Hospital Insurance, Supplementary Medical Insurance, and Old-Age, Survivors, and Disability Insurance: Financing Basis Under the 1965 Amendments

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AMENDMENTS TO THE Social Security Act passed in 1965 (Public Law 89–97) not only made major changes in the existing old-age, survivors, and disability insurance (OASDI) system but also established two new insurance programs: the hospital insurance program and the supplementary medical insurance program.[1] The three systems are to be financed separately and are therefore discussed separately here.

OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE

The cost aspects of any proposed changes in the OASDI program have always received careful study by Congress. In the 1950 amendments, Congress expressed its conviction that the program should be completely self-supporting from the contributions of covered individuals and employers, and it repealed the provision permitting appropriations to the system from the general revenue of the Treasury. All major legislation since 1950, including the 1965 amendments, has indicated the intent of Congress that the tax schedule make the program as self-supporting as possible and actuarially sound.

Actuarial soundness does not have precisely the same meaning for OASDI as for private insurance companies and, to some extent, for private pension plans. With respect to individual insurance, the private insurance company to be actuarially sound must, in general, have sufficient funds on hand to pay off all accrued liabilities if operations are terminated. This is not a necessary basis for a national compulsory social insurance program, nor is it always necessary for a well-administered private pension plan.

The national program can be expected to continue indefinitely, and the test is whether the expected future income from taxes and from interest on invested assets will be sufficient to meet anticipated expenditures for benefits and administrative costs. Though future experience may vary from the actuarial cost estimates, the intent that the program be self-supporting and actuarially sound can be expressed in law by a contribution schedule that, according to the intermediate-cost estimate, brings the program into approximate balance.

Following the recommendations of the 1963–64 Advisory Council on Social Security Financing, the long-range basis of the financing was changed from perpetuity to a 75-year period. Beginning with the year 1964, all estimates have been prepared on this 75-year basis.

ACTUARIAL BALANCE, 1950–65

The actuarial balance of the OASDI system is measured in relation to effective taxable payroll (referred to hereafter as "payroll"). "Payroll" means the total earnings of all covered workers, reduced to take into account both the maximum taxable earnings base and the fact that the contribution rate for the self-employed is lower than the combined employer-employee rate. In this way, the actuarial balance of the system is expressed as an equivalent combined employer-employee tax rate on earnings not in excess of the maximum taxable base and represents the differences between the benefit costs and the level contribution rate.

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[1] For a summary of the 1965 amendments see Wilbur J. Cohen and Robert M. Ball, "Social Security Amendments of 1965: Summary and Legislative History," *Social Security Bulletin*, September 1965.

At the time the 1952 amendments were passed, it was believed that the 1950–52 rise in earnings levels would offset the higher cost resulting from the benefit liberalizations and that the actuarial balance would be the same as that estimated for the 1950 act (table 1). Cost estimates made in 1954 indicated, however, that the level-cost (the average long-range cost, based on discounting at interest, in relation to payroll) was somewhat more than 0.5 percent of payroll higher than the level-equivalent of the scheduled taxes, including allowance for interest on the existing trust fund. The actuarial insufficiency in the 1952 act was substantially reduced by the 1954 legislation, which provided for an increase in the contribution schedule that also met all the additional cost of the benefit changes.

The estimates for the 1954 act were revised in 1956 to take into account the rise in the earnings level since 1951 and 1952, the 2-year base period that had been used for the earnings assumption in the 1954 estimates. The lack of actuarial balance under the 1954 act was thus reduced to the point where, for all practical purposes, it was nonexistent. Since the benefit changes made by the 1956 amendments were fully financed by the increased contribution income provided, the program's actuarial balance was not affected.

In cost estimates made in early 1958, the program was found to be out of actuarial balance by somewhat more than 0.4 percent of payroll. The large number of retirements among the groups newly covered by the 1954 and 1956 legislation had resulted in higher benefit expenditures than those estimated, and the average retirement age had dropped significantly, probably in part because of the liberalizations of the retirement test. The 1958 amendments recognized this situation and provided additional financing, both to reduce the lack of actuarial balance and to finance certain benefit liberalizations.

As a basis for the revised cost estimates made in 1958 for the disability insurance program, certain modified assumptions that recognized the emerging experience were made. As a result, the moderate actuarial surplus originally estimated was increased somewhat; most of the increase was used in the 1958 amendments to finance certain benefit liberalizations.

The cost estimates for OASDI were reexamined at the beginning of 1960 and modified in certain respects. The earnings assumption was changed to reflect the 1959 level, and revised assumptions were made for the disability insurance portion of the program on the basis of newly available data. It was found that the number of persons meeting the insured-status conditions for disability benefits had been significantly overestimated and that the disability incidence rates with respect to eligible women were considerably lower than had been originally estimated.

TABLE 1.—Old-age, survivors, and disability insurance: Actuarial balance under various acts and for various estimates, intermediate basis

[Percent]

