

VI. ACTUARIAL ESTIMATES

Section 201(c)(2) of the Social Security Act requires the Board of Trustees to report annually to the Congress on the operations and status of the OASI and DI Trust Funds during the preceding fiscal year and on the expected operations and status of those trust funds during the ensuing 5 fiscal years. Such information for the fiscal year that ended September 30, 1984, is presented in the preceding section of this report. Estimates of the operations and status of the trust funds during fiscal years 1985-89 are presented in this section. Similar estimates for calendar years 1985-89 are also presented.

In the short range, the adequacy of the trust fund level is often measured by the "contingency reserve trust fund ratio," which is defined to be the assets at the beginning of the year, including advance tax transfers for January and amounts owed to other trust funds, expressed as a percentage of the outgo during the year. Thus, this ratio represents the proportion of the year's outgo which is available at the beginning of the year. The primary purpose of the trust funds is to act as contingency reserves. During periods when outgo temporarily exceeds income, as might happen during an economic recession, trust fund assets are used to meet the shortfall. In the event of recurring shortfalls for an extended period, the trust funds can allow sufficient time for the development of legislation to restore financial balance to the program. Although there is no general agreement regarding the appropriate size of the trust funds, each of them should be at least large enough to accomplish these purposes. When either trust fund is not this large, its future financing—to be considered adequate—must provide for rebuilding the fund within a reasonable period of time, without significant declines in the interim.

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

Basic to the discussion of the medium-range or long-range actuarial status are the concepts of "cost rate" and "total income rate," each of which is expressed as a percentage of taxable payroll. The OASDI taxable payroll consists of the total earnings which are subject to OASDI taxes, adjusted to include, after 1982, deemed wages based on military service, and to reflect the lower effective tax rates (as compared to the combined employee-employer rate) which apply to tips and to multiple-employer "excess wages," and which did apply, before 1984, to net earnings from self-employment. The cost rate is the ratio of the cost (or outgo or disbursements) of the program to the taxable payroll. In this context, the outgo is defined to include benefit payments, administrative expenses, net transfers under the financial interchange between the trust funds and the Railroad Retirement Account, and payments for vocation-

al rehabilitation services for disabled beneficiaries; it excludes special monthly payments to certain uninsured persons who generally attained age 72 before 1968, and transfers under the interfund borrowing provisions. Because the taxable payroll reflects the adjustments described above, the total income rate (or more simply, the income rate) can be defined to be the sum of the combined OASDI employee-employer tax rate (or the payroll tax rate) scheduled in the law and the rate of income from taxation of benefits (which is in turn expressed as a percentage of taxable payroll). As such, it excludes reimbursements from the general fund of the Treasury for the costs associated with the special payments to certain uninsured persons (as described above), transfers under the interfund borrowing provisions, and net investment income. For any year, the income rate minus the cost rate is referred to as the "balance" for the 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 program 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 program's financing or benefit provisions 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 status of the program 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 accumulate in the early years could eventually be depleted at some point beyond the end of the 75-year projection period, leaving the program 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 program 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.

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

A. ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS

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

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

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

Economic assumptions

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

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

Calendar year	Average annual percentage increase in—			Real-earnings differential ^a (percent)	Average annual interest rate ^a (percent)	Average annual unemployment rate ^a (percent)
	Real GNP ^a	Average earnings in covered employment	Consumer price index			
Past experience:						
1960-64.....	4.0	3.3	1.3	2.1	3.7	5.7
1965-69.....	4.4	5.4	3.4	2.1	5.2	3.8
1970.....	-2	4.6	5.9	-1.4	7.3	4.9
1971.....	3.4	5.0	4.3	.8	6.0	5.9
1972.....	5.7	7.1	3.3	3.8	5.9	5.6
1973.....	5.8	7.1	6.2	.9	6.6	4.9
1974.....	-.6	7.1	11.0	-3.9	7.5	5.6
1975.....	-1.2	6.7	9.1	-2.5	7.4	8.5
1976.....	5.4	8.4	5.7	2.6	7.1	7.7
1977.....	5.5	6.9	6.5	*2.0	7.1	6.1
1978.....	5.0	*9.6	7.6	*2.0	8.2	6.1
1979.....	2.8	*8.9	11.4	*-2.5	9.1	5.8
1980.....	-.3	*8.1	13.5	*-5.4	11.0	7.1
1981.....	2.5	*8.3	10.3	*-2.0	13.3	7.6
1982.....	*-2.1	*5.6	6.0	*-4	12.8	9.7
1983.....	*3.7	*4.3	3.0	*1.3	11.0	9.6

TABLE 10.—SELECTED ECONOMIC ASSUMPTIONS BY ALTERNATIVE, CALENDAR YEARS 1980-2060 (Cont.)

