TABLE 25.—BENEFIT PAYMENTS UNDER THE OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM WITH RESPECT TO DISABLED BENEFICIARIES, BY TRUST FUND, SELECTED CALENDAR YEARS 1960–84

[Amounts in millions]

| | | Benefit payments [1] from— | | |
| | | | Old-age and survivors insurance trust fund | |
Calendar year	Total [1]	Disability insurance trust fund [2]	Amount [3]	As a percentage of total benefit payments with respect to disabled beneficiaries
Past experience:				
1960	$627	$568	$59	9.4
1965	1,707	1,573	134	7.9
1970	3,386	3,085	301	8.9
1971	4,146	3,783	363	8.8
1972	4,911	4,502	409	8.3
1973	6,256	5,764	492	7.9
1974	7,524	6,957	567	7.5
1975	9,169	8,505	664	7.2
1976	10,803	10,055	748	6.9
1977	12,415	11,547	868	7.0
1978	13,549	12,599	950	7.0
1979	14,857	13,786	1,071	7.2
Estimated future experience: [4]				
1980	16,717	15,468	1,249	7.5
1981	18,762	17,301	1,461	7.8
1982	20,654	18,998	1,656	8.0
1983	22,425	20,576	1,849	8.2
1984	24,438	22,392	2,046	8.4

[1] Beginning in 1966, includes payments for vocational rehabilitation services.
[2] Benefit payments to disabled workers and their dependents.
[3] Benefit payments to disabled children aged 18 and over, to certain mothers and fathers (see text), and to disabled widows and widowers. (See footnote 3, table 24.)
[4] The estimates are based on the intermediate set of assumptions and reflect the resulting assumed changes under the automatic increase provisions, as described in an earlier section.

E. Actuarial Status of the Trust Funds

In recent reports, the financial status of the OASDI program over the medium range and long range has been measured by the actuarial balance, computed over the 25-year and 75-year periods beginning with the calendar year of issuance of the report. In accordance with this practice, the statements of the medium-range and long-range actuarial status contained in this report pertain to the periods 1980–2004 and 1980–2054, respectively. In addition to the medium-range and long-range actuarial balances, two other indicators of the financial condition of the trust funds are shown in this report. One is the time series of projected trust fund ratios (assets at the beginning of the year expressed as a percentage of expenditures during the year), and the other is the time series of projected annual expenditures (expressed as a percentage of taxable payroll). These indicators are described earlier in this section and are analyzed later in this section.

The annual expenditures as a percentage of taxable payroll are useful in establishing tax rate schedules according to the current-cost method of financing described earlier. However, these cost estimates

do not reflect the cost of increasing the trust fund ratio from its current level or even maintaining it at that level. Therefore, any consideration of alternative financing provisions must also include consideration of the desired level of the trust fund in relation to outgo and the time by which that level is to be attained. In this way, the tax schedule can be designed so that the projected annual tax revenues not only meet the projected annual expenditures but also produce the desired trust fund ratios. For example, if it were considered appropriate to increase the combined OASDI trust fund ratio to 100 percent of the projected annual expenditures by the end of the 75-year period, under alternative II it would be necessary to raise the combined employer-employee tax rate by an additional 0.19 percent of taxable payroll per year above the amount needed to meet expenditures. Similarly, if it were considered appropriate to increase that ratio to 75 percent, an additional 0.13 percent of taxable payroll would be needed.

MEDIUM RANGE COST ESTIMATES: 1980–2004

The medium-range cost estimates are summarized in the tables shown below. For convenience of reference, these tables also summarize the long-range (1980–2054) projections discussed later in this section.

The medium-range cost estimates are sensitive to changes in many economic and demographic assumptions upon which they are based, but the degree of sensitivity to change varies considerably among the various assumptions. For example, variations in projected fertility rates have little effect on the medium-range cost estimates since almost all covered workers and beneficiaries projected for this period were born prior to the start of the projection period. However, variations in economic factors such as wage and price increases have significant effects on the estimates. The degree of confidence that can be placed in economic and demographic assumptions is greater for the first 25 years than for the entire 75-year period. Nonetheless, even over the medium-range period the projections of expenditures are only an indication of the trend and general range of the actual expenditures. Appendix A contains a more detailed discussion of the effects of varying selected economic and demographic assumptions on the estimated average medium-range expenditure.

Table 26 presents a comparison of the estimated expenditures under alternative II with the scheduled OASDI tax rates. After the first 5 years, the OASDI system is projected to have a surplus of tax revenues over expenditures in each year of the medium-range period. These annual surpluses produce a medium-range actuarial surplus of 1.19 percent of taxable payroll. However, the first 5 years of deficit are sufficient to exhaust the OASI trust fund (as described earlier in this report).

