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THE FEDERAL HOSPITAL INSURANCE TRUST FUND

COMMUNICATION

FROM

**THE BOARD OF TRUSTEES OF THE FEDERAL
HOSPITAL INSURANCE TRUST FUND**

TRANSMITTING

**THE 1992 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE TRUST FUND, PURSUANT TO 42
U.S.C. 1395i(b)**



**APRIL 3, 1992.—Referred to the Committee on Ways and Means and
ordered to be printed**

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**1992 ANNUAL REPORT OF
THE BOARD OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE
TRUST FUND**

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FEDERAL HOSPITAL
INSURANCE
TRUST FUND**

Transmitting

**THE 1992 ANNUAL REPORT OF THE BOARD,
PURSUANT TO
SECTION 1817(b) OF THE SOCIAL SECURITY ACT,
AS AMENDED**

LETTER OF TRANSMITTAL

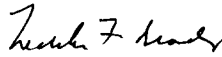
BOARD OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE TRUST FUND
Washington, D.C., April 2, 1992

HONORABLE THOMAS S. FOLEY
Speaker of the House of Representatives
Washington, D.C.

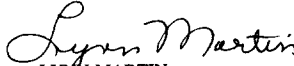
HONORABLE DAN QUAYLE
President of the Senate
Washington, D.C.

GENTLEMEN: We have the honor of transmitting to you the 1992 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund (the 27th such report), in compliance with the provisions of section 1817(b) of the Social Security Act.

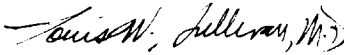
Respectfully,



NICHOLAS F. BRADY,
*Secretary of the Treasury, and
Managing Trustee of the Trust Fund*



LYNN MARTIN,
Secretary of Labor, and Trustee



LOUIS W. SULLIVAN, M.D.,
*Secretary of Health and Human Services,
and Trustee*



STANFORD G. ROSS,
Trustee



DAVID M. WALKER,
Trustee



MICHAEL HUDSON,
*Acting Administrator of the Health Care
Financing Administration, and
Secretary, Board of Trustees*

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I. OVERVIEW

A. SUMMARY

1. Operations of the Hospital Insurance Program

The hospital insurance (HI) program pays for inpatient hospital care and other related care for those age 65 and over, and for the long-term disabled. In calendar year 1991, HI covered about 31 million aged and about 3 million disabled enrollees at a cost of \$72.6 billion. Of this amount, \$71.5 billion was for benefit payments and \$1.0 billion, 1.4 percent of total disbursements, was for administrative expenses.

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 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. These obligations are backed by the full faith and credit of the United States Government.

The payroll taxes of 137 million workers and their employers provided the primary source of financing for the HI program in calendar year 1991. Payroll taxes amounting to \$77.9 billion, or 87.6 percent of total income to the fund, were collected during the year. Interest credits to the HI trust fund amounted to 10.7 percent of total income. The remaining 1.7 percent of calendar year 1991 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.

The HI contribution rates applicable to taxable earnings are 1.45 percent for employees and employer each and 2.90 percent for self-employed. The maximum taxable amount of annual earnings for 1991 was \$125,000. After 1991, the automatic-adjustment provisions in section 230 of the Social Security Act determine the maximum taxable amount.

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 Trustees' 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,

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defined as the ratio of assets at the beginning of the year to disbursements during the year, is projected to increase to a level of 149 percent in 1993 and then decline steadily until the fund is completely exhausted in 2002. Under the more optimistic set of assumptions (alternative I), the trust fund ratio is projected to increase to 154 percent in 1994 and then decline until it is completely exhausted in 2009. Under the more pessimistic set of assumptions (alternative III), the trust fund ratio is projected to increase to a level of about 145 percent in 1993 and then decrease rapidly until the fund is exhausted in 2000. These projections serve to demonstrate that the HI program is severely out of financial balance using a range of plausible economic and demographic assumptions.

Table 4 in this report 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 4, the Trustees' short-range test of financial adequacy, which is described in the "Expected Operations and Status of the Trust Fund" (section I.C.), is not met by the fund under the alternative II assumptions.

The adequacy of the current law financing schedule 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 using the present value method is defined to be the difference in the sum of the present values of the tax rates for the valuation period over the sum of the present value of the cost rates (insured, incurred costs expressed as a percentage of taxable payroll) of the program for the same period, divided by the sum of the present values of the effective taxable payroll for the valuation period. The "Actuarial Status of the Trust Fund" (section I.D.) describes the method used to calculate summarized cost rates, tax rates, and actuarial balances. The HI trust fund does not meet the Trustees long-range test of financial adequacy, as discussed in section I.D., under any of the three sets of assumptions.

Table I presents a comparison of the projected experience contained in the 1991 and 1992 reports. As Table I indicates, the projections in the 1992 report show that the fund will be depleted earlier than in the 1991 report under all three sets of assumptions. The major reasons for this change are

the larger estimated disabled population and the lower estimated payroll taxes. Section I.D. discusses the reasons for the change in the actuarial balance.

Table I. -- STATUS OF THE HOSPITAL INSURANCE TRUST FUND

<u>Sets of assumptions</u>	<u>Year in which the trust fund is exhausted as published in the</u>		<u>75-year actuarial balance of the HI program as published in the</u>	
	<u>1991 report</u>	<u>1992 report</u>	<u>1991 report</u>	<u>1992 report</u>
I (optimistic)	2018	2009	-0.81%	-1.34%
II (intermediate)	2005	2002	-3.35	-4.20
III (pessimistic)	2001	2000	-8.03	-9.45

2. Conclusion of the Board of Trustees

Under the Trustees' Alternative II assumptions, the present financing schedule for the HI program is sufficient to ensure the payment of benefits over the next 10 years; however, the HI trust fund does not meet the Trustees' short-term test of financial solvency and the HI trust fund is projected to be exhausted in 2002. Under the more pessimistic alternative III, the fund is projected to be exhausted in 2000, approximately eight years from the present. Under the more optimistic alternative I, the trust fund is projected to be exhausted in 2009.

There are currently about 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 the assumptions, the trust fund is projected to become exhausted even before the major demographic shift begins to occur. As noted above, exhaustion of the fund is projected to occur shortly after the turn of the century under the intermediate assumptions, and could occur as early as 2000 if the pessimistic assumptions were to happen.

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The Trustees note that some steps have been taken to attempt to reduce 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 may be an effective means of constraining the growth in hospital payments and improving the efficiency of the hospital industry. Nonetheless, projected costs for the HI program far exceed projected revenues over the 75-year long-range period. As a result, the HI program is severely out of financial balance.

The HI program is projected to increase from 1.3 percent of Gross Domestic Product (GDP) in CY 1991 to 4.7 percent of GDP in CY 2065. This rapid growth is attributable primarily to (1) increases in hospital admissions, and (2) increases in reported case mix. With 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 Trustees urge the Congress to take additional actions designed to control HI program costs either through specific program legislation or as a part of enacting more comprehensive health care reform.

B. THE BOARD OF TRUSTEES

The Federal Hospital Insurance Trust Fund, established on July 30, 1965, is held by the Board of Trustees under the authority of section 1817(b) of the Social Security Act, as amended. The Board is composed of five members, three of whom serve in an ex officio capacity: the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health and Human Services. The President nominated and the Senate confirmed Stanford G. Ross and David M. Walker to be the other two members, who serve as representatives of the public. Mr. Ross and Mr. Walker are serving 4-year terms that began on October 2, 1990.

By law, the Secretary of the Treasury is designated as the Board Chairperson and Managing Trustee, and the Administrator of the Health Care Financing Administration is designated as Secretary of the Board. The Board of Trustees reports to the Congress each year on the operation and status of the trust fund, in compliance with section 1817(b)(2) of the Social Security Act. This annual report, for 1992, is the 27th such report.

C. EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND

Table 1 shows the expected operations of the trust fund during fiscal years 1992 to 1994, together with the past experience of the program. The estimate shown in Table 1 is based on an intermediate set of assumptions labeled "Alternative II." This set of assumptions represents the Trustees' best estimate of the expected future economic and demographic trends that will affect the financial status of the program. The assumptions underlying the alternative II projections are presented in the technical section.

Income received through the financial interchange between the railroad retirement account and the trust fund under the provisions of the Railroad Retirement Act is estimated on the same basis as income from HI contributions. Estimates of the corresponding outgo are included in the disbursement items.

Estimated income to the trust fund which is appropriated from general revenues to reimburse the program for the cost of coverage of noninsured persons is the same as the estimates of disbursements incurred for such persons, net of corrections for differences between costs and amounts transferred for previous years. Premium income for other noninsured persons who may enroll in the HI program on a voluntary basis is estimated based on projected premium rates calculated according to statute and estimated average enrollment.

The transfers from general revenues for military wage credits are based on provisions of the Social Security Amendments of 1983 (Public Law 98-21), as described in the technical section.

The investment of new assets received during fiscal years 1992-94 is assumed to be in the form of special public-debt obligations bearing interest rates ranging from 6 percent to 6.75 percent, payable semiannually. The average effective annual rate of interest on the assets held by the HI trust fund on September 30, 1991, was 9.1 percent.

Disbursements for benefits are projected to increase in fiscal years 1992-94, primarily as a result of the increase in hospital payment rates and hospital admissions under the program. The expenditures for benefit payments shown

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in Table 1 differ from those shown in the 1993 Federal Budget. These estimates are based on more recent demographic and economic projections, and they do not reflect the implementation of proposed changes in regulations which were included in the budget. The expenditures for benefit payments shown in this section are based on the assumption that for fiscal years 1993 and later, the prospective payment rates will be increased in accordance with Public Law 101-508, the Omnibus Budget Reconciliation Act of 1990; for fiscal year 1992, the prospective payment rates have already been determined in accordance with the same statute.

The actual operations of the HI program are organized, in general, on a calendar year basis. Earnings subject to taxation and the applicable tax rates are established by calendar year, as are the inpatient hospital deductible and other cost-sharing amounts. The projected operations of the trust fund on a calendar year basis are shown in Table 2, according to the same assumptions as used in Table 1. The ratios of assets in the trust fund at the beginning of each calendar year to total disbursements during that year are shown in Table 3 for past years and as projected, under the same assumptions, through 1994.

TABLE 1.—OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING FISCAL YEARS 1970-94
(In millions)

Fiscal year ¹	Income							Disbursements				Trust fund	
	Payroll taxes	Transfers from railroad retirement account	Reimbursement for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest and other income ²	Total Income	Benefits Payments ³	Administrative expenses ⁴	Total disbursements	Interfund borrowing transfers ⁵	Net increase in fund	Fund at end of year
Historical Data:													
1970	\$4,785	\$64	\$617	--	\$11	\$137	\$5,614	\$4,804	\$149	\$4,953	--	\$661	\$2,677
1975	11,291	132	481	\$6	48	609	12,568	10,353	259	10,612	--	1,956	9,870
1980	23,244	244	697	17	141	1,072	25,415	23,790	497	24,288	--	1,127	14,490
1981	30,425	276	659	21	141	1,341	32,863	28,907	353	29,260	--	3,603	18,093
1982	34,390	351	808	25	207	1,829	37,611	34,343	521	34,864	--	2,747	20,840
1983	36,387	358	878	26	3,663 ⁶	2,629	43,940	38,102	522	38,624	-\$12,437	-7,121	13,719
1984	41,364	351	752	35	250	2,812	45,563	41,476	633	42,108	--	3,455	17,174
1985	46,490	371	766	38	86	3,182	50,933	47,841	813	48,654	1,824	4,103	21,277
1986	53,020	364	566	40	-714 ⁷	3,167	56,442	49,018	667	49,685	10,613	17,370	38,648
1987	57,820	368	447	40	94	3,982	62,751	49,967	836	50,803	--	11,949	50,596
1988	61,901	364	475	42	80	5,148	68,010	52,022	707	52,730	--	15,281	65,877
1989	67,527	379	515	42	86	6,567	75,116	57,433	805	58,238	--	16,878	82,755
1990	70,655	367	413	113	107	7,908	79,563	65,912	774	66,687	--	12,876	95,631
1991	74,655	352	605	367	-1,011 ⁸	8,969	83,938	68,705	934	69,638	--	14,299	109,930
Estimates:⁹													
1992	79,785	370	621	494	85	10,070	91,425	76,560	1,059	77,619	--	13,806	123,736
1993	84,859	384	367	547	80	10,824	97,061	83,242	1,111	84,353	--	12,708	136,444
1994	90,296	382	293	608	75	11,378	103,032	91,917	1,187	93,104	--	9,928	146,372

¹Fiscal year 1975 consists of the 12 months ending on June 30; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.

²Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and a small amount of miscellaneous income.

³Includes costs of Peer Review Organizations (beginning with the implementation of the Prospective Payment System on October 1, 1983).

⁴Includes costs of experiments and demonstration projects.

⁵A negative amount is a loan to the OASI trust fund; a positive amount is a repayment of loan principal to the HI trust fund.

⁶Includes the lump sum general revenue transfer of \$3,456 million, as provided for by section 151 of P.L. 98-21.

⁷Includes the lump sum general revenue adjustment of -\$805 million, as provided for by section 151 of P.L. 98-21.

⁸Includes the lump sum general revenue adjustment of -\$1,100 million, as provided for by section 151 of P.L. 98-21.

⁹Under alternative II.

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

TABLE 2.—OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING CALENDAR YEARS 1970-94
(In millions)

Calendar year	Income							Disbursements				Trust fund	
	Payroll taxes	Transfers from railroad retirement account	Reimbursement for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest and other income ¹	Total income	Benefits Payments ²	Administrative expenses ³	Total disbursements	Interfund borrowing transfers ⁴	Net increase in fund	Fund at end of year
Historical Data:													
1970	\$4,881	\$66	\$863	--	\$11	\$158	\$5,979	\$5,124	\$157	\$5,281	--	\$698	\$3,202
1975	11,502	138	621	\$7	48	664	12,980	11,315	266	11,581	--	1,399	10,517
1980	23,848	244	697	18	141	1,149	26,097	25,064	512	25,577	--	521	13,749
1981	32,959	276	659	22	207	1,603	35,725	30,342	384	30,726	--	4,999	18,748
1982	34,586	351	808	24	207	2,022	37,998	35,631	513	36,144	-\$12,437	-10,583	8,164
1983	37,259	358	878	27	3,456 ⁵	2,593	44,570	39,337	540	39,877	--	4,693	12,858
1984	42,288	351	752	33	250	3,046	46,720	43,257	629	43,887	--	2,834	15,691
1985	47,576	371	766	41	-719 ⁶	3,362	51,397	47,580	834	48,414	1,824	4,808	20,499
1986	54,583	364	566	43	91	3,619	59,267	49,758	664	50,422	10,613	19,458	39,957
1987	58,648	368	447	38	94	4,469	64,064	49,496	793	50,289	--	13,775	53,732
1988	62,449	364	475	41	80	5,830	69,239	52,517	815	53,331	--	15,908	69,640
1989	68,369	379	515	55	86	7,317	76,721	60,011	792	60,803	--	15,918	85,558
1990	72,013	367	413	122	-993 ⁷	8,451	80,372	66,239	758	66,997	--	13,375	98,933
1991	77,851	352	605	432	89	9,510	88,839	71,549	1,021	72,570	--	16,269	115,202
Estimates:⁸													
1992	80,606	370	621	514	85	10,541	92,737	78,344	1,061	79,405	--	13,332	128,534
1993	85,914	384	367	558	80	11,210	98,513	85,239	1,128	86,367	--	12,146	140,680
1994	91,329	382	293	624	75	11,664	104,367	94,271	1,206	95,477	--	8,890	149,570

¹Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and a small amount of miscellaneous income.

²Includes costs of Peer Review Organizations (beginning with the implementation of the Prospective Payment System on October 1, 1983).

³Includes costs of experiments and demonstration projects.

⁴A negative amount is a loan to the OASI trust fund; a positive amount is a repayment of loan principal to the HI trust fund.

⁵The lump sum general revenue transfer, as provided for by section 151 of P.L. 98-21.

⁶Includes the lump sum general revenue adjustment of -\$805 million, as provided for by section 151 of P.L. 98-21.

⁷Includes the lump sum general revenue adjustment of -\$1,100 million, as provided for by section 151 of P.L. 98-21.

⁸Under alternative II.

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

Overview

TABLE 3. -- RATIO OF ASSETS IN THE FUND AT THE BEGINNING OF THE YEAR TO DISBURSEMENTS DURING THE YEAR FOR THE HOSPITAL INSURANCE TRUST FUND

Calendar Year	Ratio
Historical Data:	
1967	28%
1968	25
1969	43
1970	47
1971	54
1972	47
1973	40
1974	69
1975	79
1976	77
1977	66
1978	57
1979	54
1980	52
1981	45
1982	52
1983	20
1984	29
1985	32
1986	41
1987	79
1988	101
1989	115
1990	128
1991	136
Estimates ¹ :	
1992	145
1993	149
1994	147

¹Under alternative II.

