Actuarial Status of the HI and SMI Trust Funds*

This article is adapted from the 1988 Annual Reports of the Medicare Board of Trustees. It presents a summary of the current financial and actuarial status of the Hospital Insurance (HI) and Supplementary Medical Insurance (SMI) Trust Funds. The Board found that the present financing schedule for the HI program is sufficient to ensure the payment of benefits over the next 17–20 years if the intermediate (II–A and II–B) assumptions underlying the estimates are realized. Although steps have been taken to reduce the rate of growth in payments to hospitals, the Board urges Congress to take remedial measures to bring future HI program costs and financing into balance. The Board found the SMI program to be actuarially sound but recommends that Congress take action to curtail the rapid growth in that part of Medicare.

This summary presents an overview of the information contained in the Annual Reports of the Trustees required under Title XVIII of the Social Security Act, Health Insurance for the Aged and Disabled, commonly known as Medicare. The two basic programs under Medicare are:

(1) Hospital Insurance (HI), which pays for inpatient hospital care and other related care of those aged 65 or older and of the long-term disabled; and
(2) Supplementary Medical Insurance (SMI), which pays for physicians' services, outpatient hospital services, and other medical expenses of those aged 65 or older and of the long-term disabled.

The HI program is financed primarily by payroll taxes, with the taxes paid by current workers used primarily to pay benefits to current beneficiaries. However, the HI program maintains a trust fund to provide a small reserve against fluctuations in program experience. The SMI program is financed on an accrual basis with a contingency margin. This method means that the SMI Trust Fund should always be somewhat greater than the claims that have been incurred by enrollees but not yet paid by the program. The trust funds hold all of the income not currently needed to pay benefits and related expenses. The assets of the funds may not be used for any other purpose; however, they are invested in certain interest-bearing obligations of the U.S. Government.

The Secretaries of Treasury, Labor, and Health and Human Services, and two public members serve as trustees of the HI and SMI Trust Funds. The Secretary of Treasury is the Managing Trustee. The Administrator of the Health Care Financing Administration, the agency charged with administering the Medicare program, is the Secretary of the Board of Trustees.

Operations of the HI Program

The Hospital Insurance (HI) program pays for inpatient hospital care and other related care of those aged 65 or older and of the long-term disabled. In calendar year 1987, about 28 million persons aged 65 or older and about 3 million disabled persons younger than age 65 were covered under the HI program, financed primarily by the contributions of 131 million workers through payroll taxes. Payroll taxes during 1987 amounted to $58.6 billion, accounting for 91.5 percent of all HI income. Interest payments to the HI Trust Fund amounted to 7.0 percent of all HI income for 1987. The remaining 1.5 percent of calendar year 1987 income consisted primarily of transfers from the Railroad Retirement Account and

* Adapted from the **1988 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund** and the **1988 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund,** May 5, 1988. Copies of the reports may be obtained from the Office of Public Affairs, Health Care Financing Administration, Room 660 East High Rise, 6325 Security Boulevard, Baltimore, Maryland 21207.

the general fund of the U.S. Treasury (in accordance with provisions for the collection of taxes from railroad workers, the collection of taxes on deemed military service wage credits, and reimbursement to the fund for benefits for certain uninsured persons), and premiums paid by voluntary enrollees. Of the $50.3 billion in HI disbursements, $49.5 billion was for benefit payments; the remaining $0.8 billion was for administrative expenses. Total HI administrative expenses were 1.6 percent of disbursements.

As mentioned above, the HI program is financed primarily by payroll taxes, with the taxes paid by current workers used primarily to pay benefits to current beneficiaries. Income not currently needed to pay benefits and related expenses is held in the HI Trust Fund. The assets of the fund may not be used for any purpose other than those designated and may be invested only in certain interest-bearing obligations of the U.S. Government.

The HI contribution rates applicable to taxable earnings in each of the calendar years 1984 and later are shown in table 1. The maximum taxable amounts of annual earnings are shown for 1984 through 1988. After 1988, the automatic increase provisions in section 230 of the Social Security Act determine the maximum taxable amount.

Actuarial Status of the Trust Fund

The Board of Trustees recommends that it is advisable for the Hospital Insurance program to maintain a balance in the trust fund equal to a minimum of one-half year's disbursements, as a reserve against fluctuations in program experience and to provide time for any needed legislation to remedy unexpected imbalances. At the beginning of 1988, the trust fund was above the minimum desired level.

Projections were made under four alternative sets of assumptions: optimistic, two intermediate (alternatives II-A and II-B), and pessimistic. Under both sets of intermediate assumptions, the trust fund ratio—defined as the ratio of assets at the beginning of the year to disbursements during the year—is projected to increase until about 1994 and then to decline steadily until the fund is completely exhausted shortly after the turn of the century. Under the more optimistic set of assumptions (alternative I), the trust fund is projected to remain solvent throughout the first two 25-year projection periods, with trust fund exhaustion occurring in 2044. Under the more pessimistic set of assumptions (alternative III), the trust fund ratio is projected to increase to a level of about 123 percent in 1991 and then to decrease rapidly until the fund is exhausted in 1999.

Table 2 summarizes the estimated operations of the

Table 1.—Contribution rates and maximum taxable amount of annual earnings

Calendar year	Maximum taxable amount of annual earnings	Contribution rate (percent of taxable earnings)	
		Employees and employers, each	Self-employed
1984	$37,800	1.30	2.60
1985	39,600	1.35	2.70
1986	42,000	1.45	2.90
1987	43,800	1.45	2.90
1988	45,000	1.45	2.90
Changes scheduled in present law:			
1989 and later	[1]	1.45	2.90

[1] Subject to automatic increase.