TABLE 26.—ESTIMATED EXPENDITURES OF OASDI SYSTEM UNDER ALTERNATIVE II AND COMPARISON WITH SCHEDULED TAX RATES, CALENDAR YEARS 1980–2055

[As percent of taxable payroll]

Calendar year	Estimated expenditure			Scheduled tax rate [1]	Difference
	OASI	DI	Total		
1980	9.48	1.39	10.87	10.16	−.71
1981	9.94	1.39	11.33	10.70	−.63
1982	9.97	1.35	11.32	10.80	−.52
1983	9.91	1.29	11.21	10.80	−.41
1984	9.86	1.26	11.11	10.80	−.31
1985	9.79	1.22	11.02	11.40	.38
1986	9.74	1.20	10.94	11.40	.46
1987	9.68	1.17	10.85	11.40	.55
1988	9.60	1.16	10.75	11.40	.65
1989	9.48	1.14	10.63	11.40	.77
1990	9.39	1.13	10.52	12.40	1.88
1991	9.38	1.13	10.51	12.40	1.89
1992	9.37	1.13	10.50	12.40	1.90
1993	9.36	1.13	10.49	12.40	1.91
1994	9.35	1.14	10.49	12.40	1.91
1995	9.35	1.14	10.49	12.40	1.91
1996	9.28	1.17	10.45	12.40	1.95
1997	9.22	1.20	10.41	12.40	1.99
1998	9.16	1.23	10.39	12.40	2.01
1999	9.12	1.26	10.38	12.40	2.02
2000	9.08	1.29	10.37	12.40	2.03
2001	9.03	1.33	10.36	12.40	2.04
2002	8.98	1.36	10.34	12.40	2.06
2003	8.96	1.39	10.36	12.40	2.04
2004	8.99	1.43	10.42	12.40	1.98
2005	9.02	1.46	10.48	12.40	1.92
2010	9.75	1.62	11.36	12.40	1.04
2015	11.09	1.70	12.79	12.40	−.39
2020	12.82	1.73	14.55	12.40	−2.15
2025	14.40	1.68	16.08	12.40	−3.68
2030	15.37	1.60	16.98	12.40	−4.58
2035	15.59	1.57	17.16	12.40	−4.76
2040	15.31	1.59	16.90	12.40	−4.50
2045	15.23	1.63	16.86	12.40	−4.46
2050	15.33	1.63	16.96	12.40	−4.56
2055	15.45	1.61	17.07	12.40	−4.67
25-yr averages:					
1980–2004	9.42	1.24	10.66	11.85	1.19
2005–29	11.92	1.65	13.57	12.40	−1.17
2030–54	15.37	1.61	16.98	12.40	−4.58
75-yr average:					
1980–2054	12.24	1.50	13.74	12.22	−1.52

[1] OASDI combined employer-employee tax rate.

Note: Alternative II and taxable payroll are described in the text of this report.

Table 27 presents a comparison of the expenditures estimated under alternative II with those estimated under alternatives I and III. As a percentage of taxable payroll, the estimated average medium-range expenditure varies from 9.91 percent under alternative I to 11.73 percent under alternative III. Under each alternative, the expenditures are fairly level throughout the medium-range period, ranging from 9.29 to 11.07 percent under alternative I and from 10.89 to 11.86 percent under alternative III. The annual expenditures near the end of the medium-range period under alternatives I and III differ by about 2½ percentage points. In comparison with the estimated expenditure for the year 1979 of 10.32 percent, the highest level attained during the medium-range period varies from 11.07 percent under alternative I to 11.86 percent under alternative III. As a percentage of gross national product the estimated average medium-range expenditure is fairly constant, varying from 4.37 percent under alternative I to 4.83 percent under alternative III.

The actual OASDI income and expenditures in the future may not necessarily fall within the range defined by alternatives I and III; however, the projections represent the operations of the OASDI program under several economic and demographic scenarios, spanning a reasonable range of possibilities.