Since future economic, demographic, and health care usage and cost experience may differ considerably from the intermediate assumptions on which the cost estimates were based, projections have also been prepared on the basis of two different sets of assumptions labeled "Alternative I" and "Alternative III." The assumptions used in preparing projections under alternatives I and III, as well as under alternative II, are discussed in the technical section.

The three alternative sets of assumptions were selected in order to indicate the general range in which the cost of the program reasonably might be expected to fall. The alternative I assumptions are more optimistic than the alternative II assumptions, resulting in a lower average cost over the projection period and enhanced trust fund solvency. The alternative III assumptions are more pessimistic than the alternative II assumptions, resulting in a higher average cost over the projection period and less trust fund solvency. Thus alternative III reflects the possible impact, in the near future, of conditions which are significantly more adverse than those assumed under the intermediate assumptions. Alternatives I and III provide for a fairly wide range of possible experience. Actual experience reasonably may be expected to fall within the range, but no assurance can be made that this will be the case, particularly in light of the wide variations in experience that have occurred since the beginning of the program. The projected trust fund development under alternative III also provides a measure of the strength of the financing of the program. An adequate financing schedule ought to be sufficiently strong to withstand, for a reasonable period of time, conditions in the general economy and in the hospital sector which are substantially more adverse than anticipated under alternative II.

The estimated operations of the HI trust fund during calendar years 1991-2009, on a cash basis for all program income and disbursements, are summarized in Table 4 for all three alternatives. Under alternative II, the trust fund as a percent of a year's disbursements (trust fund ratio) is projected to increase to a level of 149 percent in 1993 and then decline steadily until it is completely exhausted in 2002. Under alternative I, the trust fund ratio is projected to increase to 154 percent in 1994 and then decline until it is exhausted in 2009. Under alternative III, the trust fund ratio is projected to increase to a level of about 145 percent in 1993 and then decrease rapidly until the fund is exhausted in 2000. These projections do not reflect any reduction in disbursements due to proposed changes in legislation or regulation which were included in the 1993 Federal Budget but which have not been enacted or implemented.

TABLE 4. – ESTIMATED OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING CALENDAR YEARS 1991-2009, 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:					
1991 ²	\$88.8	\$72.6	\$16.3	\$115.2	136
1992	93.4	79.3	14.1	129.3	145
1993	100.0	85.5	14.6	143.8	151
1994	106.8	93.5	13.3	157.1	154
1995	113.4	102.1	11.3	168.4	154
2000	149.7	151.5	-1.8	186.2	124
2005	187.0	206.1	-19.1	127.7	71
2009	221.8	264.6	-42.8	(3)	15
ALTERNATIVE II:					
1991 ²	\$88.8	\$72.6	\$16.3	\$115.2	136
1992	92.7	79.4	13.3	128.5	145
1993	98.5	86.4	12.1	140.7	149
1994	104.4	95.5	8.9	149.6	147
1995	110.1	105.5	4.6	154.2	142
1996	116.2	117.4	-1.1	153.0	131
1997	122.1	129.2	-7.0	146.0	118
1998	128.1	141.6	-13.5	132.5	103
1999	133.9	155.2	-21.3	111.2	85
2000	139.8	170.0	-30.2	81.0	65
2001	145.5	184.5	-39.0	42.0	44
2002	149.0	200.3	-51.3	(4)	21
ALTERNATIVE III:					
1991 ²	\$88.8	\$72.6	\$16.3	\$115.2	136
1992	92.2	79.6	12.6	127.8	145
1993	98.3	88.4	9.9	137.7	145
1994	105.7	100.7	5.0	142.7	137
1995	112.2	113.8	-1.6	141.1	125
1996	115.7	127.2	-11.5	129.6	111
1997	121.6	142.8	-21.2	108.3	91
1998	127.3	160.1	-32.9	75.5	68
1999	131.7	178.9	-47.3	28.2	42
2000	135.7	199.9	-64.2	(5)	14

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

²Figures for 1991 represent actual experience.

³Trust fund depleted in calendar year 2009.

⁴Trust fund depleted in calendar year 2002.

⁵Trust fund depleted in calendar year 2000.

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

In order to meet the test of financial adequacy in the short-range projection period, the ratio of estimated assets in the trust fund at the beginning of the year to estimated disbursements during that year must either (a) be at least 100 percent throughout the 10-year projection period, or (b) reach a level of 100 percent within five years and remain at or above 100 percent throughout the remainder of the 10-year period. In addition, the fund's estimated assets at the beginning of each month of the 10-year period must be sufficient to cover that month's estimated disbursements. This test is applied to the estimates under alternative II for the period 1992-2001. Failure of the trust fund to meet this test is an indication that the solvency of the program over the next 10 years is in question and that action is needed to improve the short-range financial adequacy of the program. As can be seen from Table 4, this short-range test is not met under the alternative II assumptions. The trust fund ratio falls below the 100 percent level in seven years and is exhausted just after the 10-year period.

Figure 1 shows historical trust fund ratios for recent years and projected ratios under the three sets of assumptions. Figure 2 shows end-of-year trust fund balances for recent historical years and for projected years under the three sets of assumptions.

Figure 1. SHORT-TERM HI TRUST FUND RATIOS

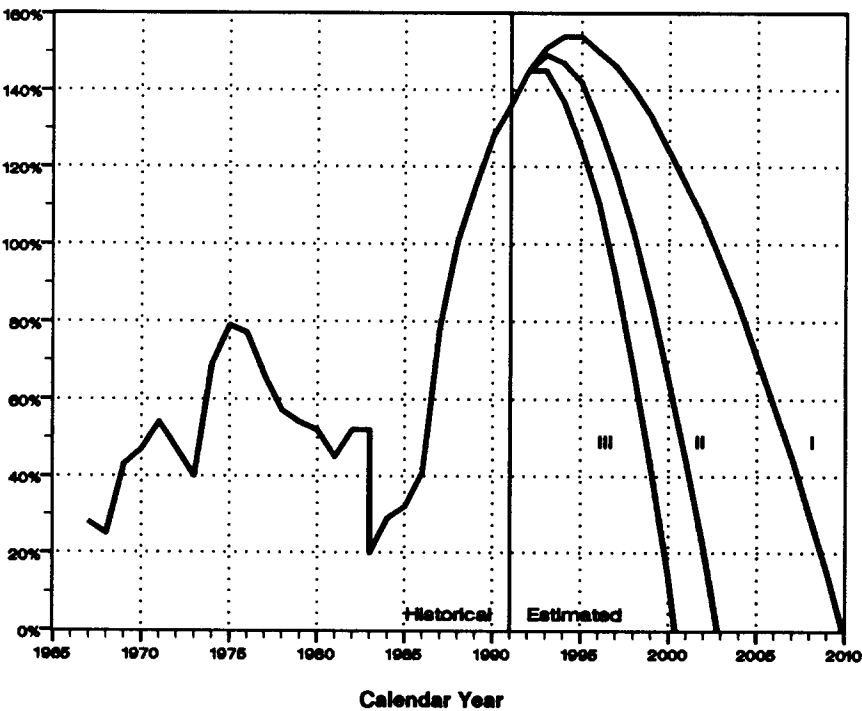
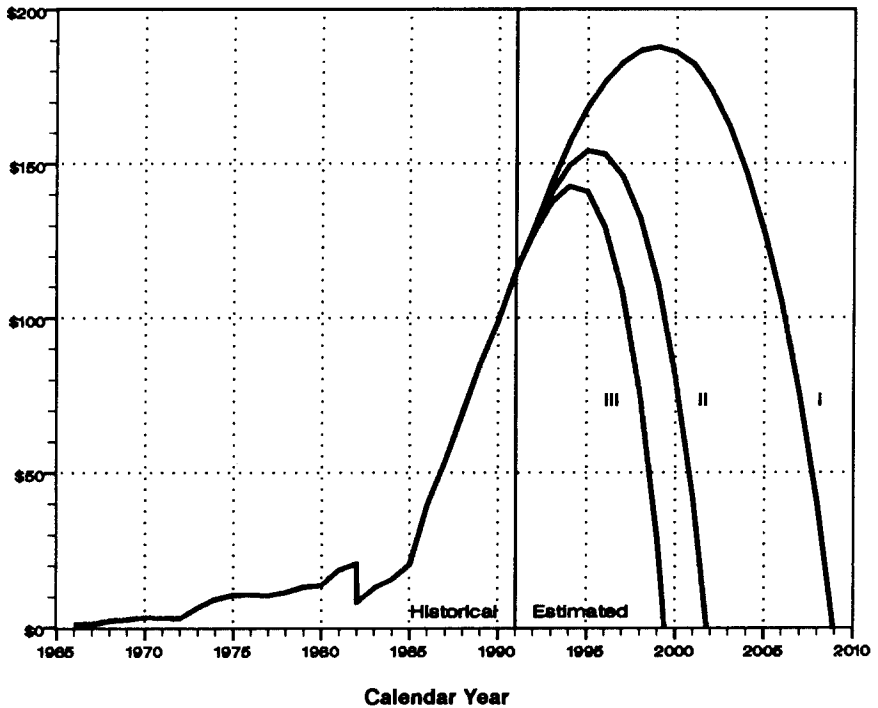


Figure 2. HI TRUST FUND BALANCE, END-OF-YEAR (in \$ Billions)

D. ACTUARIAL STATUS OF THE TRUST FUND

In the previous section, entitled "Expected Operations and Status of the Trust Fund" (I.C.), the expected operations of the HI program over the short-term period were presented. In addition, the actuarial status of the trust fund, or the adequacy of the scheduled financing to support program costs well into the future, is examined, under all three alternative assumptions. The assumptions used in preparing projections under all three alternative sets of assumptions are summarized in the technical section.

The adequacy of the current law financing schedule 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. If these two items are exactly

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equal in each year of the projection period and all projection assumptions are realized, tax revenues will be sufficient to provide for program costs. In practice, however, tax rate schedules generally are designed with rate changes occurring only at intervals of several years, rather than with continual yearly increases to match exactly with projected cost increases. To the extent that small differences between the yearly costs of the program and the corresponding tax rates occur for short periods of time and are offset by subsequent differences in the reverse direction, the substance of the financing objectives will have been met. In projecting costs under the program, only incurred expenditures (benefits and administrative costs) attributable to insured beneficiaries are considered, since benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments rather than through payroll taxes.

The historical costs of the HI program, expressed as percentages of taxable payroll, are shown in Table 5. The ratio of expenditures to taxable payroll has increased from 0.94 percent in 1967 to 2.64 percent in 1991, reflecting both the higher rate of increase in program costs than in earnings subject to HI taxes and the extension of HI benefits to disabled and end-stage renal disease beneficiaries. The projected costs of the program under alternative II, expressed as percentages of taxable payroll, and the tax rates scheduled under current law for selected years over the 75-year period 1992-2066, are shown in Table 6. Further increases in the ratio of expenditures to taxable payroll under alternative II result from the projection that the cost of the HI program will continue to increase at a higher rate than taxable earnings, as discussed later in this section. It can be seen from the selected years shown in Table 6 that, on a year-by-year basis, the tax rates specified by current law are insufficient to support the projected costs of the current program. As a result, the program is severely out of financial balance and actions will need to be taken to increase revenues and/or reduce expenditures.

TABLE 5. – COST OF THE HOSPITAL INSURANCE PROGRAM, EXPRESSED AS A PERCENT OF TAXABLE PAYROLL

Calendar year	Expenditures under the program ¹
1967	0.94%
1968	1.04

TABLE 5. -- COST OF THE HOSPITAL INSURANCE PROGRAM, EXPRESSED AS A PERCENT OF TAXABLE PAYROLL

Calendar year	Expenditures under the program ¹
1969	1.12
1970	1.20
1971	1.32
1972	1.30
1973	1.33
1974	1.42
1975	1.69
1976	1.83
1977	1.95
1978	2.01
1979	1.99
1980	2.20
1981	2.39
1982	2.65
1983	2.67 ²
1984	2.64
1985	2.63
1986	2.54
1987	2.51
1988	2.52
1989	2.65
1990	2.69
1991	2.64

¹Estimated costs attributable to insured beneficiaries only, on an incurred basis. Benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments, rather than through payroll taxes. Gratuitous credits for military service after 1956 are included in taxable payroll.

²Deemed credits for military service before 1984 were attributed to the year in which such service had occurred. If all such credits had been attributed in 1983, expenditures under the program in 1983 would have been lower by 0.18 percent of taxable payroll.

TABLE 6. -- COST AND TAX RATES OF THE HOSPITAL INSURANCE PROGRAM, EXPRESSED AS A PERCENT OF TAXABLE PAYROLL¹

Calendar Year	Expenditures under the program ²	Tax rates scheduled in the law ³	Difference ⁴
1992	2.80%	2.90%	0.10%
1993	2.91	2.90	-0.01
1994	3.05	2.90	-0.15
1995	3.18	2.90	-0.28
2000	3.76	2.90	-0.86

**TABLE 6. -- COST AND TAX RATES OF THE HOSPITAL INSURANCE PROGRAM,
EXPRESSED AS A PERCENT OF TAXABLE PAYROLL ¹**

Calendar Year	Expenditures under the program ²	Tax rates scheduled in the law ³	Difference ⁴
2005	4.28	2.90	-1.38
2010	4.87	2.90	-1.97
2015	5.75	2.90	-2.85
2020	6.58	2.90	-3.68
2025	7.63	2.90	-4.73
2030	8.62	2.90	-5.72
2035	9.29	2.90	-6.39
2040	9.71	2.90	-6.81
2045	9.94	2.90	-7.04
2050	10.13	2.90	-7.23
2055	10.41	2.90	-7.51
2060	10.82	2.90	-7.92
2065	11.27	2.90	-8.37
2066	11.35	2.90	-8.45

¹ Under Alternative II.

² Estimated costs attributable to insured beneficiaries only, on an incurred basis, under alternative II. Benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments, rather than through payroll taxes. Gratuitous credits for military service after 1956 are included in taxable payroll.

³ Rates for employees and employers combined.

⁴ Difference between the tax rate scheduled in the law and program expenditures.

While the year-by-year comparisons discussed are necessary to measure the adequacy of the financing of the HI program, 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 of the HI program is defined to be the difference in 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 present-value method is used to calculate summarized cost rates, tax rates, and actuarial balances in this report, unless otherwise indicated. This approach is the same as that used in the OASDI report. Under the present-value method, the summarized tax rates, cost rates, and actuarial balance are based upon the present values of future income attributable to taxes on an incurred basis, future insured costs on an incurred basis, and future taxable payroll. The present values are calculated by discounting the future annual amounts, at the assumed rates of interest credited to the HI

trust fund, to the beginning of the valuation period. The summarized tax and cost rates over the projection period are then obtained by dividing the present value of the taxable payroll into the present values of tax income and cost, respectively. The difference between the summarized tax rate and cost rate over the long-range projection period, after an adjustment to take into account the fund balance at the valuation date and any target trust fund at the end of the valuation period, is computed to obtain the actuarial balance. In keeping with a decision by the Board of Trustees that it is advisable to maintain a balance in the trust fund equal to a minimum of one year's expenditures, the target trust fund balance is equal to the following year's estimated costs at the end of the 75-year projection period. It should be noted that projecting an end-of-period target trust fund balance does not necessarily insure that the trust fund will maintain such a balance on a year-by-year basis.

Calculating the fund balance under the present-value method is a convenient, generally accepted way of summarizing actuarial status. When the program is in long-run deficit, the actuarial balance computed under the present-value method can be interpreted as the percentage that must be permanently added to current law tax rates or subtracted from cost rates, throughout the entire valuation period, in order that the financing cover all projected program costs and provide for the targeted trust fund balance at the end of the projection period. This actuarial deficit under alternative II assumptions is 4.2 percent of taxable payroll. However, if no changes were made until the trust fund falls below the 100 percent level recommended by the Board of Trustees, the actuarial deficit would be 4.65 percent of taxable payroll. If no changes were made until the year the trust fund will be exhausted, the actuarial deficit would be 5.08 percent of taxable payroll. The OASDI report also employs the present-value method for summarizing the long-term financial status of the Social Security program. An alternative way of calculating actuarial status, the modified average-cost method, is presented in the technical section.

The actuarial balances under all three alternative sets of assumptions, for the first 25-year period, the first 50-year period, the entire 75-year period 1992-2066, and for each 25-year subperiod, are shown in Table 7. The summarized tax rate for the entire 75-year period is 2.90 percent. The summarized cost of the program under alternative II, for the entire 75-year period, is 7.10 percent of taxable payroll. As a result, the trust fund does not meet the long-range test of financial adequacy, which is described in the OASDI report and the Glossary of this report, under any of the three assumption sets.

