As previously stated, the estimates presented in this section show substantial declines in the assets of both trust funds through 1981 under each of the three alternative sets of assumptions on which the estimates are based. As already noted, the estimates show that the assets of the disability insurance trust fund will be exhausted in 1979 under each alternative, and that the assets of the old-age and survivors insurance trust fund would be exhausted in 1981 under alternative III, and in 1984 under the intermediate assumptions. The expected substantial decline in the assets of the trust funds during 1976–81 was anticipated in the 1975 annual report and is attributable primarily to (1) the reduction in contribution income resulting from lower levels of employment and taxable earnings due to the recession that began in 1974; (2) the sharp upward movement in the CPI in 1974 and 1975, with the result that automatic benefit increases are larger than they would have otherwise been; and (3) the increasing number of disabled workers receiving disability insurance benefits.

Actuarial Analysis of Benefit Disbursements From the Federal Old-Age and Survivors Insurance Trust Fund With Respect to Disabled Beneficiaries

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

Effective January 1957, monthly benefits have been payable from the old-age and survivors insurance trust fund to disabled adult children aged 18 and over—sons and daughters of retired and deceased workers—with respect to disabilities that have continued since childhood. Effective February 1968, reduced monthly benefits have been payable from this trust fund to disabled widows and widowers beginning at age 50.

On December 31, 1975, about 436,000 persons were receiving monthly benefits from the old-age and survivors insurance trust fund with respect to disability. In addition to disabled beneficiaries, this total includes 36,000 mothers. These mothers—wives under age 65 of retired-worker beneficiaries and widows of deceased insured workers—met all other qualifying requirements and were receiving full-rate (i.e., not reduced for age) benefits solely because they had at least one disabled-child beneficiary in their care. Benefits paid from this trust fund to persons receiving benefits with respect to disability totaled $664 million in calendar year 1975. Similar figures are presented in table 23 to show the experience in each of the calendar years 1957–75.

Table 23 also shows the expected future experience in calendar years 1976–81, under the intermediate set of economic assumptions described in the preceding section. Total benefit payments from the old-age and survivors insurance trust fund with respect to disabled beneficiaries are estimated to increase from $750 million in calendar year 1976 to $1,387 million in calendar year 1981, under the intermediate assumptions.

TABLE 23.—BENEFITS PAYABLE FROM THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND WITH RESPECT TO DISABLED BENEFICIARIES, CALENDAR YEARS 1957–81

[Beneficiaries in thousands; benefit payments in millions]

Calendar year	Disabled beneficiaries, end of year			Amount of benefit payments [1]		
	Total	Children [2]	Widows and widowers	Total	Children [2]	Widows and widowers [3]
Past experience:						
1957	34	34	----	$7	$7	----
1958	59	59	----	23	23	----
1959	94	94	----	41	41	----
1960	117	117	----	59	59	----
1961	138	138	----	74	74	----
1962	163	163	----	89	89	----
1963	183	183	----	101	101	----
1964	200	200	----	113	113	----
1965	214	214	----	134	134	----
1966	228	228	----	147	147	----
1967	243	243	----	163	163	----
1968	275	256	19	212	198	$14
1969	301	270	31	249	214	35
1970	320	284	36	301	260	41
1971	338	298	40	363	307	56
1972	363	317	46	409	343	66
1973	384	333	51	492	417	75
1974	410	357	53	567	479	88
1975	436	377	59	664	560	104
Estimated future experience [4]:						
1976	463	399	64	750	636	114
1977	493	424	69	850	724	126
1978	524	450	74	970	828	142
1979	557	479	78	1,101	940	161
1980	591	509	82	1,242	1,065	177
1981	626	541	85	1,387	1,195	192

[1] Beginning in 1966, includes payments for vocational rehabilitation services.
[2] Reflects effect of including certain mothers. (See text.)
[3] Reflects the offsetting effect of lower benefits payable to disabled widows and widowers who continue to receive benefits past age 60 (62, for disabled widowers, prior to 1973) as compared to the higher nondisabled widow's (and widower's) benefits that would otherwise be payable.
[4] The estimates are based on the intermediate set of assumptions and reflect the resulting assumed changes under the automatic increase provisions, as described in the preceding section.

In calendar year 1975, benefit payments (including expenditures for vocational rehabilitation services) with respect to disabled persons from the old-age and survivors insurance trust fund and from the disability insurance trust fund (including payments from the latter fund to all dependents of disabled-worker beneficiaries) totaled $9,169 million, of which $664 million, or 7.2 percent, represented payments from the old-age and survivors insurance trust fund. Similar figures for each of the calendar years 1957–75 and estimates for calendar years 1976–81, under the intermediate set of assumptions, are presented in table 24.

TABLE 24.—BENEFIT PAYMENTS UNDER THE OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM WITH RESPECT TO DISABLED BENEFICIARIES, BY TRUST FUND, CALENDAR YEARS 1957-81

[Dollar amounts in millions]

Calendar year	Benefit payments[1] from—			
	Total[1]	Disability insurance trust fund[2]	Old-age and survivors insurance trust fund	
			Amount[3]	As a percentage of total benefit payments with respect to disabled beneficiaries
Past experience:				
1957	$64	$57	$7	11.1
1958	272	249	23	8.5
1959	498	457	41	8.2
1960	627	568	59	9.4
1961	961	887	74	7.7
1962	1,194	1,105	89	7.4
1963	1,311	1,210	101	7.7
1964	1,422	1,309	113	8.0
1965	1,707	1,573	134	7.9
1966	1,932	1,784	147	7.6
1967	2,113	1,950	163	7.7
1968	2,523	2,311	212	8.4
1969	2,806	2,557	249	8.9
1970	3,386	3,085	301	8.9
1971	4,146	3,783	363	8.8
1972	4,911	4,502	409	8.3
1973	6,256	5,764	492	7.9
1974	7,524	6,957	567	7.5
1975	9,169	8,505	664	7.2
Estimated future experience[4]:				
1976	10,725	9,975	750	7.0
1977	12,123	11,273	850	7.0
1978	13,823	12,853	970	7.0
1979	15,637	14,536	1,101	7.0
1980	17,619	16,377	1,242	7.0
1981	19,712	18,325	1,387	7.0

[1] Beginning in 1966, includes payments for vocational rehabilitation services.
[2] Benefit payments to disabled workers and their dependents.
[3] Benefit payments to disabled children aged 18 and over, to certain mothers (see text), and to disabled widows and widowers (see footnote 3, table 23).
[4] The estimates are based on the intermediate set of assumptions, and reflect the resulting assumed changes under the automatic increase provisions, as described in the preceding section.

Long-Range Actuarial Status of the Trust Funds

SIGNIFICANCE OF LONG-RANGE COST ESTIMATES

Section 201(c) of the Social Security Act requires the Board of Trustees to report annually on the operation and status of the old-age and survivors insurance and disability insurance trust funds during the preceding fiscal year and the expected operation and status of the trust funds during the next ensuing five fiscal years. Such information for the fiscal year that ended June 30, 1975, and for the period July 1, 1975, to December 31, 1981, is presented in earlier sections of this report.

