

## Actuarial Status of the HI and SMI Trust Funds\*

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This article presents the "Summary of the 1991 Annual Reports of the Medicare Board of Trustees." The Board reports that the present financing schedule for the Hospital Insurance (HI) program is sufficient to ensure the payment of benefits over the next 14 years with trust fund exhaustion occurring in 2005 if the alternative II (intermediate) assumptions are realized. Although the HI Trust Fund is financially adequate based on the short-range test, the Board believes that corrective action will be needed very soon to avoid the need for potentially precipitous changes later. For the Supplementary Medical Insurance (SMI) Trust Fund, the Board concludes that funds are sufficient to cover projected benefits and administrative costs through December 1991, but notes with concern the rapid growth in the cost of the program and recommends that Congress continue to work to curtail the rapid growth in the cost of the SMI program.

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\*Adapted from the **1991 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund** and the **1991 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund**, May 17, 1991. Single copies of the reports may be obtained from the Office of the Actuary, Health Care Financing Administration, Mailstop M-1, Equitable Building, 1705 Whitehead Road, Baltimore, Maryland 21207.

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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. There are two basic programs under Medicare:

- (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 physician 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 and their employers used primarily to pay benefits for current beneficiaries. However, the HI program maintains a trust fund to provide a small reserve against fluctuations and to anticipate changes in the demographic makeup of the population. The SMI program essentially is yearly renewable term insurance financed from premium income paid by the enrollees and from income contributed from general revenue. This means that the SMI program is

financed on an accrual basis with a contingency margin, and, therefore, 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, 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.

## HI Summary

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The Hospital Insurance program pays for inpatient hospital care and other related care for those aged 65 or older, and for the long-term disabled. In calendar year 1990, HI covered about 30 million aged and about 3 million disabled enrollees at a cost of \$67.0 billion. Of this amount, \$66.2 billion was for benefit payments and \$0.8 billion, 1.1

percent of total disbursements, was for administrative expenses.

The payroll taxes of 138 million workers and their employers provided the primary source of financing for the HI program in calendar year 1990. Payroll taxes amounting to \$72.0 billion, or 89.6 percent of total income, were collected during the year. Interest credits to the HI Trust Fund amounted to 10.5 percent of total income. The remaining calendar year 1990 income consisted mostly of a transfer from the Railroad Retirement program, transfers to and from the general fund of the Treasury, and premiums paid by voluntary enrollees.<sup>1</sup>

The HI program is primarily financed by payroll taxes, with the taxes paid by current workers and their employers used mainly to pay benefits for current beneficiaries. Income not currently needed to pay benefits and related expenses is held in the HI Trust Fund. The

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<sup>1</sup>It can be seen that these minor calendar year 1990 income categories account for -0.1 percent of total income. They contribute in a negative fashion because of the magnitude of a transfer from the HI Trust Fund to the general fund of the Treasury. This transfer was an adjustment to the lump-sum transfer previously made for military wage credits, as mandated by the provisions of Public Law 98-21. This transfer is discussed in the "Nature of the Trust Fund" and "Expected Operations and Status of the Trust Fund During the Period October 1, 1990 to December 31, 1993" sections of the full report.

assets of the fund may not be used for any other purpose. While in the fund, the assets are invested in certain interest-bearing obligations of the U.S. Government.

The HI contribution rates applicable to taxable earnings in each of the calendar years 1987 and later are shown in table 1. The maximum taxable amounts of annual earnings are shown for 1987-91. After 1991, the automatic adjustment provisions in section 230 of the Social Security Act determine the maximum taxable amount.

### Actuarial Status of the Trust Fund

The adequacy of the HI program's scheduled financing to support program costs in the future is examined under three alternative sets of assumptions: optimistic, intermediate, and pessimistic. The intermediate set of assumptions represents the Board's best estimate of the expected future economic and demographic trends that will affect the financial status of the program. Under the intermediate set of assumptions (alternative II), 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 1995 and then decline steadily

until the fund is completely exhausted in 2005. Under the more optimistic set of assumptions (alternative I), the trust fund is projected to remain solvent throughout the first 25-year projection period, with trust fund exhaustion occurring in 2018. Under the more pessimistic set of assumptions (alternative III), the trust fund ratio is projected to increase to a level of about 146 percent in 1993 and then decrease rapidly until the fund is exhausted in 2001.

Table 2 summarizes the estimated operations of the HI Trust Fund that have just been described, under the three alternative sets of assumptions. As can be seen from table 2, the new short-range test of financial adequacy, which is described in the "Actuarial Status of the Trust Fund" section of the full report, is met by the fund, under the alternative II assumptions. However, it should be noted that the trust fund is expected to be exhausted shortly after the 10-year period examined in the short-range test. Chart 1 shows historical trust fund ratios for recent years and projected ratios under the three sets of assumptions. Chart 2 shows end-of-year trust fund balances for recent historical years and for

projected years under the three sets of assumptions.