HI Trust Fund under the four alternative sets of assumptions. Chart 1 shows historical trust fund ratios for recent years and projected ratios under the four sets of assumptions.

The adequacy of the financing of the HI program on a long-range basis is measured by comparing on a year-by-year basis the actual tax rates specified by law with the corresponding costs of the program, expressed as percentages of taxable payroll. The actuarial balance is defined to be the excess of the average tax rate for the valuation period over the average cost of the program expressed as a percentage of taxable payroll.[1] Table 3 compares the actuarial balance under each of the four sets of assumptions for the 75-year projection period 1988–2062.[2] Chart 2 shows the year-by-year costs as a percent of taxable payroll for each of the four sets of assumptions, as well as the scheduled tax rates. The cost figures in this chart do not include amounts for maintaining the trust fund at the level of at least a half-year's disbursements.

Chart 2 emphasizes the inadequacy of the financing of the HI program by illustrating the divergence of the program costs and scheduled tax rates under each set of assumptions.

Table 4 presents a comparison of the projected ex-

[1] In the 1987 report, the actuarial balance was defined as the excess of the average tax rate for the valuation period over the average cost of the program, expressed as a percentage of taxable payroll, for the same period, where cost included (1) program expenditures and (2) a small amount to maintain the trust fund at the level of at least a half-year's outgo after accounting for the offsetting effect of interest earnings. In the 1988 report, the actuarial balance is defined as the excess of the average tax rate for the valuation period over the average cost of the program, expressed as a percentage of taxable payroll, for the same period, where cost represents program expenditures only. This approach is more in line with the reporting methods of the **1988 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.**

[2] Multiyear actuarial balances in the 1988 report are computed on the average cost basis, as described on page 45 of the **1988 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund.**

Table 2.—Estimated operations of the Hospital Insurance Trust Fund during calendar years 1987-2010, under alternative sets of assumptions

[Dollar amounts in billions]

Calendar year	Total income	Total disbursements	Net increase in fund	Fund at end of year	Ratio of assets to disbursements [1] (percent)
Alternative I					
1987 [2]	$64.1	$50.3	$13.8	$53.7	79
1988	69.3	53.0	16.2	70.0	101
1989	74.3	57.6	16.8	86.7	122
1990	78.5	63.4	15.1	101.8	137
1991	85.5	68.5	17.0	118.8	149
1992	91.1	73.4	17.8	136.6	162
1993	96.6	78.1	18.5	155.0	175
1994	102.1	83.0	19.1	174.1	187
1995	107.4	87.9	19.5	193.6	198
2000	139.1	114.6	24.5	304.9	245
2005	181.4	145.5	35.9	458.6	291
2010	235.6	183.7	52.0	683.3	344
Alternative II-A					
1987 [2]	64.1	50.3	13.8	53.7	79
1988	69.1	53.1	16.0	69.8	101
1989	74.0	58.4	15.7	85.4	120
1990	78.7	65.0	13.7	99.1	131
1991	85.1	71.2	13.9	113.0	139
1992	90.7	77.4	13.3	126.3	146
1993	96.2	84.0	12.2	138.5	150
1994	101.7	91.0	10.7	149.2	152
1995	107.3	98.4	8.8	158.0	152
1996	113.0	106.2	6.8	164.8	149
1997	118.8	114.3	4.5	169.3	144
1998	124.9	122.9	2.0	171.3	138
1999	131.2	132.2	-1.1	170.2	130
2000	137.6	142.0	-4.4	165.8	120
2001	144.3	152.0	-7.7	158.0	109
2002	151.1	162.7	-11.6	146.5	97
2003	158.1	174.1	-16.1	130.4	84
2004	165.3	186.2	-20.9	109.5	70
2005	172.7	198.6	-25.9	83.6	55
2006	180.1	212.0	-31.9	51.7	39
2007	187.6	226.7	-39.1	12.6	23
2008	195.0	243.2	-48.2	(3)	5
Alternative II-B					
1987 [2]	64.1	50.3	13.8	53.7	79
1988	68.9	53.1	15.9	69.6	101
1989	73.6	58.4	15.2	84.8	119
1990	78.2	65.2	13.0	97.8	130
1991	84.3	71.7	12.7	110.5	136
1992	90.3	78.5	11.8	122.2	141
1993	96.3	85.9	10.4	132.7	142
1994	102.5	93.8	8.7	141.4	142
1995	108.7	102.2	6.5	147.9	138
1996	115.1	111.2	3.9	151.8	133
1997	121.5	120.4	1.1	152.9	126
1998	128.2	130.4	-2.2	150.7	117
1999	134.9	141.2	-6.3	144.4	107
2000	141.9	152.7	-10.8	133.6	95
2001	149.0	164.5	-15.5	118.0	81
2002	156.2	177.2	-21.0	97.0	67
2003	163.6	190.9	-27.3	69.7	51
2004	171.2	205.3	-34.1	35.7	34
2005	179.0	220.3	-41.3	(4)	16
Alternative III					
1987 [2]	64.1	50.3	13.8	53.7	79
1988	68.2	53.1	15.1	68.8	101
1989	71.6	58.7	12.9	81.8	117
1990	77.2	66.8	10.4	92.2	122
1991	82.8	75.1	7.7	99.9	123
1992	86.8	82.8	4.0	103.9	121
1993	92.8	92.6	.2	104.1	112
1994	98.9	103.8	-4.9	99.3	100
1995	104.7	116.1	-11.3	87.9	86
1996	110.4	129.2	-18.9	69.0	68
1997	115.7	143.3	-27.7	41.4	48
1998	120.4	158.5	-38.1	3.3	26
1999	125.1	175.4	-50.2	(5)	2

[1] Ratio of assets in the trust fund at the beginning of the year to disbursements during the year.