Calendar year	Average annual percentage increase in—			Real-earnings differential ¹ (percent)	Average annual interest rate ² (percent)	Average annual unemployment rate ³ (percent)
	Real GNP ¹	Average earnings in covered employment	Consumer price index			
Alternative I:						
1984	6.8	5.8	3.4	2.4	12.4	7.5
1985	4.1	3.7	3.2	.5	10.7	6.8
1986	4.2	5.4	3.5	1.9	10.1	6.3
1987	4.0	5.5	3.7	1.9	9.5	6.0
1988	4.0	5.4	3.5	1.9	8.9	5.6
1989	3.9	5.6	3.1	2.5	8.0	5.2
1990	3.2	4.3	2.7	1.6	7.0	5.0
1991	3.1	4.3	2.3	2.0	5.9	5.0
1992	3.1	4.2	2.0	2.2	5.4	5.0
1993	3.1	4.3	2.0	2.3	5.3	4.9
1994	3.1	4.4	2.0	2.4	5.1	4.9
1995	3.7	4.6	2.0	2.6	5.0	5.0
2000	3.8	4.6	2.0	2.6	5.0	5.0
2010 & later..	*3.1	4.5	2.0	2.5	5.0	5.0
Alternative II-A:						
1984	6.8	5.6	3.4	2.2	12.4	7.5
1985	3.9	3.9	3.6	.3	10.8	6.8
1986	3.8	5.6	4.1	1.5	10.4	6.4
1987	3.5	5.7	4.2	1.5	10.0	6.1
1988	3.5	5.5	4.0	1.5	9.4	5.8
1989	3.1	5.6	3.6	2.0	8.5	5.6
1990	2.8	4.5	3.2	1.3	7.5	5.5
1991	2.8	4.8	3.0	1.8	6.5	5.5
1992	2.8	4.9	3.0	1.9	6.0	5.4
1993	2.8	4.9	3.0	1.9	5.8	5.4
1994	2.8	4.9	3.0	1.9	5.7	5.4
1995	3.2	5.1	3.0	2.1	5.5	5.5
2000	3.1	5.1	3.0	2.1	5.5	5.5
2010 & later..	*2.5	5.0	3.0	2.0	5.5	5.5
Alternative II-B:						
1984	6.8	5.3	3.4	1.9	12.4	7.5
1985	3.2	3.8	3.9	.0	10.9	6.9
1986	2.7	5.6	4.7	.8	10.8	6.8
1987	3.0	6.4	5.3	1.1	10.7	6.6
1988	3.0	6.1	5.0	1.1	10.4	6.4
1989	2.9	6.2	4.6	1.6	9.6	6.1
1990	2.5	5.2	4.2	1.0	8.5	6.0
1991	2.5	5.4	4.0	1.4	7.5	6.0
1992	2.5	5.6	4.0	1.6	6.9	5.9
1993	2.5	5.6	4.0	1.6	6.6	5.9
1994	2.5	5.6	4.0	1.6	6.3	5.9
1995	2.6	5.6	4.0	1.6	6.0	6.0
2000	2.6	5.6	4.0	1.6	6.0	6.0
2010 & later..	*2.0	5.5	4.0	1.5	6.0	6.0
Alternative III:						
1984	6.8	4.8	3.4	1.4	12.4	7.5
1985	.7	3.1	4.8	-1.7	11.1	7.4
1986	.0	4.4	5.9	-1.5	11.4	8.6
1987	4.3	7.4	5.1	2.3	11.3	7.7
1988	1.6	5.0	5.4	-5	10.8	7.5
1989	-7	4.5	5.9	-1.5	10.1	8.5
1990	4.0	7.1	4.6	2.4	9.3	7.9
1991	2.6	6.0	4.8	1.2	8.4	7.4
1992	2.5	6.4	5.0	1.4	7.7	7.1
1993	2.2	6.3	5.0	1.3	7.3	6.9
1994	1.9	6.1	5.0	1.1	6.8	6.8
1995	2.0	6.1	5.0	1.1	6.5	7.0
2000	1.9	6.1	5.0	1.1	6.5	7.0
2010 & later..	*1.4	6.0	5.0	1.0	6.5	7.0

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

²The real-earnings differential is defined as the difference between the percentage increase in average annual earnings in covered employment and the percentage increase in the average annual CPI, before rounding.