**TABLE 7. – ACTUARIAL BALANCES OF THE HOSPITAL INSURANCE PROGRAM,
UNDER ALTERNATIVE SETS OF ASSUMPTIONS**

	Alternative		
	I	II	III
Projection periods:			
1992-2016:			
Summarized tax rate ¹	2.90%	2.90%	2.90%
Summarized cost rate ²	3.32	4.25	5.52
Actuarial balance ³	-0.42	-1.35	-2.62
1992-2041:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ²	3.84	6.00	9.78
Actuarial balance ³	-0.94	-3.10	-6.88
1992-2066:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ²	4.24	7.10	12.35
Actuarial balance ³	-1.34	-4.20	-9.45
25-year subperiods:			
1992-2016:			
Summarized tax rate ¹	2.90%	2.90%	2.90%
Summarized cost rate ⁴	3.34	4.20	5.36
Actuarial balance ³	-0.44	-1.30	-2.46
2017-2041:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ⁴	4.47	8.12	14.89
Actuarial balance ³	-1.57	-5.22	-11.99
2042-2066:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ⁴	5.33	10.41	20.50
Actuarial balance ³	-2.43	-7.51	-17.60

¹As scheduled under present law.

²Expenditures 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% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

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

⁴Expenditures 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.

The divergence in outcomes among the three alternatives is reflected both in the estimated operations of the trust fund on a cash basis (as discussed in section I.C.) and in the 75-year summarized costs. The variations in the underlying assumptions, as shown in the technical section, can be characterized as (1) moderate in terms of magnitude of the differences on a year-by-year basis, and (2) persistent over the duration of the projection period. During the first 25-year projection period, under the intermediate assumptions, program expenditures are projected to increase faster than taxable payroll, at a rate which gradually declines to about 2.5 percent more per year than taxable payroll by 2010. However, program expenditures are expected to grow at a rate over 3 percent more than taxable payroll for alternative II in 2016, the last year of the first 25-year projection period. This is just after the major demographic shift, as described below, begins. Under alternative I, program expenditures are also projected to increase faster than taxable payroll, but at a somewhat lower rate, which gradually declines to about one percent more per year than taxable payroll by 2010; the rate then increases, reaching about 1.5 percent more per year than taxable payroll in 2016. Similarly, alternative III follows a pattern whereby program expenditures initially increase faster than taxable payroll and at a somewhat higher rate than the intermediate assumptions, gradually declining to about 4.5 percent more than taxable payroll by 2010, and then increasing to about 5 percent more than taxable payroll in 2016. Past experience has indicated that conditions producing results as adverse as those under alternative III can occur. In view of this and because of the wide range of possible experience, it is important that a balance be maintained in the HI trust fund as a reserve for contingencies.

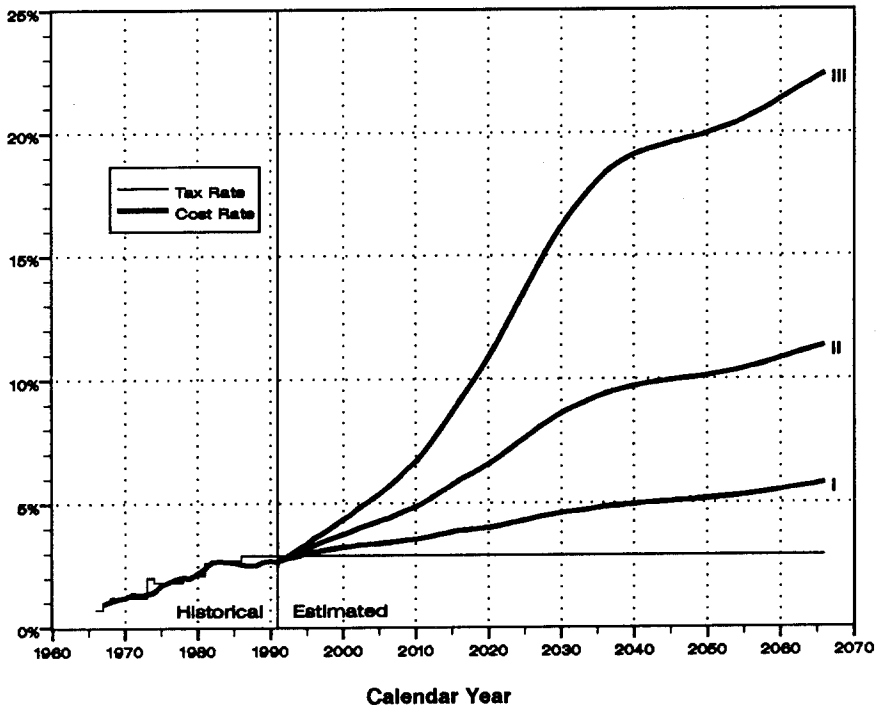
A valuation period of 75 years is needed to present fully the future contingencies that reasonably may be expected to occur, such as the impact of the large shift in the demographic composition of the population which occurs after the turn of the century. As Table 6 indicates, estimated expenditures under the program, expressed as percentages of taxable payroll, increase rapidly during the second 25 years of the projection period. This rapid increase in costs occurs because the relatively large number of persons born during the period between the end of World War II and the early 1960's (known as the "baby boom") will reach retirement age and begin to receive benefits, while the relatively small number of persons born during later years will comprise the labor force. During the last 25 years of the projection period, the projected increases in expenditures under the program stabilize.

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Costs beyond the initial 25-year projection period for alternative II are based upon the assumption that costs per unit of service will increase at the same rate as average hourly earnings increase. Thus, changes in the last fifty years of the projection period primarily reflect the impact of the changing demographic composition of the population. Costs beyond the initial 25-year projection period for alternatives I and III begin by assuming that program cost increases, relative to taxable payroll increases, are approximately two percent less rapid and two percent more rapid, respectively, than the results under the intermediate assumptions. The two percent differentials gradually decrease until the year 2041 when program cost increases, relative to taxable payroll, are approximately the same as under the intermediate assumptions.

Figure 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. Figure 3 illustrates the magnitude of the projected financial imbalance in the HI program by displaying the divergence of the program costs and scheduled tax rates under each set of assumptions.

Figure 3. ESTIMATED HI COSTS AND TAX RATES AS PERCENT OF TAXABLE PAYROLL



The 75-year actuarial balance of the HI program, under alternative II, is estimated to be -4.20, as shown in Table 7. The actuarial balance under alternative II as reported in the 1991 Annual Report was -3.35. The major reasons for the change in the 75-year actuarial balance are summarized in table 6. In more detail, these changes are:

- (1) Changes in valuation period: Deletion of 1991 and the addition of 2066 to the 75-year projection period substitutes a deficit year for a surplus year with respect to the operations of the HI trust fund. The net effect on the actuarial balance is -0.08.
- (2) Home Health Assumptions: Changes in the home health assumptions described in the technical section result in a -0.25 change in the actuarial

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balance. The primary factors contributing to the change are significantly higher recent trends in utilization and slightly higher increases in reimbursement per visit.

- (3) Economic and demographic assumptions: Changes in the economic and demographic assumptions described in the technical section result in a -0.15 change in the actuarial balance. Projections of the population covered by the program are higher than in the 1991 report, while the effects of most economic assumptions are lower.
- (4) Updating the projection base: The cost as a percent of payroll for 1991 was slightly more than estimated in the 1991 report. The net effect of this change on the actuarial balance is -0.05.
- (5) Hospital assumptions: Changes in the hospital assumptions described in the technical section result in a -0.32 change in the actuarial balance. The primary factor contributing to the change is the use of average hourly earnings instead of wages to increase payments per admission in the last 50 years of the projection period.

TABLE 8. – CHANGE IN THE 75-YEAR ACTUARIAL BALANCE SINCE THE 1991 REPORT

1. Actuarial balance, alternative II, 1991 report	-3.35%
2. Changes:	
a. Valuation period	-0.08
b. Base estimate	-0.05
c. Home health assumptions	-0.25
d. Economic and demographic assumptions	-0.15
e. Hospital assumptions	-0.32
f. Net effect, above changes	-0.85
3. Actuarial balance, alternative II, 1992 report	-4.20

E. CONCLUSION

The balance in the Federal Hospital Insurance Trust Fund at the beginning of 1992 was 136 percent of estimated outgo for calendar year 1992, above the minimum 100 percent level recommended by the Board of Trustees. The tax rates specified in the law are sufficient, along with interest earnings and assets in the fund, to support program expenditures only over the next 10 years, under the Trustees' intermediate assumptions. However, the trust fund does not meet the short-range test of financial adequacy, which was described in a previous section of this report. Any significant adverse deviation from these

projections could result in the inability of the fund to meet its obligations much sooner than projected.

Over the 75-year projection period, the tax rate necessary to provide for benefits and administrative expenses far exceeds the tax rate scheduled in the law in most years. The actuarial balance, as defined in the previous section (that is, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance), is -1.35 for the first 25-year projection period, -3.10 for the first 50-year projection period, and -4.20 over the entire 75-year projection period, under the alternative II assumptions. The actuarial balances for the 25-year subperiods, as defined in the previous section (that is, including 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 subperiod), are -1.30, -5.22, and -7.51 for the first, second, and third 25-year subperiods, respectively, under the alternative II assumptions. The trust fund does not meet the Trustees' long-range test of financial adequacy, which is defined in the OASDI report and the Glossary of this report, under any of the three assumption sets. In order to bring the HI program into actuarial balance even for the first 25-year projection period under the alternative II assumptions, either outlays will have to be reduced by 32 percent or income increased by 47 percent (or some combination thereof).

There are currently about 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. As the post-World War II "baby boom" becomes eligible for benefits, the annual rate of increase in program costs as a percentage of taxable payroll rises substantially, from 2.5 percent in 2010 to 3.4 percent in 2015 under alternative II. Not only are the anticipated reserves and financing of the HI program inadequate to offset this demographic change, but under all the assumptions, the HI 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, in 2002 under the alternative II assumptions, and could occur as early as 2000 if the pessimistic assumptions were to happen.

The Trustees note that some steps to attempt to reduce the rate of growth in payments to hospitals have been taken, including the implementation of

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prospective payment and diagnosis-related groups. Initial experience under the prospective payment system for hospitals suggests that this payment mechanism may be an effective means of constraining the growth in hospital payments and improving the efficiency of the hospital industry. Nonetheless, projected costs for the HI program far exceed projected revenues over the 75-year long-range period. As a result, the HI program is severely out of financial balance.

The HI program is projected to increase from 1.3 percent of GDP in CY 1991 to 4.7 percent of GDP in CY 2065. This rapid growth is attributable primarily to (1) increases in hospital admissions, and (2) increases in reported case mix. With 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 Trustees urge the Congress to take additional actions designed to control HI program costs either through specific program legislation or as a part of enacting more comprehensive health care reform.

II. TECHNICAL SECTION

A. SOCIAL SECURITY AMENDMENTS SINCE THE 1991 REPORT

Since the 1991 Annual Report was transmitted to Congress, on May 17, 1991, there have been no legislative changes enacted which would have a significant effect on the financial status of the HI program.

B. NATURE OF THE TRUST FUND

The Federal Hospital Insurance Trust Fund was established on July 30, 1965, as a separate account in the United States Treasury. All the financial operations of the HI program are handled through this fund.

The primary source of income to the trust fund is amounts appropriated to it under permanent authority on the basis of contributions paid by workers, their employers, and individuals with self-employment income, in work covered by the HI program. Beginning January 1, 1987, these appropriated amounts include contributions paid by, or on behalf of, workers employed by State and local governments and their employers, with respect to work covered by the program through State agreements. (Prior to 1987, such contributions were deposited directly into the trust fund.) The coverage of the HI program includes workers covered under the old-age, survivors, and disability insurance (OASDI) program, those covered under the railroad retirement program, and certain Federal, State, and local employees not otherwise covered under the OASDI program.

All employees and their employers in employment covered by the program are required to pay contributions with respect to the wages of individual workers, including cash tips. All covered self-employed persons are required to pay contributions with respect to their self-employment income.

In general, an individual's contributions are computed on annual wages or self-employment income, or both wages and self-employment income combined, up to a specified maximum annual amount, with the contributions being determined first on the wages and then on any self-employment income up to the maximum annual amount. An employee who pays contributions on wages in excess of the annual maximum amount (because of employment with two or more employers) is eligible for a refund of the excess employee contributions. The amount of contributions subject to refund for any period

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is a charge against the trust fund. The maximum amount of earnings on which contributions are payable in a year is called the contribution base.

The HI contribution rates applicable to taxable earnings in each of the calendar years 1966 and later are shown in Table 9. For 1993 and later, the contribution rates shown are the rates scheduled in the provisions of present law. The contribution bases for calendar years 1966 to 1992 are also shown. For 1975 to 1978, the contribution bases were determined under the automatic-adjustment provisions in section 230 of the Social Security Act. The bases for 1979 to 1981 were specified in the law, as amended in 1977. For 1981 to 1990, the automatic-adjustment provisions were again applicable, as they will be for 1992 and later. For calendar year 1991, the contribution base is specified in the law, as amended in 1990.

TABLE 9. -- 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
Past experience:			
1966	\$6,600	0.35	0.35
1967	6,600	0.50	0.50
1968-71	7,800	0.60	0.60
1972	9,000	0.60	0.60
1973	10,800	1.00	1.00
1974	13,200	0.90	0.90
1975	14,100	0.90	0.90
1976	15,300	0.90	0.90
1977	16,500	0.90	0.90
1978	17,700	1.00	1.00
1979	22,900	1.05	1.05
1980	25,900	1.05	1.05
1981	29,700	1.30	1.30
1982	32,400	1.30	1.30
1983	35,700	1.30	1.30
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
1989	48,000	1.45	2.90

TABLE 9. -- 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
Past experience:			
1990	51,300	1.45	2.90
1991	125,000	1.45	2.90
1992	130,200	1.45	2.90
Changes scheduled in present law:			
1993 & later	Subject to automatic adjustment	1.45	2.90

All contributions are collected by the Internal Revenue Service and deposited in the general fund of the Treasury as internal revenue collections. The contributions received are automatically appropriated, on an estimated basis, to the trust fund. The exact amount of contributions received is not known initially since HI contributions, OASDI contributions, and individual income taxes are not separately identified in collection reports received by the Treasury Department. Periodic adjustments are subsequently made to the extent that the estimates are found to differ from the amounts of contributions actually payable on the basis of reported earnings.

Prior to May 1983 and after June 1984, the estimated internal revenue collections were transferred to the trust funds immediately upon receipt. For May 1983 through June 1984, estimated total collections for each month were credited to the trust funds on the first day of the month. As the actual collections were received during the month, they were deposited in the general fund of the Treasury and remained there. The trust funds paid interest to the general fund to reimburse it for the interest lost because of this provision.

Another substantial source of trust fund income is interest credited from investments in government securities held by the fund. The investment procedures of the fund are described later in this section.

The income and expenditures of the trust fund are also affected by the provisions of the Railroad Retirement Act which provide for a system of

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coordination and financial interchange between the railroad retirement program and the HI program.

Sections 217(g) and 229(b) of the Social Security Act, prior to modification by the Social Security Amendments of 1983, authorized annual reimbursement from the general fund of the Treasury to the HI trust fund for costs arising from the granting of deemed wage credits for military service prior to 1957, according to quinquennial determinations made by the Secretary of Health and Human Services. These sections, as modified by the Social Security Amendments of 1983, provided for a lump sum transfer in 1983 for costs arising from such wage credits. In addition, the lump sum transfer included combined employer-employee HI taxes on the noncontributory wage credits for military service after 1965 and before 1984. After 1983, HI taxes on military wage credits are credited to the fund on July 1 of each year. The Social Security Amendments of 1983 also provided for (1) quinquennial adjustments to the lump sum amount transferred in 1983 for costs arising from pre-1957 deemed wage credits and (2) adjustments as deemed necessary to any previously transferred amounts representing HI taxes on noncontributory wage credits.

Section 231 of the Social Security Act authorizes reimbursement from the general fund of the Treasury to the HI trust fund for any costs arising from the granting of deemed wage credits to individuals who were interned during World War II at a place within the United States operated by the Federal Government for the internment of persons of Japanese ancestry.

Two sections of the statute authorize HI benefits for uninsured persons aged 65 and over. Section 103 of the Social Security Amendments of 1965 provided transitional entitlement to HI benefits to those who were 65 before 1968 or who attained age 65 after 1967 and had at least three quarters of covered employment. This entitlement does not apply for those who reach 65 after 1973. Section 278 of the Tax Equity and Fiscal Responsibility Act of 1982 added similar transitional entitlement for those federal employees who would retire before having a chance to earn sufficient quarters of Medicare-qualified federal employment. This provision allows those who were employed by the Federal Government during and before January, 1983, to have the necessary quarters of federal employment counted toward their Medicare entitlement. Such payments are made initially from the HI trust fund, with reimbursement from the general fund of the Treasury for the costs, including administrative expenses, of the payments. The reimbursements so made are on a provisional

basis and are subject to adjustment, with appropriate interest allowances, as the actual experience develops and is analyzed.