TABLE 27.—ESTIMATED EXPENDITURES OF OASDI SYSTEM UNDER ALTERNATIVES I, II AND III, CALENDAR YEARS 1980–2055

Calendar year	Expenditures as percent of taxable payroll by alternative			Expenditures as percent of gross national product by alternative		
	I	II	III	I	II	III
1980	10.81	10.87	10.89	4.77	4.79	4.83
1981	11.07	11.33	11.65	4.91	5.05	5.16
1982	11.05	11.32	11.86	4.91	5.02	5.17
1983	10.90	11.21	11.80	4.83	4.93	5.11
1984	10.68	11.11	11.84	4.74	4.88	5.10
1985	10.46	11.02	11.85	4.65	4.83	5.07
1986	10.27	10.94	11.85	4.58	4.78	5.03
1987	10.17	10.85	11.84	4.55	4.72	5.00
1988	10.06	10.75	11.83	4.51	4.66	4.96
1989	9.91	10.63	11.78	4.45	4.60	4.93
1990	9.73	10.52	11.74	4.37	4.55	4.91
1991	9.67	10.51	11.77	4.33	4.54	4.88
1992	9.63	10.50	11.78	4.30	4.53	4.85
1993	9.61	10.49	11.78	4.27	4.51	4.81
1994	9.60	10.49	11.78	4.25	4.50	4.78
1995	9.60	10.49	11.78	4.23	4.49	4.75
1996	9.54	10.45	11.74	4.19	4.45	4.71
1997	9.49	10.41	11.71	4.16	4.42	4.67
1998	9.46	10.39	11.69	4.13	4.39	4.64
1999	9.43	10.38	11.68	4.10	4.37	4.62
2000	9.40	10.37	11.69	4.08	4.35	4.60
2001	9.35	10.36	11.70	4.04	4.33	4.58
2002	9.30	10.34	11.69	4.01	4.31	4.56
2003	9.29	10.36	11.75	3.99	4.30	4.56
2004	9.31	10.42	11.86	3.99	4.31	4.58
2005	9.33	10.48	11.98	3.99	4.32	4.61
2010	9.95	11.36	13.32	4.18	4.59	5.00
2015	10.98	12.79	15.42	4.55	5.07	5.65
2020	12.25	14.55	18.13	4.99	5.66	6.49
2025	13.22	16.08	20.89	5.30	6.14	7.30
2030	13.56	16.98	23.22	5.36	6.36	7.93
2035	13.24	17.16	24.88	5.15	6.31	8.30
2040	12.57	16.90	26.05	4.81	6.09	8.49
2045	12.18	16.86	27.43	4.59	5.97	8.73
2050	12.03	16.96	28.80	4.46	5.89	8.95
2055	11.97	17.07	29.83	4.37	5.82	9.05
25-yr averages:						
1980–2004	9.91	10.66	11.73	4.37	4.58	4.83
2005–29	11.48	13.57	16.84	4.71	5.32	6.08
2030–54	12.59	16.98	26.60	4.80	6.08	8.57
75-yr average:						
1980–2054	11.33	13.74	18.39	4.63	5.33	6.49

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

Table 28 presents a comparison of the average annual expenditure by trust fund estimated under the three alternative sets of assumptions with the average of the scheduled tax rates. Under alternative II, the OASI and DI programs are estimated to have medium-range actuarial surpluses of 0.41 percent and 0.78 percent, respectively. Under alternative I, both programs are also estimated to have medium-range actuarial surpluses, but under alternative III, the OASI program has a medium-range actuarial deficit of 0.52 percent. Although the OASI program has a medium-range actuarial surplus under alternatives I and II, the pattern of estimated expenditures is such that the OASI trust fund is exhausted in 1981 or 1982 under all three alternatives (as described earlier in this report). Throughout the medium-range period, the scheduled financing for the DI program appears to be more than adequate under all three alternatives.

TABLE 28.—ESTIMATED AVERAGE ANNUAL EXPENDITURE OF OASDI SYSTEM UNDER ALTERNATIVES I, II AND III AND COMPARISON WITH AVERAGE SCHEDULED TAX RATE

[As percent of taxable payroll]

Calendar years	Average scheduled tax rate	Estimated average expenditure by alternative			Difference by alternative		
		I	II	III	I	II	III
OASI:							
1980–2004	9.83	8.81	9.42	10.35	1.02	.41	−.52
2005–29	10.20	10.16	11.92	14.83	.04	−1.72	−4.63
2030–54	10.20	11.36	15.37	24.50	−1.16	−5.17	−14.30
1980–54	10.08	10.11	12.24	16.56	−.03	−2.16	−6.48
DI:							
1980–2004	2.02	1.10	1.24	1.38	.92	.78	.64
2005–29	2.20	1.32	1.65	2.00	.88	.55	.20
2030–54	2.20	1.23	1.61	2.10	.97	.59	.10
1980–54	2.14	1.22	1.50	1.83	.92	.64	.31
Total:							
1980–2004	11.85	9.91	10.66	11.73	1.94	1.19	.12
2005–29	12.40	11.48	13.57	16.84	.92	−1.17	−4.44
2030–54	12.40	12.59	16.98	26.60	−.19	−4.58	−14.20
1980–54	12.22	11.33	13.74	18.39	.89	−1.52	−6.17