³The average annual interest rate is the average of the nominal interest rates, compounded semiannually, for special public-debt obligations issuable to the trust funds in each of the 12 months of the year.

⁴Through 1994, the rates shown are crude civilian unemployment rates. For 1995 and later, the rates are total rates (including military personnel), adjusted by age and sex based on the total labor force on July 1, 1985.

*Preliminary.

⁵This value is for 2010. The annual percentage increase in real GNP is assumed to continue to change after 2010 for each alternative to reflect the dependence of labor force growth on the size and age-sex distribution of the population. The percentage increases for 2060 are 3.2, 2.3, 1.9, and 0.6 for alternatives I, II-A, II-B, and III, respectively.

Alternatives I, II-A, II-B, and III present a range of generally consistent sets of economic assumptions which have been designed to encompass most of the possibilities that might be encountered, particularly in the near term. Alternative I presents the most optimistic outlook, with robust economic growth and low inflation. The intermediate sets of assumptions—alternatives II-A and II-B—bracket the current consensus view of moderate growth and inflation for the first few years; thereafter, alternative II-A continues to reflect more robust economic growth than does alternative II-B. Alternative III is a pessimistic forecast in which the economy experiences two recessions between now and the end of the decade. In view of the fact that three recessions have occurred in the last 12 years, the inclusion of a cyclical forecast seems prudent. The recessions in alternative III are patterned after recent ones in terms of depth and timing of the downturns, although the intervening recoveries are weaker, in general, than those experienced in the last 12 years. This scenario presents a realistic assessment of the combined effects of business cycles and generally weak economic growth on the OASDI program.

For alternatives I, II-A, and II-B, the economic recovery that started in the first quarter of 1983 is assumed to continue through 1985. The strength of the recovery, as measured by growth in real GNP, is assumed to be stronger for alternative I than for alternative II-A. Similarly, growth for alternative II-A is stronger than that for alternative II-B. For alternative III, the recovery is assumed to fade during the first quarter of 1985; a recession is assumed to occur during the remainder of the year and the first quarter of 1986.

After 1985, and continuing through the end of the decade, steady growth in real GNP is assumed to continue, for alternatives I and II-A. For alternative II-B, the economy is assumed to experience a growth recession during the first half of 1986, with a recovery and steady growth thereafter. For alternative III, after 2 years of recovery, a second recession is assumed to begin in the third quarter of 1988, lasting through the second quarter of 1989. For alternatives I, II-A, and II-B, the unemployment rate is assumed to decline gradually toward its ultimate level. For alternative III, the unemployment rate is assumed to reach its ultimate level after the recovery which is assumed to follow the second recession. After the early 1990s, the projected rates of growth in real GNP, for all four alternatives, are determined by the assumed rates of growth in employment, average hours worked, and productivity.

Assumed values for the other economic variables are generally consistent with the assumed rates of real GNP growth and inflation. For alternative II-A, the average annual unemployment rate declines from 7.5 percent in 1984 to its ultimate level of 5.5 percent (age-sex adjusted to the 1985 labor force) in 1995. The annual rate of increase in average earnings in covered employment is assumed to decline generally from the assumed 5.6-percent increase for 1984, to its ultimate rate of 5.0 percent by 2010. The assumed annual rate of increase in the CPI rises from 3.4 percent in 1984 to 4.2 percent in 1987, and then declines to an ultimate rate of 3.0 percent in 1991. The real-earnings differential (i.e., the difference between the annual rates of increase in average earnings in

covered employment and in the CPI) is assumed to remain generally between the 1.3-percentage-point differential experienced in 1983 and the 2.2-percentage-point differential assumed for 1984, reaching its ultimate value of 2.0 percentage points by 2010. The annual interest rate is assumed to reach its ultimate value of 5.5 percent in 1995.