Section 1818 of the Social Security Act provides that certain persons not eligible for HI protection either on an insured basis or on the uninsured basis described in the previous paragraph may obtain protection by enrolling in the program and paying a monthly premium.

Section 201(i) of the Social Security Act authorizes the Managing Trustee to accept and deposit in the trust fund unconditional money gifts or bequests made for the benefit of the fund or any activity financed through the fund.

Expenditures for benefit payments and administrative expenses under the HI program are paid from the trust fund. All expenses incurred by the Department of Health and Human Services and by the Treasury Department in carrying out the provisions of title XVIII of the Social Security Act pertaining to the HI program and of the Internal Revenue Code relating to the collection of contributions are charged to the trust fund. The Secretary of Health and Human Services certifies benefit payments to the Managing Trustee, who makes the payments from the trust fund in accordance therewith.

Prior to fiscal year 1984, hospitals, at their option, were permitted to combine their billing for both hospital and physician components of radiology and pathology services rendered to hospital inpatients by hospital-based physicians. Where hospitals elected this billing procedure, payments were made initially from the HI trust fund. The reimbursements so made were on a provisional basis and are subject to adjustment, with appropriate interest allowance.

The Social Security Amendments of 1967 and 1972 authorize the Secretary of Health and Human Services to develop and conduct a broad range of experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services, under the HI and supplementary medical insurance (SMI) programs. A sizable portion of the costs of such experiments and demonstration projects is paid from the HI and SMI trust funds.

Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities

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for use in connection with the administration of the HI program. Both the capital costs of construction financed directly through the trust funds and the rental and lease, or purchase contract costs of acquiring facilities are included in trust fund expenditures. In 1972-75, construction of several large facilities was authorized under purchase contract authority, wherein initial capital costs were borne by the private sector. Under this method of facilities acquisition, trust fund expenditures for use and ultimate Government ownership of a facility are made over periods of from 10 to 30 years. Whatever the manner of acquisition, the net worth of facilities and other fixed capital assets is not carried in the statement of the assets of the trust fund presented in this report. This is because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and, therefore, is not viewed as being a consideration in assessing the actuarial status of the funds.

That portion of the trust fund which, in the judgment of the Managing Trustee, is not required to meet current expenditures for benefits and administration, is invested, on a daily basis, in interest-bearing obligations of the U.S. Government (including special public-debt obligations described below), in obligations guaranteed as to both principal and interest by the United States, or in certain federally sponsored agency obligations that are designated in the laws authorizing their issuance as lawful investments for trust funds under the control and authority of the United States or any officer of the United States. These obligations may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that such special public-debt obligations shall bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month next preceding the date of such issue) on all marketable interest-bearing obligations of the United States forming a part of the public debt which are not due or callable until after the expiration of 4 years from the end of such month. These special issue securities are redeemable at par value at all times, and so are not subject to the uncertainty of price fluctuations as interest rates change.

From December 29, 1981, until January 1, 1988, the Social Security Act authorized borrowing among the OASI, DI, and HI trust funds when necessary "to best meet the need for financing the benefit payments" from the

three funds. Interfund loans under the borrowing authority were made to the OASI trust fund from the DI and HI trust funds in 1982, and were fully repaid by May 1986. In this report, the assets of the HI trust fund at the end of 1982 through 1985, inclusive, do not include the amounts owed to the trust fund. This procedure is followed because the borrowed amounts were available to the borrowing fund for the payment of benefits or other obligations, while such amounts were not readily available to the lending fund.

C. SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1991

A statement of the revenue and disbursements of the Federal Hospital Insurance Trust Fund in fiscal year 1991, and of the assets of the fund at the beginning and end of the fiscal year, is presented in Table 10.

The total assets of the trust fund amounted to \$95,631 million on September 30, 1990. During fiscal year 1991, total revenue amounted to \$83,938 million, and total disbursements were \$69,638 million. The assets of the trust fund thus increased \$14,299 million during the year to a total of \$109,930 million on September 30, 1991.

TABLE 10. -- STATEMENT OF OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING FISCAL YEAR 1991
(In thousands of dollars)

Total assets of the trust fund, beginning of period	\$95,631,052
Revenue:	
Appropriation of employment taxes	\$74,813,969
Refunds of employment taxes	-160,950
Deposits arising from State agreements	2,448
Interest on investments	8,962,383
Premiums collected from voluntary participants	366,615
Transfer from railroad retirement account	329,000
Transitional uninsured coverage	605,000
Military service credits of 1991	89,338
Military service credit quinquennial adjustment	-1,100,000
Interest on reimbursements, SSA ¹	6,361
Interest on reimbursements, HCFA ¹	0
Interest on reimbursements, Railroad	23,177

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TABLE 10. -- STATEMENT OF OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING FISCAL YEAR 1991
(In thousands of dollars)

Other	308
Total revenue	<u>\$83,937,648</u>
Disbursements:	
Benefit payments	\$68,704,805
Administrative expenses:	
Treasury administrative expenses	38,908
Salaries and expenses, SSA ²	305,361
Salaries and expenses, HCFA ³	562,013
Salaries and expenses, Office of Secretary	19,780
Construction	638
Professional Standards Review Organization	0
Reimbursement of SSA expenses	0
Reimbursement of HCFA expenses	0
Payment Assessment Committee	3,294
Policy and Research	3,535
Total disbursements	<u>\$69,638,335</u>
Total assets of the trust fund, end of period	<u>\$109,930,366</u>

¹A positive figure represents a transfer of the HI trust fund from the other trust funds. A negative figure represents a transfer from the HI trust fund to the other trust funds.

²For facilities, goods, and services provided by the Social Security Administration (SSA).

³Includes administrative expenses of the intermediaries.

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

Included in total revenue during fiscal year 1991 was \$74,814 million representing contributions appropriated to the trust fund. As an offset, \$161 million was transferred from the trust fund into the Treasury as repayment for the estimated amount of contributions subject to refund to employees who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum earnings base, and \$2 million was transferred from State and local governments to the trust fund for underpayments from previous State agreements for coverage of State and local government employees.

Net contributions amounted to \$74,655 million, representing an increase of 5.7 percent over the amount of \$70,655 million for the preceding 12-month period. This growth in contribution income resulted primarily from (1) the higher level of earnings in covered employment and (2) the two increases in

the maximum annual amount of earnings taxable from \$48,000 to \$51,300 and from \$51,300 to \$125,000 that became effective January 1, 1990, and January 1, 1991, respectively.

Section II.B. referred to provisions under which the HI trust fund is to be reimbursed from the general fund of the Treasury for costs of paying benefits under this program on behalf of certain uninsured persons. The reimbursement in fiscal year 1991 amounted to \$605 million (\$559 million for the non-federal uninsured and \$46 million for the federal uninsured), consisting of \$596 million for benefit payments and \$9 million for administrative expenses.

Section II.B. referred to provisions of the Social Security Act under which certain persons not otherwise eligible for HI protection may obtain such protection by enrolling in the program and paying a monthly premium. Premiums collected from such voluntary participants in fiscal year 1991 amounted to about \$367 million.

In accordance with the provisions of the Railroad Retirement Act which coordinate the railroad retirement and the HI programs and which govern the financial interchange arising from the allocation of costs between the two systems, the Railroad Retirement Board and the Secretary of Health and Human Services determined that a transfer of \$329 million in principal and about \$3 million in interest from the railroad retirement program's Social Security Equivalent Benefit Account to the HI trust fund would place this fund in the same position, as of September 30, 1990, in which it would have been if railroad employment had always been covered under the Social Security Act. This amount, together with interest to the date of transfer amounting to about \$20 million, was transferred to the trust fund in June 1991.

In accordance with provisions for the appropriation to the trust fund of HI taxes on noncontributory military wage credits as discussed in section II.B., the trust fund was credited on July 1, 1991 with \$89 million for calendar year 1991 taxes on wage credits. In addition, \$1,100 million was transferred out of the trust fund due to the quinquennial adjustment as described in section II.B..

The remaining \$8,969 million of revenue consisted almost entirely of interest credited from the investments held by the trust fund.

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Of the \$69,638 million in total disbursements, \$68,705 million represented benefits paid directly from the trust fund for health services covered under title XVIII of the Social Security Act. Benefit payments increased 4.2 percent in fiscal year 1991 over the corresponding amount of \$65,912 million paid during the preceding 12 months.

The remaining \$934 million of disbursements was for net administrative expenses. Administrative expenses are allocated and charged directly to each of the four trust funds--OASI, DI, HI, and SMI--on the basis of provisional estimates. Similarly, the expenses of administering other programs of the Health Care Financing Administration are also allocated and charged directly to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses and costs of construction for prior periods are effected by interfund transfers, including transfers between the HI and SMI trust funds and the program management general fund account, with appropriate interest allowances.

Table 11 compares the actual experience in fiscal year 1991 with the estimates presented in the 1990 and 1991 annual reports. Section II.B. referred to the appropriation of contributions to the trust funds on an estimated basis, with subsequent periodic adjustments to account for differences from the amounts of contributions actually payable on the basis of reported earnings. In interpreting the figures in Table 11, it should be noted that the "actual" amount of contributions in fiscal year 1991 reflects the aforementioned type of adjustments to contributions for prior fiscal years. On the other hand, the "actual" amount of contributions for fiscal year 1991 does not reflect adjustments to contributions for fiscal year 1991 that were to be made after September 30, 1991.

TABLE 11. -- COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND, FISCAL YEAR 1991
(Dollar amounts in millions)

Item	Comparison of actual experience with estimates for fiscal year 1991 published in--				
	1991 report		1990 report		
	Actual amount	Estimated amount ¹	Actual as percentage of estimate	Estimated amount ²	Actual as percentage of estimate
Net contributions	\$74,655	\$75,104	99	\$75,252	99
Benefit payments	\$68,705	\$69,127	99	\$66,773	103

¹Under Alternative II

²Under Alternative II-B

The assets of the HI trust fund at the end of fiscal year 1990 totaled \$95,631 million, consisting of \$96,249 million in the form of obligations of the U.S. Government or of federally-sponsored agency obligations and, as an offset, an extension of credit of \$617 million against securities to be redeemed. The assets of the HI trust fund at the end of fiscal year 1991 totaled \$109,930 million, consisting of \$109,327 million in the form of U.S. government obligations and an undisbursed balance of \$604 million. Table 12 shows the total assets of the fund and their distribution at the end of fiscal years 1990 and 1991.

TABLE 12. -- ASSETS OF THE HOSPITAL INSURANCE TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1990 AND 1991¹

	September 30, 1990	September 30, 1991
Investments in public-debt obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
7 7/8-percent, 1992	-----	\$1,975,955,000.00
8 7/8-percent, 1991	\$4,150,537,000.00	-----
Bonds:		
8 1/8-percent, 1993-2006	-----	19,033,521,000.00
8 1/4-percent, 1993	622,286,000.00	622,286,000.00
8 3/8-percent, 1992	1,231,586,000.00	-----
8 3/8-percent, 1993-2001	11,602,906,000.00	11,602,906,000.00
8 5/8-percent, 1992	686,250,000.00	415,260,000.00
8 5/8-percent, 1993-2002	9,371,654,000.00	9,371,654,000.00
8 3/4-percent, 1992-2005	40,033,166,000.00	40,033,166,000.00
9 1/4-percent, 1991	1,000,698,000.00	-----

TABLE 12. – ASSETS OF THE HOSPITAL INSURANCE TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1990 AND 1991¹

9 1/4-percent, 1992-2003	15,609,899,000.00	15,609,899,000.00
9 3/4-percent, 1993-1995	1,240,090,000.00	1,240,090,000.00
10 3/8-percent, 1991	427,023,000.00	-----
10 3/8-percent, 1992	427,023,000.00	427,023,000.00
10 3/8-percent, 1998-2000	2,131,610,000.00	2,131,610,000.00
10 3/4-percent, 1991	588,410,000.00	-----
10 3/4-percent, 1992	588,410,000.00	588,410,000.00
10 3/4-percent, 1998	588,410,000.00	588,410,000.00
13 -percent, 1993-1996	1,770,094,000.00	1,770,094,000.00
13 1/4-percent, 1993-1997	2,541,541,000.00	2,541,541,000.00
13 3/4-percent, 1991	262,134,000.00	-----
13 3/4-percent, 1992	262,134,000.00	262,134,000.00
13 3/4-percent, 1998-1999	1,112,678,000.00	1,112,678,000.00
Total investments	\$96,248,539,000.00	\$109,326,637,000.00
Undisbursed balance ²	-617,486,894.57	603,728,746.67
Total assets	\$95,631,052,105.43	\$109,930,365,746.67

¹ Certificates of indebtedness and bonds are carried at par value, which is the same as book value.

² Negative figures represent extension of credit against securities to be redeemed within the following few days.

New securities at a total par value of \$101,038 million were acquired during the fiscal year through the investment of revenue and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the fiscal year was \$87,960 million. Thus, the net increase in the par value of the investments held by the fund during fiscal year 1991 amounted to \$13,078 million.

The effective annual rate of interest earned by the assets of the HI trust fund during the 12 months ending on June 30, 1991, was 9.51 percent. (This period is used because interest on special issues is paid semiannually on June 30 and December 31.) The interest rate on public-debt obligations issued for purchase by the trust fund in June 1991 was 8.125 percent, payable semiannually.

***D. ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS
FOR THE HOSPITAL INSURANCE COST ESTIMATES***

This section describes the basic methodology and assumptions used in the estimates for the HI program under the intermediate (alternative II) assumptions. In addition, sensitivity testing of program costs under two alternative sets of assumptions is presented.

1. Assumptions

The alternative II economic assumptions used in the estimates can generally be characterized as assuming that economic performance will be substantially more favorable during the 75-year valuation period than during the last 25 years. Both the economic and demographic assumptions underlying the projections shown in this report are consistent with those in the 1992 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance (OASDI) Trust Funds. These assumptions are described in more detail in that report.

2. Program Cost Projection Methodology

The principal steps involved in projecting the future costs of the HI program are (1) establishing the present cost of services provided to beneficiaries, by type of service, to serve as a projection base; (2) projecting increases in payment amounts for inpatient hospital services under the program; (3) projecting increases in payment amounts for skilled nursing facility (SNF), home health agency (HHA), and hospice services covered under the program; and (4) projecting increases in administrative costs. The major emphasis is directed toward expenditures for inpatient hospital services, which account for approximately 88 percent of total benefits.

a. Projection Base

In order to establish a suitable base from which to project the future costs of the program, the incurred payments for services provided must be reconstructed for the most recent period for which a reliable determination can be made. To do this, payments to providers must be attributed to dates of service, rather than to payment dates. In addition, the nonrecurring effects of any changes in regulations, legislation, or administration of the program and of any items affecting only the timing and flow of payments to providers

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must be eliminated. As a result, the rates of increase in the incurred cost of the program differ from the increases in cash disbursement shown in Tables 1 and 2.

For those expenses still reimbursed on a reasonable cost basis, the costs for covered services are determined on the basis of provider cost reports. Payments to a provider initially are made on an interim basis; to adjust interim payments to the level of retroactively determined costs, a series of payments or recoveries is effected through the course of cost settlement with the provider. The net amounts paid to date to providers in the form of cost settlements are known; however, the incomplete data available do not permit a precise determination of the exact amounts incurred during a specific period of time. Due to the time required to obtain cost reports from providers, to verify these reports, and to perform audits (where appropriate), final settlements have lagged behind the liability for such payments of recoveries by as much as several years for some providers. Hence, the final cost of services reimbursed on a reasonable cost basis has not been completely determined for the most recent years of the program, and some degree of uncertainty remains even for earlier years.

Even for inpatient hospital operating payments paid for on the basis of diagnosis-related groups (DRGs), most payments are initially made on an interim basis, and final payments are determined on the basis of bills containing detailed diagnostic information which are later submitted by the hospital.

Additional problems are posed by changes in legislation or regulation, or in administrative or reimbursement policy, which have a substantial effect on either the amount or incidence of payment. The extent and timing of the incorporation of such changes into interim payment rates and cost settlement amounts cannot be determined precisely.

The process of allocating the various types of payments made under the program to the proper incurred period--using incomplete data and estimates of the impact of administrative actions--presents difficult problems, the solutions to which can be only approximate. Under the circumstances, the best that can be expected is that the actual incurred cost of the program for a recent period can be estimated within a few percent. This increases the projection error directly, by incorporating any error in estimating the base year into all future years.

b. Payments for Inpatient Hospital Costs

Beginning with hospital accounting years starting on or after October 1, 1983, the HI program began paying almost all participating hospitals a prospectively-determined amount for providing covered services to beneficiaries. With the exception of certain expenses (such as capital-related and medical education expenses) reimbursed on a reasonable cost or per resident cost basis, as defined by law, the payment rate for each admission depends upon the DRG to which the admission belongs.