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

Table 29 shows how the pattern of the estimated expenditures affects the size of the trust funds under all three alternatives. The annual surpluses estimated to occur during the medium-range period in the DI program are reflected in the high levels attained by the trust fund ratios at the end of that period. Under alternative II, the DI ratio is estimated to increase to 1,314 percent. Under alternatives I and III, it is estimated to increase to 1,757 and 935 percent, respectively. Because the OASI trust fund is projected to become exhausted in 1981 or 1982 (as described earlier), the trust fund ratios shown thereafter are theoretical in that they are calculated on the assumption that the exhaustion of the fund can be prevented by allowing it to borrow money although no such borrowing authority exists in present law. The theoretical ratios are derived by assuming that money is borrowed and repaid as necessary in a manner analogous to that in which positive trust fund balances are invested. Under alternatives I and II, the OASI ratio is projected (on a theoretical basis) to become positive by the end of the medium-range period, reaching a value of 292 percent under alternative I. However, under alternative III the OASI trust fund does not recover within the projection period after becoming exhausted in 1981. The deficits under alternatives II and III in the OASI program are sufficient to exhaust the combined OASI and DI funds in 1982 or 1983 (as described earlier).

TABLE 29.—ESTIMATED TRUST FUND RATIOS¹ OF OASDI SYSTEM UNDER ALTERNATIVES I, II AND III, CALENDAR YEARS 1980-2055

Calendar year	Alternative I			Alternative II			Alternative III		
	OASI	DI	Total	OASI	DI	Total	OASI	DI	Total
1980	23	36	24	23	35	24	23	35	24
1981	15	45	19	15	44	18	14	43	18
1982	8	65	15	6	61	12	3	55	9
1983	2	92	12	−2	84	8	(²)	70	(³)
1984	−4	126	11	−10	111	4	(²)	88	−8
1985	−8	169	11	−17	142	(³)	(²)	109	−17
1986	−7	239	19	−21	196	3	(²)	149	−21
1987	−4	320	30	−23	254	7	(²)	192	−25
1988	(³)	406	42	−26	315	11	(²)	236	−30
1989	5	498	55	−27	378	16	(²)	283	−34
1990	11	594	70	−28	442	23	(²)	332	−38
1991	27	717	97	−21	533	39	(²)	401	−34
1992	44	837	124	−13	627	56	(²)	471	−30
1993	61	956	152	−4	721	74	(²)	539	−25
1994	78	1,072	180	4	813	91	(²)	605	−21
1995	96	1,186	208	12	902	109	(²)	667	−16
1996	115	1,275	238	21	971	127	(²)	718	−11
1997	135	1,359	268	31	1,035	146	(²)	763	−6
1998	155	1,436	298	41	1,093	165	(²)	804	(³)
1999	177	1,507	329	52	1,145	185	(²)	840	5
2000	199	1,573	360	64	1,193	204	(²)	872	10
2001	222	1,625	391	76	1,230	224	(²)	896	16
2002	245	1,673	422	89	1,263	243	(²)	914	22
2003	269	1,717	451	102	1,291	262	(²)	926	27
2004	292	1,757	480	115	1,314	279	(²)	935	32
2005	315	1,792	507	127	1,330	295	(²)	941	35
2010	393	1,957	601	159	1,393	335	(²)	954	27
2015	407	2,160	626	135	1,482	315	(²)	970	(²)
2020	360	2,428	593	57	1,613	242	(²)	1,001	(²)
2025	281	2,822	535	(²)	1,820	137	(²)	1,071	(²)
2030	192	3,317	477	(²)	2,093	13	(²)	1,177	(²)
2035	111	3,730	438	(²)	2,324	(²)	(²)	1,265	(²)
2040	47	3,995	426	(²)	2,483	(²)	(²)	1,327	(²)
2045	2	4,169	426	(²)	2,610	(²)	(²)	1,395	(²)
2050	(²)	4,303	430	(²)	2,780	(²)	(²)	1,503	(²)
2055	(²)	4,703	435	(²)	2,995	(²)	(²)	1,644	(²)
Trust fund is projected to be first exhausted in the year	1982	(⁴)	(⁴)	1981	(⁴)	1983	1981	(⁴)	1982

¹ The trust fund ratio is defined to be the trust fund assets at the beginning of the year expressed as a percentage of expenditures during the year.
² The fund is projected to be exhausted and not to recover before the end of the projection period.
³ The trust fund ratio is less than 0.5 percent.
⁴ The fund is not projected to be exhausted within the projection period.

Notes: Alternatives I, II and III are described in the text of this report. The OASI and Total ratios for 1983 and later under alternative I, and for 1982 and later under alternatives II and III, are theoretical because they are calculated on the assumption that the exhaustion of the OASI trust fund (see text) can be resolved by allowing the fund to borrow money.