For alternative II-B, the average annual unemployment rate declines to its ultimate level of 6.0 percent in 1995. The annual rate of increase in average earnings in covered employment is assumed to rise to 6.4 percent in 1987, and then to decline generally to its ultimate rate of 5.5 percent by 2010. The annual rate of increase in the CPI is assumed to rise from 3.4 percent in 1984 to 5.3 percent in 1987, and then to decline to an ultimate rate of 4.0 percent in 1991. The real-earnings differential is assumed to remain generally between the 0.8-percentage-point differential assumed for 1986 and the 1.9-percentage-point differential assumed for 1984, reaching its ultimate value of 1.5 percentage points by 2010. The annual interest rate is assumed to decline to its ultimate value of 6.0 percent in 1995.

Demographic assumptions

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

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

Calendar year	Total fertility rate ¹	Age-sex-adjusted death rate ² (per 100,000)	Life expectancy ³			
			At birth		At age 65	
			Male	Female	Male	Female
Past experience:						
1940.....	2.23	1,403.5	61.4	65.7	11.9	13.4
1945.....	2.42	1,248.1	62.9	68.4	12.6	14.4
1950.....	3.03	1,116.4	65.6	71.1	12.8	15.1
1955.....	3.50	1,030.3	66.7	72.8	13.1	15.6
1960.....	3.61	1,024.8	66.7	73.2	12.9	15.9
1965.....	2.88	1,001.6	66.8	73.8	12.9	16.3
1970.....	2.43	948.6	67.1	74.9	13.1	17.1
1975.....	1.77	848.8	68.7	76.6	13.7	18.0
1976.....	1.74	838.0	69.1	76.8	13.7	18.1
1977.....	1.80	815.5	69.4	77.2	13.9	18.3
1978.....	1.76	809.7	69.6	77.3	13.9	18.3
1979.....	1.82	784.2	70.0	77.7	14.2	18.4
1980.....	1.85	795.5	69.9	77.5	14.0	18.6
1981.....	1.82	773.6	70.4	77.9	14.2	18.6
1982.....	1.81	750.0	70.8	78.2	14.5	18.8
1983.....	1.76	745.1	71.1	78.3	14.5	18.8
Alternative I:						
1984.....	1.79	739.8	71.2	78.4	14.5	18.9
1985.....	1.82	734.4	71.3	78.5	14.5	18.9
1990.....	1.94	709.8	71.7	79.0	14.7	19.2
1995.....	2.06	688.9	72.1	79.4	14.8	19.4
2000.....	2.16	673.6	72.4	79.7	14.9	19.6
2010.....	2.30	654.8	72.8	80.0	15.1	19.9
2020.....	2.30	638.6	73.1	80.3	15.3	20.1
2030.....	2.30	623.2	73.3	80.6	15.5	20.4
2040.....	2.30	608.6	73.6	80.9	15.7	20.6
2050.....	2.30	594.7	73.9	81.2	15.9	20.9
2060.....	2.30	581.5	74.2	81.5	16.1	21.1
Alternatives II-A and II-B:						
1984.....	1.79	732.3	71.3	78.5	14.6	19.0
1985.....	1.80	719.8	71.5	78.8	14.7	19.1
1990.....	1.85	664.3	72.6	79.8	15.1	19.8
1995.....	1.90	621.7	73.4	80.7	15.5	20.3
2000.....	1.94	596.8	73.9	81.2	15.8	20.7
2010.....	2.00	569.2	74.5	81.8	16.1	21.1
2020.....	2.00	545.1	75.0	82.3	16.5	21.6
2030.....	2.00	522.4	75.5	82.9	16.8	22.0
2040.....	2.00	501.0	76.0	83.5	17.2	22.5
2050.....	2.00	480.9	76.4	84.0	17.6	23.0
2060.....	2.00	461.9	76.9	84.6	17.9	23.4

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

Calendar year	Total fertility rate ¹	Age-sex-adjusted death rate ² (per 100,000)	Life expectancy ³			
			At birth		At age 65	
			Male	Female	Male	Female
Alternative III:						
1984.....	1.79	724.8	71.4	78.7	14.7	19.1
1985.....	1.77	705.4	71.8	79.0	14.8	19.3
1990.....	1.72	622.9	73.4	80.7	15.6	20.3
1995.....	1.68	563.8	74.6	81.9	16.2	21.2
2000.....	1.64	528.1	75.4	82.7	16.7	21.8
2010.....	1.60	478.3	76.5	84.0	17.5	22.7
2020.....	1.60	435.0	77.6	85.1	18.3	23.6
2030.....	1.60	396.2	78.7	86.3	19.1	24.6
2040.....	1.60	361.5	79.7	87.5	19.9	25.5
2050.....	1.60	330.4	80.8	88.6	20.8	26.5
2060.....	1.60	302.4	81.9	89.7	21.6	27.4

¹The total fertility rate for any year is the average number of children who would be born to a woman in her lifetime if she were to experience the birth rates by age observed in, or assumed for, the selected year, and if she were to survive the entire child-bearing period. The ultimate total fertility rate is assumed to be reached in 2009.