[2] Figures for 1987 represent actual experience.

[3] Trust fund depleted in calendar year 2008.

[4] Trust fund depleted in calendar year 2005.

[5] Trust fund depleted in calendar year 1999.

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

Table 3.—Seventy-five year actuarial balance of the Hospital Insurance program, under alternative sets of assumptions[1]

Item	Alternative			
	I	II-A	II-B	III
Average contribution rate[2]	2.90	2.90	2.90	2.90
Average program expenditures[3,4]	3.05	5.01	5.25	9.53
Actuarial balance[5]	-.15	-2.11	-2.35	-6.63
Trust fund building and maintenance[3,6]	+.00	+.01	+.02	+.12
Program cost, including trust fund building and maintenance[3,7]	3.05	5.02	5.27	9.65
Augmented balance[8]	-.15	-2.12	-2.37	-6.75

[1] For the 75-period 1988-2062.
[2] As scheduled under present law.
[3] Expressed as a percentage of taxable payroll.
[4] Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis.
[5] Difference between the average contribution rate (tax rate scheduled in the law) and program expenditures.
[6] Allowance for building and maintaining the trust fund balance at the level of at least a half-year's outgo after accounting for the offsetting effect of interest.
[7] Sum of program expenditures and trust fund building and maintenance.
[8] The augmented balance is the difference between the average contribution rate and the average cost of the program, including trust fund building and maintenance.
Note: The balances in this table do not use the new level-financing methodology used in the **1988 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Funds.**

perience in the 1987 and 1988 Trustees' Reports. As the table indicates, the projections in the 1988 report show that the fund will be depleted several years later than in the 1987 report under all alternative projections. This change is primarily due to legislation passed since the 1987 report was issued. The following tabulation shows the major reasons for the change in the 75-year actuarial balance of the HI program from the 1987 report. The section entitled "Actuarial Status of the Trust Fund" in the 1988 Annual Report discusses more completely the reasons for the change in the actuarial balance.

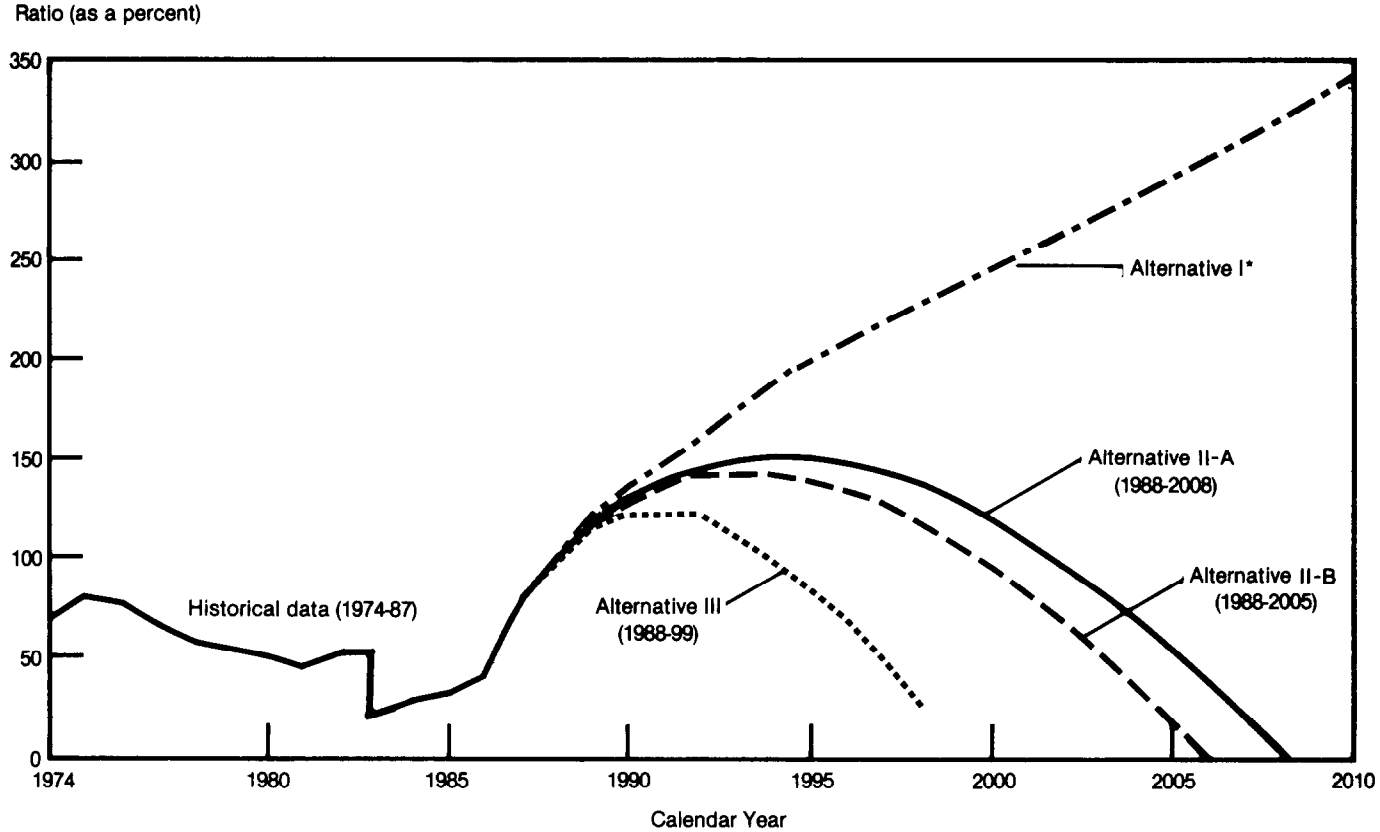
Item	Percent
Actuarial balance, alternative II-B, 1987 report[1]	-2.30
Changes:	
Net effect, all changes	-.05
Valuation period	-.06
Base estimate	+.09
Legislation since the 1987 report	+.40
Economic and demographic assumptions	-.24
Hospital assumptions	-.24
Actuarial balance, alternative II-B, 1988 report[1]	-2.35

[1] See table 4, footnotes 1 and 2.