The patterns of the trust fund ratios indicate imbalances in the financing of the OASI and DI programs over the medium-range period. For example, under alternative II, while, after the early years, the financing over the medium-range period is adequate for the combined OASI and DI programs, it is inadequate for the OASI program and more than adequate for the DI program.

The cost estimates and actuarial balances shown in this report are different from those published in last year's report. Table 30 traces the differences between the estimates under the intermediate assumptions in the two reports.

TABLE 30.—CHANGE IN ESTIMATED AVERAGE ANNUAL EXPENDITURE OF OASDI SYSTEM UNDER ALTERNATIVE II BY REASON FOR CHANGE

[As percent of taxable payroll]

Item	Medium range			Long range		
	OASI	DI	Total	OASI	DI	Total
Shown in 1979 report:[1]						
Actuarial balance	+.69	+.48	+1.17	−1.41	+.21	−1.20
Average scheduled tax rate	9.76	2.00	11.76	10.05	2.13	12.19
Estimated average expenditure	9.07	1.52	10.59	11.47	1.92	13.38
Changes in estimated average expenditure due to changes in:[2]						
Social Security Act (Disability Amendments of 1980)	−.00	−.12	−.12	−.01	−.19	−.20
Valuation date	−.01	+.01	+.00	+.06	+.01	+.07
Economic assumptions	+.42	+.05	+.47	+.15	+.02	+.17
Fertility assumptions	+.00	+.00	+.00	+.09	+.00	+.09
Mortality assumptions	+.15	+.00	+.15	+.46	+.00	+.46
Disability assumptions	+.00	−.16	−.16	+.00	−.22	−.22
Methods	−.16	−.02	−.18	−.12	−.03	−.15
All other factors	−.05	−.04	−.09	+.14	−.01	+.13
Total change in estimated average expenditure	+.35	−.28	+.07	+.77	−.42	+.35
Shown in this report:[3]						
Estimated average expenditure	9.42	1.24	10.66	12.24	1.50	13.74
Average scheduled tax rate	9.83	2.02	11.85	10.08	2.14	12.22
Actuarial balance	+.41	+.78	+1.19	−2.16	+.64	−1.52

[1] Expenditures and taxable payroll are calculated under the intermediate set of assumptions (alternative II) described in last year's report which incorporates ultimate annual increases of 5¾ percent in average wages in covered employment and 4 percent in the CPI, an ultimate annual unemployment rate of 5 percent and an ultimate total fertility rate of 2.1 children per woman. The averages are computed over projection periods commencing with 1979.

[2] See the text for a discussion of the items shown.

[3] Expenditures and taxable payroll are calculated under the intermediate set of assumptions (alternative II) described in the text of this report. The averages are computed over projection periods commencing with 1980.

Note: Taxable payroll is described in the text of this report.

The Disability Amendments of 1980 changed the Social Security Act in several ways. Certain administrative changes are expected to reduce the numbers of future beneficiaries from those projected in the 1979 Trustees Report. Changes in the methods of calculating workers' benefits and maximum family benefits are expected to reduce the average amounts for future DI beneficiaries as compared to the amounts projected in the 1979 Trustees Report. The total effect of the changes is to substantially decrease the estimated cost of the disability insurance program over both the medium-range and the long-range periods.

In changing from the valuation periods of last year's report, which were 1979–2003 and 1979–2053 for the medium-range and long-range periods, respectively, to the valuation periods of this report, 1980–2004 and 1980–2054, the year 1979 is replaced by 2004 in the medium-range and 2054 in the long-range. Except for the OASI medium-range projection, the replacement year is a year of higher cost than the year being replaced, thereby increasing the estimated average expenditures even in the absence of any other changes.

The increase in estimated cost because of changes in economic assumptions results from the larger CPI increases assumed in the early years in comparison with the assumed wage increases. The ultimate wage and CPI increases (5.75 and 4 percent, respectively) are the same as those in last year's report.

In the demographic area, although the ultimate fertility assumption has not been changed, lower fertility rates have been assumed during the rest of this century. As a result, higher estimated costs develop after the turn of the century because of the smaller proportion of the population at the working ages. The mortality level assumed in this report is about 6 percent lower by the year 2050 than the level in last

year's report. This difference in assumed mortality levels results from giving more recognition to the rapid improvement in mortality experienced over the past decade when determining long-range trends for mortality.

Changes in the assumed disability incidence and termination rates were made to reflect more recent experience. These changes result in large decreases in the estimated cost of the disability insurance program over both the medium-range and long-range periods. These changes in cost are in addition to those resulting from the Disability Admendments of 1980.