²The age-sex-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 and sex observed in, or assumed for, the selected year.

³The life expectancy for any year is the average number of years of life remaining for a person if that person were to experience the death rates by age observed in, or assumed for, the selected year.

The demographic assumptions for alternatives II-A and II-B are identical. The assumed ultimate total fertility rate of 2.0 children per woman is attained in 2009, after a gradual increase from the 1983 level of 1.76 children per woman. The age-sex-adjusted death rate is assumed to decrease gradually during the entire projection period, with a reduction of 38 percent from the 1983 level by 2060. The resulting life expectancies at birth in 2060 are 76.9 years for men and 84.6 years for women, compared to 71.1 and 78.3 years, respectively, in 1983. Life expectancies at age 65 in 2060 are projected to be 17.9 years for men and 23.4 years for women, compared to 14.5 and 18.8 years, respectively, in 1983.

For alternative I, the total fertility rate is assumed to reach an ultimate level of 2.3 children per woman in 2009. The age-sex-adjusted death rate is assumed to decrease more slowly than for alternatives II-A and II-B, with the reduction from the 1983 level being 22 percent by 2060. The resulting life expectancies at birth in 2060 are 74.2 years for men and 81.5 years for women, while at age 65 they are 16.1 and 21.1 years, respectively.

For alternative III, the total fertility rate is assumed to decrease from the estimated 1983 level to an ultimate level of 1.6 in 2009. The age-sex-adjusted death rate is assumed to decrease more rapidly than for alternatives II-A and II-B, with the reduction from the 1983 level being 59 percent by 2060. The resulting life expectancies at birth in 2060 are 81.9 years for men and 89.7 years for women, while at age 65 they are 21.6 and 27.4 years, respectively.

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

In addition to the assumptions discussed above, many other factors are necessary to prepare the estimates presented in this report. Appendix A includes a discussion of some of those factors.

B. AUTOMATIC ADJUSTMENTS

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

If the combined assets of the OASI and DI Trust Funds, as a percentage of annual expenditures, are below a specified level, automatic benefit increases will be limited to the *lesser* of the increases in wages or prices. This specified level is 15.0 percent with respect to benefit increases for December of each year, 1984-88, and 20.0 percent thereafter. For purposes of this "stabilizer" provision (in 1985 and later), assets as of the beginning of the year are used, including advance tax transfers for the month of January, but excluding any amounts owed to the HI Trust Fund. The price increase is normally defined to be the percentage increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) from the third quarter of the preceding year through the third quarter of the year in which the December benefit increase will occur. The wage increase is normally defined to be the increase in average wages in the preceding year as compared to the second preceding year. (This wage increase is also used for adjusting the contribution and benefit base and other wage-indexed program amounts.) The law provides for subsequent "catch-up" benefit increases, for those beneficiaries whose previous benefit increases were affected by this provision, when trust fund assets exceed 32.0 percent of annual expenditures.

The law provides for an automatic increase in the contribution and benefit base for the year following a year in which an automatic benefit increase becomes effective, based on the increase in average wages. For 1985, the contribution and benefit base was automatically increased to \$39,600.

The exempt amounts under the retirement earnings test are also increased automatically by the increase in average wages, following an automatic benefit increase. An automatic increase in the exempt amount for beneficiaries at ages 65 through 69—from \$6,960 in 1984 to \$7,320 in 1985—was announced in October 1984. Similarly, an automatic increase was announced in the exempt amount for beneficiaries under age 65—from \$5,160 in 1984 to \$5,400 in 1985. Appendix C describes the aforementioned automatic adjustments, as well as the determinations of the following amounts:

1. The amount of earnings a worker must have in 1985 to be credited with a quarter of coverage;
2. The dollar amounts (or "bend points") in the formulas used to compute benefits payable on the earnings of workers who first become eligible for retirement or disability benefits, or who die before becoming eligible for such benefits, in 1985; and

3. The average of total wages reported for calendar year 1983, to be used for indexing earnings of workers who first become eligible for benefits, or who die before such eligibility, in 1985 or later.

