beginning in 1984, assets of the OASI and DI Trust Funds, but not of the HI Trust Fund, include advance tax transfers for January. Assets are defined slightly 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.

\*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 are described in the section entitled "Economic and Demographic Assumptions" of this report and 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. See text for further details and estimated depletion years for the HI Trust Fund under the alternative sets of assumptions.

Table F2 shows projected cost rates for the OASI, DI, and HI programs during the period 1983-2007 under 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 as compared to HI, due primarily to the different coverage provisions for Federal civilian workers under the two programs. This difference does not materially affect the comparisons. It should also be noted that the cost rates shown exclude any cost associated with rebuilding the HI Trust Fund to a level suitable as a contingency reserve, or the cost of maintaining such a level once reached. 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, UNDER ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1983-2007  
[As a percentage of taxable payroll<sup>1</sup>]

Calendar year	Cost rate				Total income rate	Balance <sup>2</sup>
	OASI	DI	HI <sup>3</sup>	Total		
Alternative II-A:						
1983	10.28	1.21	2.70	14.19	13.97	-0.22
1984	10.24	1.13	2.75	14.13	14.17	.04
1985	10.15	1.08	2.85	14.09	14.28	.19
1986	10.16	1.05	2.95	14.15	14.50	.35
1987	10.08	1.02	3.04	14.14	14.52	.38
1988	9.98	.99	3.15	14.13	15.26	1.14
1989	9.84	.97	3.24	14.05	15.28	1.23
1990	9.74	.97	3.36	14.06	15.59	1.53
1991	9.64	.96	3.48	14.08	15.62	1.53
1992	9.55	.96	3.59	14.10	15.65	1.55
1993	9.34	.95	3.70	13.99	15.86	1.67
1994	9.18	.94	3.81	13.93	15.66	1.73
1995	9.03	.93	3.93	13.88	15.67	1.78
1996	8.87	.92	4.03	13.83	15.66	1.84
1997	8.73	.92	4.13	13.77	15.66	1.89

TABLE F2.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, UNDER ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1983-2007 (Cont.)  
[As a percentage of taxable payroll<sup>1</sup>]

Calendar year	Cost rate			Total	Total income rate	Balance <sup>2</sup>
	OASI	DI	HI <sup>3</sup>			
<b>Alternative II-A: (Cont.)</b>						
1988	8.60	.93	4.22	13.76	15.66	1.90
1989	8.47	.95	4.31	13.74	15.66	1.92
2000	8.35	.97	4.40	13.72	15.66	1.93
2001	8.25	1.00	4.50	13.74	15.66	1.91
2002	8.17	1.02	4.59	13.78	15.66	1.87
2003	8.11	1.06	4.68	13.85	15.66	1.81
2004	8.06	1.09	4.78	13.93	15.66	1.73
2005	8.02	1.13	4.88	14.03	15.66	1.63
2006	8.02	1.16	4.99	14.17	15.66	1.49
2007	8.04	1.20	5.11	14.35	15.67	1.32
25-year average: 1983-2007	9.08	1.02	3.89	13.98	15.35	1.37
<b>Alternative II-B:</b>						
1983	10.28	1.21	2.70	14.19	13.97	-.22
1984	10.30	1.14	2.77	14.22	14.17	-.05
1985	10.24	1.09	2.88	14.22	14.28	.07
1986	10.34	1.07	2.99	14.40	14.50	.11
1987	10.35	1.04	3.10	14.49	14.53	.04
1988	10.35	1.02	3.22	14.60	15.27	.68
1989	10.29	1.01	3.33	14.64	15.30	.68
1990	10.26	1.01	3.46	14.73	15.61	.88
1991	10.18	1.00	3.57	14.76	15.64	.88
1992	10.10	1.00	3.68	14.77	15.67	.90
1993	9.94	.99	3.80	14.72	15.68	.96
1994	9.81	.98	3.92	14.71	15.69	.97
1995	9.68	.97	4.05	14.70	15.69	.99
1996	9.54	.97	4.17	14.67	15.69	1.02
1997	9.40	.96	4.27	14.64	15.69	1.05
1998	9.29	.98	4.38	14.65	15.69	1.04
1999	9.17	1.00	4.48	14.65	15.68	1.04
2000	9.06	1.02	4.58	14.66	15.68	1.03
2001	8.96	1.05	4.69	14.70	15.68	.99
2002	8.88	1.07	4.79	14.75	15.68	.94
2003	8.81	1.11	4.90	14.82	15.69	.86
2004	8.75	1.14	5.01	14.91	15.69	.78
2005	8.72	1.18	5.13	15.03	15.69	.66
2006	8.71	1.22	5.25	15.18	15.69	.52
2007	8.73	1.26	5.39	15.37	15.70	.33
25-year average: 1983-2007	9.61	1.06	4.02	14.69	15.37	.68

<sup>1</sup>Effective taxable payroll is slightly different for OASDI as compared to HI, due primarily to different coverage provisions for Federal civilian employees under the respective programs. The difference does not materially affect the comparison.