Numerous changes were made in the methods used to project the costs of the OASDI program. The net result of these changes is to decrease the OASI and DI estimated medium-range and long-range costs. The major change in method was the revision of the procedure for projecting the average benefits for aged beneficiaries. This year, to reflect more fully the increasing average length of time beneficiaries are expected to receive benefits, the procedure was refined to allow for more detailed age-specific estimates. A number of other changes in method had only minor effects on the projected costs.

Many minor factors other than those specifically mentioned above were changed from last year's report. The net result of these changes is a small increase in the estimated OASI medium-range and long-range costs.

2. LONG–RANGE COST ESTIMATES: 1980-2054

As mentioned earlier in this section, the degree of confidence that can be placed in demographic and economic assumptions and in the consequent cost estimates decreases as the length of the projection period increases. Thus, less confidence can be placed in the estimates for the long-range 75-year period than for the medium-range 25-year period. The long-range projections, although sensitive to variations in the assumptions, provide insights which are essential for making informed policy decisions. The tables summarizing those estimates appear earlier in this section. Appendix A contains a more detailed discussion of the effect of differences in selected economic and demographic assumptions on the estimated average annual expenditure over the long-range period.

As shown in table 26, under alternative II the cost of the OASI program is projected to be a relatively constant percentage of taxable payroll during the remainder of this century. After the turn of the century, it is projected to increase rapidly to a peak around 2035. The reason for this increase is that the number of beneficiaries will be increasing faster than the number of covered workers. This occurs because the relatively large number of persons born during the period from the end of World War II through the early 1960's (when fertility rates were high) will reach retirement age and begin to receive benefits while the relatively small number of persons born during the period of current and projected low fertility rates will comprise the labor force. During the last years of the projection period, the OASI expenditures as a percentage of payroll are projected to decrease slightly because of the relatively small numbers of beneficiaries projected to result from the low birth rates experienced during the 1970's and assumed for the 1980's. Table 31 presents a comparison of the projected numbers of beneficiaries and covered workers through calendar year 2055.

TABLE 31.—COMPARISON OF OASDI BENEFICIARIES AND COVERED WORKERS UNDER ALTERNATIVES I, II AND III, CALENDAR YEARS 1945-2055

Calendar year	Covered workers [1] (in thousands)	Beneficiaries [2] (in thousands)			Covered workers per OASDI beneficiary	Beneficiaries per 100 covered workers
		OASI	DI	Total		
1945	46,390	1,106		1,106	41.9	2
1950	48,280	2,930		2,930	16.5	6
1955	65,200	7,563		7,563	8.6	12
1960	72,530	13,740	522	14,262	5.1	20
1965	80,680	18,509	1,648	20,157	4.0	25
1970	93,090	23,185	2,568	25,753	3.6	28
1975	100,200	27,244	4,125	31,369	3.2	31
1979	114,000	29,911	4,826	34,737	3.3	30
Alternative I:						
1980	114,500	30,606	4,748	35,354	3.2	31
1985	128,900	33,708	4,576	38,284	3.4	30
1990	136,700	36,664	4,686	41,350	3.3	30
1995	139,400	38,311	4,975	43,286	3.2	31
2000	142,200	39,460	5,617	45,077	3.2	32
2005	149,000	41,117	6,444	47,561	3.1	32
2010	154,500	44,561	7,216	51,777	3.0	34
2015	158,700	49,939	7,717	57,656	2.8	36
2020	162,100	56,435	7,931	64,366	2.5	40
2025	166,100	62,715	7,807	70,522	2.4	42
2030	171,500	66,533	7,553	74,086	2.3	43
2035	178,200	67,655	7,592	75,247	2.4	42
2040	185,900	66,926	7,957	74,883	2.5	40
2045	193,800	66,852	8,507	75,359	2.6	39
2050	202,000	68,474	8,930	77,404	2.6	38
2055	210,600	71,052	9,216	80,268	2.6	38
Alternative II:						
1980	114,300	30,609	4,750	35,359	3.2	31
1985	126,600	33,848	4,721	38,569	3.3	30
1990	134,800	37,053	5,131	42,184	3.2	31
1995	137,800	39,166	5,498	44,664	3.1	32
2000	140,700	40,675	6,288	46,963	3.0	33
2005	145,900	42,721	7,241	49,962	2.9	34
2010	149,500	46,596	8,093	54,689	2.7	37
2015	151,300	52,422	8,617	61,039	2.5	40
2020	151,800	59,456	8,799	68,255	2.2	45
2025	152,400	66,352	8,591	74,943	2.0	49
2030	153,500	70,841	8,216	79,057	1.9	52
2035	155,300	72,652	8,123	80,775	1.9	52
2040	157,500	72,471	8,323	80,794	1.9	51
2045	159,600	72,643	8,627	81,270	2.0	51
2050	161,700	73,759	8,757	82,516	2.0	51
2055	163,700	75,146	8,759	83,905	2.0	51
Alternative III:						
1980	113,900	30,613	4,753	35,366	3.2	31
1985	124,800	34,098	4,873	38,971	3.2	31
1990	132,800	37,818	5,588	43,406	3.1	33
1995	136,400	40,835	5,988	46,823	2.9	34
2000	140,000	43,158	6,872	50,030	2.8	36
2005	143,100	46,104	7,887	53,991	2.7	38
2010	143,900	50,948	8,750	59,698	2.4	41
2015	142,000	57,817	9,230	67,047	2.1	47
2020	138,300	66,049	9,328	75,377	1.8	55
2025	134,000	74,310	8,980	83,290	1.6	62
2030	129,500	80,257	8,432	88,689	1.5	68
2035	125,300	83,544	8,125	91,669	1.4	73
2040	121,200	84,825	8,011	92,836	1.3	77
2045	116,800	85,983	7,852	93,835	1.2	80
2050	112,200	86,849	7,486	94,335	1.2	84
2055	107,800	86,671	7,051	93,722	1.2	87