Section 201(c) of the Social Security Act also requires that the annual report of the Board of Trustees include a statement of the "actuarial status" of the trust funds; that is, estimated future benefits and administrative expenses in relation to both the estimated future income to the trust funds and the assets of the trust funds. Since 1965 this comparison has been made for the 75-year period beginning

with the year of the report. In accordance with this practice, the statement of the actuarial status of the trust funds discussed herein pertains to the period 1976 through 2050.

A statement on the actuarial status of the trust funds must necessarily be made on the basis of the system incorporated in present law. Under that system, however, because of the complex and apparently unintentional way in which future benefits are related to future changes in wages and the Consumer Price Index, the benefits projected to materialize under certain assumptions regarding such changes reach unreasonably high levels for persons who first become entitled to benefits in the next century. Historically, legislative action has been taken to bring projected future income to and disbursements from the trust funds into balance, and it is clearly imperative that legislative changes be made to prevent these projected benefit levels from materializing. (This is discussed in more detail in the remainder of the report.) Consequently, the estimated future costs which result from a projection of these unreasonably high benefit levels should be interpreted with caution.

Throughout its history the old-age, survivors, and disability insurance program has been self-supporting and since the 1950's has been operated on what may be termed a current-cost financing basis. It is self-supporting in that the only source of funds to pay benefits and administrative expenses is the social security taxes collected from workers and their employers covered under the program (and the interest earned on the invested balances of the trust funds).[1] Under the current-cost method of financing, the amount of taxes collected each year is intended to be approximately equal to the benefits and administrative expenses paid during the year plus a small additional amount to maintain the trust funds at an appropriate contingency reserve level. The purpose of the trust fund under current-cost financing is to reflect all financial transactions and to absorb temporary differences between income and expenditures. Thus, whatever normal ratio of trust fund assets to expenditures is established, it can be expected that the funds will vary somewhat from that level from time to time as they absorb those fluctuations.

Since the inception of the old-age, survivors, and disability insurance program, past payroll taxes together with interest on the trust funds have been adequate to provide all past benefits and administrative expenses. Specifically, with respect to the old-age, survivors, and disability insurance program from 1937 through calendar year 1975, cumulative income to the trust funds amounted to $586 billion and cumulative disbursements were $542 billion. The balance of $44 billion was still in the trust funds at the end of calendar year 1975. Based upon projections made under the intermediate assumptions (alternative II), it is estimated that, during the calendar years 1976–1981, income to the trust funds will total $581 billion and disbursements will be $616 billion (see tables 13 and 19). This is a projected decrease in the trust funds of $35 billion during the period 1976–1981,

[1] In addition to social security taxes and interest earnings, the trust funds receive annual reimbursements from the general fund of the Treasury for certain costs, described in an earlier section, that are not financed by payroll taxes. In fiscal year 1975, such reimbursements amounted to $499 million, or about ¾ of 1 percent of the $66.7 billion in total income to the old-age, survivors, and disability trust funds.

which would reduce the trust funds to about $9 billion by the end of calendar year 1981. For purposes of illustration, the preceding figures are for the old-age and survivors insurance and disability insurance trust funds, combined, although these are independent trust funds and must be considered separately. As indicated in an earlier section of the report, the disability insurance trust fund is projected to be exhausted during 1979. These figures illustrate that under current financing procedures the assets of the trust funds play a relatively minor role; it is the ongoing collection of social security taxes which is the most important factor in providing benefits under the program.

The Congress, in setting future tax rates for the old-age, survivors, and disability insurance program, has normally followed the principle that estimated future income to the trust funds (including interest earnings on invested assets) should be equal to estimated future disbursements, taking into account both present and future participants in the program.

When estimated future disbursements and estimated future income over the 75-year valuation period are not in balance, an "actuarial deficit" or an "actuarial surplus" exists—depending upon whether disbursements are greater than income, or vice versa. The old-age, survivors, and disability insurance program has been in close actuarial balance throughout most of the program's existence. When there was an imbalance, i.e., an actuarial deficit or actuarial surplus, the Congress has acted in due course to revise either taxes, benefits, or both so as to bring the program into close actuarial balance over the 75-year valuation period. Therefore, it is essential to the sound financial operation of the old-age, survivors, and disability insurance program that periodic estimates be made of the estimated future income and outgo to ensure that they are still in balance, and, if not, to provide information to enable appropriate action to be taken to restore the balance.

Actual future income from social security taxes, and actual future expenditures for benefit payments and administrative expenses, will depend upon a large number of factors, including the following:

(*a*) Size and composition of the active working population, which depend in turn upon fertility rates, mortality rates, migration rates, labor force participation and unemployment rates, disability rates, retirement-age patterns, etc.

(*b*) Size and composition of the population which is receiving benefits and the level of benefits, and the level of earnings of the active working population, which depend in turn on the previously mentioned factors, as well as upon wage patterns, the Consumer Price Index, remarriage rates, etc.

It is obviously impossible to know what the future holds with respect to these demographic and economic factors which will determine the actual income and expenditures under the old-age, survivors, and disability insurance program during the next 75-year period. The best that can be done is to make assumptions as to the future behavior of these demographic and economic factors, and to make long-range estimates based upon such assumptions which will indicate the trend and general range of future income and outgo. Such estimates, and their underlying assumptions, if revised periodically in the light of developing trends, provide information which is essential for making informed policy decisions.

In reviewing long-range estimates based upon demographic and economic conditions postulated to exist in the middle of the next century, it would be well to keep in mind the following: Although the underlying assumptions for these long-range estimates may appear to be reasonable, based upon current understanding, in some cases the assumptions produce results so different from the current situation that attention should be directed toward the overall implications of these assumptions and not just toward their effect on the single issue of financing the old-age, survivors, and disability insurance program. For example, since the selection of particular demographic assumptions implies a certain future composition of the U.S. population, it is important to recognize that, if the population composition should change in accordance with these assumptions, it is likely to result in substantial changes in many of the nation's social and economic arrangements. Although beyond the scope of this report, it is desirable in order to view the long-range financing questions from a broader perspective, to analyze the possible implications on various aspects of 21st-century society of the many projections included herein.

LONG-RANGE COST ESTIMATES

As stated previously, the principal determinants of future income and expenditures—frequently referred to in this report as long-range cost estimates—under the old-age, survivors, and disability insurance program are: The type and level of benefits payable; the size and composition of the population which is receiving the benefits; and the size and characteristics, including the earnings levels, of the population generating the taxes used to provide such benefits. For the most part, these future determinants of income and expenditures cannot be known with certainty, and assumptions must be made as to the future behavior of relevant demographic and economic factors.

Demographic and economic assumptions

The basic demographic and economic assumptions, as well as the methodology, used in determining the long-range cost estimates presented in this report are described in Appendix A.

When projections are made for 75 years into the future, and involve social and economic forces—as well as natural forces such as mortality and fertility—it is not unlikely that actual experience will depart significantly from any particular path which may be postulated. Accordingly, cost estimates have been determined and are presented herein based upon three different sets of assumptions, designated as alternatives I, II, and III, in order to indicate the general range in which the cost estimates might reasonably be expected to fall.