The adequacy of the current law financing scheduled for the HI program on a long-range basis is measured by comparing on a year-by-year basis the tax rates specified by law with the corresponding incurred costs of the program, expressed as percentages of taxable payroll. However, the financial status of the program is often summarized, over a specific projection period, by a single measure known as the actuarial balance. The actuarial balance is defined to be the excess of the summarized tax rate for the valuation period over the summarized cost rate (insured, incurred costs expressed as a percentage of taxable payroll) of the program for the same period. The "Actuarial Status of the Trust Fund" section of the full report describes the method used to calculate summarized costs rates, tax rates, and actuarial balances in this report. Table 3 displays the actuarial balances under each of the three sets of assumptions for the 25-year projection period 1991-2015, the 50-year projection period 1991-2040, the 75-year projection period 1991-2065, and for each 25-year subperiod. The trust fund does not meet the new long-range test of financial adequacy, as mentioned in the "Actuarial Status of the Trust Fund" section of the full report, under any of the three assumption sets. Chart 3 shows the year-by-year costs as a percent of taxable payroll for each of the three sets of assumptions, as well as the scheduled tax rates. Chart 3 illustrates the inadequacy of the current financing of the HI program by displaying the divergence of the program costs and scheduled tax rates under each set of the assumptions.

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

Calendar years	Maximum taxable amount of annual earnings	Contribution rate (Percent of taxable earnings)	
		Employees and employers, each	Self-employed
1987 .....	\$43,800	1.45	2.90
1988 .....	45,000	1.45	2.90
1989 .....	48,000	1.45	2.90
1990 .....	51,300	1.45	2.90
1991 .....	125,000	1.45	2.90
Changes scheduled in present law			
1992 and later.....	Subject to automatic adjustment	1.45	2.90

**Table 2.—Estimated operations of the Hospital Insurance Trust Fund during calendar years 1990-2015, 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 <sup>1</sup> (percent)
Alternative I					
1990 <sup>2</sup>	\$80.4	\$67.0	\$13.4	\$98.9	128
1991	89.8	72.5	17.3	116.3	136
1992	97.3	77.2	20.1	136.3	150
1993	104.1	82.7	21.5	157.8	165
1994	111.3	89.9	21.4	179.2	176
1995	118.4	97.5	20.9	200.1	184
2000	158.4	142.8	15.6	289.6	192
2005	203.8	194.4	9.4	347.1	174
2010	258.9	265.4	-6.5	353.1	135
2015	318.1	373.6	-55.5	191.0	66
Alternative II					
1990 <sup>2</sup>	\$80.4	\$67.0	\$13.4	\$98.9	128
1991	89.5	72.7	16.8	115.8	136
1992	96.9	78.8	18.1	133.9	147
1993	103.6	85.7	17.9	151.8	156
1994	110.4	94.7	15.7	167.5	160
1995	117.1	104.3	12.8	180.3	161
1996	124.1	115.4	8.7	189.0	156
1997	130.9	126.8	4.1	193.1	149
1998	137.9	138.9	-1.0	192.1	139
1999	144.9	152.1	-7.2	184.9	126
2000	151.9	166.3	-14.4	170.5	111
2001	156.9	180.4	-23.5	147.0	95
2002	163.2	195.3	-32.2	114.8	75
2003	169.4	211.2	-41.8	73.0	54
2004	175.5	228.6	-53.1	19.8	32
2005	181.5	247.4	-65.9	( <sup>3</sup> )	8
Alternative III					
1990 <sup>2</sup>	\$80.4	\$67.0	\$13.4	\$98.9	128
1991	88.5	72.7	15.8	114.7	136
1992	94.8	79.5	15.3	130.0	144
1993	102.6	88.9	13.7	143.7	146
1994	110.0	100.4	9.6	153.3	143
1995	114.2	111.1	3.1	156.4	138
1996	121.5	125.6	-4.1	152.3	125
1997	128.8	141.9	-13.1	139.2	107
1998	135.1	159.2	-24.2	115.0	87
1999	140.4	178.1	-37.7	77.3	65
2000	145.1	198.7	-53.6	23.7	39
2001	146.8	219.4	-72.6	( <sup>4</sup> )	11

<sup>1</sup> Ratio of assets in the trust fund at the beginning of the year to disbursements during the year.

<sup>2</sup> Figures for 1990 represent actual experience.