Legislation	Date of estimate	Level-equivalent [1]		
		Benefit costs [2]	Contributions	Actuarial balance [3]
		OASDI [4]		
1950 act	1950	6.20	6.10	−0.10
1950 act	1952	5.49	5.90	+.41
1952 act	1952	6.00	5.90	−.10
1952 act	1954	6.62	6.05	−.57
1954 act	1954	7.50	7.12	−.38
1954 act	1956	7.45	7.29	−.16
1956 act	1956	7.85	7.72	−.13
1956 act	1958	8.25	7.83	−.42
1958 act	1958	8.76	8.52	−.24
1958 act	1960	8.73	8.68	−.05
1960 act	1960	8.98	8.68	−.30
1961 act	1961	9.35	9.05	−.30
1961 act	1963	9.33	9.02	−.31
1961 act (perpetuity basis)	1964	9.36	9.12	−.24
1961 act (75-year basis)	1964	9.09	9.10	+.01
1965 act	1965	9.49	9.42	−.07
		OASI		
1956 act	1956	7.43	7.23	−0.20
1956 act	1958	7.90	7.33	−.57
1958 act	1958	8.27	8.02	−.25
1958 act	1960	8.38	8.18	−.20
1960 act	1960	8.42	8.18	−.24
1961 act	1961	8.79	8.55	−.24
1961 act	1963	8.69	8.52	−.17
1961 act (perpetuity basis)	1964	8.72	8.62	−.10
1961 act (75-year basis)	1964	8.46	8.60	+.14
1965 act	1965	8.82	8.72	−.10
		DI		
1956 act	1956	0.42	0.49	+0.07
1956 act	1958	.35	.50	+.15
1958 act	1958	.49	.50	+.01
1958 act	1960	.35	.50	+.15
1960 act	1960	.56	.50	−.06
1961 act	1961	.56	.50	−.06
1961 act	1963	.64	.50	−.14
1961 act (perpetuity basis)	1964	.64	.50	−.14
1961 act (75-year basis)	1964	.63	.50	−.13
1965 act	1965	.67	.70	+.03

[1] Percent of effective taxable payroll; includes adjustment to reflect the lower contribution rate for the self-employed, compared with the combined employer-employee rate. Estimates prepared before 1964 are on a perpetuity basis, those prepared after 1964 are on a 75-year basis, and those prepared in 1964 are on both bases (see text).

[2] Includes adjustments to reflect (a) the lower contribution rate for the self-employed, (b) interest earnings on the existing trust fund, (c) administrative expenses, and (d) net cost of the financial interchange with the railroad retirement system.

[3] A negative figure indicates the extent of lack of actuarial balance; a positive figure indicates more than sufficient financing, according to the estimate.

[4] The disability insurance program was established by the 1956 act; all figures for previous legislation are for OASI only.

The changes made by the 1961 amendments involved higher costs, and this rise was fully met by changes in the scheduled contribution rates. As a result the actuarial balance of the program remained unchanged.

Subsequently the cost estimates were further reexamined in the light of the developing experience. The average amount of taxable earnings was moved to the 1963 level, the interest rate was increased to reflect recent experience, and the retirement rates were modified upward to conform to the experience. The disability insurance portion of the program was found to be in an unsatisfactory financial position because benefits were not being terminated by death or recovery as rapidly as had been originally estimated. At the same time the financing of the old-age and survivors insurance portion was found to be somewhat improved. This situation was recognized by the Board of Trustees, and in its report to Congress the Board recommended an increase in the contribution allocation to the disability insurance trust fund, so that both portions of the system would be in a satisfactory actuarial balance.

Both the Committee on Ways and Means of the House of Representatives and the Senate Committee on Finance, in reporting on the 1965 legislation,[2] stated their belief that it is a matter for concern if the OASDI system shows any significant actuarial insufficiency—more than 0.10 percent of payroll. (Before the change to a 75-year basis, this limit of variation was taken at 0.30 percent.) Whenever the actuarial insufficiency has exceeded the accepted limits, any subsequent liberalizations in benefit provisions have been fully financed by appropriate changes in the tax schedule or through other methods, and at the same time the actuarial status of the program has been improved. The changes provided in the 1965 amendments are in conformity with these principles.

BASIC ASSUMPTIONS FOR COST ESTIMATES

Because of such factors as the aging of the population and the slow but steady growth of the benefit rolls, benefit disbursements may be expected to increase continuously for at least the next 50–75 years. Similar factors are inherent in any retirement program, public or private, that has been in operation for a relatively short period. Estimates of the future cost of the OASDI program are also affected by many elements that are difficult to determine. The assumptions used in the actuarial cost estimates may therefore differ widely and yet be reasonable.

The long-run estimates are presented in a range to indicate plausible variations in future costs. Both the low- and high-cost estimates are based on high economic assumptions, intended to represent close to full employment, with average annual earnings at about the 1963 level. The intermediate-cost estimates, developed by averaging the low-and high-cost estimates, indicate the basis for the financing provisions.

Costs are shown, in general, as percentages of payroll—the best measure of the program's financial cost. Dollar figures alone are misleading. A higher earnings level, for example, will increase not only the program's outgo but also—and to a greater extent—its income, with the result that cost in relation to payroll will decrease.

For the short-range cost, only a single estimate is considered necessary. A gradual rise in the earnings level, paralleling that of the past few years, is assumed. As a result, contribution income is somewhat higher than if level earnings were assumed, but benefit outgo is only slightly affected.

An important measure of long-range cost is the equivalent level contribution rate required to support the program into perpetuity, based on discounting at interest. Adoption of such a level rate would result in relatively large accumulations in the old-age and survivors insurance trust fund and, eventually, sizable income from interest. Even though such a method of financing is not followed, the concept may be used as a convenient measure of long-range costs, especially in comparing various possible alternative plans, since it takes into account the heavy deferred benefit costs.

The long-range estimates are based on level-earnings assumptions, although covered payrolls are assumed to rise steadily during the next 75 years with the growth in the population of working age. If in the future the earnings level should be considerably above that which now prevails,

[2] House Report 213 and Senate Report 404, Eigthy-ninth Congress, 1st session.

and if the benefits are adjusted upward so that the annual costs in relation to payroll remain the same as those now estimated for the present system, then the increased dollar outgo that results will offset the increased dollar income. This is an important reason for considering costs in relation to payroll rather than in dollar amounts. Although a rise in earning levels has characterized the past, the long-range estimates have not taken the possibility of such a rise into account. If such an assumption were used, along with the unlikely assumption that the benefits would not be changed, the cost in relation to payroll would, of course, be lower.