<sup>2</sup>Cost rates exclude amounts required for trust fund building and maintenance.

<sup>3</sup>The balance is the total income rate minus the OASDHI cost rate. Positive balances are surpluses, and negative balances are deficits.

<sup>4</sup>Differs from the corresponding figure in the 1983 HI Annual Report as a result of an adjustment to treat the 1983 lump-sum transfer for deemed military service wage credits on a consistent basis with the OASDI estimates.

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 under both alternatives II-A and II-B, for reasons described in the HI Annual Report. Under alternative II-A, total OASDI and HI costs would remain at roughly their current level of about 14.19 percent of taxable payroll, through this decade, and would then decline slightly, reaching 13.72 percent in the year 2000, before rising to 14.35 percent in the year 2007. Under alternative II-B, combined cost rates would increase gradually in 1983-92, decline slightly for several years, and then continue increasing, reaching 15.37 percent in the year 2007.

Under both alternatives, total cost rates for OASDI and HI combined would be less than the combined total income rates after 1984. On

average, over the 25-year period, total OASDHI income would exceed total OASDHI costs by 1.37 percent and 0.68 percent of taxable payroll, respectively, under alternatives II-A and II-B.

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

TABLE F3.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS UNDER ALTERNATIVE II-B, CALENDAR YEARS 1983-2057  
[As a percentage of taxable payroll]<sup>1</sup>

Calendar year	Cost rate			Total	Total income rate	Balance <sup>2</sup>
	OASI	DI	HI <sup>3</sup>			
1983 .....	10.28	1.21	*2.70	14.19	13.97	-0.22
1985 .....	10.24	1.09	2.88	14.22	14.28	.07
1990 .....	10.26	1.01	3.48	14.73	15.61	.88
1995 .....	9.68	.97	4.05	14.70	15.69	.99
2000 .....	9.06	1.02	4.58	14.66	15.68	1.03
2005 .....	8.72	1.19	5.1 <sup>4</sup>	15.03	15.89	.66
2010 .....	8.95	1.37	5.61	15.92	15.72	-.20
2015 .....	9.93	1.49	6.22	17.85	15.78	-1.87
2020 .....	11.21	1.55	7.00	19.77	15.86	-3.91
2025 .....	12.40	1.56	7.89	21.85	15.92	-5.92
2030 .....	13.22	1.51	8.65	23.38	15.98	-7.40
2035 .....	13.62	1.53	9.10	24.26	16.02	-8.24
2040 .....	13.80	1.57	9.29	24.47	16.04	-8.43
2045 .....	13.56	1.61	9.32	24.49	16.06	-8.43
2050 .....	13.66	1.61	9.35	24.62	16.06	-8.55
2055 .....	13.79	1.60	9.37	24.77	16.07	-8.69
25-year averages:						
1983-2007 .....	9.61	1.06	4.02	14.89	15.37	.68
2008-2032 .....	11.14	1.49	7.08	19.71	15.85	-3.86
2033-2057 .....	13.65	1.58	9.29	24.52	16.05	-8.47
75-year average:						
1983-2057 .....	11.46	1.38	*6.79	19.64	15.76	-3.88

<sup>1</sup>Effective taxable payroll is slightly different for OASDI as compared to HI, due primarily to different coverage provisions for Federal civilian employees under the respective programs. The difference does not materially affect the comparisons.

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

<sup>3</sup>The balance is the total income rate minus the OASDHI cost rate. Positive balances are surpluses, and negative balances are deficits.

<sup>4</sup>Differs from the corresponding figure in the 1983 HI Annual Report as a result of an adjustment to treat the 1983 lump-sum transfer for deemed military service wage credits on a consistent basis with the OASDI estimates.

A description of the trend in long-range OASDI cost rates has already been given in this report. HI cost rates are projected to increase substantially under the alternative II-B assumptions, from their current level of about 2.70 percent to over 9.30 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 about 24.80 percent of taxable payroll by the year 2055 under the intermediate II-B assumptions. Beginning in about 2010, combined cost rates would exceed combined total income rates, with the difference growing over time. Over the 75-year period, the combined actuarial deficit would average 3.88 percent of taxable payroll under the alternative II-B assumptions.

As noted previously, in this report and in the HI Annual Report, long-range projections such as these are subject to considerable uncertainty and should be interpreted carefully. It seems clear, however, that even under reasonably normal economic and demographic conditions, the total cost of the Social Security program would be significantly in excess of scheduled income.

**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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