The law contemplates that the annual increase in the payment rate for each admission will be related to a hospital input price index, which measures the increase in prices for goods and services purchased by hospitals for use in providing care to hospital inpatients. In other literature, the hospital input price index is also called the hospital market basket percentage increase. For fiscal years through 1992, the prospective payment rates have already been determined. The projections contained in this report are based on the assumption that for fiscal years 1993 through 1995, the prospective payment rates will be increased in accordance with Public Law 101-508, the Omnibus Budget Reconciliation Act of 1990, and these legislated annual payment rate increases are indeed functions of the annual hospital input price indices. For fiscal years 1996 and later, current statute mandates that the annual increase in the payment rate per admission equal the annual hospital input price index.

Increases in aggregate payments for inpatient hospital care covered under the HI program can be analyzed into four broad categories:

- (1) Labor factors--the increase in the hospital input price index which is attributable to increases in hospital workers' hourly earnings;
- (2) Non-labor factors--the increase in the hospital input price index which is attributable to factors other than hospital workers' hourly earnings, such as the costs of energy, food, and supplies;
- (3) Unit input intensity allowance--the increase in inpatient hospital payments per admission which are in excess of those attributable to increases in the hospital input price index; and

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- (4) Volume of services--the increase in total output of units of service (as measured by hospital admissions covered by the HI program).

It has been possible to isolate some of these elements and to identify their roles in previous hospital payment increases. Table 13 shows the estimated values of the principal components of the increases for historical periods for which data are available and the projected trends used in the estimates. The following discussions apply to projections under alternative II, unless otherwise indicated.

TABLE 13.—COMPONENTS OF HISTORICAL AND PROJECTED INCREASES IN HI INPATIENT HOSPITAL PAYMENTS¹
(Percent)

Calendar year	Labor			Non-labor			Units of service					
	Average hourly earnings	Hospital hourly earnings level	Hospital hourly earnings		Hospital price input intensity	Non-labor hospital prices	Input price index	Unit input intensity allowance ²	HI enrollment	Admission incidence	Other Sources	HI inpatient hospital payments
				CPI								
Historical Data:												
1981	9.4%	0.5%	10.0%	10.3%	0.0%	10.3%	10.1%	1.0%	1.9%	2.7%	3.0%	19.7%
1982	5.8	2.9	8.9	6.0	-0.1	5.9	7.4	1.0	1.8	0.0	4.8	15.7
1983	4.1	1.9	6.1	3.0	1.0	4.0	5.1	1.0	1.7	0.8	2.2	11.2
1984	6.4	-0.9	5.4	3.4	0.9	4.3	4.9	1.0	1.8	-3.8	7.4	11.4
1985	5.4	-0.9	4.5	3.5	-0.5	3.0	3.8	0.0	1.6	-7.4	8.2	5.7
1986	5.3	-1.6	3.6	1.6	0.0	1.6	2.6	-2.5	2.3	-5.6	7.1	3.5
1987	4.8	-0.7	4.1	3.6	-0.5	3.1	3.6	-2.5	1.7	-3.0	5.0	4.7
1988	4.3	0.2	4.5	4.0	1.6	5.7	5.1	-2.6	1.7	-1.2	2.8	5.9
1989	3.2	1.6	4.9	4.8	1.0	5.9	5.4	-1.4	2.0	-2.5	4.7	8.3
1990	5.3	-0.3	5.0	5.3	-0.6	4.7	4.9	-0.2	2.1	-1.0	1.2	7.1
Projection: ³												
1991	3.3	1.3	4.6	4.1	-0.8	3.3	4.0	-0.9	2.2	-0.8	2.6	7.2
1992	4.0	1.0	5.0	2.9	1.0	3.9	4.5	-1.4	2.2	0.3	3.4	9.3
1993	4.3	0.7	5.0	3.3	0.9	4.2	4.6	-1.0	2.1	0.7	2.5	9.2
1994	4.6	0.7	5.3	3.6	0.8	4.4	4.9	0.2	1.9	1.2	2.5	11.1
1995	5.1	0.5	5.6	3.9	0.7	4.6	5.2	0.2	1.7	1.1	2.5	11.1
2000	5.4	0.5	5.9	4.0	0.5	4.5	5.3	0.0	1.2	1.1	1.6	9.5
2005	5.2	0.5	5.7	4.0	0.5	4.5	5.2	0.0	1.4	0.5	1.0	8.3
2010	5.3	0.5	5.8	4.0	0.5	4.5	5.3	0.0	1.9	0.2	0.8	8.4
2015	5.4	0.5	5.9	4.0	0.5	4.5	5.4	0.0	2.7	-0.1	1.0	9.2
2016	5.4	0.5	5.9	4.0	0.5	4.5	5.4	0.0	2.7	-0.4	1.0	8.9

¹Percent increase in year indicated over previous year, on an incurred basis.

²Reflects the allowances provided for in the prospective payment update factors.

³Under alternative II.

Note: Historical and projected data reflect the hospital input price index which was recalibrated to a 1987 base year in 1990.

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Increases in hospital workers' hourly earnings can be analyzed and projected in terms of the assumed increases in hourly earnings in employment in the general economy and the difference between hourly earnings increases in the general economy and the proxy for hospital hourly earnings used in the hospital input price index. Since the beginning of the HI program, the differential between the proxy for hospital workers' hourly earnings and hourly earnings in the general economy has fluctuated widely. Since 1981, this positive differential has averaged about 0.3 percent, as hospital workers' earnings have risen faster than general earnings. Several factors contributing to this differential can be identified, including (1) growth in third-party reimbursement of hospitals--through Medicare, Medicaid, and comprehensive private plans--which is likely to have weakened hospital resistance to wage demands; (2) increased proportions of highly trained and more highly paid personnel; (3) an increased degree of labor organization and activity; and (4) the fact that hospital employees had historically earned less than similarly skilled workers in other industries. During the initial years of the prospective payment system, it appears that hospital hourly earnings were depressed relative to those in the general economy as hospitals adapted to the prospective payment system. This differential is assumed to decrease to a level of one-half percent over the short term, declining to zero just after the end of the first 25-year projection period.

Increases in hospital price input intensity, which are primarily the result of price increases for non-labor goods and services that hospitals purchase which do not parallel increases in the Consumer Price Index (CPI), are measured as the difference between the non-labor component of the hospital input price index and the CPI. Although the level has fluctuated erratically in the past, this differential has averaged about 0.3 percent during 1981-1990. Over the short term, hospital price input intensity is assumed to decrease to a level of one-half percent, declining to zero just after the end of the first 25-year period.

For years prior to the beginning of the prospective payment system, the unit input intensity allowance has been set at one percent for illustrative purposes, with historical increases in excess of one percent allocated to other sources. For years after the beginning of the prospective payment system, the unit input intensity allowance is the allowance provided for in the prospective payment update factor; that is, the unit input intensity allowance is the amount added onto (or subtracted from) the input price index to yield the update factor. (It should be noted that the update factors are generally prescribed

on a fiscal year basis, while Table 13 is on a calendar year basis. Calculations have therefore been performed to estimate the unit input intensity allowance on a calendar year basis.) For fiscal years 1991-1995, the allowances shown are prescribed in Public Law 101-508. (Again, calculations were performed to show the unit input intensity allowance on a calendar year basis.) Beginning in fiscal year 1996, the law provides that future increases in payments to participating hospitals for covered admissions will equal the increase in the hospital input price index. Thus, the unit input intensity allowance, as indicated in Table 13, is assumed to equal zero for the rest of the years in the first 25-year projection period.

Since the beginning of the prospective payment system, increases in inpatient hospital payments from other sources are primarily due to three factors: (1) the improvement in DRG coding as hospitals continue to adjust to the prospective payment system; (2) the trend toward treating less complicated (and thus, less expensive) cases in outpatient settings, resulting in an increase in the average prospective payment per admission; and (3) legislation affecting the payment rates. The effects of several budget reconciliation acts, sequesters as required by the Gramm-Rudman-Hollings Act, and other legislative effects are reflected in other sources, as appropriate. Some of the expansions in hospital payments due to the Medicare Catastrophic Coverage Act of 1988, and the subsequent reductions in hospital payments due to the Medicare Catastrophic Coverage Repeal Act of 1989, are reflected in other sources for 1989 to 1991. A two percent increase for fiscal years 1991 through 2000 and a one percent increase for fiscal years 2001 through 2016 reflected in other sources are attributable to a continuation of the current trend toward treating less complicated cases in outpatient settings and continued improvement in DRG coding. Additionally, part of the increase from other sources can be attributed to the increase in payments for certain costs not included in the DRG payment; these costs are generally increasing at a rate faster than the input price index. Possible other sources of both relative increases and decreases in payments include (1) a shift to more or less expensive admissions (DRGs) due to changes in the demographic characteristics of the covered population; (2) changes in medical practice patterns; and (3) adjustments in the relative payment levels for various DRGs or addition/deletion of DRGs in response to changes in technology. As experience under the prospective payment system continues to develop and is further analyzed, it may be possible to establish a predictable trend for this component.

Other factors which contribute to increases in payments for inpatient hospital services include increases in units (volume) of service as measured by increases in inpatient hospital admissions covered under the HI program. Increases in admissions are attributable both to increases in enrollment under the HI program and to increases in admission incidence (admissions per beneficiary). The historical and projected increases in enrollment reflect the more rapid increase in the population aged 65 and over than in the total population of the United States, and the coverage of certain disabled beneficiaries and persons with end-stage renal disease. Increases in the enrollment are expected to continue, reflecting a continuation of the demographic shift into categories of the population which are eligible for HI protection. In addition, increases in the average age of beneficiaries lead to higher levels of admission incidence. Admission incidence levels are also often affected by changes in the laws and regulations that define and guide the HI program's coverage of inpatient hospital care.

c. Skilled Nursing Facility (SNF), Home Health Agency (HHA), and Hospice Costs

Historical experience with the number of days of care covered in SNFs under the HI program has been characterized by wide swings. The number of covered days dropped very sharply in 1970 and continued to decline through 1972. This was the result of strict enforcement of regulations separating skilled nursing care from custodial care. Because of the small fraction of nursing home care covered under the program, this reduction primarily reflected the determination that Medicare was not liable for payment rather than reduced usage of services. The 1972 amendments extended benefits to persons who require skilled rehabilitative services regardless of their need for skilled nursing services (the former prerequisite for benefits). This change and subsequent related changes in regulations have resulted in significant increases in the number of services covered by the program. More recently, changes made in 1988 to coverage guidelines for SNF services resulted in about a 100 percent increase in utilization, and expansions and changes due to the Medicare Catastrophic Coverage Act of 1988, effective January 1, 1989, resulted in about another 30 percent increase in utilization of SNF services. For 1990, the projections contained in this report reflect a reduction in utilization consistent with the SNF transition provisions of the Medicare Catastrophic Coverage Repeal Act of 1989; for 1991, the complete repeal of the catastrophic expansions and changes are reflected. Modest increases in

covered days, based on growth and aging of the population, are projected for 1992 and later, and are included in the 1990 and 1991 estimates as well.

Increases in the average cost per day (where cost is defined to be the total of program reimbursement and beneficiary cost sharing) in skilled nursing facilities under the program are caused principally by increasing payroll costs for nurses and other required skilled labor. Projected rates of increase in cost per day are assumed to be slightly lower than increases in general earnings throughout the projection period, but adjustments to reflect regulations limiting SNF costs per day are included where appropriate. Increases in reimbursement per day reflect the changes in beneficiary cost sharing amounts, including those changes resulting from the catastrophic coverage and catastrophic coverage repeal legislation.

The resulting increases in expenditures for SNF services are shown in Table 14.

**TABLE 14. -- RELATIONSHIP BETWEEN INCREASES IN HI PROGRAM
EXPENDITURES AND INCREASES IN TAXABLE PAYROLL ¹**
(Percent)

Calendar year	Inpatient hospital ^{2,3}	Skilled nursing facility ³	Home health agency ³	Weighted average ^{3,4}	HI admin- istrative costs ^{3,5}	HI program expendi- tures ^{3,5}	HI taxable payroll	Ratio of expendi- tures to payrolls ⁶
1992	9.3%	6.3%	20.1%	10.2%	8.1%	10.2%	3.8%	6.1%
1993	9.3	6.0	15.3	9.8	6.4	9.8	5.3	4.2
1994	11.2	5.9	8.9	10.9	6.9	10.8	5.9	4.7
1995	11.1	6.1	9.1	10.9	7.3	10.8	6.2	4.4
2000	9.5	6.2	8.8	9.4	6.9	9.4	6.2	3.0
2005	8.3	5.8	8.3	8.3	6.4	8.2	5.9	2.2
2010	8.4	5.5	8.0	8.3	6.4	8.3	5.7	2.5

TABLE 14. -- RELATIONSHIP BETWEEN INCREASES IN HI PROGRAM EXPENDITURES AND INCREASES IN TAXABLE PAYROLL ¹
(Percent)

Calendar year	Inpatient hospital ^{2,3}	Skilled nursing facility ³	Home health agency ³	Weighted average ^{3,4}	HI administrative costs ^{3,5}	HI program expenditures ^{3,5}	HI taxable payroll	Ratio of expenditures to payrolls ⁶
2015	9.2	5.6	8.2	9.0	7.0	9.0	5.4	3.4
2016	8.9	5.7	8.3	8.8	6.7	8.8	5.3	3.2

¹Percent increase in year indicated over previous year, under alternative II.

²This column may differ slightly from the last column of Table 13, since Table 13 includes all persons eligible for HI protection while this table excludes noninsured persons.

³Costs attributable to insured beneficiaries only, on an incurred basis. Benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments, rather than through payroll taxes.

⁴Includes costs for hospice care.

⁵Includes costs of Peer Review Organizations.

⁶Percent increase in the ratio of program expenditures to taxable payroll. This is equivalent to the differential between the increase in program costs and the increase in taxable payroll.

NOTE: Taxable payroll is adjusted to take into account the lower contribution rates on multiple-employer "excess wages," as compared with the combined employer-employee rate.

Program experience with HHA payments has shown a generally upward trend. The number of visits had increased sharply from year to year, but some decreases, albeit small in magnitude relative to past increases, were experienced in the mid-1980's; these were followed by modest increases. Recently, however, large increases in the number of visits have occurred, and this trend is projected to continue through 1993. Modest increases, based on growth and aging of the population, are projected thereafter. Reimbursement per visit is assumed to increase at a slightly higher rate than increases in general earnings, but adjustments to reflect regulations limiting HHA reimbursement per visit are included where appropriate. The resulting increases in expenditures for HHA services are shown in Table 14.

Coverage of certain hospice care for terminally ill beneficiaries is a relatively new program benefit, resulting from the enactment of the Tax Equity and Fiscal Responsibility Act of 1982, and payments for hospice care are very small relative to total program benefit payments. Detailed hospice data is, at this time, scant, but increases in hospice benefit payments are estimated based on daily payment rates and annual payment caps, as mandated by law and regulation, and modest growth in the number of covered days. Increases in hospice payments are not shown separately in Table 14 due to their extremely

small contribution to the weighted average increase for all HI types of service, but are included in the average.

d. Administrative Expenses

The costs of administering the HI program have remained relatively small, in comparison with benefit amounts, throughout the history of the program. The ratio of administrative expenses to benefit payments has generally fallen within the range of one to three percent. The short-range projection of administrative cost is based on estimates of workloads and approved budgets for intermediaries and the Health Care Financing Administration. In the long range, administrative cost increases are based on assumed increases in workloads, primarily due to growth and aging of the population, and on assumed unit cost increases of slightly less than the increases in average hourly earnings shown in Table 13.

3. Financing Analysis Methodology

In order to analyze costs and to evaluate the financing of a program supported by payroll taxes, program costs must be compared on a year-by-year basis with the taxable payroll which provides the source of income for these costs. Since the vast majority of total program costs are related to insured beneficiaries and since general revenue appropriations and premium payments are expected to support the uninsured segments, the remainder of this report will focus on the financing for insured beneficiaries.

a. Taxable Payroll

Taxable payroll increases can be separated into a part due to increases in covered earnings and a part due to increases in the number of covered workers. The taxable payroll projection used in this report is based on economic assumptions consistent with those used in the OASDI report. Increases in taxable payroll assumed for this report are shown in Table 14.

b. Relationship Between Program Costs and Taxable Payroll

The single most meaningful measure of program cost increases, with reference to the financing of the system, is the relationship between program cost

increases and taxable payroll increases. If the rates of increase in both series are the same, given that the current tax rate applied to taxable payroll is sufficient to support program costs, continuing that tax rate over time will be adequate to support the program. However, to the extent that program costs increase more rapidly than taxable payroll, either a schedule of increasing tax rates or a reduction in program costs (or some combination thereof) will be required to finance the system in the future. Table 14 shows the resulting increases in program costs relative to taxable payroll over the first 25-year projection period. These relative increases reduce gradually to a level of about 2.5 percent per year by 2010, but increase to a level of about 3 percent per year by 2016 for alternative II, just after the post-World War II "baby boom" population starts becoming eligible for benefits. The result of these increases is a continued increase in the year-by-year ratios of program expenditures to taxable payroll, as shown in Table 15.