The possibility that a rise in earnings levels will produce lower costs in relation to payroll is an important "safety factor" in the system's financial operations. The financing of the system is based essentially on the intermediate-cost estimate, along with the assumption of level earnings; if experience follows the high-cost assumption, additional financing will be necessary. If covered earnings do increase in the future as in the past, the resulting reduction in program costs (expressed as a percentage of taxable payroll) will more than offset the higher cost under experience following the high-cost estimate. If the latter condition prevails, the reduction in the relative cost of the program coming from rising earnings levels can be used to maintain the actuarial soundness of the system, and any remaining savings can be used to adjust benefits upward (although to a lesser degree than the increase in the earnings level).

If benefits are adjusted currently to keep pace with rising earnings trends as they occur, the year-by-year costs as a percentage of payroll would be unaffected. The level-premium cost, however, would be higher, since the relative importance of the interest earned by the trust funds would gradually diminish with the passage of time. If earnings do consistently rise, the financing basis of the system must be given thorough consideration because the proportion of the benefit costs met by the interest receipts would be less than anticipated under the assumption that the earnings level would not rise.

The costs of OASDI are affected significantly by amendments made to the Railroad Retirement Act in 1951. Under these amendments, railroad retirement compensation and the earnings covered under OASDI are combined in determining benefits for workers with fewer than 10 years of railroad service and for all survivor claimants. Under the financial interchange provisions adopted at the same time, the old-age and survivors insurance trust fund and the disability insurance trust fund are to be maintained in the same financial position in which they would have been if railroad employment had always been covered by the Social Security Act. It is estimated that in the long run the net effect will be a relatively small loss to the OASDI system since the reimbursements from the railroad retirement system will be somewhat smaller than the net additional benefits paid on the basis of railroad earnings.

Program costs are also affected by the 1956 legislation that provided for reimbursement from general revenues for past and future expenditures with respect to the noncontributory credits that had been granted for persons in military service before 1957. The cost estimates reflect the effect of these reimbursements (included as contributions), based on the assumption that the required appropriations will be made in 1966 and thereafter.

RESULTS OF INTERMEDIATE-COST ESTIMATES

The long-range intermediate-cost estimates are developed from the low- and high-cost estimates by averaging the dollar estimates and then developing the corresponding estimates in relation to payroll. The intermediate-cost estimate is not presented as the most probable estimate but rather as a convenient, single set of figures to use for comparative purposes.

Because Congress believes that the OASDI

TABLE 2.—Old-age, survivors, and disability insurance: Contribution rate schedule under the acts of 1961 and 1965

[Percent]

Calendar year	Combined employer-employee rate		Rate for self-employed	
	1961 act	1965 act	1961 act	1965 act
1965	7.25	7.25	5.4	5.4
1966	8.25	7.70	6.2	5.8
1967	8.25	7.80	6.2	5.9
1968	9.25	7.80	6.9	5.9
1969–72	9.25	8.80	6.9	6.6
1973 and thereafter	9.25	9.70	6.9	7.0

program should be on a completely self-supporting basis, a single estimate is necessary in the development of a tax schedule. No schedule can be expected to obtain exact balance between contributions and benefits. Development of a specific schedule does, however, make the intention clear, even though in actual practice future changes in the tax schedule may be required. Similarly, exact self-support cannot be obtained from a specified set of integral or rounded fractional tax rates increasing in orderly intervals, but this principle of self-support is aimed at as closely as possible.

The combined employer-employee rates under the contribution schedule contained in the 1965 act are lower than those in the 1961 law for the years 1966–72 and higher for 1973 and thereafter (table 2), with a resulting average increase of 0.29 percent in the rate. The increased schedule of contributions will be applied to a maximum base of $6,600 instead of the $4,800 under the old law. The allocation to the disability portion of the program is also changed in the 1965 act, from 0.50 percent of payroll to 0.70 percent, thus improving the financial situation of the disability insurance trust fund as recommended by the Board of Trustees.

TABLE 3.—Old-age, survivors, and disability insurance: Actuarial balance, in terms of estimated level-cost as percent of taxable payroll, under 1961 and 1965 acts and effect of changes under 1965 act, by type of change based on intermediate-cost estimate at 3.5-percent interest

[Percent]

Item	OASDI total	OASI	DI
Actuarial balance, 1961 act	+0.01	+0.14	−0.13
Earnings base increase to $6,600	+.55	+.51	+.04
Revised contribution schedule	+.29	+.09	+.20
Extensions of coverage	+.01	+.01	(1)
7-percent benefit increase [2]	−.59	−.59	−.05
Earnings test liberalization	−.14	−.14	(1)
Child's benefits to age 22 if in school	−.12	−.10	−.02
Reduced widow's benefits at age 60 [3]	(1)	(1)	(5)
Disability definition revision [4]	−.01	(5)	−.01
Transitional insured status for persons aged 72 or over	−.01	−.01	(5)
Broader definition of child	−.01	−.01	(1)
Total effect of changes	−.08	−.24	+.16
Actuarial balance, 1965 act	−.07	−.10	+.03

[1] Includes also the effect of the minimum increase of $4 in the primary insurance amount. The 7-percent increase does not apply beyond the first $400 of average monthly wage: the same benefit factor underlying 1961 law for average monthly wages in excess of $110 applies for that portion of the average monthly wage above $400.

[2] Less than 0.005 percent.

[3] Includes also the cost of benefits to certain divorced women and to widows who had remarried but are no longer married.

[4] Includes also (a) the cost-of payment of disability benefits after the individual has first become entitled to some other benefit, (b) the cost for the liberalized disability benefits for blind persons, and (c) the savings arising from the offset provision when workmen's compensation benefits are also payable.

[5] Not applicable to this program.

The interest rate used in the latest valuation of the 1961 act was 3.50 percent. The same rate was retained for the cost estimates of the 1965 amendments.

Table 3 traces the change in the actuarial balance of the system from its situation under the 1961 act, according to the latest estimate, to that under the 1965 amendments, by type of major changes involved.