An historical summary of the Social Security program amounts determined under the automatic-adjustment provisions, and the average-wage series used for indexing earnings, are shown in Appendix D. Estimates of the corresponding amounts through 1990, based on the two intermediate sets of assumptions, are also shown in Appendix D.

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 1990 (the actual benefit increase for 1984 and the actual contribution and benefit bases for 1984 and 1985 are also shown as a basis for comparison):

Calendar year	General benefit increase ¹ (percent) based on alternative—				Contribution and benefit base ² based on alternative—			
	I	II-A	II-B	III	I	II-A	II-B	III
1984.....	3.5	3.5	3.5	3.5	\$37,800	\$37,800	\$37,800	\$37,800
1985.....	(*)	3.4	3.7	4.8	39,600	39,600	39,600	39,600
1986.....	6.7	4.2	5.0	6.1	39,600	41,700	41,700	41,400
1987.....	3.6	4.1	5.3	4.9	43,200	43,200	43,200	42,600
1988.....	3.5	4.0	5.0	5.5	45,300	45,600	45,600	44,400
1989.....	3.1	3.6	4.6	5.1	47,700	48,300	48,600	47,400
1990.....	(*)	3.1	4.1	4.5	50,400	51,000	51,600	49,800

¹Effective with benefits for December of the year shown.

²Effective on January 1 of the stated year.

*Based on the alternative I assumptions, benefit increases would not occur for December of 1985 or 1990 because the assumed applicable increase in the Consumer Price Index for each year is less than 3 percent, which is the minimum required to trigger a benefit increase. Similarly, the absence of automatic benefit increases for December of 1985 and 1990 would prevent corresponding automatic increases in the contribution and benefit bases, and in the exempt amounts under the retirement earnings test, for 1986 and 1991, respectively.

³Based on the alternative III assumptions, the benefit increase for December of 1989 would be determined under the benefit-increase stabilizer provision. If the benefit increase were based on the CPI increase, without the limitation imposed by the stabilizer provision, it would be 6.0 percent based on these assumptions.

The automatic benefit increases shown in the above table based on alternative III reflect the effects of the benefit-increase stabilizer provision on the benefit increase for December 1989. Based on alternative III, the combined assets of the OASI and DI Trust Funds (excluding amounts owed to the HI Trust Fund) would represent less than 20.0 percent of annual expenditures at the beginning of 1989. In addition, the assumed increase in average annual wages in 1988 is less than the assumed annual increase in prices (as measured by the third-quarter CPI) in 1989. Under these conditions, the stabilizer provision would require the automatic benefit increase for December 1989 to be based on the lower increase in average wages, rather than on the CPI increase which would normally apply. While not shown in the table, on the basis of alternative III, the combined assets of the trust funds would increase sufficiently after 1989 to trigger a "catch-up" benefit increase for December 1994 for those beneficiaries whose benefit increases were limited as a result of this provision. The catch-up increase would raise each affected individual's monthly benefit to virtually the same level at which it would have been if all previous increases had been based on the CPI.

Under the automatic-adjustment provisions of the law, the four different sets of economic assumptions result in the following annual exempt amounts under the retirement earnings test, both for beneficiaries under age 65 and for beneficiaries aged 65 through 69 (the actual amounts for 1984 and 1985 are also shown as a basis for comparison):

ANNUAL EXEMPT AMOUNTS UNDER THE RETIREMENT EARNINGS TEST¹

Calendar year	Annual exempt amount for beneficiaries under age 65 based on alternative—				Annual exempt amount for beneficiaries aged 65 through 69 based on alternative—			
	I	II-A	II-B	III	I	II-A	II-B	III
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	7,320
1986	5,400	5,640	5,640	5,640	7,320	7,680	7,680	7,680
1987	5,880	5,880	5,880	5,880	8,040	7,920	7,920	7,920
1988	6,240	6,240	6,240	6,120	8,400	8,400	8,400	8,280
1989	6,600	6,600	6,600	6,600	8,880	8,880	8,880	8,880
1990	6,960	6,960	6,960	6,960	9,360	9,360	9,360	9,360

¹Effective for January of the stated year.