TABLE 15. -- SUMMARY OF ALTERNATIVE PROJECTIONS FOR THE HOSPITAL INSURANCE PROGRAM
(Percent)

Calendar year	Increases in aggregate HI inpatient hospital payments ¹				Changes in the relationship between expenditures and payroll ¹			
	Average hourly earnings	CPI	Other factors ²	Total ³	Program expenditures ^{3,4,5}	Taxable payroll	Ratio of expenditures to payroll	Expenditures as a percent of taxable payroll ^{3,4,5}
Alternative I:								
1992	4.3%	2.5%	5.4%	9.0%	9.9%	4.5%	5.1%	2.77%
1993	4.5	2.8	4.2	8.0	8.8	6.2	2.4	2.83
1994	4.8	3.0	5.5	9.7	9.7	6.6	2.9	2.91
1995	5.0	3.0	5.2	9.5	9.4	6.7	2.6	2.99
2000	4.9	3.0	3.0	7.2	7.3	6.0	1.3	3.24
2005	4.6	3.0	1.9	5.9	6.1	5.6	0.5	3.38
2010	4.7	3.0	1.9	6.0	6.2	5.3	0.8	3.55
2015	4.8	3.0	2.6	6.8	6.9	5.2	1.6	3.84
2016	4.9	3.0	2.3	6.5	6.6	5.1	1.4	3.90
Alternative II:								
1992	4.0%	2.9%	5.6%	9.3%	10.2%	3.8%	6.1%	2.80%
1993	4.3	3.3	5.2	9.2	9.8	5.3	4.2	2.91
1994	4.6	3.6	6.7	11.1	10.8	5.9	4.7	3.05
1995	5.1	3.9	6.3	11.1	10.8	6.2	4.4	3.18
2000	5.4	4.0	4.5	9.5	9.4	6.2	3.0	3.76
2005	5.2	4.0	3.5	8.3	8.2	5.9	2.2	4.28
2010	5.3	4.0	3.5	8.4	8.3	5.7	2.5	4.87
2015	5.4	4.0	4.2	9.2	9.0	5.4	3.4	5.75

**TABLE 15. -- SUMMARY OF ALTERNATIVE PROJECTIONS FOR THE HOSPITAL
INSURANCE PROGRAM**
(Percent)

Calendar year	Increases in aggregate HI inpatient hospital payments ¹				Changes in the relationship between expenditures and payroll ¹			
	Average hourly earnings	CPI	Other factors ²	Total ³	Program expendi- tures ^{3,4,5}	Taxable payroll	Ratio of expenditures to payroll	Expenditures as a percent of taxable payroll ^{3,4,5}
2016	5.4	4.0	3.9	8.9	8.8	5.3	3.2	5.94
Alternative III:								
1992	3.8%	3.5%	6.1%	10.0%	10.7%	3.2%	7.3%	2.83%
1993	5.3	5.2	6.4	12.0	12.2	5.9	5.9	3.00
1994	6.8	6.4	7.6	14.7	14.1	7.8	5.8	3.18
1995	6.0	6.2	6.9	13.4	12.9	6.8	5.8	3.36
2000	6.1	5.0	6.0	11.9	11.6	6.4	4.8	4.35
2005	5.9	5.0	4.9	10.7	10.5	6.2	4.0	5.39
2010	5.9	5.0	5.2	11.0	10.7	6.1	4.3	6.70
2015	6.0	5.0	5.8	11.7	11.4	5.8	5.3	8.66
2016	6.0	5.0	5.5	11.4	11.1	5.7	5.1	9.11

¹Percent increase in the year indicated over the previous year.

²Other factors include hospital hourly earnings, hospital price input intensity, unit input intensity allowance, units of service as measured by admissions, and other sources.

³On an incurred basis.

⁴Includes expenditures attributable to insured beneficiaries only.

⁵Includes costs of Peer Review Organizations.

NOTE: Taxable payroll is adjusted to take into account the lower contribution rates on multiple-employer "excess wages," as compared with the combined employer-employee rate.

4. Sensitivity Testing of Costs Under Alternative Assumptions

Over the past 20 years, aggregate inpatient hospital costs for Medicare beneficiaries have increased substantially faster than increases in average earnings and prices in the general economy. Table 13 shows the estimated experience of the HI program for 1981 to 1990. As mentioned earlier, the HI program now makes payments to most participating hospitals on a prospective basis (with the exception of certain expenses). Thus, the trends in aggregate HI inpatient hospital costs prior to 1983, as shown in the historical section of Table 13, have little relation to the projected HI inpatient hospital payments. The prospective payment system has made the outlays of the HI program potentially less vulnerable to excessive rates of growth in the hospital industry. However, there is some uncertainty in projecting HI expenditures, for inpatient hospital services as well as the other covered types of services, due to the uncertainty of the underlying economic assumptions and utilization

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increases. In addition, there is uncertainty in projecting HI expenditures due to the possibility of future legislation affecting unit payment levels, particularly for inpatient hospital services. Current law is assumed throughout the estimates shown in this report, but legislation affecting the payment levels to hospitals has been enacted nearly annually for about the past ten years, and future legislation is probable.

In view of the uncertainty of future cost trends, projected costs for the HI program have been prepared under three alternative sets of assumptions. A summary of the assumptions and results is shown in Table 15. The set of assumptions labeled "Alternative II" forms the basis for the detailed discussion of hospital cost trends and resulting program costs presented throughout this report. It represents intermediate cost increase assumptions, compared with the lower cost and more optimistic alternative I and the higher cost and less optimistic alternative III. Increases in the economic factors (average hourly earnings and CPI) for the three alternatives are consistent with those underlying the OASDI report.

As noted earlier, the single most meaningful measure of HI program cost increases, with reference to the financing of the system, is the relationship between program cost increases and taxable payroll increases. The extent to which program cost increases exceed increases in taxable payroll will determine how steeply tax rates must be increased or program costs curtailed to finance the system over time.

By the end of the first 25-year projection period, program costs are projected to increase about 3 percent faster per year than increases in taxable payroll for alternative II, as discussed in the "Financing Analysis Methodology" section. Program costs beyond the first 25-year projection period are based on the assumption that costs per unit of service will gradually decline to increase at the same rate as average hourly earnings increase. Program expenditures, which were about 2.6 percent of taxable payroll in 1991, increase to a level above six percent by the year 2016 and to over eleven percent by the year 2066 under alternative II. Hence, if all of the projection assumptions are realized over time, HI tax rates provided in the present financing schedule (2.9 percent of taxable payroll) will be grossly inadequate to support the cost of the program.

During the first 25-year projection period, alternatives I and III contain assumptions which result in program costs increasing, relative to taxable payroll increases, approximately two percent less rapidly and two percent more rapidly, respectively, than the results under the intermediate assumptions. Costs beyond the first 25-year projection period assume the two percent differential gradually decreases until the year 2041 when program cost

increases relative to taxable payroll are approximately the same as under the intermediate assumptions. Under alternative I, program costs increase about 1.6 percent more per year than increases in taxable payroll during the first 25-year projection period. Program expenditures under this alternative would be about 3.9 percent of taxable payroll in the year 2016, increasing to about 5.8 percent of taxable payroll by 2066. The summarized program costs for the 75-year projection period are about 4.2 percent of taxable payroll; hence, HI tax rates provided in the present financing schedule will be inadequate even under the optimistic alternative I assumptions. Under alternative III, program costs increase about 5.1 percent more rapidly per year than increases in taxable payroll during the first 25-year projection period. The result of this differential is a level of program expenditures in the year 2016 which is about 9.1 percent of taxable payroll, increasing to about 22.4 percent of taxable payroll in the year 2066.

E. ACTUARIAL BALANCE UNDER THE MODIFIED AVERAGE-COST METHOD

In section I.D., the summarized tax rates, cost rates, and actuarial balances under the present-value method, and the present-value methodology were described. In this section II.E., the same summary measures for the HI program, but under the modified average-cost method, are presented, and the modified average-cost methodology is described. The Health Technical Panel to the 1991 Advisory Council on Social Security concluded that both the present-value method and the modified average-cost method have value and should be reported.

Under the modified average-cost method which was used, prior to 1988, to evaluate the actuarial status of the program, the actuarial balance is defined as the difference between the arithmetic means of the annual cost rates (as defined in section I.D.) and the annual tax rates. Thus, under this method, the cost rates and tax rates for each year are given equal weights when summarized into a single measure. The annual cost rates include an amount to maintain the trust fund at a desired target level, if the fund would otherwise drop below that level. In years where the fund is at or exceeds the desired target level, no adjustment is made to lower the fund balance to the target level. In addition, the actuarial balances calculated under the modified average-cost method include the offset to cost due to the starting trust fund balance, and reflect the actual interest earned on the trust fund before it is exhausted.

The actuarial balance using the modified average-cost method can thus be characterized as being mathematically equivalent to the average tax rate

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increase needed to maintain the trust fund at the target level over the 75-year projection period, taking into account the beginning trust fund balance and the interest earnings of the trust fund. The implied funding pattern under the modified average-cost method is that the current law trust fund ratios are maintained until the trust fund ratio falls below the target amount (100 percent of the following year's estimated expenditures, in this year's report). After that, the tax rate is increased each year to cover the cost of the program and to maintain the trust fund at the target level.

The results of calculating the actuarial balance using the modified average-cost method are presented in Table 16. The assumptions used to calculate the results are the same as those presented throughout this report.

TABLE 16. -- ACTUARIAL BALANCES OF THE HI PROGRAM, UNDER ALTERNATIVE SETS OF ASSUMPTIONS (MODIFIED AVERAGE-COST METHOD)

	I	Alternative II	III
1992-2016:			
Summarized tax rate ¹	2.90%	2.90%	2.90%
Summarized cost rate ²	3.33	4.29	5.62
Actuarial balance ³	-0.43	-1.39	-2.72
1992-2041:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ²	3.91	6.28	10.49
Actuarial balance ³	-1.01	-3.38	-7.59
1992-2066:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ²	4.38	7.65	13.79
Actuarial balance ³	-1.48	-4.75	-10.89

¹As scheduled under present law.

²Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the modified average-cost basis, including the cost of maintaining the trust fund at a level of 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

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

III. APPENDICES

A. ANNOUNCEMENT OF THE MEDICARE PART A (HOSPITAL INSURANCE) INPATIENT HOSPITAL DEDUCTIBLE AND HOSPITAL AND SKILLED NURSING FACILITY COINSURANCE AMOUNTS, FOR CALENDAR YEAR 1992¹

SUMMARY: This notice announces the inpatient hospital deductible and the hospital and skilled nursing facility coinsurance amounts for services furnished in calendar year 1992 under Medicare's hospital insurance program (Part A). The Medicare statute specifies the formulae to be used to determine these amounts.

The inpatient hospital deductible will be \$652. The daily coinsurance amounts will be: (a) \$163 for the 61st through 90th days of hospitalization in a benefit period; (b) \$326 for lifetime reserve days; and (c) \$81.50 for the 21st through 100th days of extended care services in a skilled nursing facility in a benefit period.

Effective Date: January 1, 1992.

SUPPLEMENTARY INFORMATION:

1. Background

Section 1813 of the Social Security Act (the Act) provides for an inpatient hospital deductible to be subtracted from the amount payable by Medicare for inpatient hospital services furnished to a beneficiary. It also provides for certain coinsurance amounts to be subtracted from the amounts payable by Medicare for inpatient hospital and extended care services. Section 1813(b)(2) of the Act requires the Secretary to determine and publish between September 1 and September 15 of each year the amount of the inpatient

¹ Extracted from the notice entitled "Medicare Program; Inpatient Hospital Deductible and Hospital and Skilled Nursing Facility Coinsurance Amounts for 1992," which was published in the Federal Register on November 15, 1991 (Vol. 56, no. 221, pp. 58061-58062).

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hospital deductible and the hospital and skilled nursing facility (SNF) coinsurance amounts applicable for services furnished in the following calendar year.

2. Computing the Inpatient Hospital Deductible for 1992

Section 1813(b) of the Act prescribes the method for computing the amount of the inpatient hospital deductible. The inpatient hospital deductible is an amount equal to the inpatient hospital deductible for the preceding calendar year, changed by the Secretary's best estimate of the payment-weighted average of the applicable percentage increases (as defined in section 1886(b)(3)(B) of the Act) used for updating the payment rates to hospitals for discharges in the fiscal year (FY) that begins on October 1 of the same preceding calendar year, and adjusted to reflect real case mix. The adjustment to reflect real case mix is determined on the basis of the most recent case mix data available. The amount determined under the formula is rounded to the nearest multiple of \$4 (or, if midway between two multiples of \$4, to the next higher multiple of \$4).

For FY 1992, section 1886(b)(3)(B) of the Act, as amended by section 4002 of the Omnibus Budget Reconciliation Act of 1990 (Pub. L. 101-508, enacted on November 5, 1990), provides that the applicable percentage increase for all urban prospective payment system (PPS) hospitals is the market basket percentage increase minus 1.6 percent; and for rural PPS hospitals, the applicable percentage increase is the market basket percentage increase minus 0.6 percent. The market basket percentage increase for FY 1992 is 4.4 percent, as announced in the **Federal Register** on August 30, 1991 (56 FR 43196). Therefore, the percentage increases for Medicare prospective payment rates are 2.8 percent for urban hospitals and 3.8 percent for rural hospitals; the payment percentage increase for hospitals excluded from the PPS is 4.7 percent. Thus, the Secretary's best estimate of the payment-weighted average of the increases in the payment rates for FY 1992 is 2.9859 percent. We recognize that Congress has frequently revised the payment rate increase provisions found in section 1886(b)(3)(B) of the Act during the budget reconciliation process, subsequent to the determination and promulgation of the deductible. Such revisions may occur this year as well and may affect the FY 1992 payment rate increase. However, at the time of this determination, we must use the payment rate increase specified in current law to determine the 1992 deductible.

To develop the adjustment for real case mix, an average case mix was first calculated for each hospital that reflects the relative costliness of that hospital's mix of cases compared to that of other hospitals. We then computed the increase in average case mix for hospitals paid under the Medicare PPS in FY 1991 compared to FY 1990. (Hospitals excluded from the PPS were excluded from this calculation since their payments are based on reasonable costs and are affected only by real increases in case mix.) We used bills from prospective payment hospitals received in HCFA as of the end of July 1991. These bills represent a total of about 7.3 million discharges for FY 1991 and provide the most recent case mix data available at this time. Based on these bills, the increase in average case mix in FY 1991 is 1.73 percent.

Although average case mix has increased by 1.73 percent in 1991, section 1813 of the Act requires that the inpatient hospital deductible be increased only by that portion of the case mix increase that is determined to be real. We estimate that the increase in real case mix is about 1 percent. The increase in total case mix is about the same as the increase for FY 1990. We expect that the real case mix percentage would be about the same as it was for FY 1990. Consequently, we will continue to use our estimate of one percent for the real case mix increase.

Thus, the estimate of the payment-weighted average of the applicable percentage increases used for updating the payment rates is 2.9859 percent, and the real case mix adjustment factor for the deductible is 1 percent. Therefore, under the statutory formula, the inpatient hospital deductible for services furnished in calendar year 1992 is \$652. This deductible amount is determined by multiplying \$628 (the inpatient hospital deductible for 1991) by the payment rate increase of 1.029859 multiplied by the increase in average real case mix of 1.01, which equals \$653.22 and is rounded to \$652.

3. Computing the Inpatient Hospital and Skilled Nursing Facility Coinsurance Amounts for 1992

The coinsurance amounts provided for in section 1813 of the Act are defined as fixed percentages of the inpatient hospital deductible for services furnished in the same calendar year. Thus, the increase in the deductible generates increases in the coinsurance amounts. For inpatient hospital and extended care services furnished in 1992, in accordance with the fixed percentages

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defined in the law, the daily coinsurance for the 61st through 90th days of hospitalization in a benefit period will be \$163 (1/4 of the inpatient hospital deductible); the daily coinsurance for lifetime reserve days will be \$326 (1/2 of the inpatient hospital deductible); and the daily coinsurance for the 21st through 100th days of extended care services in a SNF in a benefit period will be \$81.50 (1/8 of the inpatient hospital deductible).

4. Cost to Beneficiaries

We estimate that in 1992 there will be about 8.3 million deductibles paid at \$652 each, about 3.2 million days subject to coinsurance at \$163 per day (for hospital days 61 through 90), about 1.3 million lifetime reserve days subject to coinsurance at \$326 per day, and about 12.5 million extended care days subject to coinsurance at \$81.50 per day. Similarly, we estimate that in 1991 there will be about 8.0 million deductibles paid at \$628 each, about 3.1 million days subject to coinsurance at \$157 per day (for hospital days 61 through 90), about 1.3 million lifetime reserve days subject to coinsurance at \$314 per day, and about 12.2 million extended care days subject to coinsurance at \$78.50 per day. Therefore, the estimated total increase in cost to beneficiaries is about \$500 million (rounded to the nearest \$10 million), due to (1) the increase in the deductible and coinsurance amounts and (2) the change in the number of deductibles and daily coinsurance amounts paid.