Table 10 in an earlier section of the report summarizes, for the period 1976–1981, the assumptions made under these three alternative sets of assumptions with respect to increases in average annual wages and in the Consumer Price Index, and the average annual unemployment rate. The following table summarizes the factors which vary from one set of alternative assumptions to another, for the period 1982–2050. The variable factors include those which have the greatest impact on the estimates of future costs, yet have the lowest predictability, namely: the fertility rate, changes in wages and in the Consumer Price Index, and the resulting real wage changes. Except

for unemployment rates, which were assumed to vary slightly among the three alternative sets of assumptions, all other factors such as mortality rates, migration rates, etc., which either have relatively less impact on the cost estimates or are more predictable, or both, have not been varied among the three alternative sets of assumptions.

VALUES OF SELECTED ECONOMIC AND DEMOGRAPHIC FACTORS FOR THE PERIOD 1982-2050 UNDER 3 ALTERNATIVE SETS OF ASSUMPTIONS

Alternative	Percentage increases in average annual—			Unemployment rate (percent)	Ultimate fertility rate [2]
	Wages	Consumer price index	Real wages [1]		
I	5¼	3	2¼	4.5	2.3
II	5¾	4	1¾	5.0	1.9
III	6¼	5	1¼	[3] 5.5	1.7

[1] Expressed as the difference between percentage increases in average annual wages and average annual CPI.
[2] Average number of children born per woman in her lifetime.
[3] The ultimate rate of 5.5 percent is not attained until 1989.

The estimates under alternative I may be characterized as being more "optimistic" than the estimates under the "intermediate" (alternative II) assumptions. The estimates under alternative III may be characterized as being more "pessimistic" than the estimates under the intermediate assumptions.

While it does not seem unreasonable to assume that actual experience will fall within the range defined by alternatives I and III, particularly during the first 25 years of the projection period, there can be no guarantee that this will be the case because of the high degree of uncertainty in long-range economic forecasting. Estimates of future costs during the first half of the 75-year projection period are more predictable and fall within a narrower range than estimates of costs during the second half of the period. Even though estimates for the latter half of the period are less reliable, the preparation and presentation of long-range cost estimates, as modified periodically in the light of developing trends, can help to prevent surprising and unexpected results from materializing without warning.

In the first part of this section, long-range cost estimates based on the intermediate set of assumptions are presented in considerable detail and are compared with the cost estimates shown in the 1975 annual report that were based on the alternative labeled "central assumptions" in that report. Thereafter, cost estimates are shown in a more summarized form under all three alternative sets of assumptions so that appropriate comparisons can be made.

Benefit levels

The type and level of benefits which are payable under the old-age, survivors, and disability insurance program are extremely important determinants of the cost of the program. The long-range cost estimates presented in this report are based upon the benefits payable under present law, except as specifically noted otherwise.

Under traditional social insurance systems, the level of benefits payable upon the retirement, death, or disability of workers in the future is frequently dependent upon future changes in earnings levels.

Accordingly, although future benefit levels and costs under such systems are not readily predictable in absolute dollar amounts, they are generally predictable in relation to future earnings levels, i.e., expressed as a percentage of earnings.

This is not the case for the old-age, survivors, and disability insurance program under present law, which provides that benefits payable at retirement, death, or disability will be related in a complicated way to increases in both wages and the Consumer Price Index. The result is that the level of benefits payable in the future under present law is highly unpredictable, even in relation to future earnings.

In examining this matter it is helpful to consider the concept of the "replacement ratio," which may be defined as the ratio of the benefit amount payable at retirement to the worker's earnings just prior to retirement. The effect of various economic assumptions on replacement ratios under present law, and the resulting problems involved in estimating future benefit costs, are illustrated in the table shown below. Replacement ratios under various economic assumptions are shown in the table for workers at different earnings levels; namely, workers with maximum taxable earnings throughout their working life, workers with earnings equal to the median earnings of all workers in each year, and workers with "low" earnings, i.e., earnings equal to the minimum Federal wage level in each year. These examples are not intended to suggest that all workers fall neatly into one of these earnings categories, but rather to illustrate the instability of the benefit formula under present law. The replacement ratios shown in the table are based upon gross preretirement earnings. The replacement ratios could be substantially higher if benefit amounts, which are not subject to taxes, were related to preretirement earnings after taxes, especially in the case of workers at median or maximum earnings levels.

ILLUSTRATIVE REPLACEMENT RATIOS[1] FOR RETIRED MALE WORKERS AT SELECTED EARNINGS LEVELS, UNDER VARIOUS ECONOMIC ASSUMPTIONS

Earnings level	1975	Retirement at age 65 in 2050 under assumptions of:[2] 5–2 3/4	5–3	6–4	5 3/4–4
(1)	(2)	(3)	(4)	(5)	(6)
Worker without spouse:					
Maximum	0.29	0.33	0.38	0.43	0.47
Median	.42	.47	.53	.63	.69
Low	.62	.72	.84	1.02	1.12
Worker with spouse aged 65:					
Maximum	.43	.50	.56	.65	.71
Median	.63	.70	.80	.94	1.03
Low	.93	1.08	1.26	1.53	1.69

[1] The replacement ratios are based upon gross preretirement earnings. They could be substantially higher if benefit amounts, which are not subject to taxes, were related to preretirement earnings after taxes, especially in the case of workers at median or maximum earnings levels.

[2] The 2 figures shown in each set of assumptions represent assumed annual percentage increases in average wages and average CPI, respectively, during the period 1982–2050. During 1976–81, the assumed rates of change are those shown in table 10 under alternative II.

Column (2) of the table shows the replacement ratios for male workers retiring at age 65 in January 1975 at different earnings levels. The figures represent the ratio of the benefit payable for January 1975

to average monthly earnings in 1974. For example, the replacement ratio for a worker without a spouse retiring in January 1975 who has had maximum taxable earnings throughout his working life is 0.29, meaning that his benefit payable for January 1975 is 29% of his average monthly earnings in 1974.

When the automatic adjustment provisions were adopted in 1972, it was assumed, for purposes of determining future benefits and the costs thereof, that the ultimate average annual increase in wages would be 5 percent and the ultimate average annual increase in the Consumer Price Index would be 2¾ percent. (These were the assumptions used in the 1972 and 1973 Annual Reports of the Board of Trustees.) Based upon these assumptions for 1982 and later, and the economic assumptions shown in table 10 under alternative II for the period 1976–81, the replacement ratios for workers retiring at age 65 in January 2050 are shown in column (3) of the preceding text table. Column (4) of the table indicates the sample replacement ratios under the short-range economic assumptions specified in alternative II and long-range wage-CPI assumptions of 5 percent and 3 percent respectively, as used in the 1974 annual report.

For the 1975 annual report, the assumptions as to future changes in average wages and in the Consumer Price Index were considerably different from corresponding assumptions used in the 1972 annual report and were assumed to be 6 percent for wages and 4 percent for the CPI. These changes significantly increased projected future replacement ratios as illustrated by column (5) of the text table. The cost of such increased benefits was correspondingly higher and accounted for much of the increase in the actuarial deficit which was reported in the 1975 annual report as compared with that reported in the 1974 report.