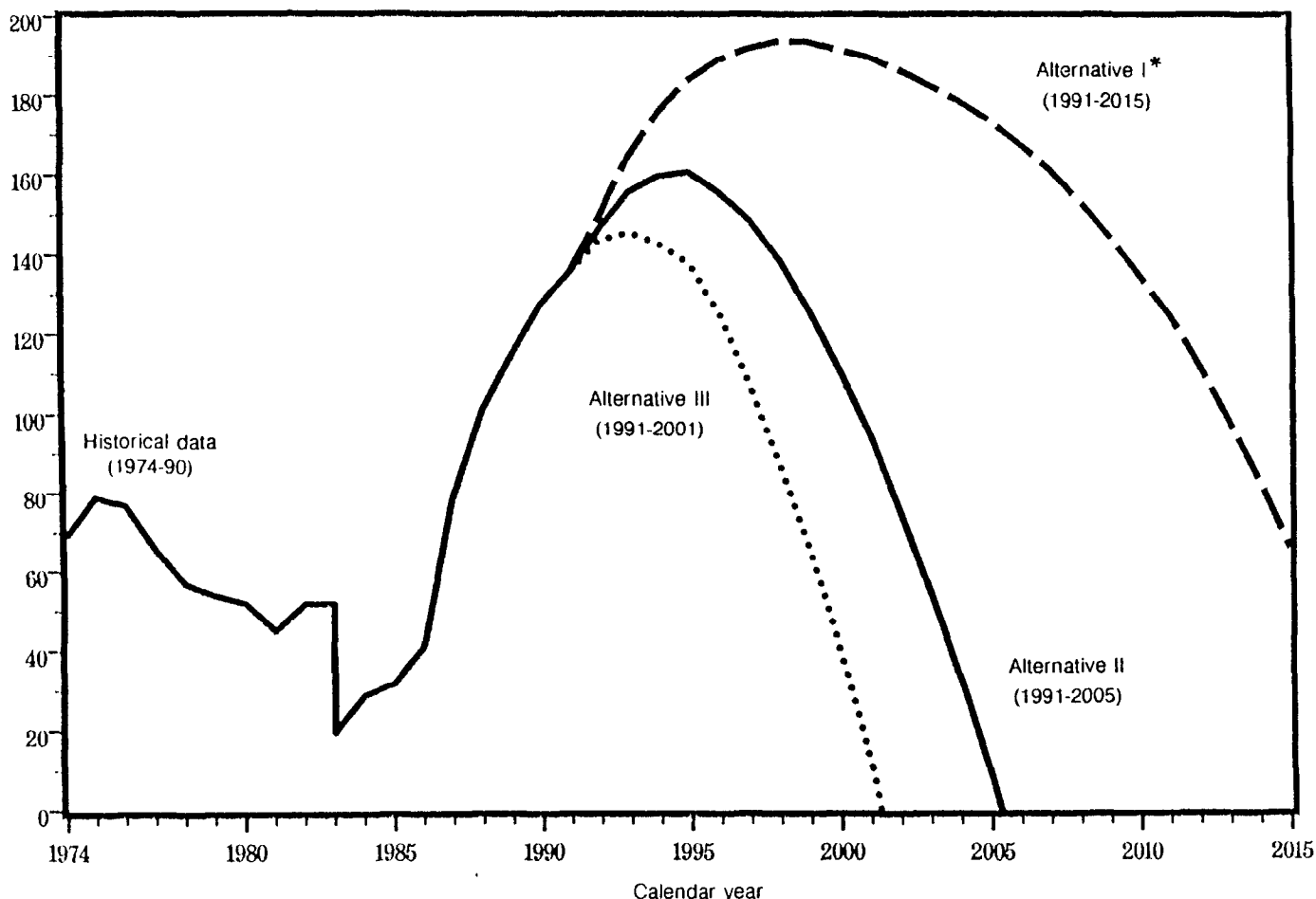
<sup>3</sup> Trust fund depleted in calendar year 2005.

<sup>4</sup> Trust fund depleted in calendar year 2001.

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

**Chart 1.—Short-term HI Trust Fund ratios**

Ratio (as a percent)



\* The trust fund is depleted in 2018 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 presents a comparison of the projected experience in the 1990 and 1991 reports. As table 4 indicates, the projections in the 1991 report show that the fund will be depleted at about the same time as in the 1990 report under all three sets of assumptions. Table 5 shows the major reasons for the change in the 75-year actuarial balance of the HI program from that in the 1990 report. The section of the report entitled "Actuarial Status of the Trust Fund" discusses more completely the reasons for the change in the actuarial balance.

### Conclusion of the Board of Trustees

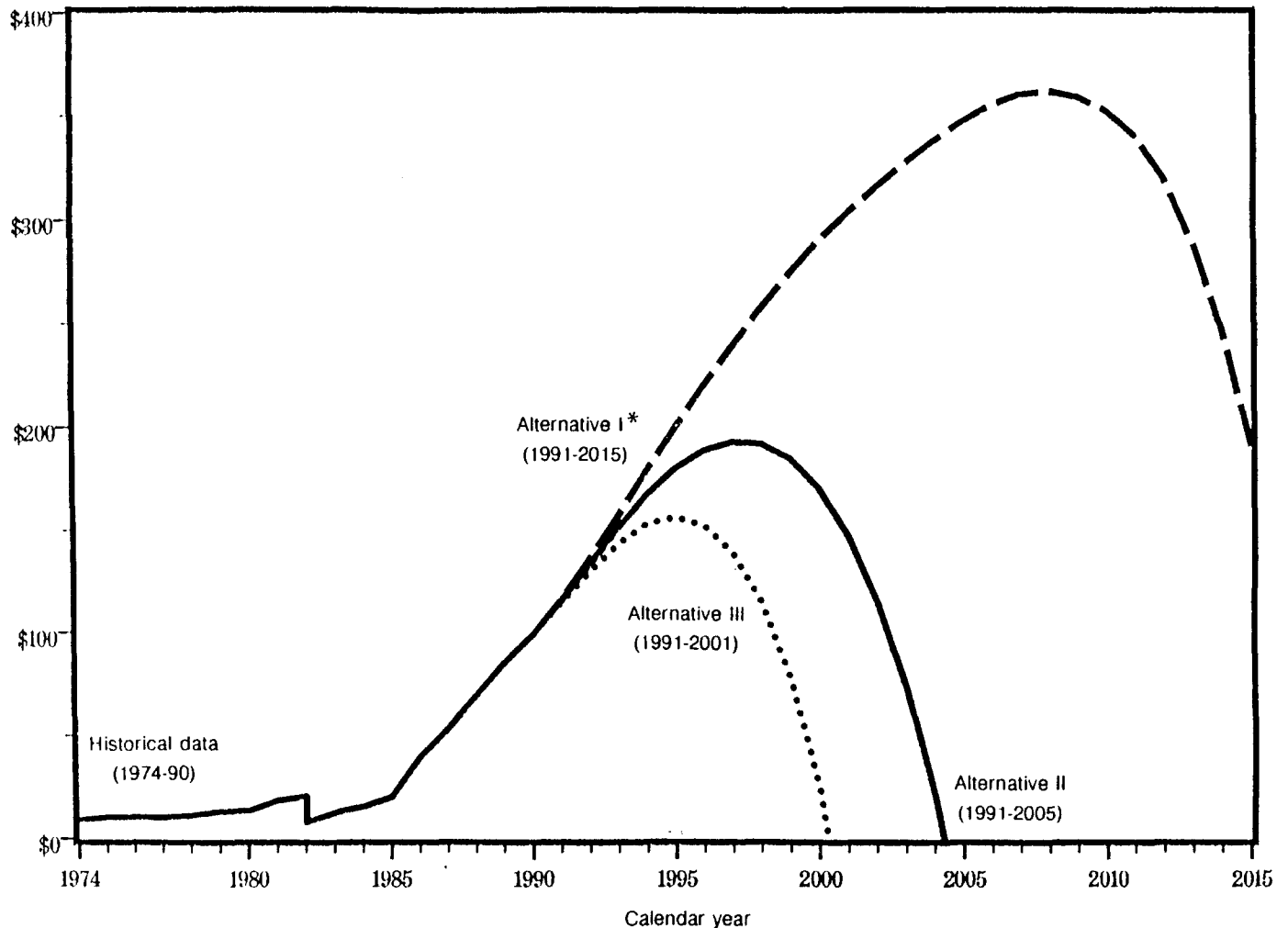
The present financing schedule for the Hospital Insurance program is sufficient to ensure the payment of benefits over the next 14 years with trust fund exhaustion occurring in 2005, if the alternative II assumptions are realized. Under the more pessimistic alternative III, the fund is exhausted in 2001. Under the more optimistic alternative I, the trust fund is exhausted in 2018.