5. Regulatory Impact Statement

This notice merely announces amounts required by legislation. This notice is not a proposed rule or a final rule issued after a proposal and does not alter any regulation or policy. Therefore, we have determined, and the Secretary certifies, that no analyses are required under Executive Order 12291, the Regulatory Flexibility Act (5 U.S.C. 601 through 612), or section 1102(b) of the Act.

Dated: September 16, 1991.

Gail R. Wilensky,
Administrator,
Health Care Financing Administration

Approved: October 30, 1991.

**Louis W. Sullivan,
Secretary,
Department of Health and Human Services**

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B. ANNOUNCEMENT OF THE MEDICARE PART A (HOSPITAL INSURANCE) MONTHLY PREMIUM RATE FOR THE UNINSURED AGED, FOR CALENDAR YEAR 1992¹

SUMMARY: This notice announces the hospital insurance premium for the uninsured aged for calendar year 1992 under Medicare's hospital insurance program (Part A). The monthly Medicare Part A premium for the 12 months beginning January 1, 1992 for individuals who are not insured under the Social Security or Railroad Retirement Acts and do not otherwise meet the requirements for entitlement to Part A is \$192. Section 1818(d) of the Social Security Act specifies the method to be used to determine this amount.

Effective Date: January 1, 1992.

SUPPLEMENTARY INFORMATION:

1. Background

Section 1818 of the Social Security Act (the Act) provides for voluntary enrollment in the Medicare hospital insurance program (Medicare Part A), subject to payment of a monthly premium, of certain persons age 65 and older who are uninsured for social security or railroad retirement benefits and do not otherwise meet the requirements for entitlement to Part A. (Persons insured under the Social Security or Railroad Retirement Acts need not pay premiums for hospital insurance.)

The Omnibus Budget Reconciliation Act of 1989 (Pub. L. 101-239, enacted on December 19, 1989) added section 1818A to the Act, which provides for voluntary enrollment in Medicare Part A, subject to payment of a monthly premium, of certain disabled individuals who have exhausted other entitlement. These individuals are those not now entitled but who have been entitled under section 226(b) of the Act, continue to have the disabling impairment upon which their entitlement was based, and whose entitlement

¹Extracted from the notice entitled "Medicare Program; Part A Premium for the Uninsured Aged for 1992," which was published in the Federal Register on November 15, 1991 (Vol. 56, No. 221, pp. 58067-58068).

ended solely because the individuals had earnings that exceeded the substantial gainful activity amount (as defined in section 223(d)(4) of the Act).

Section 1818(d)(2) of the Act, as amended by section 103 of the Medicare Catastrophic Coverage Act of 1988 (Pub. L. 100-360, enacted on July 1, 1988), requires the Secretary to determine and publish, during September of each calendar year, the amount of the monthly premium for the following calendar year for persons who voluntarily enroll in Medicare Part A.

Section 1818(d) of the Act, as amended by section 103 of Pub. L. 100-360, requires the Secretary to estimate, on an average per capita basis, the amount to be paid from the Federal Hospital Insurance Trust Fund for services performed and for related administrative costs incurred in the following year with respect to individuals age 65 and over who will be entitled to benefits under Part A. The Secretary must then, during September of each year, determine the monthly actuarial rate (the per capita amount estimated above divided by 12) and publish the dollar amount to be applicable for the monthly premium in the succeeding year. If the premium is not a multiple of \$1, the premium is rounded to the nearest multiple of \$1 (or if it is a multiple of 50 cents but not of \$1, it is rounded to the next highest \$1). The 1991 premium under this method was \$177 and was effective January 1991. (See 55 FR 41603; October 12, 1990.)

2. Premium Amount for 1992

Under the authority of section 1818(d)(2) of the Act (42 U.S.C. 1395i-2(d)(2)), the Secretary has determined that the monthly Medicare Part A hospital insurance premium for the uninsured aged for the 12 months beginning January 1, 1992 is \$192.

3. Statement of Actuarial Assumptions and Bases Employed in Determining the Monthly Premium Rate

As discussed in section 1 of this notice, the monthly premium for the uninsured aged for 1992 is equal to the estimated monthly actuarial rate for 1992 rounded to the nearest multiple of \$1. The monthly actuarial rate is defined to be one-twelfth of the average per capita amount that the Secretary estimates will be paid from the Federal Hospital Insurance Trust Fund for services performed and related administrative costs incurred in 1992 for individuals age 65 and over who will be entitled to benefits under the hospital

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insurance program. Thus, the number of individuals age 65 and over who will be entitled to hospital insurance benefits and the costs incurred on behalf of these beneficiaries must be projected to determine the premium rate.

The principal steps involved in projecting the future costs of the hospital insurance program are (a) establishing the present cost of services provided to beneficiaries, by type of service, to serve as a projection base; (b) projecting increases in payment amounts for each of the various service types; and (c) projecting increases in administrative costs. Establishing historical Medicare Part A enrollment and projecting future enrollment, by type of beneficiary, is part of this process.

We have completed all of the above steps, basing our projections for 1992 on (a) current historical data and (b) projection assumptions under current law from the Midsession Review of the President's Fiscal Year 1992 Budget. It is estimated that in calendar year 1992, 30.935 million people age 65 and over will be entitled to Medicare Part A benefits (without premium payment), and that these individuals will, in 1992, incur \$71.388 billion of benefits for services performed and related administrative costs. Thus, the estimated monthly average per capita amount is \$192.31 and the monthly premium is \$192.

4. Costs to Beneficiaries

The 1992 Part A premium is about 8.5 percent higher than the \$177 monthly premium amount for the 12-month period beginning January 1, 1991.

We estimate that there will be, in calendar year 1992, approximately 220 thousand enrollees who are voluntarily enrolled in Medicare Part A by paying the premium, who do not otherwise meet the requirements for entitlement. The estimated cost of the increase in the premium to these enrollees will be about \$40 million. As of January 1, 1991, there were approximately 130 thousand enrollees paying the premium. This is the latest complete data available to us on voluntary enrollment through payment of premium. However, as a result of section 6013 of the Pub. L. 101-239, "Buy-In Under Part A for Qualified Medicare Beneficiaries," we expect, based on preliminary data, that approximately 90 thousand individuals who do not otherwise meet the requirements for entitlement and who are not currently enrolled will be enrolling in Medicare Part A by premium payment (with payment of the premium being made by the States). The estimated Federal share of the increased Medicaid cost of covering the estimated 200,000 Qualified Medicare

Beneficiaries due to the increase in the premium is \$20.5 million. The estimated State share is \$15.5 million.

5. Regulatory Impact Statement

This notice merely announces amounts required by legislation. This notice is not a proposed rule or a final rule issued after a proposal, and does not alter any regulation or policy. Therefore, we have determined, and the Secretary certifies, that no analyses are required under Executive Order 12291, the Regulatory Flexibility Act (5 U.S.C. 601 through 612) or section 1102(b) of the Act.

Dated: September 20, 1991.

Gail R. Wilensky,
Administrator,
Health Care Financing Administration

Approved: October 10, 1991.

Louis W. Sullivan,
Secretary,
Department of Health and Human Services

C. GLOSSARY

Accrual basis. An incurred basis.

Actuarial balance. The difference between the summarized tax rate and the summarized cost rate over a given period.

Actuarial deficit. A negative actuarial balance.

Actuarial surplus. A positive actuarial balance.

Administrative expenses. Expenses incurred by the Department of HHS and the Department of the Treasury in administering the HI program and the provisions of the Internal Revenue Code relating to the collection of contributions. Such administrative expenses include expenditures for contractors to determine costs of and make payments to providers as well as salaries and expenses of the HCFA.

Advisory Council on Social Security. Under the Social Security Act, an Advisory Council is appointed every four years to study and review the financial status of the OASDI and Medicare programs. The most recent Advisory Council was appointed in 1989 and issued its reports in 1991.

Aged enrollee. An individual, age 65 or over, who has been enrolled in the Medicare program.

Alternative I, II, or III. See "Assumptions."

Amortization. Process of the gradual retirement of an outstanding debt by making periodic payments to the trust fund.

Annual balance. The difference between the income rate and the cost rate in a given year.

Assets. Treasury notes and bonds guaranteed by the Federal government and cash held by the trust funds for investment purposes.

Assumptions. Values relating to future trends in certain factors which affect growth of the trust funds. Demographic assumptions include fertility, mortality, net immigration, marriage, divorce, retirement patterns, disability

incidence and termination rates, and changes in the labor force. Economic assumptions include unemployment, average earnings, inflation, interest rates, and productivity. Three sets of economic assumptions are presented in the Trustees Report.

(1) Alternative I is characterized as an "optimistic" set--it assumes relatively rapid economic growth, low inflation, and favorable (from the standpoint of program financing) demographic conditions.

(2) Alternative II is the "intermediate" set of assumptions, with "best estimates" of future economic and demographic conditions.

(3) Alternative III is more "pessimistic," with slow economic growth, more rapid inflation, and financially disadvantageous demographic conditions.

Automatic adjustment. This refers to the increase in the maximum taxable amount of annual earnings. In 1992, it was \$130,200, and it is indexed to increases in covered wages.

Average market yield. A computation which is made on all marketable interest-bearing obligations of the United States. It is computed on the basis of market quotations as of the end of the calendar month next preceding the date of such issue.

Baby boom. The period from the end of World War II through the mid-1960s marked by unusually high birth rates.

Base estimate. The updated estimate of the most recent historical year.

Beneficiary. A person enrolled in the HI program.

Benefit payments. The amounts disbursed for service covered after the deductible and coinsurance amounts have been deducted.

Board of Trustees. A Board established by the Social Security Act to oversee the financial operations of the Federal Hospital Insurance Trust Fund. The Board is composed of five members, three of whom serve automatically by virtue of their positions in the Federal government: the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health and Human Services. The other two members are appointed by the President as public representatives: Stanford G. Ross and David M. Walker are currently serving four-year terms that began on October 2, 1990. The Administrator of the HCFA serves as Secretary of the Board of Trustees.

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Bond. A certificate of ownership of a specified portion of a debt due by the Federal government to individual holders, bearing a fixed rate of interest.

Callable. Subject to redemption upon notice, such as a bond.

Case mix index. The average DRG relative weight for all the Medicare admissions.

Cash basis. The costs of the service at the point payment was made rather than when the service was performed.

Certificate of indebtedness. A short-term certificate of ownership of 12 months or less of a specified portion of a debt due by the Federal government to individual holders, bearing a fixed rate of interest.

Consumer Price Index--(CPI). A measure of the average change in prices over time in a fixed market basket of goods and services.

Contribution rate. The percentage of taxable earnings that is paid for Medicare tax. In 1992 the percentages are 1.45 for employees and employers, each. The self-employed pay 2.9 percent. For 1992, \$130,200 is the maximum taxable amount of annual earnings.

Cost rate. The cost rate for a year is the ratio of the cost (or outgo, expenditures, or disbursements) of the program to the taxable payroll for the year. In this context, the outgo is defined to include benefit payments, and exclude payments for certain uninsured persons whose payments are reimbursable from the general fund of the Treasury as well as payments for voluntary enrollees who pay a premium in order to be enrolled.

Covered employment. All employment and self-employment creditable for Social Security purposes. Almost every kind of employment and self-employment is covered under the program. In a few employment situations, for example, religious orders under a vow of poverty, foreign affiliates of American employers, or State and local governments, coverage must be elected by the employer. However, effective July 1991, coverage is mandatory for State and local employees who are not participating in a public employee retirement system. All new State and local employees have been covered since April 1986. In a few situations, for example, ministers or self-employed members of certain religious groups, workers can opt out of

coverage. Even though employment is covered, not all earnings may be taxable and creditable.

Covered services. For those expenses still reimbursed on a reasonable cost basis, medically necessary care as an inpatient in a hospital or a skilled nursing facility following a hospital stay, home health, and hospice care.

Current dollars. Amounts expressed in nominal dollars with no adjustment for inflationary changes in the value of a dollar over time.

Deductible. The amount payable by the beneficiary for covered services before Medicare makes reimbursement.

Deemed wage credit. See "Military Service wage credits."

Demographic assumptions. See "Assumptions."

Diagnosis-related groups (DRGs). A classification system that groups patients according to diagnosis, type of treatment, age, and other relevant criteria. Under the Prospective Payment System, hospitals are paid a set fee for treating patients in a single DRG category, regardless of the actual cost of care for the individual.

Disability. For Social Security purposes, the inability to engage in substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or to last for a continuous period of not less than 12 months. Special rules apply for workers age 55 or older whose disability is based on blindness.

The law generally requires that a person be disabled continuously for five months before he or she can qualify for a disabled-worker cash benefit. An additional 24 months is necessary to qualify for benefits under Medicare.

Disabled enrollee. An individual under age 65 who has been entitled to disability benefits under Title II of the Social Security Act or the railroad retirement system for at least two years and who are now enrolled under Medicare.

DRG Coding. The DRG categories used by hospitals on discharge billing.

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Earnings. Unless otherwise qualified, all wages from employment and net earnings from self-employment, whether or not taxable or covered.

Economic assumptions. See "Assumptions."

End-stage renal disease (ESRD). A disease involving irreversible and permanent kidney failure.

Excess wages. Wages in excess of the wage base on which a worker initially pays taxes as a result of working for more than one employer. Employee taxes on excess wages are refunded to affected employees, while the employer taxes are not refunded.

Federal Insurance Contributions Act (FICA). Provision authorizing taxes on the wages of employed persons to provide for Retirement, Survivors, and Disability insurance, and for Hospital Insurance for persons over age 65 and for disabled persons. The tax is paid in equal amounts by workers and their employers.

Financial interchange. Provisions of the Railroad Retirement Act providing for transfers between the trust funds and the Social Security Equivalent Benefit Account of the Railroad Retirement program in order to place each trust fund in the same position as if railroad employment had always been covered under Social Security.

Fiscal year. The accounting year of the United States Government. Since 1976, each fiscal year has begun on October 1 of the prior calendar year and ended the following September 30. For example, fiscal year 1992 began October 1, 1991 and will end September 30, 1992.

Fixed capital assets. The net worth of facilities and other resources.

General fund of the Treasury. Funds held by the Treasury of the United States, other than revenue collected for a specific purpose (such as Medicare) and maintained in a separate account for that purpose. The majority of this income is from individual and business income tax.

General revenue. Income to the HI trust fund from the general fund of the Treasury.

Gramm-Rudman-Hollings Act. The Balanced Budget and Emergency Deficit Control Act of 1985.

Gross Domestic Product (GDP). The total dollar value of all goods and services produced in a year in the United States, regardless of who supplies the labor or property.

Home health agency (HHA). A public agency or private organization which is primarily engaged in providing skilled nursing services and other therapeutic services, such as physical, occupational, or speech therapy, in the home.

Hospice. A program for the terminally ill to provide a variety of services and supplies, including nursing care, physician services, medical supplies, and short term inpatient hospital care.

Hospital assumptions. These include differentials between hospital labor and non-labor indices compared to general economy, rates of admission incidence, the trend toward treating less complicated cases in outpatient settings, and continued improvement in DRG coding, etc.

Hospital coinsurance. From the 61 - 90th day of a benefit period, a daily amount equal to one-fourth of the inpatient hospital deductible for which the enrollee is responsible.

Hospital input price index. An alternate name for the hospital market basket.

Hospital Insurance (HI). The Medicare program which covers specified hospital inpatient services, posthospital skilled nursing care, home health services, and hospice care.

Hospital market basket. The cost of the mix of goods and services (including personnel costs but excluding nonoperating costs) comprising routine, ancillary, and special care unit inpatient hospital services.

Incurred costs. The costs based on when the service was performed rather than when the payment was made.

Inpatient hospital deductible. An amount of money which is deducted from the amount payable by Medicare for inpatient hospital services furnished to

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a beneficiary during a spell of illness. In 1992 the inpatient hospital deductible is \$652.

Inpatient hospital services. These services include bed and board, nursing services, diagnostic or therapeutic services, and medical or surgical services.

Interest. A payment for the use of money during a specified period.

Interfund borrowing. The borrowing of assets by a trust fund (OASI, DI, HI or SMI) from another of the trust funds when one of the funds is in danger of exhaustion.

Intermediary. A private or public organization, under contract to the Health Care Financing Administration, to administer the Part A benefits under Medicare. Also referred to as "contractors," these organizations make payments for providers.

Intermediate assumptions. See "Assumptions."

Lifetime reserve days. Under HI, there are 60 lifetime reserve days per beneficiary which are to be used when regular benefits are exhausted. Medicare does not pay for the entire day; the beneficiary pays for one half of the inpatient deductible for each day used.