In this annual report, for reasons stated earlier, cost estimates are being presented on the basis of three alternative sets of assumptions. Under the intermediate set of assumptions (alternative II) it has been assumed that after 1981, wages will increase at the rate of 5¾ percent and the CPI will increase at the rate of 4 percent. Under these assumptions, the projected benefits will increase in the future as illustrated in column (6) of the text table. A comparison of the figures in columns (2), (3), and (6) illustrates that currently projected benefit levels (shown in column (6)) are considerably different from the benefit levels which prevailed in 1975 (as illustrated in column (2)), and the benefit levels which would be projected today based upon the economic assumptions employed in the 1972–73 annual reports (as illustrated in column (3)).

Whereas the preceding table has been included to show the different levels of the replacement ratios under the various wage-CPI assumptions used in recent issues of the report, the following table is included to show the widely varying levels resulting from the range of such assumptions contained in this year's report.

TABLE 25.—REPLACEMENT RATIOS[1] FOR RETIRED MALE WORKERS AT SELECTED EARNINGS LEVELS UNDER ALTERNATIVES I, II, AND III[2]

Earnings level and year of retirement	Worker without spouse			Worker with spouse aged 65		
	Alternative I	Alternative II	Alternative III	Alternative I	Alternative II	Alternative III
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Low:						
1975	0.62	0.62	0.62	0.93	0.93	0.93
2000	.67	.78	.89	1.01	1.17	1.34
2025	.73	.99	1.32	1.09	1.48	1.98
2050	.75	1.12	1.66	1.12	1.69	2.49
Median:						
1975	.42	0.42	0.42	0.63	0.63	0.63
2000	.46	.52	.60	.68	.78	.89
2025	.48	.62	.81	.71	.93	1.21
2050	.48	.69	.97	.73	1.03	1.45
Maximum:						
1975	.29	.29	.29	.43	0.43	0.43
2000	.32	.37	.42	.48	.56	.63
2025	.34	.44	.55	.51	.65	.82
2050	.34	.47	.63	.52	.71	.95

[1] See text for definition of replacement ratio. It is assumed the worker retires at age 65 at the beginning of the year shown in col. (1).
[2] Alternatives I, II, and III are defined in the text.

A comparison of the figures for alternatives I and III shows that for a given individual the replacement ratios vary significantly under different wage-CPI assumptions. Under alternative III with its relatively high 5 percent CPI assumption and low real-wage differential (that is, the difference between the percentage increases in the average annual wages and the CPI) of 1¼ percent, the 1975 ratios increase by about 50 percent by the turn of the century, by about 100 percent by 2025, and by more than 100 percent by 2050. However, under alternative I with its relatively low 3 percent CPI assumption and high real-wage differential of 2¼ percent, those ratios increase by less than 20 percent over the entire 75-year period.

It is necessary that this report on the actuarial status of the trust funds be based on estimated future costs under present law, even though such projections, based upon the alternative II assumptions, result in future estimated replacement ratios of the magnitude illustrated in the preceding text table, and even though at the time that the automatic adjustment provisions were adopted in 1972 there apparently was no intention that replacement ratios should rise substantially from the levels then prevailing, and even though it seems clear that projected replacement ratios such as those associated with alternative II cannot be permitted to materialize.

However, for illustrative purposes, in addition to projections of future costs based on present law, cost projections have also been prepared on the basis of a "modified theoretical" old-age, survivors, and disability insurance system which would maintain through time the relationship between average awarded benefits and average earnings existing at the beginning of calendar year 1978. It is assumed that under this theoretical system, as under present law, benefits after retirement, death, or disability would be increased automatically to keep up with increases in the CPI. This modified theoretical system is assumed to apply to insured workers who retire, die, or become disabled after 1977. The projected cost of this modified theoretical system is presented later in this report in table 31, under all three alternative sets of assumptions.

Long-range cost estimates under present law

Basic to the discussion of the long-range cost estimates is the concept of expenditures as percent of taxable payroll. The expenditures consist of outgo from the trust funds. They include benefit payments; administrative expenses; interchanges between the old-age, survivors, and disability insurance trust funds and the railroad retirement trust fund (including the reflection of net income from that fund); and payments for vocational rehabilitation services for disability beneficiaries. The payroll consists of the total earnings which are subject to social security taxes after adjustment to reflect the lower contribution rates on self-employed income, tips, and multiple-employer "excess wages"; this adjustment is made so as to facilitate both the calculation of tax income (which is thereby the product of the combined employer-employee tax rate and the payroll) and the comparison of expenditure percentages with tax rates.

Table 26 contains the projected expenditures of the old-age, survivors, and disability insurance system under present law based on the intermediate set of assumptions. (Projected expenditures are shown under these assumptions as well as under two alternative sets of assumptions in table 29.)

TABLE 26.—ESTIMATED EXPENDITURES OF OLD-AGE, SURVIVORS AND DISABILITY INSURANCE SYSTEM AS PERCENT OF TAXABLE PAYROLL FOR SELECTED YEARS, 1985-2050 UNDER ALTERNATIVE II

[In percent]

Calendar year	Expenditures as percent of taxable payroll[1]			Tax rate in law	Difference
	Old-age and survivors insurance	Disability insurance	Total		
1985	9.46	1.70	11.16	9.90	−1.26
1990	9.98	2.08	12.06	9.90	−2.16
1995	10.37	2.52	12.89	9.90	−2.99
2000	10.48	2.93	13.41	9.90	−3.51
2005	10.90	3.43	14.33	9.90	−4.43
2010	12.10	3.89	15.99	9.90	−6.09
2015	14.18	4.22	18.40	11.90	−6.50
2020	16.89	4.40	21.29	11.90	−9.39
2025	19.68	4.41	24.09	11.90	−12.19
2030	21.67	4.36	26.03	11.90	−14.13
2035	22.61	4.43	27.04	11.90	−15.14
2040	22.84	4.61	27.45	11.90	−15.55
2045	23.13	4.79	27.92	11.90	−16.02
2050	23.72	4.87	28.59	11.90	−16.69
25-yr averages:					
1976–2000	9.79	2.02	11.81	9.90	−1.91
2001–25	14.00	3.95	17.95	11.10	−6.85
2026–50	22.47	4.57	27.04	11.90	−15.14
75-yr average: 1976–2050	15.42	3.51	18.93	10.97	−7.96

[1] Expenditures and payroll are calculated under the intermediate set of assumptions (alternative II) which incorporates ultimate annual increases of 5¾ percent in average earnings and 4 percent in CPI, an ultimate unemployment rate of 5 percent, and an ultimate fertility rate of 1.9 children per woman. (See the text for further detail.) Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

Under the intermediate set of assumptions the cost of the old-age and survivors insurance program is projected to increase slowly during the remainder of this century. After the turn of the century two effects combine to cause the expenditures to increase very rapidly. One is that the replacement ratio continues to increase. The second is that workers born during the period of very high birth rates, from post-World-War-II years through the late 1950's and into the 1960's, reach retirement age and begin to receive benefits.

During the last years of the projection period the expenditures continue to increase but at a much slower rate, thereby reflecting both the decelerated increases in the replacement ratios and the low birth rates of the 1970's.