There are currently over four covered workers supporting each HI

enrollee. This ratio will begin to decline rapidly early in the next century. By the middle of that century, there will be only about two covered workers supporting 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 of the fund is projected to occur

**Chart 2.—HI Trust Fund balance, end-of-year**

Balance (dollars in billions)



\*The trust fund is depleted in 2018 under alternative I.

shortly after the turn of the century under the intermediate assumptions, and could occur as early as 2001 if the pessimistic assumptions are realized.

The Board notes that promising steps have been taken to begin reducing the rate of growth in payments to hospitals, including the implementation of prospective payment and diagnosis-related groups. Initial experience under the prospective payment system for hospitals suggests that this payment mechanism can be an effective

means of constraining the growth in hospital payments and improving the efficiency of 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.

Even though the HI Trust Fund is financially adequate based on the short-range test, because of the

magnitude of the projected actuarial deficit in the HI program and the high probability that the HI Trust Fund will be exhausted shortly after the turn of the century, the Board believes that corrective action will be needed very soon in order to avoid the need for potentially precipitous changes later.

**Table 3.—Actuarial balances of the Hospital Insurance program, under alternative sets of assumptions**

Period	Alternative		
	I	II	III
Projection periods			
1991-2015:			
Summarized tax rate <sup>1</sup> .....	2.90%	2.90%	2.90%
Summarized cost rate <sup>2</sup> .....	3.03	3.86	5.06
Actuarial balance <sup>3</sup> .....	-.13	-.96	-2.16
1991-2040:			
Summarized tax rate <sup>1</sup> .....	2.90	2.90	2.90
Summarized cost rate <sup>2</sup> .....	3.48	5.39	8.86
Actuarial balance <sup>3</sup> .....	-.58	-2.49	-5.96
1991-2065:			
Summarized tax rate <sup>1</sup> .....	2.90	2.90	2.90
Summarized cost rate <sup>2</sup> .....	3.71	6.25	10.93
Actuarial balance <sup>3</sup> .....	-.81	-3.35	-8.03
25-year subperiods:			
1991-2015:			
Summarized tax rate <sup>1</sup> .....	2.90	2.90	2.90
Summarized cost rate <sup>4</sup> .....	3.06	3.82	4.91
Actuarial balance <sup>3</sup> .....	-.16	-.92	-2.01
2016-2040:			
Summarized tax rate <sup>1</sup> .....	2.90	2.90	2.90
Summarized cost rate <sup>4</sup> .....	4.03	7.28	13.45
Actuarial balance <sup>3</sup> .....	-1.13	-4.38	-10.55
2041-2065:			
Summarized tax rate <sup>1</sup> .....	2.90	2.90	2.90
Summarized cost rate <sup>4</sup> .....	4.53	8.84	17.53
Actuarial balance <sup>3</sup> .....	-1.63	-5.94	-14.63

<sup>1</sup> As scheduled under present law.

<sup>2</sup> Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100 percent of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

<sup>3</sup> Difference between the summarized tax rate (as scheduled under present law) and the summarized cost rate.

<sup>4</sup> Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis. Includes neither the trust fund balance at the beginning of the period nor the cost of attaining a non-zero trust fund balance at the end of the period.