The changes made in 1965 will reasonably maintain the actuarial position of the OASDI system. The favorable actuarial balance of 0.01 percent of taxable payroll estimated under the 1961 law is changed slightly, to a lack of balance of 0.07 percent, which is less than the established limit within which the system is considered substantially in actuarial balance.

It is significant that in the 1950 law and in all amendments since that time, Congress did not recommend a high, level tax rate in the future but rather an increasing schedule, which, of necessity, ultimately rises higher than the level rate. Since this graded tax schedule will produce a considerable excess of income over outgo for many years, a sizable trust fund will develop; the fund will, however, be smaller than it would have been under a level tax rate. This fund, like the trust funds of the civil-service retirement, railroad retirement, national service life insurance, and U.S. Government life insurance systems, will be invested in Government securities. The resulting interest income will help to bear part of the higher benefit costs of the future.

According to the latest intermediate-cost estimate, the level-premium cost of the old-age and survivors insurance benefits (excluding administrative expenses and the effect of interest earnings on the existing trust fund) under the 1961 act was about 8.5 percent of payroll, and under the 1965 act it is about 8.8 percent. The corresponding figures for the disability benefits are 0.62 percent and 0.67 percent.

Table 4 presents the benefit costs for the system as it is under the 1965 amendments, separately for each of the various types of benefits.

Income and Outgo in Near Future

Under the 1965 act, the OASDI benefit disbursements will increase by about $1.5 billion in

the calendar year 1965. Most of this additional amount results from the 7-percent increase in benefits. In the calendar year 1966, when all the changes will be in full operation, the benefits will be an estimated $2.32 billion higher than they otherwise would have been. The contribution collections for 1965 will not change, since the changes in the rate and taxable earnings base will not be effective until the beginning of 1966. For 1966 the increase in the earnings base will more than offset the decrease in the tax rate, and the contributions collected will be higher by about $1 billion than they would have been.

TABLE 4.—Old-age, survivors, and disability insurance: Estimated level-cost of benefit payments, administrative expenses, and interest earnings on existing trust funds as percent of taxable payroll,[1] under 1965 act, by type of benefit, intermediate-cost estimate at 3.5-percent interest

[Percent]

Item	OASI	DI
Old-age benefits	6.27	0.53
Wife's benefits	.51	.04
Widow's benefits	1.11	(2)
Parent's benefits	.01	(2)
Child's benefits	.67	.09
Mother's benefits	.15	(2)
Lump-sum death payments	.11	(2)
Total benefits	8.83	.66
Administrative expenses	.13	.03
Railroad retirement financial interchange	.04	.00
Interest on existing trust fund [3]	−.18	−.02
Net total level-cost	8.82	.67

[1] Includes adjustment to reflect the lower contribution rate for the self-employed, compared with the combined employer-employee rate.
[2] Not payable under this program.
[3] Includes reimbursement for additional cost of noncontributory credit for military service, which is taken as an offset to the benefit and administrative expense costs.

Under the amended act the size of the old-age and survivors insurance trust fund is expected to decrease by about $1.2 billion in 1965, to remain at about the same level in 1966, and then to increase substantially each year in the future. The situation is practically the same for the disability insurance trust fund, but the decline in 1965 is estimated to be about $470 million (tables 5 and 6).

LONG-RANGE PROJECTIONS

Table 5 gives the estimated operations of the old-age and survivors insurance trust fund under the amended program for the long-range future, based on the intermediate-cost estimate. It will, of course, be recognized that the figures for the next two or three decades are the most reliable (under the assumption of level-earnings trends in the future), since the populations concerned—both covered workers and beneficiaries—are already born. As the estimates proceed further into the future, there is much more uncertainty—if for no reason other than the relative difficulty in predicting future birth trends. But it is nevertheless desirable and necessary to consider these long-range possibilities under a social insurance program that is intended to operate into perpetuity.

In every year after 1965 for the next 20 years, contribution income under the system is estimated to exceed old-age and survivors insurance benefit disbursements. Even after the benefit-outgo curve rises ahead of the contribution-income curve, the trust fund will continue to in-

TABLE 5.—Old-age and survivors insurance trust fund: Progress under the 1965 act, intermediate-cost estimate at 3.5-percent interest [1]

[In millions]

Calendar year	Contributions [2]	Benefit payments	Administrative expenses	Railroad retirement financial interchange [3]	Interest on fund [1]	Balance in fund at end of year [4]
Actual data:						
1951	$3,367	$1,885	$81	.....	$417	$15,540
1952	3,819	2,194	88	.....	365	17,442
1953	3,945	3,006	88	.....	414	18,707
1954	5,163	3,670	92	−$21	447	20,576
1955	5,713	4,968	119	−7	454	21,663
1956	6,172	5,715	132	−5	526	22,519
1957	6,825	7,347	[5] 162	−2	556	22,393
1958	7,566	8,327	[5] 194	124	552	21,864
1959	8,052	9,842	[5] 184	282	532	20,141
1960	10,866	10,677	203	318	516	20,324
1961	11,285	11,862	239	332	548	-19,725
1962	12,059	13,356	256	361	526	18,337
1963	14,541	14,217	281	423	521	18,480
1964	15,689	14,914	296	403	569	19,125
Estimated data (short-range estimate):						
1965	16,014	16,986	351	436	570	17,936
1966	18,848	18,520	377	445	546	17,988
1967	20,687	19,512	363	524	580	18,856
1968	21,568	20,334	369	474	634	19,881
1969	24,958	21,213	377	487	733	23,495
1970	26,328	22,101	385	478	900	27,759
1971	27,163	23,001	393	455	1,082	32,155
1972	28,041	23,908	401	454	1,271	36,704
Estimated data (long-range estimate):						
1975	28,818	24,848	390	313	1,212	40,044
1980	31,105	28,828	431	130	1,895	59,891
1990	35,600	36,629	510	−23	2,689	82,433
2000	41,293	40,926	559	−77	3,287	101,233
2025	51,238	62,118	769	−107	4,476	132,792