Table 27 compares the average tax rate in present law with the average expenditures (as percent of taxable payroll) of the old-age, survivors, and disability insurance system projected under the intermediate set of assumptions for three successive periods of 25 years beginning in 1976. A similar comparsion is made for the entire 75-year period 1976–2050. According to these calculations the old-age, survivors, and disability insurance system is estimated to be underfinanced over the customary long-range 75-year period by an average annual amount equivalent to 7.96 percent of taxable payroll.

TABLE 27.—COMPARISON OF EXPENDITURES AND TAXES FOR OLD-AGE, SURVIVORS AND DISABILITY INSURANCE SYSTEM AS PERCENT OF TAXABLE PAYROLL UNDER ALTERNATIVE II

[In percent]

Item	Average for period		
	Old-age and survivors insurance	Disability insurance	Total
1st 25-yr period (1976–2000):			
Expenditures as percent of taxable payroll [1]	9.79	2.02	11.81
Tax rate in law	8.56	1.34	9.90
Difference	−1.23	−.68	−1.91
2d 25-yr period (2001–25):			
Expenditures as percent of taxable payroll [1]	14.00	3.95	17.95
Tax rate in law	9.52	1.58	11.10
Difference	−4.48	−2.37	−6.85
3d 25-yr period (2026–50):			
Expenditures as percent of taxable payroll [1]	22.47	4.57	27.04
Tax rate in law	10.20	1.70	11.90
Difference	−12.27	−2.87	−15.14
Total 75-yr period (1976–2050):			
Expenditures as percent of taxable payroll [1]	15.42	3.51	18.93
Tax rate in law	9.43	1.54	10.97
Difference	−5.99	−1.97	−7.96

[1] Expenditures and payroll are calculated under the intermediate set of assumptions which incorporates ultimate annual increases of 5¾ percent in average earnings and 4 percent in CPI, an ultimate unemployment rate of 5 percent, and an ultimate fertility rate of 1.9 children per woman. (See the text for further detail.) Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

Over the first 25-year period the cost would exceed taxes by an average annual amount equivalent to 1.91 percent of taxable payroll, over the second 25-year period by 6.85 percent, and over the third 25-year period by 15.14 percent. In all cases the underfinancing is more pronounced for the disability insurance program than for the old-age and survivors insurance program when viewed as a proportion of the cost of each program.

As stated earlier in the report, the high cost of the old-age, survivors, and disability insurance program projected to occur after the turn of the century, indicated in tables 26 and 27, is due partially to unintended results in the automatic benefit adjustment provisions enacted in 1972. These provisions, under the economic assumptions currently being utilized in making projections, cause future projected benefits to increase substantially from the levels of wage replacement established by benefits currently paid under the program, resulting in

unreasonably high benefits for persons first becoming eligible for benefits in the next century. Thus the costs which are projected to occur after the turn of the century as presented in table 26 are unlikely to materialize and should be interpreted accordingly. It may also be said that the figures in table 27 regarding the projected expenditures after the year 2000, including the projected difference of 7.96 percent between expenditures and income for the 75-year period (sometimes referred to as the "actuarial deficit") are similarly misleading. Likewise, the figures shown in table 28 regarding the change from the 1975 Trustees Report to the current report in the estimated 75-year average expenditures are somewhat misleading and have limited value; however, they are shown to provide continuity with the prior and future reports.

The intermediate set of assumptions underlying the results in tables 26 and 27 differ in several important respects from the central set of assumptions used in last year's report. The effect on the long-range cost of changing from last year's assumptions to this year's assumptions is summarized in table 28. (Projections of the long-range cost based on assumptions similar to those incorporated in the central set of assumptions which was used in last year's report are shown in Appendix B.)

TABLE 28.—CHANGES IN LONG-RANGE EXPENDITURES OF OLD-AGE, SURVIVORS AND DISABILITY INSURANCE PROGRAM AS PERCENT OF TAXABLE PAYROLL, BY REASON FOR CHANGE

[In percent]

Item	Old-age and survivors insurance	Disability insurance	Total
Estimates in last year's report: [1]			
Average-current-cost	13.29	2.97	16.26
Trust fund cost	−0.11	−0.02	−0.13
Average expenditures as percent of taxable payroll	13.18	2.95	16.13
Changes in estimated expenditures due to changes in:			
Economic assumptions	+1.04	+0.20	+1.24
Demographic assumptions	+0.60	+.09	+0.69
Disability assumptions	.00	+.33	+.33
All other factors	+.60	−.06	+.54
Total change in estimated expenditures	+2.24	+.56	+2.80
New estimated expenditures as percent of taxable payroll [2]	15.42	3.51	18.93

[1] The average-current-cost represents the arithmetic average of the expenditures as percent of taxable payroll from 1975–2049 augmented by the cost of increasing the funds on hand at the beginning of 1975 to the level of one year's expenditures by the end of 2049. This additional cost is defined as the trust fund cost. Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

[2] Expenditures and payroll are calculated under the intermediate set of assumptions which incorporates ultimate annual increases of 5¾ percent in average earnings and 4 percent in CPI, an ultimate unemployment rate of 5 percent, and an ultimate fertility rate of 1.9 children per woman. (See the text for further detail.) Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

The major factors underlying the cost estimates shown herein under alternative II that differ from those underlying the cost estimates under the central set of assumptions used in last year's report are summarized below.

The assumption regarding the ultimate level of the real-wage differential was changed from 2 percent to 1¾ percent. In conjunction with the retention of the assumption of an annual increase in the average CPI of 4 percent, this real-wage differential implies a change in the ultimate annual increases in average wages from 6 percent to 5¾ percent. In addition, the real-wage differentials for the short-range

period average less than those in last year's report, thus adding to the long-range cost of the program.

The total fertility rate was assumed to reach an ultimate level of 1.9 children per woman as opposed to the ultimate rate of 2.1 children per woman assumed last year. In addition, slight changes were made in the assumptions with respect to mortality rates and migration levels, based on more recent experience.

The number of persons insured for disability was projected to be a slightly smaller proportion of the fully insured population than was projected last year. The disability termination rates used in preparing the estimates in this year's report are based on the mortality and recovery experience of the disability program during the years 1968–1974. These rates are lower than the ones used in preparing last year's estimates. Over the 75-year projection period the rates at which persons become entitled to disabled-worker benefits were projected to average about 6 percent higher than those projected for last year's report.

The number of workers in covered employment was projected to be a larger proportion of the population than in last year's report. Average old-age benefits were projected to increase faster than in previous reports in order to reflect the tendency in the historical averages to reflect percentage increases in excess of both legislated benefit increases and increases attributable to the higher replacement ratios reflected in newly-awarded benefits. Various factors contribute to this tendency; among them are the effect of post-entitlement earnings on average benefits and the method by which actuarially-reduced benefits are increased to reflect general legislated increases as well as increases resulting from the automatic provisions in present law.

In last year's report, some of the figures included a "trust fund cost," representing the amount necessary to increase the assets of the trust funds to the level of one year's expenditures by the end of the 75-year valuation period. This trust fund cost has been eliminated from the presentation of expenditure estimates throughout this report to facilitate the presentation of the wide variety of figures which are shown, and to permit explicit recognition to be given to the build-up and maintenance of the trust fund.