[1] Workers with taxable earnings at some time during the year.
[2] Those with monthly benefits in current-payment status as of June 30.

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

As shown in table 26, the cost of the DI program as a percentage of taxable payroll is projected to decrease somewhat for the next decade and then to increase steadily until about 2020, after which it decreases slightly. The pattern of the estimated DI expenditures is affected by many of the same demographic factors that affect the pattern of the estimated OASI expenditures and, in addition, by the assumptions about future disability experience. In particular, the projected increase in DI costs results in part from assumed disability incidence rates that are higher than current rates. (See Appendix A for further information.)

Table 26 shows that under alternative II for the OASDI system, estimated annual surpluses continue beyond the medium-range period to about 2010, after which the system experiences annual deficits. These deficits grow rapidly to a peak around 2035, after which they decline slightly to about 4½ percent of taxable payroll during the last fifteen years of the long-range projection period. The net result of this pattern of annual surpluses and deficits is a long-range actuarial deficit of 1.52 percent of taxable payroll. This deficit is about 11 percent of the estimated 75-year average expenditure (which is 13.74 percent of taxable payroll). Because the deficit exceeds 5 percent of the estimated average expenditure (that is, exceeds 0.69 percent of taxable payroll), the system is not regarded as being in close actuarial balance over the long-range period. Once the OASI financing problems expected in the 1980's are overcome, there will be ample time to study the system and to make well-considered changes to improve its long-range financial status.

Table 27 shows that under each alternative the estimated expenditures as a percentage of taxable payroll increase rapidly after the turn of the century because of the previously discussed change in the demographic structure of the United States. Under alternatives I and II, the expenditures peak around 2030 or 2035, while under alternative III they are still increasing somewhat at the end of the projection period. As a percentage of GNP, the estimated average long-range expenditure varies from 4.63 percent under alternative I to 6.49 percent under alternative III, with the average under alternative II being 5.33 percent.

Table 28 shows that under each alternative a long-range deficit is projected for the OASI program, while a long-range surplus is projected for the DI program. The combined OASDI long-range actuarial balance ranges from a surplus of 0.89 percent under alternative I to a deficit of 6.17 percent under alternative III.

The long-range projections of the trust funds are shown in table 29. The OASI trust fund is exhausted in 1981 under the intermediate and pessimistic assumptions, and in 1982 under the optimistic assumptions (as described earlier). Under alternative II, assuming that the OASI financing problems expected in the 1980's are overcome, the OASI

trust fund ratio is projected to rise to over 150 percent around 2010 before decreasing rapidly until 2022, the year in which the OASI trust fund would again be exhausted. The DI trust fund ratio is projected to rise steadily throughout the projection period to almost 3,000 percent by the end of the long-range projection period. Under alternative I, the theoretical OASI ratio peaks around 2015 at about 400 percent before decreasing until 2045, when the OASI trust fund would again be exhausted; the DI ratio increases to about 4,700 percent by the end of the projection period. The combined OASDI trust fund at the end of the long-range period represents about 19 percent of the projected gross national product under alternative I. Under alternative III, the OASI trust fund does not recover from its exhaustion in 1981 before the end of the projection period; the DI trust fund ratio increases to over 1,600 percent by the end of the projection period. The combined OASDI trust fund is exhausted in 1982, but on a theoretical basis would become positive again in 1997 and increase to about 35 percent of annual expenditures before again becoming exhausted in 2012.