Conclusion

The present financing schedule for the Hospital Insurance program is sufficient to ensure the payment

Chart 1. — Short-term Hospital Insurance Trust Fund ratios



*The trust fund is depleted in 2044 under alternative I.

Note: The trust fund ratio is defined as the ratio of assets at the beginning of the year to disbursements during the year.

Table 4.—Status of the Hospital Insurance Trust Fund

Assumptions	Year trust fund is exhausted as published in the—		75-year actuarial balance[1,2] of the HI program (percent) as published in the—	
	1987 report	1988 report	1987 report	1988 report
Alternative I	2043	2044	-0.11	-0.15
Alternative II-A	2005	2008	-2.02	-2.11
Alternative II-B	2002	2005	-2.30	-2.35
Alternative III	1996	1999	-6.55	-6.63

[1] The actuarial balance of the Hospital Insurance program was defined in the 1987 report as the excess of the average tax rate for the valuation period over the average cost of the program, including an amount for trust fund building and maintenance and expressed as a percentage of taxable payroll, for the same period. Trust fund building and maintenance is not included in the definition of the actuarial balance in the 1988 report. For purposes of comparison, the figures from the 1987 report have been restated according to the 1988 report's definition of the actuarial balance. This approach is more in line with the reporting methods of the **1988 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.**

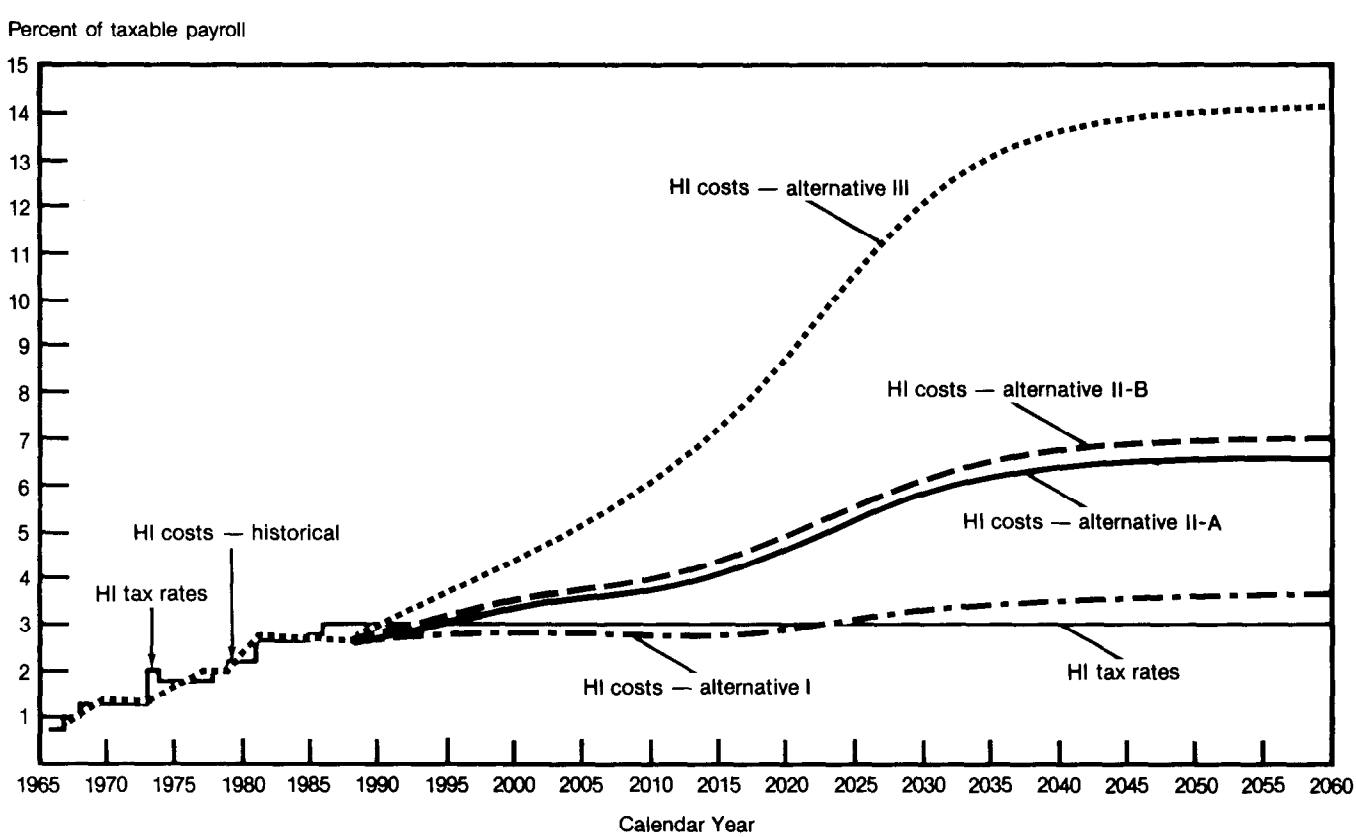
[2] Multiyear actuarial balances in the 1988 report are computed on the average cost basis, as described on page 45 of the **1988 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund.**

of benefits over the next 17-20 years if the intermediate assumptions underlying the estimates are realized. The trust fund is exhausted in 2008 and 2005 under alternatives II-A and II-B, respectively. Under the more pessimistic alternative III, the fund is exhausted in 1999. Under the more optimistic alternative I, the trust fund is exhausted in 2044.

