



# Medicare: History of Insolvency Projections

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## Summary

Medicare is the nation's health insurance program for persons age 65 and older and certain disabled persons. Medicare consists of four distinct parts: Part A (Hospital Insurance, or HI); Part B (Supplementary Medical Insurance, or SMI); Part C (Medicare Advantage, or MA); and Part D (the outpatient prescription drug benefit). The Part A program is financed primarily through payroll taxes levied on current workers and their employers; these are credited to the HI trust fund. The Part B program is financed through a combination of monthly premiums paid by current enrollees and general revenues. Income from these sources is credited to the SMI trust fund. As an alternative, beneficiaries can choose to receive all their Medicare services through private health plans under the MA program; payment is made on their behalf in appropriate parts from the HI and SMI trust funds. The Part D drug benefit is funded through a separate account in the SMI trust fund and is financed through general revenues, state contributions, and beneficiary premiums. The HI and SMI trust funds are overseen by a board of trustees that makes an annual report to Congress concerning the financial status of the funds.

Almost from its inception, the HI trust fund has faced a projected shortfall. The insolvency date has been postponed a number of times, primarily due to legislative changes that have had the effect of restraining growth in program spending. The 2011 Medicare trustees report projects that, under intermediate assumptions, the HI trust fund will become insolvent in 2024, five years earlier than projected in the 2010 report. This earlier projected insolvency date is primarily due to lower than previously anticipated revenues from payroll taxes. This report is a supplement to CRS Report R41436, *Medicare Financing*, which discusses the findings from the 2011 trustees report. Both reports will be updated upon receipt of the trustees 2012 report.

## Contents

Introduction .....	1
HI Financing .....	2
What Is the HI Trust Fund? .....	2
History of HI Solvency Projections .....	3
Current Insolvency Projections.....	6
What Would Happen If the Fund Became Insolvent? .....	6
Financing Issues.....	7

## Figures

Figure 1. Projected Number of Years Until HI Insolvency.....	4
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## Tables

Table 1. Year of Projected Insolvency of the Hospital Insurance Trust Fund in Past Trustees Reports .....	4
Table A-1. Operation of the Hospital Insurance Trust Fund, Calendar Years 1970-2020 .....	8
Table B-1. Tax Rates and Maximum Tax Bases .....	10

## Appendixes

Appendix A. Operation of the Hospital Insurance Trust Fund .....	8
Appendix B. Historical Payroll Tax Rates.....	10

## Contacts

Author Contact Information .....	11
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## Introduction

Medicare is a federal insurance program that pays for covered health care services of qualified beneficiaries. It was established in 1965 under Title XVIII of the Social Security Act as a federal entitlement program to provide health insurance to individuals 65 and older, and has been expanded over the years to include permanently disabled individuals under 65.

Medicare consists of four distinct parts, A through D. Part A covers hospital services, skilled nursing facility (SNF) services, home health visits, and hospice services. Most persons aged 65 or older are automatically entitled to premium-free Part A because they or their spouse paid Medicare payroll taxes for at least 40 quarters (10 years) on earnings covered by either the Social Security or the Railroad Retirement systems. Part B covers a broad range of medical services, including physician services, laboratory services, durable medical equipment, and outpatient hospital services. Enrollment in Part B is voluntary; however, most beneficiaries with Part A also enroll in Part B. Part C provides private plan options, such as managed care, for beneficiaries who are enrolled in both Parts A and B. Part D provides optional outpatient prescription drug coverage.<sup>1</sup>

Medicare expenditures are driven by a variety of factors, including the level of enrollment, the complexity of medical services provided, health care inflation, and expected life expectancy. In 2010, Medicare provided benefits to an estimated 47.5 million persons at an estimated total cost of \$523 billion.

The Medicare program has two separate trust funds—the Hospital Insurance (HI) trust fund and Supplementary Medical Insurance (SMI) trust fund. The Part A program, which is financed mainly through payroll taxes levied on current workers, is accounted for through the HI trust fund. The Part B and D programs, which are primarily funded through general revenue and beneficiary premiums, are accounted for through the SMI trust fund.<sup>2</sup> Both funds are maintained by the Department of the Treasury and are overseen by a board of trustees that reports annually to Congress concerning the funds' financial status.<sup>3</sup> Financial projections are made using economic assumptions based on current law, including estimates of consumer price index (CPI), workforce size, wage increases, and life expectancy.