[1] An interest rate of 3.5 percent is used in determining the level-costs, but in developing the progress of the trust fund a varying rate in the early years has been used that is equivalent to such fixed rate.
[2] Includes reimbursement for additional cost of noncontributory credit for military service.
[3] A negative figure indicates payment to the trust fund from the railroad retirement account; a positive figure indicates the reverse.
[4] Excludes amounts in the railroad retirement account to the credit of the OASI trust fund—$377 million for 1953, $284 million for 1954, $163 million for 1955, and $60 million for 1956.
[5] Figures for 1957 and 1958 are artificially high and figures for 1959 too low because of the method of reimbursements between this trust fund and the disability insurance trust fund.

crease because of the effect of interest earnings (which more than meet the administrative expense disbursements and any financial interchanges with the railroad retirement program). As a result, this trust fund is estimated to grow steadily under the long-range cost estimate (with a level-earnings assumption), reaching $40 billion in 1975, $60 billion in 1980, and more than $100 billion at the end of the century. In the very distant future—in about the year 2015—the trust fund is estimated to reach a maximum of approximately $160 billion and to then start decreasing.

The disability insurance trust fund under the program grows slowly but steadily after 1966, according to the intermediate long-range cost estimate, as shown by table 6. In 1975, it will reach an estimated $3.8 billion, and in 1990 it will be $9.0 billion. There is estimated to be a small excess of contribution income over benefit disbursements for every year after 1965 for 40 years.

TABLE 6.—Disability insurance trust fund: Progress under the 1965 act, intermediate-cost estimate at 3.5-percent interest [1]

[In millions]

Calendar year	Contributions [2]	Benefit payments	Administrative expenses	Railroad retirement financial interchange [3]	Interest on fund [1]	Balance in fund at end of year
Actual data:						
1957	$702	$57	[4] $3	-------	$7	$649
1958	966	249	[4] 12	-------	25	1,379
1959	891	457	[4] 50	—$22	40	1,825
1960	1,010	568	36	—5	53	2,289
1961	1,038	887	64	5	66	2,437
1962	1,046	1,105	66	11	68	2,368
1963	1,099	1,210	68	20	66	2,235
1964	1,154	1,309	79	19	64	2,047
Estimated data (short-range estimate):						
1965	1,187	1,600	85	24	51	1,576
1966	1,821	1,734	102	25	49	1,585
1967	2,048	1,827	108	29	52	1,721
1968	2,132	1,898	112	21	58	1,880
1969	2,207	1,960	115	24	64	2,052
1970	2,282	2,013	119	26	70	2,246
1971	2,356	2,065	122	29	78	2,464
1972	2,433	2,113	125	32	87	2,714
Estimated data (long-range estimate):						
1975	2,247	2,022	103	— 3	121	3,834
1980	2,425	2,211	106	—11	166	5,177
1990	2,776	2,472	107	—13	291	8,965
2000	3,220	2,907	120	—13	509	15,443
2025	3,996	3,970	156	—13	1,113	33,236

[1] An interest rate of 3.5 percent is used in determining the level-costs, but in developing the progress of the trust fund a varying rate in the early years has been used that is equivalent to such fixed rate.
[2] Includes reimbursement for additional cost of noncontributory credit for military service.
[3] A negative figure indicates payment to the trust fund from the railroad retirement account; a positive figure indicates the reverse.
[4] Figures for 1957 and 1958 are artificially low and figures for 1959 too high because of the method of reimbursements between this trust fund and the OASI trust fund.

TABLE 7.—Old-age and survivors insurance trust fund: Progress under the 1965 act, low-cost and high-cost estimates

[In millions]

Calendar year	Contributions [1]	Benefit payments	Administrative expenses	Railroad retirement financial interchange [2]	Interest on fund [3]	Balance in fund at end of year
Low-cost estimate:						
1975	$29,426	$24,371	$361	$293	$1,633	$50,193
1980	32,080	27,996	398	105	2,767	81,283
1990	37,965	34,882	469	—52	5,316	151,886
2000	45,265	38,365	515	—112	9,525	270,603
High-cost estimate:						
1975	28,209	25,326	418	333	906	30,989
1980	30,129	29,661	464	155	1,212	40,370
1990	33,235	38,376	550	7	537	18,064
2000	37,320	43,487	603	—42	[4]	[4]

[1] Includes reimbursement for additional cost of noncontributory credit for military service.
[2] A negative figure indicates payment to the trust fund from the railroad retirement account; a positive figure indicates the reverse.
[3] At rates of 3.75 percent for the low-cost estimate and 3.25 percent for the high-cost estimate.
[4] Fund exhausted in 1993.

LOW- AND HIGH-COST ESTIMATES

Table 7 shows the estimated operation of the old-age and survivors insurance trust fund under the program as it would be changed by the act for low- and high-cost estimates. Corresponding figures for the disability insurance trust fund are given in table 8.

Under the low-cost estimate, the old-age and survivors insurance trust fund builds up rapidly and in the year 2000 is shown as being about $270 billion; it is then growing at a rate of about $16 billion a year. The disability insurance trust fund also grows steadily under the low-cost estimate, reaching about $9 billion in 1980 and $35 billion in 2000, at which time its annual rate of growth is about $2 billion. For both trust funds, under these estimates, benefit disbursements do not exceed contribution income in any year after 1965 for the foreseeable future.

Under the high-cost estimate, on the other hand, the old-age and survivors insurance trust fund builds up to a maximum of about $40 billion in about 15 years, but it decreases thereafter until it is exhausted some time before the year 2000. Under this estimate, benefit disbursements from the fund are lower than contribution income during all years after 1968 and before 1981.