Currently more than four covered workers support each HI enrollee. This ratio will begin to decline rapidly early in the next century. By the middle of that century, only about two covered workers will support each enrollee. Not only are the anticipated reserves and financing of the HI program inadequate to offset this demographic change but, under all but the most optimistic assumptions, the trust fund is projected to become exhausted even before the major demographic shift begins to occur. Exhaustion is projected to occur shortly after the turn of the century under the intermediate assumptions and could occur as early as 1999 if the pessimistic assumptions are realized.

The Board notes that promising steps to begin reducing the rate of growth in payments to hospitals have already been taken, including the implementation of the prospective payment system, for example. Initial experience under the prospective payment system for hospitals suggests that this payment mechanism is an effective means of constraining the growth in hospital payments and improving the efficiency of

Chart 2.— Estimated Hospital Insurance program cost and tax rates



Note: Hospital insurance projected costs shown are expenditures attributable to insured beneficiaries only, on an incurred basis, without an allowance for building and maintaining the trust fund balance at the level of at least a half-year's outgo.

the hospital industry. Efforts focused on improving the efficiency and reducing the costs of the health care delivery system need to be continued, in close combination with mechanisms that will assure that the quality of health care is not adversely affected.

Because of the magnitude of the projected actuarial deficit in the HI program and the probability that the HI Trust Fund will be exhausted shortly after the end of this century, the Board believes that early corrective action is essential to avoid the need for later, potentially precipitous changes. The Board, therefore, urges that Congress take early remedial measures to bring future HI program costs and financing into balance and to maintain an adequate trust fund against contingencies.

SMI Trust Fund

The Supplementary Medical Insurance (SMI) program pays for physician services, outpatient hospital services, and other medical expenses for both those aged 65 or older and for the long-term disabled. In calendar year 1987, 31.1 million persons were covered under the SMI program. General revenue contributions during 1987 amounted to $23.6 billion, accounting for 74.0 percent of all SMI income. About 23.3 percent of all income resulted from the premiums paid by the enrollees, with interest payments to the SMI fund accounting for the remaining 2.7 percent. Of the $31.7 billion in SMI disbursements, $30.8 billion was for benefit payments; the remaining $0.9 billion was spent for administrative expenses. Total SMI administrative expenses were 2.9 percent of disbursements.

The SMI program is financed on an accrual basis with a contingency margin. This method of financing means that the SMI Trust Fund should always be somewhat greater than the claims that have been incurred by enrollees but not yet paid by the program. The trust fund holds all of the income not currently needed to pay benefits and related expenses. The assets of the fund may not be used for any other purpose; however, they may be invested in certain interest-bearing obligations of the U.S. Government.

Financing for the SMI program is established annually on the basis of standard monthly premium rates (paid by or on behalf of all participants) and monthly actuarial rates determined separately for aged and disabled beneficiaries (on which general revenue contributions are based). Prior to the 6-month transition period (July 1, 1983, through December 31, 1983), these rates were applicable in the 12-month periods ending June 30. Beginning January 1, 1984, the annual basis was changed to calendar years. Monthly actuarial rates are equal to one-half the monthly amounts necessary to finance the SMI program. These rates determine the amount to be contributed from general revenues on behalf of each enrollee. Based on the formula in the law, the Government contribution effectively makes up the difference between twice the monthly actuarial rates and the standard monthly premium rate. Chart 3 presents these values for financing periods since 1974. This chart clearly indicates the extent to which general revenue financing is the major source of income for the program.

Operations of the SMI Program

Historical and projected operations of the fund through 1990 are shown in tables 5 and 6. As can be seen, income has exceeded disbursements for most of the historical years. At the time that financing was being established for calendar year 1988, assets appeared not to be sufficient to cover outstanding liabilities and an appropriate contingency for these liabilities. Therefore, the financing was established to amortize this unfunded liability and begin to build the assets to a level necessary to maintain the actuarial soundness of the program. On an accrual basis, income is projected to exceed disbursements in calendar year 1988. However, the trust fund balance is projected to decrease through calendar year 1988. This apparent inconsistency arises from a provision in the law whereby the Social Security benefit checks, normally delivered on January 3, 1988, were delivered on December 31, 1987. Consequently, the premiums withheld from the checks and the general revenue contribution were added to the SMI Trust Fund in calendar year 1987 and not in calendar year 1988. If the trust fund balance were adjusted to credit these transactions in calendar year 1988, the trust fund balance would be projected to increase through calendar year 1988 and would increase in future years.

The financial status of the program depends on both the total net assets and liabilities. It is, therefore, necessary to examine the incurred experience of the program, since it is this experience that is used to determine the actuarial rates discussed above and that forms the basis of the concept of actuarial soundness as it relates to the SMI program.