## SMI Summary

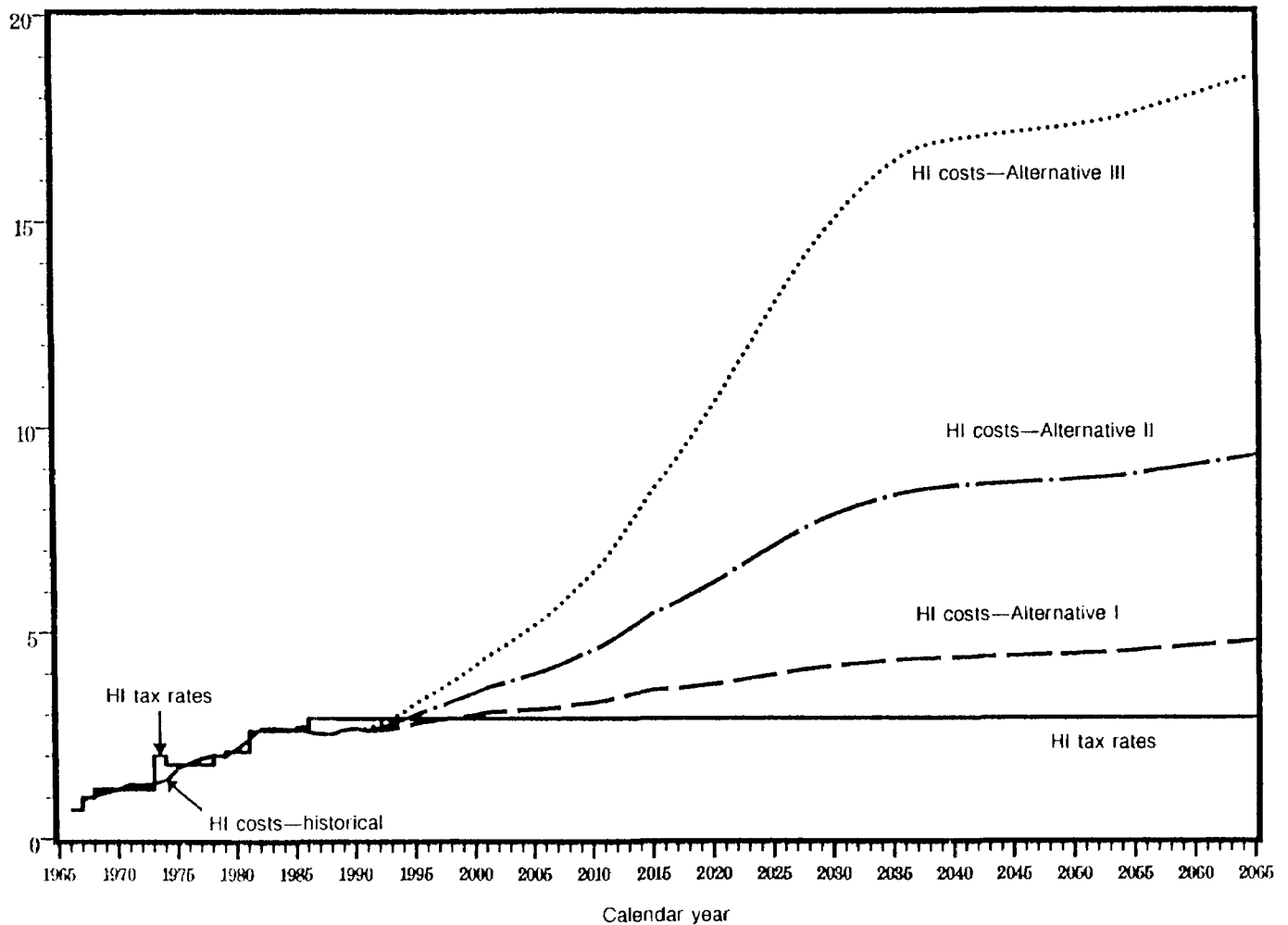
The Supplementary Medical Insurance program pays for physician services, outpatient hospital services, and other medical expenses for both aged 65 or older and for the long-term disabled. In calendar year (CY) 1990, 32.5 million persons were covered under SMI. General revenue contributions during 1990 amounted to \$33.0 billion, accounting for 72.0 percent of all SMI income. About 24.7 percent of all income resulted from the premiums paid by the enrollees. Interest payments to the SMI fund accounted for the remaining 3.3 percent. Of the \$44.0 billion in SMI disbursements, \$42.5 billion was for benefit payments while the remaining was spent for administrative expenses. SMI administrative expenses were 3.5 percent of total disbursements.

The SMI program essentially is yearly renewable term insurance financed from premium income paid by the enrollees and from income contributed from general revenue. This means that the SMI program is financed on an accrual basis with a contingency margin, and, therefore, 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

**Chart 3.—Estimated HI costs and tax rates**

Percent of taxable payroll



Note: HI projected costs shown are expenditures attributable to insured beneficiaries only, on an incurred basis, without an allowance for maintaining the trust fund balance at a desired level.

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 4 presents these values for financing periods since 1977. This illustration clearly indicates the extent to which general revenue financing is the major source of income for the program.