For the disability insurance trust fund, in the early years of operation the contribution income under the high-cost estimate is slightly in excess of benefit outgo until 1977. Accordingly the fund, as shown by this estimate, will grow to about $1.9

billion in the early 1970's and will then slowly decrease until it is exhausted in 1986.

These results are consistent and reasonable, since the system on the basis of an intermediate-cost estimate is intended to be approximately self-supporting, as indicated previously. Accordingly, a low-cost estimate should show that the system is more than self-supporting, and a high-cost estimate should show that a deficiency would arise later on. In actual practice, under the philosophy in the 1950 and subsequent legislation—set forth in the Committee reports—the tax schedule would be adjusted in future years so that none of the developments of the trust funds shown in tables 7 and 8 would ever eventuate.

Thus, if experience followed the low-cost estimate and if the benefit provisions were not changed, the contribution rates would probably be adjusted downward—or perhaps the increases scheduled for future years would not go into effect. If, on the other hand, the experience followed the high-cost estimate, the contribution rates would have to be raised above those scheduled. At any rate, the high-cost estimate does indicate that, under the tax schedule adopted, there will be ample funds to meet benefit disbursements for several decades, even under relatively high-cost experience.

Table 9 shows the estimated costs of the old-age and survivors insurance benefits and of the disability insurance benefits under the amended program, as a percentage of taxable payroll for various future years, through 2040. It also shows the level costs of the two programs for the low-, high-, and intermediate-cost estimates.

TABLE 8.—Disability insurance trust fund: Progress under the 1965 act, low-cost and high-cost estimates

[In millions]

Calendar year	Contributions [1]	Benefit payments	Administrative expenses	Railroad retirement financial interchange [2]	Interest on fund [3]	Balance in fund at end of year
Low-cost estimate:						
1975	$2,294	$1,886	$94	−$6	$201	$5,911
1980	2,501	2,050	95	−15	311	8,986
1990	2,960	2,283	94	−18	655	18,647
2000	3,529	2,723	103	−18	1,252	35,267
High-cost estimate:						
1975	2,200	2,157	112	0	55	1,824
1980	2,250	2,372	117	−7	36	1,217
1990	2,592	2,661	120	−8	(4)	(4)
2000	2,911	3,091	137	−8	(4)	(4)

[1] Includes reimbursement for additional cost of noncontributory credit for military service.
[2] A negative figure indicates payment to the trust fund from the railroad retirement account; a positive figure indicates the reverse.
[3] At rates of 3.75 percent for the low-cost estimate and 3.25 percent for the high-cost estimate.
[4] Fund exhausted in 1986.

TABLE 9.—Old-age, survivors, and disability insurance: Estimated cost of benefits as percent of taxable payroll[1] under the 1965 act

[In percent]

Calendar year	Low-cost estimate	High-cost estimate	Intermediate-cost estimate [2]
OASI benefits:			
1975	7.47	8.10	7.78
1980	7.87	8.88	8.36
1990	8.28	10.42	9.28
2000	7.64	10.51	8.94
2025	8.77	13.97	10.91
2040	9.95	15.01	11.95
Level-cost [3]	7.74	10.23	8.82
DI benefits:			
1975	0.58	0.69	0.63
1980	.57	.71	.64
1990	.54	.72	.62
2000	.54	.74	.63
2025	.61	.81	.70
2040	.65	.86	.73
Level-cost [3]	.60	.78	.67

[1] Takes into account the lower contribution rate for the self-employed, compared with the combined employer-employee rate.
[2] Based on the averages of the dollar contributions and dollar costs under the low-cost and high-cost estimates.
[3] Level contribution rate, at 3.25 percent for high-cost, 3.50 percent for intermediate-cost, and 3.75 percent for low-cost estimates, for benefits after 1964, taking into account (a) interest on the trust fund on Dec. 31, 1964, (b) future administrative expenses, (c) the railroad retirement financial interchange provisions, (d) the reimbursement of military-wage-credits cost, and (e) the lower contribution rates payable by the self-employed.

HOSPITAL INSURANCE PROGRAM

The hospital insurance system established by the 1965 amendments has an estimated cost for benefit payments and administrative expenses that is in long-range balance with contribution income. It should be recognized that the preparation of cost estimates for hospitalization and related benefits is much more difficult and is much more subject to variation than cost estimates for the cash benefits of the OASDI system. The hospital insurance program is a newly established program, with no past operating experience. In addition, more variable factors are involved in a service program than in one paying cash benefits. The cost estimates were made, however, under very conservative assumptions with respect to all foreseeable factors.

Financing Basis

The contribution schedule contained in the 1965 act for the hospital insurance program, on a maximum earnings base of $6,600, is as follows:

[Percent]

Calendar year	Employer-employee rate	Rate for the self-employed
1966	0.7	0.35
1967–72	1.0	.50
1973–75	1.1	.55
1976–79	1.2	.60
1980–86	1.4	.70
1987 and after	1.6	.80

Although the earnings base will be the same under the hospital insurance program and OASDI, the two programs will be completely separate in several ways.

First, the schedules of tax rates for OASDI and for hospital insurance are in separate subsections of the Internal Revenue Code. (For old-age and survivors insurance and for disability insurance, there is a single tax rate for both programs, but funds are allocated into two portions.)

Second, the hospital insurance program has a separate trust fund (as is also the case for old-age and survivors insurance and for disability insurance).

Third, the act provides that income-tax withholding statements (forms W-2) shall show what proportion of the total contribution for both programs is for hospital insurance.

Fourth, whenever the railroad retirement system has a different maximum earnings base than the hospital insurance program, this program will cover railroad employees directly in the same manner as other covered workers. Their contributions will go directly into the hospital insurance trust fund, and their benefit payments will be paid directly from this trust fund, rather than directly or indirectly through the railroad retirement system. (Railroad employees are not covered by OASDI, except indirectly through the financial interchange provisions.) When the two earnings bases are the same, the hospital insurance taxes will be collected with the railroad retirement taxes and will be transferred to the hospital insurance trust fund through the financial interchange provisions. Either way, the hospital and related benefits with respect to railroad workers will be paid from the hospital insurance trust fund.