Actuarial Soundness of SMI Program

The concept of actuarial soundness, as it applies to the SMI program, is closely related to the concept as it applies to private group insurance. The SMI program is essentially yearly renewable term insurance financed from premium income paid by the enrollees,

Table 5.—Estimated progress of the Supplementary Medical Insurance Trust Fund (cash basis) fiscal years 1988–90 and actual data for 1967–87

[In millions]

Fiscal year [1]	Income				Disbursements			Balance in fund at end of year [4]
	Total income	Premiums from enrollees	Government contributions [2]	Interest and other income [3]	Total disbursements	Benefit payments	Administrative expenses	
Historical:								
1967	$1,285	$647	$623	$15	$799	$664	[5] $135	$486
1968	1,353	698	634	21	1,532	1,390	142	307
1969	1,911	903	984	24	1,840	1,645	195	378
1970	1,876	936	928	12	2,196	1,979	217	57
1971	2,516	1,253	1,245	18	2,283	2,035	248	290
1972	2,734	1,340	1,365	29	2,544	2,255	289	481
1973	2,902	1,427	1,430	45	2,637	2,391	246	746
1974	3,809	1,704	2,029	76	3,283	2,874	409	1,272
1975	4,322	1,887	2,330	105	4,170	3,765	405	1,424
1976	4,994	1,951	2,939	104	5,200	4,672	528	1,219
T.Q.	1,421	539	878	4	1,401	1,269	132	1,239
1977	7,383	2,193	5,053	137	6,342	5,867	475	2,279
1978	9,045	2,431	6,386	228	7,356	6,852	504	3,968
1979	9,839	2,635	6,841	363	8,814	8,259	555	4,994
1980	10,275	2,928	6,932	415	10,737	10,144	593	4,532
1981	12,439	3,320	8,747	372	13,228	12,345	883	3,743
1982	17,627	3,831	13,323	473	15,560	14,806	754	5,810
1983	19,147	4,227	14,238	682	18,311	17,487	824	6,646
1984	22,525	4,907	16,811	807	20,372	19,473	899	8,799
1985	24,577	5,524	17,898	1,155	22,730	21,808	922	10,646
1986	25,004	5,699	18,076	1,228	26,217	25,169	1,049	9,432
1987	27,797	6,480	20,299	1,018	30,837	29,937	900	6,392
Alternative A:								
1988	34,840	8,719	25,418	703	35,059	33,992	1,067	6,173
1989	42,211	10,341	31,137	733	39,470	38,347	1,123	8,914
1990	46,177	11,065	34,212	900	44,753	43,568	1,185	10,338
Alternative B:								
1988	34,840	8,719	25,418	703	35,057	33,992	1,065	6,175
1989	42,213	10,341	31,137	735	39,475	38,356	1,119	8,913
1990	46,245	11,095	34,242	908	44,790	43,611	1,179	10,368

[1] For 1967 through 1976, fiscal years cover the interval from July 1 through June 30; the 3-month interval from July 1, 1976, through September 30, 1976, is labeled "T.Q.," the transition quarter; fiscal years 1977–90 cover the interval from October 1 through September 30.

[2] The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.

[3] Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income.

[4] The financial status of the program depends on both the total net assets and the liabilities of the program (see table 9 on page 33 of the 1988 Annual Report).

[5] Administrative expenses shown include those paid in fiscal years 1966 and 1967.

from income contributed from general revenue in proportion to premium payments, and from interest payments on the trust fund assets.

In testing the actuarial soundness of the SMI program, it is not appropriate to look beyond the period for which the enrollee premium rate and level of general revenue financing have been established. The primary tests of actuarial soundness, then, are that (1) assets and income for years for which financing has been established be sufficient to meet the projected benefits and associated administrative expenses incurred for that period and (2) assets be sufficient to cover projected liabilities that will have been incurred by the end of that time but will not have been paid yet. Even if these tests of actuarial soundness are not met, the program can continue to operate if the trust fund remains at a level adequate to permit the payment of claims as presented. However, to protect against the possibility that cost increases under the program will be higher than assumed, assets should be sufficient to cover the impact of a moderate degree of variation between actual and projected costs.

The primary tests for actuarial soundness and trust fund adequacy can be viewed by direct examination of absolute dollar levels. In providing an appropriate contingency or margin for variation, however, there must also be some relative measure. The relative measure or ratio used for this purpose is the ratio of the assets less liabilities to the following year's incurred expenditures. Chart 4 shows this ratio for historical years and for projected years under the intermediate assumptions (alternative II–B), as well as high (pessimistic) and low (optimistic) cost sensitivity scenarios.

Financing for calendar year 1988 was established to amortize the unfunded liability and to begin to build the excess of assets over liabilities to a more appropriate level to maintain the actuarial soundness of the trust fund.

Conclusion

The financing established through December 1988 is sufficient to cover projected benefits and administrative costs incurred through that time period and to maintain a level of trust fund assets that is adequate to cover the impact of a small degree of variation between actual costs and projected costs. The SMI program can thus be said to be actuarially sound.

Although the SMI program is financially sound, the Board notes with concern the rapid growth in the cost of the program. Growth rates have been so rapid that outlays of the program have doubled in the last 5 years. For the same time period, the program grew 40 percent faster than the economy as a whole. This growth rate shows no sign of abating despite recent efforts to control the cost of the program. The Board recommends that Congress continue to work to curtail the rapid growth in the SMI program.