At the time of developing any financing provisions, it will be necessary to determine the desired level of the trust funds and the point in time at which such level is to be attained, so that adequate provision can be made in the revised tax rates. For example, if it were considered appropriate to provide for increasing the old-age and survivors and the disability insurance trust funds to the level of one year's expenditures by the end of the 75-year valuation period, the trust funds would require an additional amount of income equivalent to 0.27 percent of taxable payroll.

The overall result of the changes described above is to increase the estimated average expenditures as percent of taxable payroll over the 75-year period from 16.13 percent to 18.93 percent. A more detailed description of the assumptions used in this year's cost estimates, and the rationale for their selection, can be found in Appendix A of this report.

The results in tables 26, 27, and 28 should be read with full recognition of the uncertainties involved in the projection of economic and demographic factors over long-range periods as discussed above.

In addition, due to the sensitivity of future benefit levels under present law to changes in the long-range economic assumptions, these results are subject to wide variation. An indication of the degree of variation possible is shown in table 29 which presents cost estimates under alternatives I, II, and III.

TABLE 29.—ESTIMATED EXPENDITURES OF OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE SYSTEM AS PERCENT OF TAXABLE PAYROLL UNDER ALTERNATIVES I, II, AND III, FOR SELECTED YEARS, 1985–2050

[In percent]

Calendar year	Expenditures as percent of taxable payroll [1]		
	Alternative I [2]	Alternative II [2]	Alternative III [2]
1985	10.39	11.16	11.96
1990	11.09	12.06	13.05
1995	11.58	12.89	14.30
2000	11.68	13.41	15.32
2005	11.99	14.33	16.95
2010	12.80	15.99	19.63
2015	14.06	18.40	23.46
2020	15.54	21.29	28.17
2025	16.75	24.09	33.10
2030	17.21	26.03	37.15
2035	17.04	27.04	40.05
2040	16.56	27.45	42.06
2045	16.30	27.92	43.98
2050	16.34	28.59	46.02
25-yr averages:			
1976–2000	10.93	11.81	12.79
2001–25	13.83	17.95	22.81
2026–50	16.73	27.04	40.82
75-yr average: 1976–2050	13.83	18.93	25.47

[1] Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.
[2] The alternative I, II, and III sets of assumptions are defined in the text.

The wide variation in the expenditures as percent of taxable payroll translates into a variation in the difference between those expenditures and the tax rates in present law as shown in table 30. Table 30 shows that in the first 25-year period from 1976 through 2000, the difference between expenditures and taxes varies from 1.03 to 2.89 percent of taxable payroll. From 2001 through 2025 the variation is from 2.73 to 11.71, and for the final 25 years, 2026–2050, the difference varies from 4.83 to 28.92 percent of taxable payroll.

TABLE 30.—COMPARISON OF ESTIMATED EXPENDITURES AND TAXES FOR OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE SYSTEM UNDER PRESENT LAW AS PERCENT OF TAXABLE PAYROLL UNDER ALTERNATIVES I, II, AND III

[In percent]

Item	Average for period— Alternative I [1]	Alternative II [1]	Alternative III [1]
1st 25-yr period (1976–2000):			
Expenditures as percent of taxable payroll [2]	10.93	11.81	12.79
Tax rate in law	9.90	9.90	9.90
Difference	−1.03	−1.91	−2.89
2d 25-yr period (2001–25):			
Expenditures as percent of taxable payroll [2]	13.83	17.95	22.81
Tax rate in law	11.10	11.10	11.10
Difference	−2.73	−6.85	−11.71
3d 25-yr period (2026–50):			
Expenditures as percent of taxable payroll [2]	16.73	27.04	40.82
Tax rate in law	11.90	11.90	11.90
Difference	−4.83	−15.14	−28.92
Total 75-yr period (1976–2050):			
Expenditures as percent of taxable payroll [2]	13.83	18.93	25.47
Tax rate in law	10.97	10.97	10.97
Difference	−2.86	−7.96	−14.50

[1] The assumptions specified in alternative I, II, and III are described in the text.
[2] Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

In both tables 29 and 30, it can be seen that the largest variations in the expenditures and in the difference between the expenditures and taxes materialize in the latter part of the 75-year projection period. This characteristic is primarily due to the automatic benefit adjustment provisions in present law which were described previously. Therefore, the projected expenditures shown in these tables after the year 2000 should be interpreted carefully.

Long-range cost estimates under a modified theoretical system

As stated previously, it is unlikely that the expenditures projected under present law and current economic assumptions will be allowed to materialize, since they result from the unreasonably high awarded benefits that are produced by the complex relationship between such benefits and future changes in wages and the Consumer Price Index. Consequently, based on the assumption that it would be useful for long-range financial planning to illustrate the general trends in the expenditures for a system under which the previously mentioned relationship is more stable, cost projections have been prepared on the basis of a "modified theoretical" old-age, survivors, and disability insurance system which would maintain through time the relationship between average awarded benefits and average earnings existing at the beginning of calendar year 1978. It is assumed that under this theoretical system, as under present law, benefits after retirement, death, or disability would be increased automatically to keep up with increases in the CPI. This modified theoretical system is assumed to apply to insured workers who retire, die, or become disabled after 1977. The projected cost of this modified theoretical system is presented in table 31, under all three alternative sets of assumptions.

TABLE 31.—ESTIMATED EXPENDITURES OF A MODIFIED THEORETICAL OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE SYSTEM [1] AS PERCENT OF TAXABLE PAYROLL UNDER ALTERNATIVES I, II, AND III, FOR SELECTED YEARS, 1985–2050

[In percent]

Calendar year	Expenditures as percent of taxable payroll [2]		
	Alternative I [3]	Alternative II [3]	Alternative III [3]
1985	10.52	11.12	11.73
1990	11.35	11.85	12.39
1995	11.94	12.44	12.98
2000	12.06	12.56	13.12
2005	12.20	12.84	13.48
2010	12.81	13.69	14.48
2015	13.86	15.09	16.13
2020	15.18	16.84	18.21
2025	16.27	18.47	20.22
2030	16.62	19.39	21.54
2035	16.35	19.59	22.09
2040	15.78	19.35	22.12
2045	15.42	19.20	22.18
2050	15.37	19.25	22.34
25-yr averages:			
1976–2000	11.13	11.58	12.09
2001–25	13.73	14.91	15.93
2026–50	15.98	19.30	21.88
75-yr average: 1976–2050	13.61	15.25	16.63

[1] See text for brief description of theoretical system.
[2] Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.
[3] The alternative I, II, and III sets of assumptions are defined in the text.

It may be observed from table 31 that the long-range cost of the modified theoretical old-age, survivors, and disability insurance system would be much less sensitive than the present law system to changes in the basic assumptions. Much of the variation of the long-range costs shown in table 31 is due to the different fertility assumptions used in the three alternative projections. This is demonstrated in Appendix A under the various sensitivity tests. It can also be noted from the table that the overall level of estimated expenditures is reduced as a result of eliminating the "excess" benefits which stem from rising replacement rates.