**Table 4.—Status of the Hospital Insurance Trust Fund**

Sets of assumptions	Year in which the trust fund is exhausted as published in the—		75-year actuarial balance <sup>1</sup> of the HI program as published in the—	
	1990 report	1991 report	1990 report	1991 report
I (optimistic).....	2018	2018	-.75%	-.81%
II (intermediate).....	<sup>2</sup> 2003	2005	<sup>3</sup> -3.26	-3.35
III (pessimistic).....	1999	2001	-8.35	-8.03

<sup>1</sup> The actuarial balance in the 1990 report was computed on the present-value basis (then referred to as the level-financing basis), without the cost of attaining a non-zero trust fund balance at the end of the period. In this article, it is computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100 percent of the following year's estimated expenditures.

<sup>2</sup> In the 1990 report, estimates under two sets of intermediate assumptions, labeled alternative II-A and alternative II-B, were

presented. The figure shown is the year of trust fund exhaustion as estimated under the alternative II-B assumptions. Under alternative II-A, the trust fund was estimated to be exhausted in 2005.

<sup>3</sup> In the 1990 report, estimates under two sets of intermediate assumptions, labeled alternative II-A and alternative II-B, were presented. The figure shown is the actuarial balance as estimated under the alternative II-B assumptions. Under alternative II-A, the actuarial balance was estimated to be -2.83 percent.

**Operations of the SMI Program**

Historical and projected operations of the fund through 1993 are shown in tables 6 and 7 in this article. As can be seen, income has exceeded disbursements for most of the historical years. The financing for CY 1991 was established to reduce assets. However, the Omnibus Budget Reconciliation Act of 1990, (OBRA 90, Public Law 101-508) was passed November 5, 1990 after the CY 1991 financing had been established. As a result, in CY 1991, income is again projected to exceed disbursements, and the trust fund balance is projected to increase through CY 1991.

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 which forms the basis of the concept of actuarial soundness as it relates to the SMI program.

**Table 5.—Change in the 75-year actuarial balance since the 1990 report**

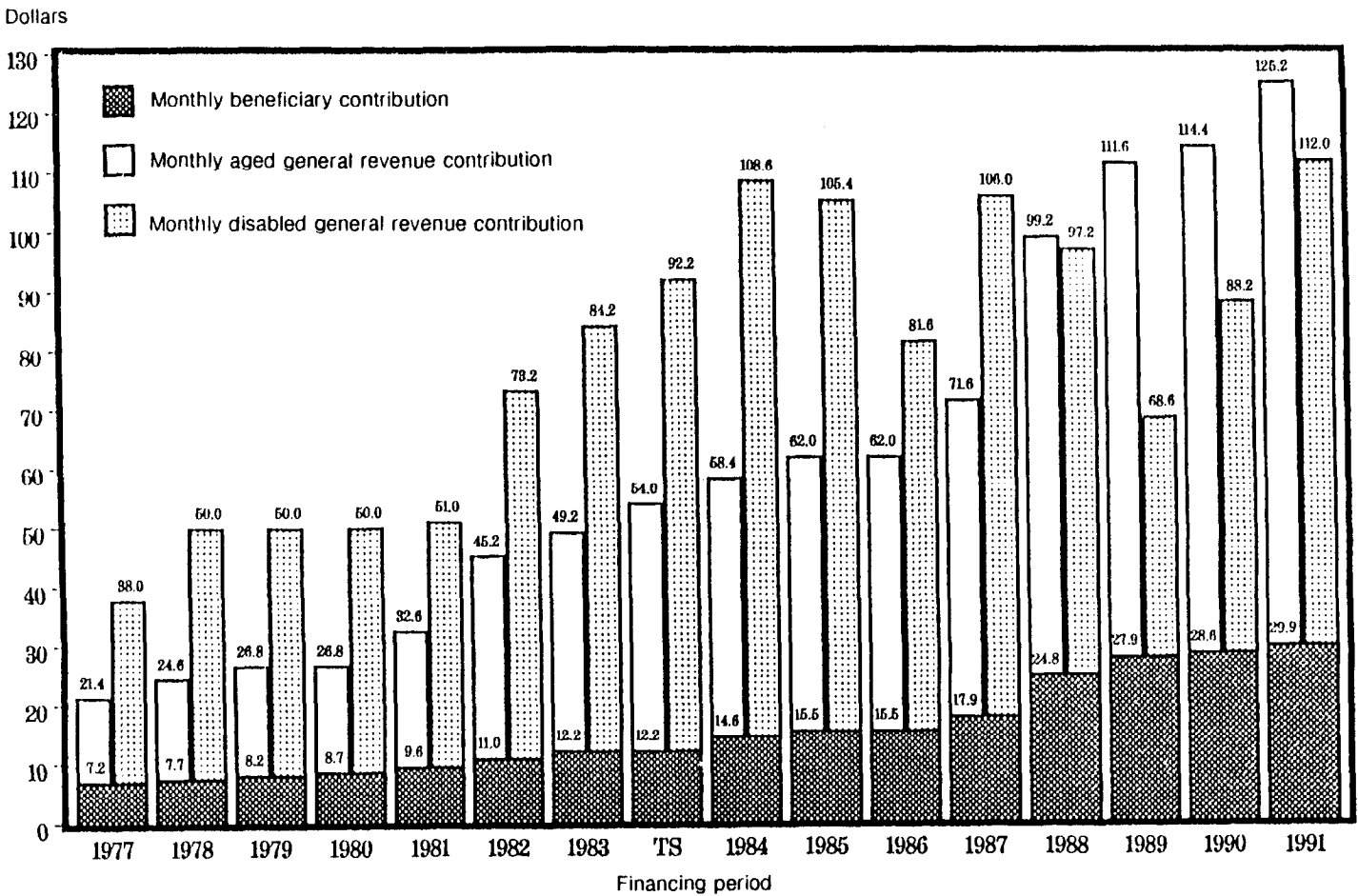
Actuarial balance, alternative II-B, 1990 report <sup>1</sup> .....	-3.26%
Changes:	
Valuation period.....	-.09
Base estimate.....	-.22
Legislation since the 1990 report.....	+ .68
Economic and demographic assumptions.....	-.22
Hospital assumptions.....	-.15
Definitional change <sup>2</sup> .....	-.09
Net effect, above changes.....	-.09
Actuarial balance, alternative II, 1991 report <sup>3</sup> .....	-3.35