Long-range. Actuarial estimates covered over the next seventy-five years.

Medicare. A nationwide, federally administered health insurance program authorized in 1965 to cover the cost of hospitalization, medical care, and some related services for most people over age 65. In 1972 coverage was extended to people receiving Social Security Disability Insurance payments for two years, and people with End-Stage Renal Disease. Medicare consists of two separate but coordinated programs -- Part A (Hospital Insurance, HI) and Part B (Supplementary Medical Insurance, SMI). Almost all persons aged 65 and over or disabled entitled to HI are eligible to enroll in the SMI program on a voluntary basis by paying a monthly premium. Health insurance protection is available to Medicare beneficiaries without regard to income.

Military service wage credits. Credits recognizing that military personnel receive other cash payments and wages in kind (such as food and shelter) in addition to their basic pay. Noncontributory wage credits of \$160 are provided for each month of active military service from September 16, 1940,

through December 31, 1956. For years after 1956, the basic pay of military personnel is covered under the Social Security program on a contributory basis. Noncontributory wage credits of \$300 for each calendar quarter in which a person receives pay for military service from January 1957 through December 1977 are granted in addition to contributory credits for basic pay. Deemed wage credits of \$100 are granted for each \$300 of military wages in years after 1977. (The maximum credits allowed in any calendar year are \$1,200.)

Modified average-cost method. Under this system, the actuarial balance is defined as the difference between the arithmetic means of the annual cost rates and the annual tax rates.

Net contributions. The appropriation of employment taxes less refunds of employment taxes and deposits arising from State agreements.

Non-contributory or deemed wage credits. Prior to January 1, 1957, \$160 per month wage credit given to members of the military for noncontributory quarters worked. To extend coverage for Medicare, for Civil Service annuitant employed during January 1983, credit was given for the period before 1983.

Optimistic assumptions. See "Assumptions."

Part A. This term refers to the Medicare Hospital Insurance program.

Part A premium. A monthly premium paid by individuals who wish for and are entitled to voluntary enrollment in the Medicare hospital insurance program. These individuals are those who are age 65 and older who are uninsured for social security or railroad retirement and do not otherwise meet the requirements for entitlement to Part A. In addition, disabled individuals who have exhausted other entitlement are qualified. These individuals are those not now entitled but who have been entitled under section 226(b) of the Act, continue to have the disabling impairment upon which their entitlement was based, and whose entitlement ended solely because the individuals had earnings that exceeded the substantial gainful activity amount (as defined in section 223(d)(4) of the Act).

Participating hospitals. Those hospitals who participate in the Medicare program.

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Pay-as-you-go financing. A financing scheme where taxes are scheduled to produce just as much income as required to pay current benefits, with trust fund assets built up only to the extent needed to prevent exhaustion of the fund by random economic fluctuations.

Payroll taxes. A tax levied on the gross wages of workers.

Per capita. By individuals.

Peer Review Organization (PRO). A group of practicing physicians and other health care professionals, paid by the federal government, to review the care given to Medicare patients.

Pessimistic assumptions. See "Assumptions."

Present value. The present value of a future stream of payments is the lump-sum amount that, if invested today, together with interest earnings would be just enough to meet each of the payments as they fell due. At the time of the last payment, the invested fund would be exactly zero.

Professional Standards Review Organization. The predecessor of the Peer Review Organization.

Projection error. Degree of variation between estimated and actual costs.

Prospective Payment Assessment Commission. This is a commission established by the Social Security Amendments of 1983. It reviews and recommends the appropriate percentage changes which should be effected for hospital inpatient discharges each fiscal year beginning with fiscal year 1986. Furthermore, it is expected to study and make recommendations regarding existing reimbursement policy for each fiscal year.

Prospective payment system (PPS). A method of reimbursement for hospitals which was implemented effective with hospital cost reporting periods beginning on or after October 1, 1983. Under this system, Medicare payment is made at a predetermined, specific rate for each discharge. All discharges are classified according to a list of diagnosis-related groups (DRGs).

Provider. Any organization or individual who is involved in providing health care services to the Medicare population. The provider list includes hospitals, physicians, ambulatory surgical centers, outpatient clinics, etc.

Proxy. The stand-in for estimating the labor and non-labor pieces of the hospital input price index.

Public Health Service. An agency within the Department of Health and Human Services dealing with health care research, medical research, food and drug analysis, and Indian health care.

Quinquennial military service determinations and adjustments. The Social Security Amendments of 1983 provided that the Federal Old-Age and Survivors Insurance Trust Fund, the Federal Disability Insurance Trust Fund, and the Federal Hospital Insurance Trust Fund should be reimbursed in lump sums for the past and future benefits based on military service credits. This amount is adjusted every five years on the basis of benefits and administrative benefits actually paid from the trust funds.

Railroad retirement. A federal insurance program similar to Social Security designed for workers in the railroad industry. The provisions of the Railroad Retirement Act provide for a system of coordination and financial interchange between the Railroad Retirement program and the Social Security program.

Real-wage differential. The difference between the percentage increases, before rounding, in (1) the average annual wage in covered employment, and (2) the average annual Consumer Price Index.

Reasonable cost basis. The calculation to determine the reasonable cost incurred by the individual providers when furnishing covered services to beneficiaries. The reasonable cost is based on the actual cost of providing such services, including direct and indirect costs of providers, and excluding any costs which are unnecessary in the efficient delivery of services covered by the health insurance program.

Recession. A temporary decline in business occurring during a period of generally increasing economic prosperity.

Self-Employed Contributions Act (SECA). Provision authorizing taxes on the income of self employed persons to provide for Retirement, Survivors, and Disability insurance, and for Hospital Insurance for persons over age 65 and for disabled persons.

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Self-employment. Operation of a trade or business by an individual or by a partnership in which an individual is a member.

Sequester. The reduction of funds to be used for benefits or administrative costs from a Federal account based on the requirements specified in the Gramm-Rudmann-Hollings Act.

Skilled nursing facility (SNF). An institution which is primarily engaged in providing skilled nursing care and related services for residents who require medical or nursing care, or engage in rehabilitation of injured, disabled, or sick persons.

SNF coinsurance. This is an amount for the 21st day through the 100th day of extended care services in a benefit period which is to be deducted from the amount payable by Medicare for SNF services furnished to a beneficiary. It is 1/8 of the inpatient hospital deductible. In 1992, this amount is \$81.50.

Social Security Act. Public Law 74-271, enacted August 14, 1935, with subsequent amendments. The Social Security Act consists of 20 titles, of which four have been repealed. The Hospital Insurance and Supplementary Medical Insurance Trust Funds are authorized by Title XVIII of the Social Security Act.

Special public-debt obligation. Securities of the United States Government issued exclusively to the OASI, DI, HI, and SMI Trust Funds. Section 1817(c) of the Social Security Act provides that the public-debt obligations issued for purchase by the HI Trust Fund shall have maturities fixed with due regard for the needs of the funds. The usual practice in the past has been to spread the holdings of special issues, as of each June 30, so that the amounts maturing in each of the next 15 years are approximately equal. Special public-debt obligations are redeemable at par at any time.

Summarized balance. The difference between the summarized cost rate and the summarized tax rate, expressed as a percentage of taxable payroll.

Summarized cost rate. The ratio of the present value of expenditures to the present value of the taxable payroll for the years in a given period. The summarized cost rate includes the cost of reaching and maintaining a "target" trust fund level, or contingency fund ratio. Because a trust fund level of about one year's expenditures is considered to be an adequate reserve for unforeseen contingencies, the targeted contingency fund ratio used in

determining summarized cost rates is 100 percent of annual expenditures. Accordingly, the summarized cost rate is equal to the ratio of (a) the sum of the present value of the outgo during the period plus the present value of the targeted ending trust fund level plus the beginning trust fund level, to (b) the present value of the taxable payroll during the projection period.

Summarized tax rate. The ratio of (a) the present value of the total income (excluding interest earnings) during a given period, to (b) the present value of the taxable payroll for the years in a given period.

Supplementary Medical Insurance (SMI). The trust fund used for paying a portion of the costs of physician's services, outpatient hospital services, and other related medical and health services for voluntarily insured aged and disabled individuals.

Taxable earnings. Taxable wages and/or self-employment income under the prevailing annual maximum taxable limit.

Taxable payroll. A weighted average of taxable earnings and taxable self-employment income. When multiplied by the combined employee-employer tax rate, it yields the total amount of taxes incurred by employees, employers, and the self-employed for work during the period.

Taxable self-employment income. Net earnings from self-employment, generally above \$400 and below the annual taxable and creditable maximum amount for a calendar or other taxable year, less any taxable wages in the same taxable year.

Taxable wages. Wages paid for services rendered in covered employment up to the annual taxable maximum. In some cases, wages must also be above a specified amount to be taxed and credited (for example, \$50 or more in a calendar quarter from one employer for domestic employment, \$100 or more in a calendar year for employment in a nonprofit organization or for services not in the course of an employer's trade or business).

Taxes. See "Contributions."

Test of Actuarial Status. The overall test of actuarial status for the HI program, which includes a test of Short-Range Financial Adequacy, and a test of Long-Range Close Actuarial Balance.

Test of Long-Range Close Actuarial Balance. Summarized tax rates and cost rates are calculated for each of the 65 valuation periods in the full 75 year long-range projection period. The first of these periods consists of the next 11 years. Each succeeding period becomes longer by one year, culminating with the period consisting of the next 75 years. The long-range test is met if, for each of the 65 time periods, the actuarial balance is not less than zero or is negative by, at most, a specified percentage of the summarized cost rate for the same time period. The percentage allowed for a negative actuarial balance is five percent for the full 75-year period and is reduced uniformly for shorter periods, approaching zero as the duration of the time periods approaches the first 10 years. The criterion for meeting the test is less stringent for the longer periods in recognition of the greater uncertainty associated with estimates for more distant years.

Test of Short-Range Financial Adequacy. The conditions required to meet this test are as follows: If the trust fund ratio for a fund exceeds 100 percent at the beginning of the projection period, then it must be projected to remain at or above 100 percent throughout the 10 year projection period. Alternatively, if the fund ratio is initially less than 100 percent, it must be projected to reach a level of at least 100 percent within five years (and not be depleted at any time during this period) and then remain at or above 100 percent throughout the remainder of the 10 year period.

Trust fund. Separate accounts in the United States Treasury mandated by Congress whose assets may only be used for a specified purpose. Funds not withdrawn for current monthly or service benefits, the financial interchange, and administrative expenses are invested in interest-bearing Federal securities, as required by law; the interest earned is also deposited in the trust funds.

Trust fund ratio. A short range measure of the adequacy of the trust fund level, the "trust or contingency fund ratio," is defined to be the assets at the beginning of the year expressed as a percentage of the outgo during the year.

Unit input intensity allowance. The amount added to or subtracted from the hospital input price index to yield the PPS update factor.

Valuation period. A period of years which is considered as a unit for purposes of calculating the status of a trust fund.

Voluntary enrollee. Any individual aged 65 or older not otherwise entitled to Medicare may obtain coverage under Part A by paying a monthly premium.

Worker. A person who has earnings creditable for Social Security purposes on the basis of services for wages in covered employment and/or on the basis of income from covered self-employment. Data on covered self-employment exclude self-employed persons who had no self-employment income taxable or creditable under Social Security because they had wages or salaries reaching the annual taxable maximum reported for the same year.

Year of exhaustion. The year in which a trust fund would be unable to pay benefits when due because the assets of the fund were exhausted.

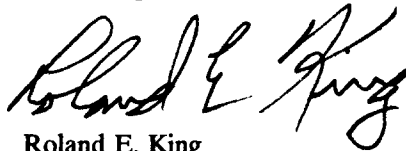
D. STATEMENT OF ACTUARIAL OPINION

Subject to the reservations noted below, it is my opinion that (1) the methodology used herein is based upon sound principles of actuarial practice and (2) the assumptions used and the resulting cost estimates are, in the aggregate, reasonable for the purpose of evaluating the actuarial and financial status of the Federal Hospital Insurance Trust Fund, taking into account the experience and expectations of the program.

The Board of Trustees has assumed that real earnings increases during the next quarter century, and each quarter century thereafter, will greatly exceed the rates of the last quarter century. My opinion is that the real earnings assumption is substantially inconsistent with appropriate projections based on past experience.

The present-value method used to summarize the long-range actuarial status of the HI program is inappropriate because (1) it produces a summary actuarial balance that is inconsistent with the trust fund projections it is intended to summarize and (2) it understates the long-range cost and the long-range deficit of the program by assuming significant amounts of hypothetical interest income.

The combined effect of the two concerns noted above is substantial. The actuarial deficit of the HI program using an earnings assumption similar to real earnings of the most recent 25-year period and using the modified average-cost method for summarizing the long-range actuarial status of the program is significantly greater than the actuarial deficit presented under the intermediate assumptions in this report.

A handwritten signature in black ink, appearing to read "Roland E. King". The signature is fluid and cursive, with the first name "Roland" and last name "King" being clearly distinguishable.

Roland E. King
Fellow of the Society of Actuaries
Member of the American Academy of Actuaries
Chief Actuary,
Health Care Financing Administration

E. STATEMENT OF THE PUBLIC TRUSTEES

The Social Security Act requires that the annual report of the Board of Trustees on the Federal Hospital Insurance (HI) Trust Fund include "an actuarial opinion by the Chief Actuarial Officer of the Health Care Financing Administration [HCFA] certifying that the techniques and methodologies used are generally accepted within the actuarial profession and that the assumptions and cost estimates used are reasonable."

The HCFA Chief Actuary has issued a qualified and confusing actuarial opinion on the 1992 HI report based on his concerns about the actuarial methodology and real-wage assumptions made by the Board. In particular, the fourth paragraph of his actuarial opinion appears to contradict the first paragraph and could be read as, in substance, an adverse opinion on the 1992 HI report. Last year, the HCFA Chief Actuary qualified his opinion on the 1991 HI report for essentially the same reasons, and we included a statement in that report regarding his opinion.

We fully support the requirement in the Social Security Act for an independent actuarial opinion and recognize the value that this provision adds to the HI report. In fact, we have strongly supported the right of the HCFA Chief Actuary to express his professional opinion regarding the actuarial methods and assumptions adopted by the Trustees. In an effort to provide for full and fair disclosure of differences of opinion, we encouraged the HCFA Chief Actuary to include a section in the 1991 report and in the 1992 report to fully set forth his opinions, and both reports include sections that discuss his preferred actuarial methods and present alternative actuarial projections based on those methods. The only issue is whether the opinion qualification of the HCFA Chief Actuary is consistent with the statutory provisions of the Social Security Act and generally accepted standards of the actuarial profession.

As Trustees of the HI Trust Fund, we have a statutory requirement to determine the actuarial methods and assumptions to be adopted; and in discharging our statutory duty, we believe that the opinion qualification of the HCFA Chief Actuary exceeds the bounds of the statutory requirements for the

HI actuarial opinion and is inconsistent with prevailing standards of actuarial practice. Furthermore, we believe that the methodology, assumptions, data, estimates, and all other information contained in the HI report clearly, fully, and fairly present the current and projected financial condition of the HI fund.

The HCFA Chief Actuary asserts that the method used to measure the financial condition of the HI trust fund is inappropriate. After extensive examination and consultation, we have determined that the present-value method used in the HI report is generally accepted within the actuarial profession and, in our opinion, meets the statutory test for actuarial certification.

The HCFA Chief Actuary also asserts that the real wage assumptions chosen by the Trustees are unreasonable, based on his analysis of certain historical data. After extensive review, we believe that the assumptions used in the HI report meet the statutory test of reasonableness.

In reaching those conclusions, we relied on, among other things, the unqualified opinion of the Chief Actuary of the Social Security Administration on this year's Old-Age, Survivors, and Disability Insurance report, based on the same underlying actuarial methodology and economic and demographic assumptions that are used in the HI report.

It is perplexing and disconcerting that an actuarial opinion with unjustifiable qualifications has been allowed to be repeated for several years in the HI reports. It seems to us that the public would be better served by having what are technical, professional issues resolved as promptly as possible. The continuation of this controversy is confusing to the public and serves to distract attention from the essential issue that is of public concern. By any measure, the HI Trust Fund is severely out of financial balance, and it is projected to run out of funds in about 10 years. The Trustees have urged the Congress to take prompt legislative action to control the alarming growth in costs of the Medicare program and to restore the financial integrity of the HI Trust Fund by enacting specific program legislation or as a part of more comprehensive health care reform.

For the reasons stated above, we have adopted the 1992 HI report with the ex officio Trustees who, this year as last year, have indicated that they agree

Appendices

with our conclusion that the methods and assumptions in the report are both generally accepted and reasonable, and we have signed the 1992 HI report for transmission to the Congress and the public.

Stanford G. Ross
Trustee

David M. Walker
Trustee