Fifth, the financing basis for the hospital insurance program is determined by a different approach than that used for the OASDI system, reflecting the different natures of the two programs. Rising earnings and rising hospitalization costs in future years are assumed, instead of level earnings, and the estimates are for a 25-year period rather than 75 years.

Sixth, the self-employed contribute for hospital insurance at the same rate as do employees. For OASDI, the self-employed contribute at about one and one-half times the employee rate until 1973 and thereafter at slightly less than that.

The concept of actuarial soundness is somewhat similar for the two programs, but there are important differences. One major difference is that cost estimates for the hospital insurance program should desirably be made over a period of only 25 years in the future, rather than 75 years as it is for the OASDI program. A shorter period for the hospital insurance program is necessary because it is more difficult to make forecast assumptions for a service benefit than for a cash benefit. There is a reasonable likelihood that during the next 75 years the number of beneficiaries aged 65 and over will tend to increase in relation to the covered population (a period of this length is thus both necessary and desirable for studying the cost of the cash OASDI benefits). It is far more difficult, however, to make reasonable assumptions concerning the trends of medical care costs and practices for more than 25 years in the future.

In starting the new program, it seemed desirable that it be completely in actuarial balance. To accomplish this result, a contribution schedule was developed that will meet this requirement, according to the underlying cost estimates.

Basic Assumptions

Perhaps the major consideration in preparing actuarial cost estimates for hospital benefits is the fact that—unlike the situation for the monthly cash benefits—an unfavorable cost result is shown when the average earnings level is assumed to increase. The reason is that the hospitalization costs should then be assumed to increase at least at the same rate as the earnings level; if the maximum taxable earnings base is not adjusted accordingly, the taxable earnings will not increase as fast as the hospitalization costs. Accordingly, the assumption of a fixed

taxable earnings base at $6,600 should be considered as a "safety factor" in the cost estimates.

The average total earnings (including earnings above the taxable base) were assumed to increase in the future at a rate of 3 percent, and hospitalization costs by an additional 2.7 percent for a total of 5.7 percent during the next 5 years. The differential was then assumed to decrease gradually from the sixth year on, until it becomes zero after the tenth year. For the last 15 years of the period the hospitalization costs are assumed to increase at the same rate as the average total earnings. It should be noted that, although the taxable earnings base is assumed to remain fixed at $6,600, the earnings level and the hospitalization costs were projected under dynamic assumptions. Similar dynamic assumptions were made for the deductible and coinsurance provisions in the benefits.

The level-cost of the hospital insurance benefits provided in the 1965 law is 1.23 percent of taxable payroll. As shown below, the level equivalent of the contribution schedule is also 1.23 percent of taxable payroll. Accordingly, these estimates indicate that the hospital insurance program is in actuarial balance under the assumptions made.

[Percent]

Item	Level-cost
Hospital and extended-care facility benefits	1.19
Outpatient diagnostic benefits	.01
Home health service benefits	.03
Total benefits	1.23
Level-equivalent of contributions	1.23
Actuarial balance of system	.00

The estimated level-cost of the hospital and related benefits—1.23 percent—consists predominantly of the cost of the hospital benefits. Subdivision of the cost between the hospital benefits and the extended-care facility benefits does not seem feasible. In the early years, virtually all such costs will be for hospital benefits. In later years, it is possible that posthospital extended-care services will be used more extensively and tend to reduce the use of hospitals. From a cost standpoint, then, it seems desirable to consider hospital benefits and extended-care facility benefits in combination.

It is estimated that on July 1, 1966, the total population of the United States (including American Samoa, Guam, Puerto Rico, and the Virgin Islands) who are aged 65 and over will be about 19.1 million. The number who will then be eligible for OASDI or railroad retirement benefits is about 16.90 million. Of the remaining 2.20 million, an estimated 1.98 million will be eligible under the transitional provision for uninsured individuals contained in the amendments. The others—about 220,000—will not be eligible for benefits principally because they are active or retired Federal employees or are alien residents who do not meet the residence and other requirements.

The cost for the 1.98 million uninsured persons who will be blanketed in will be met from the general fund of the Treasury (with the financial transactions involved passing through the hospital insurance trust fund). The costs involved have not been included in the preceding cost analysis. They are estimated to be as follows for the first 5 years of operation (in millions):

Calendar year	*Cost to Treasury*
1966 (6 months)	$140
1967	278
1968	272
1969	264
1970	256

Future Operation of the Trust Fund

Table 10 shows the estimated operation of the hospital insurance trust fund. According to this

TABLE 10.—Hospital insurance trust fund: Estimated progress, intermediate-cost estimate at 3.5-percent interest [1]

[In millions]

Calendar year	Contributions	Benefit payments	Administrative expenses	Interest on fund [2]	Balance in fund at end of year
1966	$1,637	$987	[3] $50	$18	$618
1967	2,756	2,210	66	25	1,123
1968	3,018	2,406	72	46	1,709
1969	3,123	2,623	79	66	2,196
1970	3,229	2,860	86	82	2,561
1971	3,329	3,077	92	91	2,812
1972	3,433	3,303	99	95	2,938
1973	3,891	3,540	106	100	3,283
1974	4,096	3,788	114	108	3,585
1975	4,260	4,047	121	112	3,789
1980	6,113	5,307	159	166	5,790
1985	7,026	6,860	206	259	8,341
1990	9,015	8,797	264	323	10,426

[1] Excludes costs relating to noninsured persons covered for the benefits of this program, which are met out of the general fund of the Treasury.

[2] An interest rate of 3.50 percent is used in determining the level-costs, but in developing the progress of the trust fund a higher rate is used in the first 10 years (4.0 percent for 1966–70 and then a gradually decreasing rate).