<sup>1</sup> The actuarial balance in the 1990 report was computed on the present-value basis (then referred to as the level-financing basis), including an offset to cost due to the beginning trust fund balance but without the cost of attaining a non-zero trust fund balance at the end of the period.

<sup>2</sup> The definitional change is the inclusion of the cost of attaining a trust fund balance at the end of the period equal to 100 percent of the following year's estimated expenditures; see footnotes 1 and 3.

<sup>3</sup> The actuarial balance in the 1991 report is computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100 percent of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

Chart 4.—SMI 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.

For 1984 through 1991, the financing period is January 1 through December 31.

\* The amounts shown do not include the catastrophic coverage monthly premium rate for 1989.

### Actuarial Soundness of the SMI Program

The concept of actuarial soundness, as it applies to the Supplementary Medical Insurance 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, from income contributed from general revenue, 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 rates 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.

**Table 6.—Estimated progress of Supplementary Medical Insurance Trust Fund (cash basis) fiscal years 1991-93 and actual data for 1967-90**

[In millions]

Fiscal year <sup>1</sup>	Income				Disbursements			Balance in fund at end of year <sup>4</sup>
	Total income	Premiums from enrollees	Government contributions <sup>2</sup>	Interest and other income <sup>3</sup>	Total disbursements	Benefit payments	Administrative expenses	
Historical								
1967 .....	\$1,285	\$647	\$623	\$15	\$799	\$664	<sup>5</sup> \$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 .....	25,003	5,699	18,076	1,228	26,218	25,169	1,049	9,432
1987 .....	27,797	6,480	20,299	1,018	30,837	29,937	900	6,392
1988 .....	35,002	8,756	25,418	828	34,947	33,682	1,265	6,447
1989 .....	<sup>6</sup> 43,282	<sup>6</sup> 11,548	30,712	<sup>6</sup> 1,022	<sup>6</sup> 38,317	36,867	<sup>6</sup> 1,450	<sup>6</sup> 11,412
1990 .....	<sup>6</sup> 46,138	<sup>6</sup> 11,494	33,210	<sup>6</sup> 1,434	<sup>6</sup> 43,022	41,498	<sup>6</sup> 1,524	<sup>6</sup> 14,527
Projected								
1991 .....	47,833	11,671	34,730	1,432	47,326	45,767	1,559	15,034
1992 .....	54,320	12,559	40,403	1,358	53,557	51,922	1,635	15,797
1993 .....	59,205	14,420	43,483	1,302	60,261	58,539	1,722	14,741

<sup>1</sup> 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; FY 1977-93 cover the interval from October 1 through September 30.

<sup>2</sup> The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.

<sup>3</sup> Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and other miscellaneous income.

<sup>4</sup> The financial status of the program depends on both the total net assets and the liabilities of the program (see table 10).

<sup>5</sup> Administrative expenses shown include those paid in FY 1966 and 1967.

<sup>6</sup> Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

**Table 7.—Estimated progress of Supplementary Medical Insurance Trust Fund (cash basis)  
Fiscal years 1991-93 and actual data for 1967-90**

[In millions]

Fiscal year <sup>1</sup>	Income				Disbursements			Balance in fund at end of year <sup>4</sup>
	Total income	Premiums from enrollees	Government contributions <sup>2</sup>	Interest and other income <sup>3</sup>	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	<sup>4</sup> 3,722	<sup>4</sup> 11,291	361	14,028	13,113	915	5,877
1982 .....	16,580	<sup>4</sup> 3,697	<sup>4</sup> 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	<sup>5</sup> 7,409	<sup>5</sup> 23,560	875	31,740	30,820	920	8,394
1988 .....	35,825	<sup>5</sup> 8,761	<sup>5</sup> 26,203	861	35,230	33,970	1,260	8,990
1989 .....	<sup>6</sup> 44,349	<sup>6</sup> 12,263	30,852	<sup>6</sup> 1,234	<sup>6</sup> 39,783	38,294	<sup>6</sup> 1,489	<sup>6</sup> 13,556
1990 .....	45,913	11,320	33,035	1,558	43,987	42,468	1,519	15,482
Projected								
1991 .....	50,467	11,844	37,301	1,322	48,832	47,259	1,573	17,117
1992 .....	53,765	12,797	39,601	1,367	55,168	53,512	1,656	15,714
1993 .....	60,972	14,960	44,776	1,236	62,157	60,413	1,744	14,529

<sup>1</sup> The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.

<sup>2</sup> Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and other miscellaneous income.

<sup>3</sup> The financial status of the program depends on both the total net assets and the liabilities of the program (see table 10).