Almost from its inception, the HI trust fund has faced a projected shortfall and eventual insolvency. Because of the way it is financed, the SMI trust fund does not face exhaustion; however, the Medicare trustees continue to express concerns about the rapid growth in SMI costs.<sup>4</sup>

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<sup>1</sup> For additional information on the Medicare program, see CRS Report R40425, *Medicare Primer*.

<sup>2</sup> Payments are made for beneficiaries enrolled in Part C in appropriate portions from the HI and SMI trust funds.

<sup>3</sup> Medicare trustee reports may be found at <http://www.cms.hhs.gov/reportstrustfunds/>.

<sup>4</sup> For further information on Medicare financing and its financial outlook, see CRS Report R41436, *Medicare Financing*, by Patricia A. Davis.

## HI Financing

Similar to the Social Security system, the HI portion of Medicare was designed to be self-supporting and is financed through dedicated sources of income rather than relying on general tax revenues. The primary source of income credited to the HI trust fund is *payroll taxes* paid by employees and employers; each pays a tax of 1.45% on earnings. The self-employed pay 2.9%. Unlike Social Security, there is no upper limit on earnings subject to the tax.<sup>5</sup> The Patient Protection and Affordable Care Act (PPACA, P.L. 111-148) imposes an additional tax of 0.9% on high-income workers with wages over \$200,000 for single filers, and \$250,000 for joint filers effective for taxable years beginning in 2013.<sup>6</sup>

Additional income to the HI trust fund consists of premiums paid by voluntary enrollees who are not entitled to premium-free Medicare Part A through their (or their spouse's) work in covered employment; a portion of the federal income taxes paid on Social Security benefits;<sup>7</sup> and interest on federal securities held by the trust fund.

## What Is the HI Trust Fund?

The HI trust fund is a financial account in the U.S. Treasury into which all income to the Part A portion of the program is credited, and from which all benefits and associated administrative costs of the program are paid. The trust fund is solely an accounting mechanism—there is no actual transfer of money into and out of the fund.

HI operates on a “pay-as-you-go” basis; the annual revenues to the HI trust fund, primarily the taxes paid by current workers and their employers, are used to pay Part A benefits for today's Medicare beneficiaries. When the government receives Medicare revenues (payroll taxes), income is credited by the Treasury to the appropriate trust fund in the form of special issue interest-bearing government securities.<sup>8</sup> (Interest on these securities is also credited to the trust fund.) The tax income exchanged for these securities then goes into the general fund of the Treasury and is indistinguishable from other cash in the general fund; this cash may be used for any government spending purpose. When payments for Medicare Part A services are made, the payments are paid out of the general treasury and a corresponding amount of securities is deleted from (written off) the HI trust fund.

In years in which the trust fund spends less than the income it receives, it has a *cash-flow surplus*; the trust fund securities exchanged for any income in excess of spending show up as “assets” on

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<sup>5</sup> Prior to 1991, the upper limit on taxable earnings was the same as for Social Security. The Omnibus Budget Reconciliation Act of 1990 (OBRA 90, P.L. 101-508) raised the limit in 1991 to \$125,000. Under automatic indexing provisions, the maximum was increased to \$130,200 in 1992 and \$135,000 in 1993. The Omnibus Budget Reconciliation Act of 1993 (OBRA 93, P.L. 103-66) eliminated the upper limit entirely beginning in 1994.

<sup>6</sup> See CRS Report R41128, *Health-Related Revenue Provisions in the Patient Protection and Affordable Care Act (PPACA)*, by Janemarie Mulvey, for additional detail.

<sup>7</sup> Since 1994, the HI fund has had an additional funding source—OBRA 93 increased the maximum amount of Social Security benefits subject to income tax from 50% to 85% and provided that the additional revenues would be credited to the HI trust fund.