[3] Includes administrative expenses incurred in 1965.

estimate, the balance in the trust fund would grow steadily in the future, increasing from about $600 million at the end of 1966 to $2.8 billion 5 years later. Over the long range, the fund would build up steadily, reaching $10.4 billion in 1990 (representing the outgo for 1.2 years at the level of that time). The table is based on the assumption that the contributions for hospital and related benefits for railroad workers will be administered directly by the hospital insurance trust fund.

SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

The supplementary medical insurance system established by the 1965 amendments has an estimated cost for benefit payments incurred and for administrative expenses that will be adequately met in the initial period of operation, July 1, 1966–December 31, 1967, by the individual premium rates prescribed plus the equal matching contributions from the general fund of the Treasury. In subsequent years, the act provides for appropriate adjustment of the premium rates to assure the adequate financing of the program, along with the establishment of sufficient contingency reserves. Provision is made for an advance appropriation from general revenues to provide a contingency reserve during the initial period of operation. It is believed, however, that it will not actually be necessary to draw upon the reserve. Nevertheless, the reserve is a desirable safeguard for the financing basis of the program.

Financing Basis

Coverage under the supplementary medical insurance program can be voluntarily elected, on an individual basis, by virtually all persons aged 65 and over in the United States. This program is intended to be completely self-supporting from the contributions of covered individuals and the matching contributions made from the general fund of the Treasury. For the initial period of operation, the premium rate is established at $3 a month; the total income of the system per participant per month will thus be $6.

Persons who do not elect to come into the system as early as possible will generally have to pay a higher premium rate than $3. Under the act, the monthly premium rate can be adjusted for years after 1967 to reflect the expected experience, including an allowance for a margin for contingencies. All financial operations for this program will be handled through a separate fund, the supplementary medical insurance trust fund.

The concept of actuarial soundness for the medical insurance program differs somewhat from that for the OASDI program and the hospital insurance program. In essence, the medical insurance program is financed on a current-cost basis rather than on a long-range cost basis. The situations are essentially different because the financial support of the medical insurance program comes from a premium rate that is subject to change from time to time, in accordance with the experience actually developing and with the experience anticipated in the near future. The actuarial soundness of the program therefore depends only upon the adequacy of the "short-term" premium rates to meet, on an accrual basis, the benefit payments and administrative expenses (including the accumulation and maintenance of a contingency fund) for the period for which they are established.

Results of Cost Estimates

The cost estimates have been made on a conservative basis, as seems essential in a newly established program of this type. Only a relatively small amount of data is available on insurance experience with respect to physician's services and other medical services covered by the program. It is believed that the $6 per capita income (from the monthly premium of the individual and the matching Government contribution) will be fully adequate to meet the costs of administration and benefit payments incurred, as well as to build up a relatively small contingency fund.

Two cost estimates have been presented with respect to the possible per capita costs. Under the low-cost estimate, the benefits and administrative expenses will, on an accrual basis, represent about 80 percent of the contribution income; under the high-cost estimate, the corresponding ratio will be about 100 percent.

In an individual voluntary-election program such as this, it is impossible to predict accurately what proportion of those eligible to participate in the program will actually do so. Accordingly, the cost estimates have been presented on two bases—an assumed 80-percent participation and an assumed 95-percent participation.

The same per capita costs have been used for both assumptions. It can be argued that with less than complete coverage, such as the 80-percent assumption, there would be antiselection against the program and a higher per capita cost should be used. Although the argument may have some validity, there is a point on the other side of the question—that those who do not participate will consist, to a considerable extent, of uninformed persons with low incomes who will not see the need or have the foresight to participate. The per capita cost for this category will not be significantly lower than the average. Furthermore, the experience under group health insurance indicates that 75-percent participation is adequate protection against antiselection.

It is recognized that there could be a very considerable element of antiselection in an individual voluntary program such as this, if the insured person were required to pay the full cost. Since under the supplementary medical insurance program, however, half the premium is paid from general revenues, the amount paid by the individual is low enough to be very attractive to even the lowest cost groups.

If participation should fall to a very low level, the per capita cost would rise substantially because of antiselection. In this event, the initial contingency fund (a correspondingly larger proportion of the income received) would be available temporarily to meet the higher costs, and an increased premium would then be necessary for the future.

TABLE 11.—Supplementary medical insurance trust fund: Estimated progress [1]

[In millions]

Calendar year	Contributions		Benefit payments	Administrative expenses [2]	Interest on fund	Balance in fund at end of year
	Participants	Government				
Low-cost estimate, 80-percent participation:						
1966	$275	$275	$220	$65	$5	$270
1967	560	560	895	75	15	435
Low-cost estimate, 95-percent participation:						
1966	325	325	$260	80	$5	315
1967	665	665	1,060	90	15	510
High-cost estimate, 80-percent participation:						
1966	275	275	$345	85	$5	125
1967	560	560	1,065	95	5	90
High-cost estimate, 95-percent participation:						
1966	325	325	$410	100	$5	145
1967	665	665	1,260	110	5	110

[1] Excludes the advance appropriation from general revenues that is to provide a contingency reserve during 1966-67 (to be used only if needed and to be repayable).
[2] For 1966, includes those incurred in 1965 and 1966.

Table 11 presents estimates of the operation of the supplementary medical insurance trust fund for the initial period of operations. As indicated previously, four sets of estimates are given, under different assumptions concerning low- and high-cost estimates and low and high participation. A significant balance in the trust fund develops in 1966, because of the lag involved in making benefit payments. This lag, in turn, results from the factors of administrative processing and of the deductible that must be met first before any benefits are payable. In this respect, it will be noted that the income from premium payments by individuals will go into the trust fund beginning early in July 1966, and the matching Government contributions will go into the trust fund simultaneously.