Table 32 compares the estimated cost under the modified theoretical system with the average tax rate for successive 25-year periods and for the entire valuation period. Under alternatives I, II, and III, the actuarial imbalance over the customary 75-year period would be reduced to a range of about 2.64 to 5.66 percent of taxable payroll. This table also illustrates that the variation in the estimated program deficit would be reduced if the modified theoretical system were in effect.

Table 32 demonstrates that over the next 25-year period the expenditures as percent of taxable payroll under the modified theoretical old-age, survivors, and disability insurance system would exceed the taxes scheduled in present law under each set of assumptions. These costs are analogous to those projected under present law, which are shown in table 30. Table 32 shows that in the first 25-year period from 1976 through 2000, the difference between expenditures and taxes varies from 1.23 to 2.19 percent of taxable payroll. From 2001 through 2025 the variation is 2.63 to 4.83, and for the final 25 years, 2026–2050, the difference varies from 4.08 to 9.98 percent of taxable payroll.

TABLE 32.—COMPARISON OF EXPENDITURES AND TAXES FOR A MODIFIED THEORETICAL OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE SYSTEM [1] AS PERCENT OF TAXABLE PAYROLL UNDER ALTERNATIVES I, II, AND III

[In percent]

Item	Average for period		
	Alternative I [2]	Alternative II [2]	Alternative III [2]
1st 25-yr period (1976–2000):			
Expenditures as percent of taxable payroll [3]	11.13	11.58	12.09
Tax rate in law	9.90	9.90	9.90
Difference	−1.23	−1.68	−2.19
2d 25-yr period (2001–25):			
Expenditures as percent of taxable payroll [3]	13.73	14.91	15.93
Tax rate in law	11.10	11.10	11.10
Difference	−2.63	−3.81	−4.83
3d 25-yr period (2026–50):			
Expenditures as percent of taxable payroll [3]	15.98	19.30	21.88
Tax rate in law	11.90	11.90	11.90
Difference	−4.08	−7.40	−9.98
Total 75-yr period (1976–2050):			
Expenditures as percent of taxable payroll [3]	13.61	15.25	16.63
Tax rate in law	10.97	10.97	10.97
Difference	−2.64	−4.28	−5.66

[1] See text for brief description of theoretical system.
[2] The alternative I, II, and III sets of assumptions are defined in the text.
[3] Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

Estimated Operations and Status of the Trust Funds Under the System as Modified by the President's Financing Proposals

The President has proposed increases in the contribution rates payable under the old-age, survivors, and disability insurance program, in order to strengthen the financing of the program over the near term. Under the President's proposals, contribution rates would be increased, effective January 1, 1977, as shown in the following table:

Calendar year	Contribution rates (percent of taxable earnings)					
	Present law			Proposal [1]		
	OASDI	OASI	DI	OASDI	OASI	DI
Employees and employers, each:						
1976	4.950	4.375	0.575	4.950	4.375	0.575
1977	4.950	4.375	.575	5.250	4.550	.700
1978–80	4.950	4.350	.600	5.250	4.525	.725
1981–85	4.950	4.300	.650	5.250	4.475	.775
1986–2010	4.950	4.250	.700	5.250	4.425	.825
2011 and later	5.950	5.100	.850	6.250	5.275	.975
Self-employed:						
1976	7.000	6.185	.815	7.000	6.185	.815
1977	7.000	6.185	.815	7.900	6.845	1.055
1978–80	7.000	6.150	.850	7.900	6.810	1.090
1981–85	7.000	6.080	.920	7.900	6.735	1.165
1986–2010	7.000	6.010	.990	7.900	6.660	1.240
2011 and later	7.000	6.000	1.000	9.400	7.935	1.465

[1] The increases in contribution rates for employees and employers were proposed in the President's 1977 Budget. The President's Message on Older Americans later expanded the proposal to include increases in the OASDI contribution rates for the self-employed to about 150 percent of the rates for employees.

Estimates of the operations and status of the old-age and survivors insurance and disability insurance trust funds, combined, under the program as modified by the President's financing proposals are shown in table 33 for calendar years 1976–81. Estimates are shown in the table for each of the three alternative sets of assumptions that have been described in an earlier section. The estimates reflect only the effects of the proposed increases in contribution rates; no other changes in the provisions of present law are assumed.

Corresponding estimates of the operations and status of the old-age and survivors insurance trust fund and of the disability insurance trust fund through calendar year 1981 are shown in tables 34 and 35 respectively, under the system as modified by the President's financing proposals.

Enactment of the President's financing proposals would reduce the long-range average annual deficit of the old-age, survivors, and disability insurance system over the next 75 years by 0.69 percent of taxable payroll—0.59 percent due to the increase in the contribution rate for employees and employers and 0.10 percent due to the increase in the contribution rate for self-employed persons. As a result, under the intermediate assumptions, the 75-year average annual deficit would be 7.27 percent of taxable payroll based on the benefit structure in present law, and 3.59 percent based on the modified theoretical system described in an earlier section. (Under the modified theoretical system, the benefit structure would be revised in order to stabilize through time the relationship between benefits and earnings.)

TABLE 33.—ESTIMATED OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE AND DISABILITY INSURANCE TRUST FUNDS, COMBINED, UNDER THE SYSTEM AS MODIFIED BY THE PRESIDENT'S PROPOSED INCREASES IN CONTRIBUTION RATES, DURING CALENDAR YEARS 1975–81, UNDER THREE ALTERNATIVE SETS OF ASSUMPTIONS

[Amounts in billions]

Calendar year	Income	Disbursements	Net increase in fund	Fund at end of year	Fund at beginning of year as a percentage of disbursements during year
Alternative I:					
1975 [1]	$67.6	$69.2	−$1.5	$44.3	66
1976	73.8	78.2	−4.3	40.0	57
1977	87.6	86.9	0.7	40.7	46
1978	98.5	96.7	1.8	42.5	42
1979	110.1	106.3	3.9	46.4	40
1980	122.1	116.3	5.8	52.2	40
1981	134.6	126.5	8.1	60.2	41
Alternative II:					
1975 [1]	67.6	69.2	−1.5	44.3	66
1976	73.8	78.2	−4.3	40.0	57
1977	87.6	86.9	0.7	40.7	46
1978	97.7	96.8	0.9	41.6	42
1979	108.1	106.8	1.3	42.9	39
1980	119.0	117.8	1.2	44.2	36
1981	130.3	129.1	1.2	45.4	34
Alternative III:					
1975 [1]	67.6	69.2	−1.5	44.3	66
1976	73.8	78.2	−4.3	40.0	57
1977	86.6	87.0	−0.4	39.6	46
1978	95.8	97.1	−1.3	38.3	41
1979	104.7	107.6	−2.9	35.5	36
1980	114.0	119.3	−5.3	30.2	30
1981	123.3	131.4	−8.1	22.1	23

[1] Figures for 1975 represent actual experience.

Note.—Totals do not necessarily equal the sum of rounded components. The President's proposed increases in contribution rates are described in the accompanying text. The assumptions underlying the estimates are described in an earlier section.