Table 6.—Estimated progress of Supplementary Medical Insurance Trust Fund (cash basis) calendar years 1988–90 and actual data for 1966–87

[In millions]

Calendar year	Income				Disbursements			Balance in fund at end of year [3]
	Total income	Premiums from enrollees	Government contributions [1]	Interest and other income [2]	Total disbursements	Benefit payments	Administrative expenses	
Historical:								
1966	$324	$322	$0	$2	$203	$128	$75	$122
1967	1,597	640	933	24	1,307	1,197	110	412
1968	1,711	832	858	21	1,702	1,518	184	421
1969	1,839	914	907	18	2,061	1,865	196	199
1970	2,201	1,096	1,093	12	2,212	1,975	237	188
1971	2,639	1,302	1,313	24	2,377	2,117	260	450
1972	2,808	1,382	1,389	37	2,614	2,325	289	643
1973	3,312	1,550	1,705	57	2,844	2,526	318	1,111
1974	4,124	1,804	2,225	95	3,728	3,318	410	1,506
1975	4,673	1,918	2,648	107	4,735	4,273	462	1,444
1976	5,977	2,060	3,810	107	5,622	5,080	542	1,799
1977	7,805	2,247	5,386	172	6,505	6,038	467	3,099
1978	9,056	2,470	6,287	299	7,755	7,252	503	4,400
1979	9,768	2,719	6,645	404	9,265	8,708	557	4,902
1980	10,874	3,011	7,455	408	11,245	10,635	610	4,530
1981	15,374	[4] 3,722	[4] 11,291	361	14,028	13,113	915	5,877
1982	16,580	[4] 3,697	[4] 12,284	599	16,227	15,455	772	6,230
1983	19,824	4,236	14,861	727	18,984	18,106	878	7,070
1984	23,180	5,167	17,054	959	20,552	19,661	891	9,698
1985	25,106	5,613	18,250	1,243	23,880	22,947	933	10,924
1986	24,665	5,722	17,802	1,141	27,299	26,239	1,060	8,291
1987	31,844	[5] 7,409	[5] 23,560	875	31,740	30,820	920	8,394
Alternative A:								
1988	35,334	[5] 8,711	[5] 25,991	632	36,103	35,024	1,079	7,625
1989	42,018	10,653	30,527	838	40,733	39,595	1,138	8,910
1990	47,596	11,201	35,441	954	46,240	45,039	1,201	10,266
Alternative B:								
1988	35,335	[5] 8,711	[5] 25,991	633	36,101	35,025	1,076	7,628
1989	42,023	10,653	30,527	843	40,746	39,612	1,134	8,905
1990	47,689	11,241	35,481	967	46,290	45,096	1,194	10,304

[1] The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.

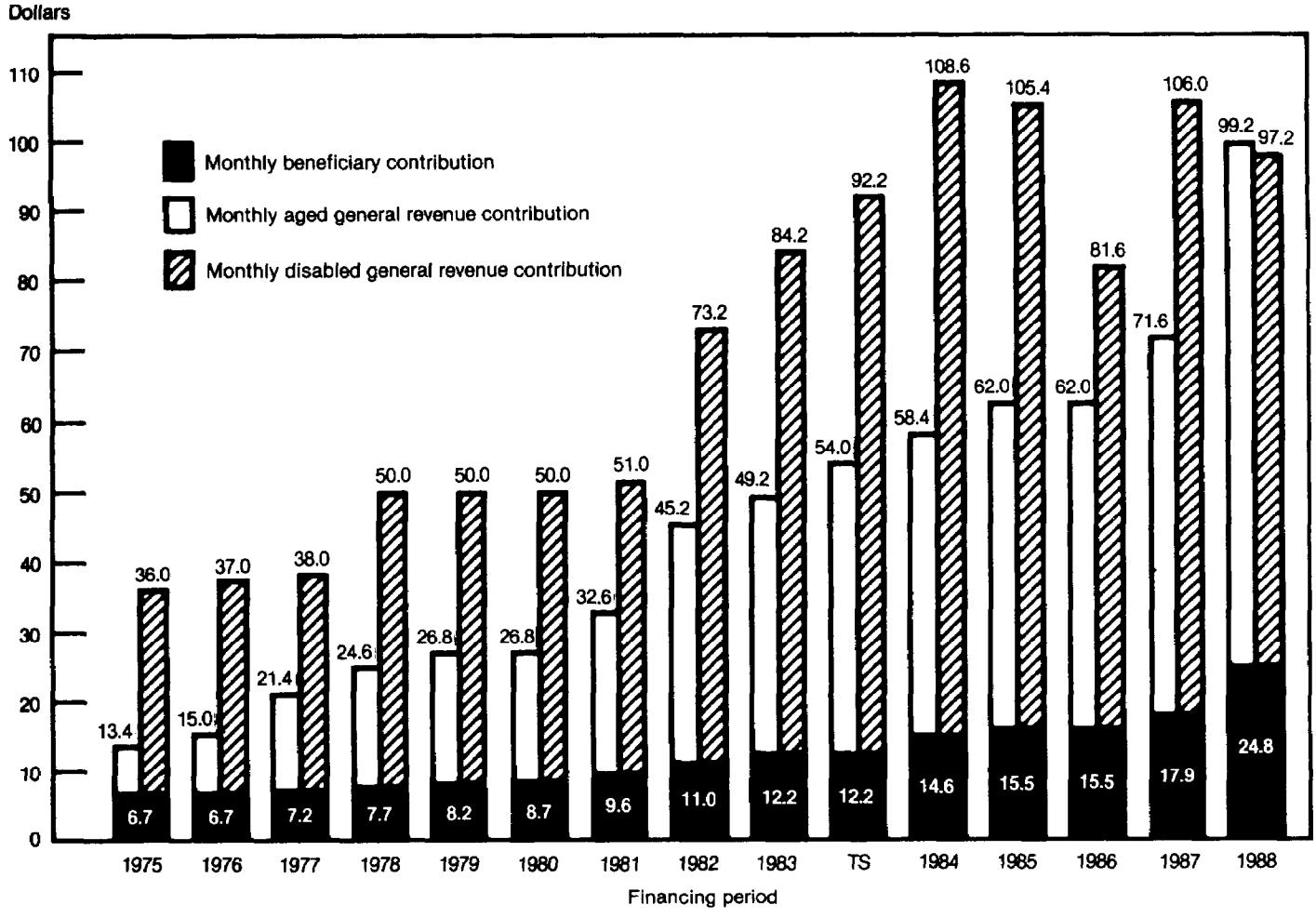
[2] Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income.