<sup>8</sup> Unlike marketable securities, special issues can be redeemed at any time at face value. Investment in special issues gives the trust funds the same flexibility as holding cash.

the financial accounting balance sheets and are available to the system to meet future obligations.<sup>9</sup> If, in a given year, the trust fund spends more than the tax income it receives, it has a *cash-flow deficit*. In deficit years, Medicare can redeem any securities (including interest) accumulated in previous years. When the securities are redeemed, monies are transferred from the Treasury's general fund to the HI trust funds. Unless the Treasury's general fund is running a surplus, Congress would need to cut overall spending, raise taxes, or increase borrowing during years in which HI has cash-flow deficits. To illustrate, if HI expenditures exceed revenues in a given year (as in years 2008 through 2010), then the government needs to raise the resources necessary to pay for the securities as they are redeemed by the HI trust fund to meet expenses. (See **Appendix A** for a discussion of recent and projected HI cash flows, and data on historical and projected HI operations.)

## History of HI Solvency Projections

The HI trust fund has never become insolvent. The Board of Trustees projected insolvency for the HI fund beginning with the 1970 report, at which time the HI trust fund was expected to become insolvent in only two years. See **Table 1** and **Figure 1**. The insolvency date has been postponed a number of times since the beginning of Medicare through a variety of methods. For example, the payroll tax rate has been adjusted periodically by Congress as one of the mechanisms to maintain the financial adequacy of the trust fund (see **Appendix B**).

Other legislative changes have been made at various times to restrain the growth in HI program spending; generally, these measures were part of larger budget reconciliation laws that attempted to restrain overall federal spending. To illustrate, in the mid-1990s, efforts to curtail Medicare spending intensified as Congress considered legislation to bring the entire federal budget into balance and culminated in the passage of the Balanced Budget Act of 1997 (BBA 97, P.L. 105-33). In early 1997, the trustees had projected that the HI trust fund would become insolvent within four years, in 2001. Following the enactment of BBA 97, significant improvements were made in the short-term projections. The new projections reflected a number of factors, including lower expected expenditures as a result of changes made by BBA 97 (primarily resulting from modifications in Medicare Part C payments,<sup>10</sup> and the establishment of prospective payment systems for certain Part A providers), continuing efforts to combat fraud and abuse, and strong economic growth, which was expected to generate more revenues to the trust fund from payroll taxes.

A number of observers contended that the savings achieved through the enactment of BBA 97 were greater than intended at the time of enactment and had unintended consequences for health care providers. As a result of these concerns, Congress subsequently enacted two measures (the Balanced Budget Refinement Act of 1999 [BBRA 99, P.L. 106-113] and the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 [BIPA 2000, P.L. 106-554]). These measures were designed to reverse some of the BBA 97 spending reductions. Despite enactment of both BBRA 99 and BIPA 2000, which increased program spending, the 2001 and 2002 trustees reports continued to delay the projected insolvency date. This improvement in solvency

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<sup>9</sup> The trust fund surpluses are not reserved for future Medicare benefits, but are simply bookkeeping entries that indicate how much Medicare has lent to the Treasury (or alternatively, what is owed to Medicare by the Treasury).

<sup>10</sup> BBA 97 established the "Medicare+Choice" program under Part C. Medicare Part C was changed to "Medicare Advantage" by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA, P.L. 108-173).