<sup>4</sup> 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 CY 1982.

<sup>5</sup> 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 CY 1988 (refer to footnote 4).

<sup>6</sup> Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

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 5 shows this ratio for historical years and for projected years under the intermediate assumptions

(alternative II), as well as high (pessimistic) and low (optimistic) cost sensitivity scenarios.

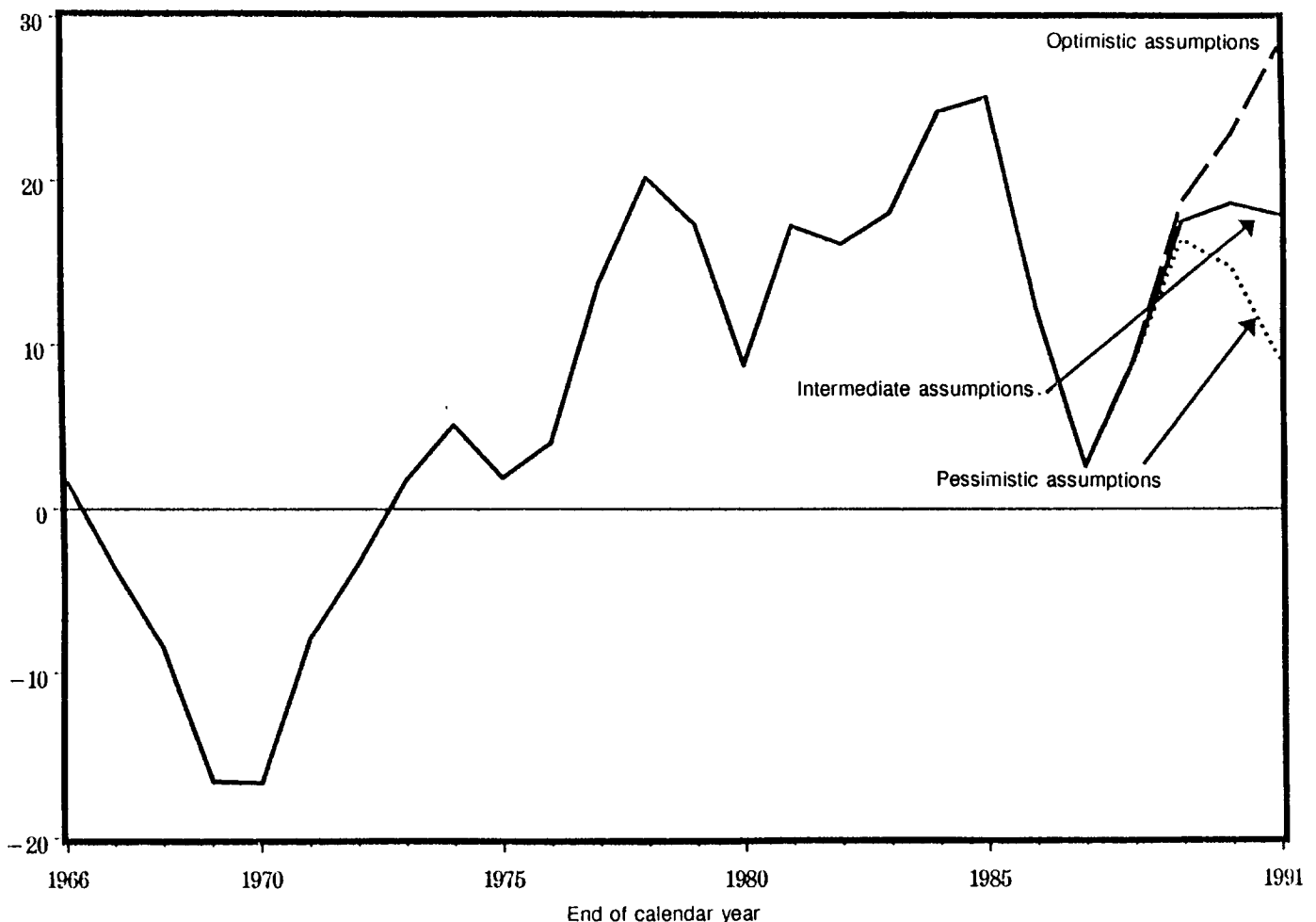
As mentioned above, financing for CY 1991 was established to reduce assets. However, Public Law 101-508 was passed November 5, 1990, after the CY 1991 financing had been established. As a net result, the excess of assets over liabilities is expected to increase by December 31, 1991.

### Conclusion of the Board of Trustees

The financing established through December 1991 is sufficient to cover projected benefits and administrative costs through that time period. This financing is sufficient to maintain a level of trust fund assets that is adequate to cover the impact of a moderate degree of variation between actual costs and projected costs. The SMI program can thus be said to be actuarially sound.

**Chart 5.—Actuarial status of the SMI Trust Fund**

Ratio (as a percent)



Note: The actuarial status of the SMI Trust Fund is measured by the ratio of the end-of-year surplus or deficit to the following year incurred expenditures.

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Although the SMI program is actuarially 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 nearly doubled in the last 5 years. For the same time period, the program grew 37 percent faster than the economy as a whole. This growth rate shows little or no sign of significantly abating despite recent efforts to control the cost of the program, including the recent changes enacted in OBRA 90. The Board recommends that Congress continue to work to curtail the rapid growth in the cost of the SMI program.