VIII. CONCLUSION

The actuarial estimates presented in this report are based upon economic and demographic assumptions which are inevitably subject to considerable uncertainty. The assumptions and estimates that appear in this report were necessarily prepared before the most recent changes in the economy were known. Current evidence indicates that the economy has moved into a recession and is weakening rapidly. Therefore, revised short-range projections will probably be necessary in the near future as more information becomes available about the intensity of the changes in the economy. Over the longer term, uncertainty is of course an even more difficult factor. However, the Board believes that the long-range estimates presented in this report will remain useful for a longer period of time because they are less sensitive to changes in the short-range economic conditions.

Over the short term the OASI trust fund will face financial strains requiring policy actions. Without such actions, the OASI fund would be depleted in late 1981 or early 1982, depending on the course of the economy. Reallocation of the tax rates between OASI and DI would postpone depletion until the latter half of 1982 or early in 1983.

In contrast to the depletion of the OASI trust fund in late 1981 or early 1982, the growth of the DI trust fund that began in 1978 is projected to continue throughout the next 75 years under all three sets of assumptious. The growth which has occurred since 1978 has resulted primarily from the reallocation of tax rates provided under the 1977 amendments and from declining disability incidence rates. While the incidence rates are assumed to increase for some time into the future, the DI trust fund is nonetheless projected to continue increasing indefinitely.

Due in part to tax increases in 1985 and 1990, the combined assets of the OASI and DI trust funds should begin rising in 1985 and continue increasing into the 21st century based on the intermediate assumptions. However, largely because of demographic factors, estimated revenues are inadequate to meet demands on the OASI trust fund in the 21st century.

The medium-range and long-range actuarial soundness of the OASDI program is usually measured in terms of the difference between expenditures and tax revenues. For the next 25 years, the average annual tax income exceeds the average annual expenditure by 1.19 percent of taxable payroll under the intermediate assumptions, by 1.94 percent under the optimistic assumptions and by 0.12 percent under the pessimistic assumptions.

For the entire 75-year projection period, however, the average annual tax income falls below the average annual expenditure by 1.52 percent of taxable payroll under the intermediate assumptions. Under the optimistic assumptions, the average annual tax income exceeds the average annual expenditure by 0.89 percent of taxable payroll over the entire 75-year period, while under the pessimistic assumptions, the average annual tax income falls below the average annual expenditure by 6.17 percent.

The members of the Board of Trustees of the old-age and survivors insurance and the disability insurance trust funds are also members of the Board of Trustees of the hospital insurance (HI) trust fund. A concurrent annual report contains estimates of the status of the HI trust fund under the same sets of assumptions that are presented in this report.

Last January, the Administration proposed legislation which would allow any of these three trust funds to borrow from another of the funds, with any such loans to be repaid with interest. If this legislation is enacted, the assests in each of the three funds will be available to meet the benefit obligations of any of the funds.

Appendix E shows estimates of the combined assets of the three trust funds as a percentage of combined expenditures of the funds under each of the three sets of assumptions. These estimates can be used to evaluate the adequacy of projected assets if the Board is granted interfund borrowing authority.

The Board notes that throughout the decade of the 1980's assets in the three funds combined are projected to be sufficient to meet the obligations of all three funds under the optimistic and intermediate sets of assumptions. However, under the intermediate assumptions, the margin between projected assets and the minimum amount required to meet projected benefit obligations is uncomfortably small for several years. Under the pessimistic assumptions, assets in the three funds combined are sufficient to meet all benefit obligations through 1982, but are insufficient beginning late in 1983.

The Board emphasizes that the projected depletion of the OASI trust fund is an immediate problem which requires early attention by the Congress. Therefore, the Board recommends that the problem be addressed in part by the adoption of the Administration's interfund borrowing proposal. In addition, because the tax rates scheduled under present law result in significant overfinancing of the DI program, the Board recommends that the OASDI tax rates be reallocated between the OASI and DI trust funds to more closely reflect the projected future costs of each program. The provision of interfund borrowing authority may be sufficient to adequately finance all three programs throughout the 1980's, thus avoiding the need to provide additional financing. At the very least, it will give the Adminstration and the Congress sufficient time to assess economic conditions and

to address any further measures which may be necessary in order to strengthen the financing of the social security programs.

The Board also notes, as it did last year, that even under optimistic assumptions the balance between aggregate revenues and aggregate expenditures of the three trust funds is quite fragile in the immediate future. Under the pessimistic assumptions, the trust funds require revenues in addition to what is provided under present law. Thus, the Board repeats its recommendation of last year that no reduction be made in the present law payroll tax schedule of the trust funds without a general restructuring of social security financing to assure the integrity of the trust funds over the short-range and medium-range period.

The long-range financial difficulties are not projected to occur for several decades into the future. However, the Board recommends that extensive studies continue to be conducted so that possible long-range solutions may be implemented in an orderly manner.