[3] The financial status of the program depends on both the total net assets and the liabilities of the program (see table 9 on page 33 of the 1988 Annual Report).

[4] Section 708 of title VII of the Social Security Act modified the provisions for the delivery of Social Security benefit checks when the regularly designated delivery day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January 1982 occurred on December 31, 1981. Consequently, the SMI premiums withheld from the checks ($264 million) and the general revenue matching contributions ($883 million) were added to the SMI Trust Fund on December 31, 1981. These amounts are excluded from the premium income and general revenue income for calendar year 1982.

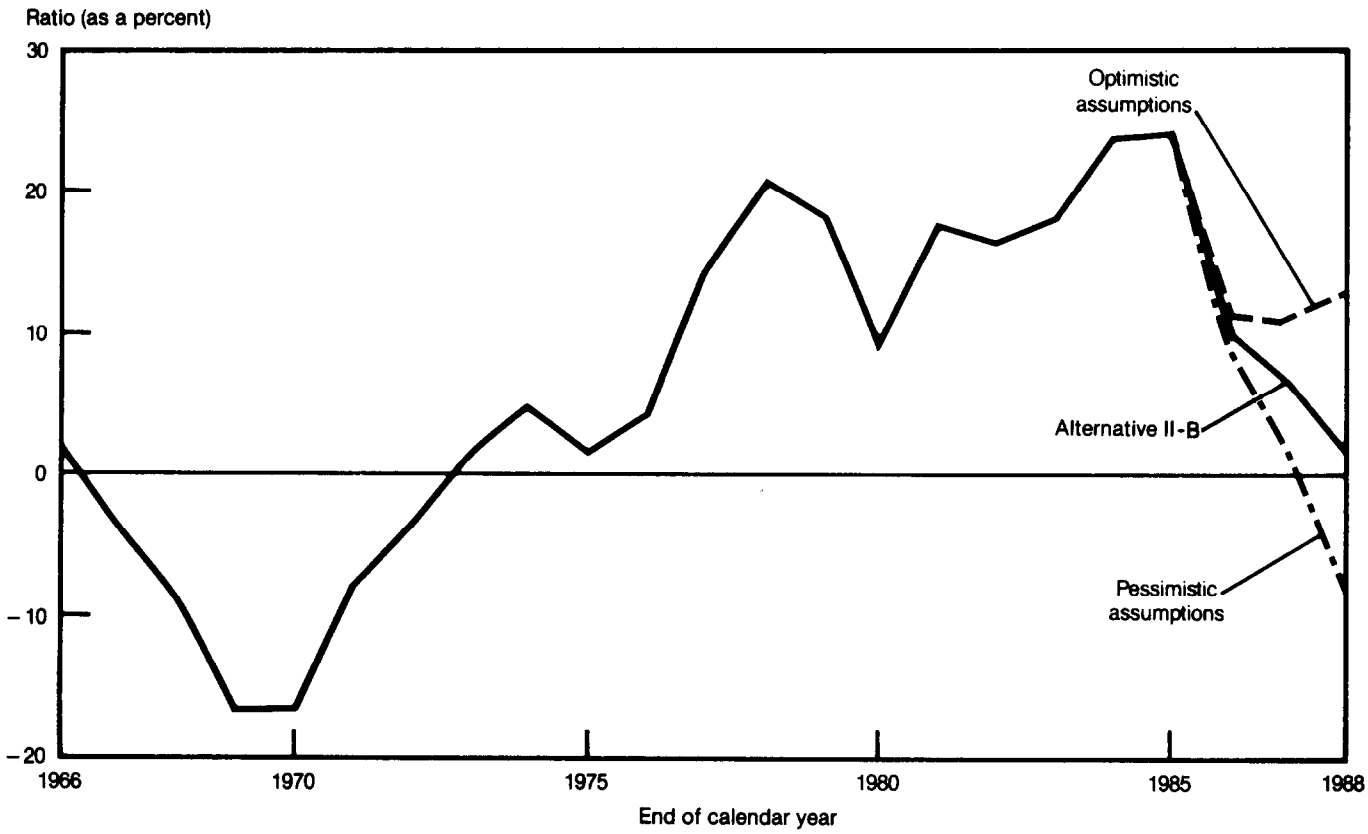
[5] Delivery of benefit checks normally due January 1988 occurred on December 31, 1987. Consequently, the SMI premiums withheld from the checks ($692 million) and the general revenue matching contributions ($2,178 million) were added to the SMI Trust Fund on December 31, 1987. These amounts are excluded from the premium income and general revenue income for calendar year 1988 (see footnote 4 above).

Chart 3. - Supplementary Medical Insurance monthly per capita income



Financing period: For periods 1983 and earlier, the financing period is July 1 through June 30.
Transitional semester (TS), the financing period is July 1, 1983 through December 31, 1983.

Chart 4. — Actuarial status of the Supplementary Medical Insurance Trust Fund



Note: The actuarial status of the SMI Trust Fund is measured by the ratio of the end-of-year assets less liabilities to the following year incurred expenditures.