TABLE 34.—ESTIMATED OPERATIONS OF THE OLD-AGE AND SURVIVORS INSURANCE TRUST FUND UNDER THE SYSTEM AS MODIFIED BY THE PRESIDENT'S PROPOSED INCREASES IN CONTRIBUTION RATES, DURING CALENDER YEARS 1975–81, UNDER THREE ALTERNATIVE SETS OF ASSUMPTIONS

[Amounts in billions]

Calendar year	Income	Disbursements	Net increase in fund	Fund at end of year	Fund at beginning of year as a percentage of disbursements during year
Alternative I:					
1975[1]	$59.6	$60.4	−$0.8	$37.0	63
1976	65.1	67.9	−2.7	34.3	55
1977	76.0	75.3	0.7	35.0	46
1978	84.9	83.4	1.5	36.5	42
1979	94.9	91.4	3.4	39.9	40
1980	105.2	99.8	5.5	45.4	40
1981	114.8	108.1	6.7	52.1	42
Alternative II:					
1975[1]	59.6	60.4	−0.8	37.0	63
1976	65.1	67.9	−2.7	34.3	55
1977	76.0	75.3	0.7	35.0	46
1978	84.2	83.5	0.7	35.7	42
1979	93.1	91.9	1.3	36.9	39
1980	102.5	101.0	1.6	38.5	37
1981	111.2	110.3	0.8	39.3	35
Alternative III:					
1975[1]	59.6	60.4	−0.8	37.0	63
1976	65.1	67.9	−2.7	34.3	55
1977	75.1	75.3	−0.2	34.1	46
1978	82.6	83.8	−1.2	32.8	41
1979	90.2	92.5	−2.3	30.5	35
1980	98.2	102.3	−4.0	26.5	30
1981	105.2	112.2	−7.0	19.5	24

[1] Figures for 1975 represent actual experience.

Note.—Totals do not necessarily equal the sum of rounded components. The President's proposed increases in contribution rates are described in the accompanying text. The assumptions underlying the estimates are described in an earlier section.

TABLE 35.—ESTIMATED OPERATIONS OF THE DISABILITY INSURANCE TRUST FUND UNDER THE SYSTEM AS MODIFIED BY THE PRESIDENT'S PROPOSED INCREASES IN CONTRIBUTION RATES, DURING CALENDAR YEARS 1975–81, UNDER THREE ALTERNATIVE SETS OF ASSUMPTIONS

[Amounts in billions]

Calendar year	Income	Disbursements	Net increase in fund	Fund at end of year	Fund at beginning of year as a percentage of disbursements during year
Alternative I:					
1975[1]	$8.0	$8.8	−$0.8	$7.4	92
1976	8.7	10.3	−1.6	5.8	71
1977	11.6	11.7	(2)	5.7	49
1978	13.6	13.2	0.4	6.1	43
1979	15.3	14.8	0.4	6.5	41
1980	16.9	16.6	0.3	6.8	39
1981	19.7	18.4	1.4	8.2	37
Alternative II:					
1975[1]	8.0	8.8	−0.8	7.4	92
1976	8.7	10.3	−1.6	5.8	71
1977	11.6	11.7	(2)	5.7	49
1978	13.5	13.2	0.2	6.0	43
1979	15.0	14.9	(3)	6.0	40
1980	16.5	16.8	−0.3	5.7	36
1981	19.1	18.8	0.3	6.0	30
Alternative III:					
1975[1]	8.0	8.8	−0.8	7.4	92
1976	8.7	10.3	−1.6	5.8	71
1977	11.5	11.7	−0.2	5.6	49
1978	13.2	13.3	−0.1	5.5	42
1979	14.5	15.1	−0.6	4.9	37
1980	15.8	17.0	−1.3	3.7	29
1981	18.1	19.1	−1.0	2.6	19

[1] Figures for 1975 represent actual experience.
[2] Disbursements exceed income by less than $50,000,000.
[3] Income exceeds disbursements by less than $50,000,000.

Note.—Totals do not necessarily equal the sum of rounded components. The President's proposed increases in contribution rates are described in the accompanying text. The assumptions underlying the estimates are described in an earlier section.

Conclusion

The short-range actuarial cost estimates indicate that the assets of the old-age and survivors insurance and disability insurance trust funds will decline during the period 1976–1981, under each of the three alternative sets of assumptions presented in this report. Without legislation to provide additional financing, the assets of the disability insurance trust fund will be exhausted in 1979 under all three alternative sets of assumptions. Similarly, the assets of the old-age and survivors insurance trust fund will be exhausted in 1981 under the most pessimistic set of alternatives, in 1984 under the intermediate set, and sometime after 1984 under the most optimistic set of assumptions.

The Board recommends that prompt action be taken to strengthen the financing of the old-age, survivors, and disability insurance system over the near term by means of appropriate increases in the tax rates. The Board opposes the use of additional general revenue financing for the old-age, survivors, and disability insurance program. The Board recommends against an increase in the taxable earnings base, other than increases which will occur automatically as average wages in covered employment increase, as a means of producing additional income because of the effect this would have on increased benefits and expenditures in future years.

The long-range actuarial cost estimates indicate that for every year in the future, under present law, the estimated expenditures will exceed the estimated income from taxes. This excess increases with time and is estimated to average about 1.9 percent of taxable payroll over the next 25-year period (1976–2000) based upon the intermediate cost estimates. Under more optimistic assumptions this excess of expenditures over income is projected to average 1.0 percent of taxable payroll, and under more pessimistic assumptions this excess is projected to average 2.9 percent of taxable payroll. Therefore, all alternative long-range cost estimates presented in this report indicate that over the remainder of this century the old-age, survivors, and disability insurance program will require additional revenues.

The long-range cost of the old-age, survivors, and disability insurance program projected to occur after the turn of the century will substantially exceed the taxes scheduled in present law. Although those projected costs are highly sensitive to variations in the demographic and economic assumptions, all reasonable assumptions indicate that there will be significant excesses of expenditures over income. Estimates have been presented in this report under three alternative sets of assumptions indicating a broad range within which actual future experience may fall; however, no assurance can be given that these estimates define the broadest possible range of variation in the long-range cost estimates.

The Board recognized in the 1975 annual report, as it does in this report, that the high cost of the old-age, survivors, and disability insurance program projected to occur after the turn of the century is partially due to unintended results in the automatic benefit adjustment provisions enacted in 1972. These provisions, under the economic assumptions currently being utilized in making projections, cause future projected benefits to increase substantially from the levels of wage replacement established by benefits currently paid under the

program, resulting in unreasonably high benefits for persons first becoming eligible for benefits in the next century. Accordingly, the costs which are projected to occur after the turn of the century should be interpreted with caution and in light of the likelihood that legislation will be enacted to prevent these projected benefit levels from materializing. The Board is in full concurrence with the intent of the 1975 Advisory Council on Social Security that the benefit structure be revised in a responsible manner. The Board recommends the adoption of a specific plan as soon as possible in order to improve the predictability of future benefit levels and to reduce the long-range cost of the system.

The Board also recommends that the development of additional plans to further strengthen the long-range financing of the old-age, survivors, and disability insurance program be given high priority.