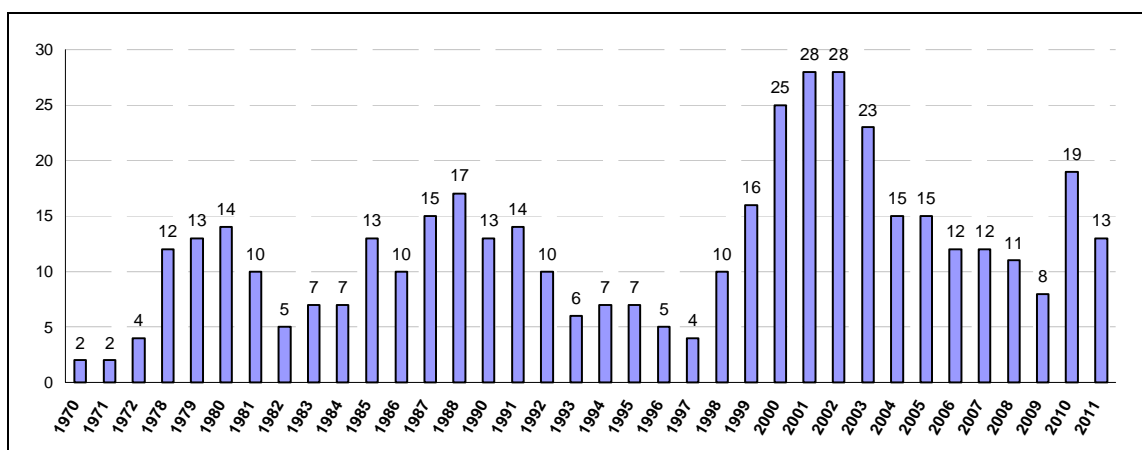
projections reflected both stronger-than-expected economic growth and lower-than-expected program costs due to lower projected enrollment in Medicare Part C, heightened anti-fraud and abuse initiatives, and lower than expected increases in health care costs.

**Table I. Year of Projected Insolvency of the Hospital Insurance Trust Fund in Past Trustees Reports**

Year of trustees report	Year of projected insolvency	Year of trustees report	Year of projected insolvency	Year of trustees report	Year of projected insolvency
1970	1972	1985	1998	1999	2015
1971	1973	1986	1996	2000	2025
1972	1976	1986 amended	1998	2001	2029
1973	none indicated	1987	2002	2002	2030
1974	none indicated	1988	2005	2003	2026
1975	late 1990s	1989	none indicated	2004	2019
1976	early 1990s	1990	2003	2005	2020
1977	late 1980s	1991	2005	2006	2018
1978	1990	1992	2002	2007	2019
1979	1992	1993	1999	2008	2019
1980	1994	1994	2001	2009	2017
1981	1991	1995	2002	2010	2029
1982	1987	1996	2001	2011	2024
1983	1990	1997	2001		
1984	1991	1998	2008		

Source: Intermediate projections of various HI trustees reports, 1970-2011.

**Figure I. Projected Number of Years Until HI Insolvency**



Source: Intermediate projections of various HI trustees reports, 1970-2011.

Notes: No specific estimates were provided by the trustees for years 1973-1977 and 1989.

However, the 2003 report shifted direction again. Its projected insolvency date was 2026, four years earlier than the 2030 date projected in the 2002 report. The revision was due to lower-than-expected HI-taxable payroll and higher-than-expected hospital expenditures.

The 2004 report projected that, under intermediate assumptions, the HI trust fund would become insolvent in 2019, seven years earlier than projected in 2003. The revision of the projected insolvency date was due to a number of factors, including slow wage growth (on which payroll taxes are based) and faster growth in inpatient hospital benefits. In addition, the enactment of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA, P.L. 108-173) added significantly to HI costs, primarily through higher payments to rural hospitals and to private plans under the MA program.<sup>11</sup>

The 2005 trustees report projected that, under intermediate assumptions, the HI trust fund would become insolvent in 2020, one year later than projected in 2004. The revision reflected slightly higher income and slightly lower costs in 2004 than previously estimated. The 2006 report moved the insolvency date forward again. Under the trustees' intermediate assumptions, the HI trust fund would become insolvent in 2018. The revision reflected expectations of slightly higher costs and increased utilization of HI services.

Both the 2007 and 2008 reports projected a 2019 insolvency date, though the 2008 report indicated it would occur earlier in the year. The 2009 report moved the insolvency date forward to 2017, due primarily to the economic recession.

The 2010 report of the Medicare Boards of Trustees, issued on August 5, 2010,<sup>12</sup> estimated that the combination of lower Part A costs<sup>13</sup> and higher tax revenues expected as a result of the Patient Protection and Affordable Care Act (PPACA, P.L. 111-148) would postpone the depletion of HI trust fund assets until 2029, 12 years later than the date projected in their 2009 report. Although the Medicare trustees noted that the financial outlook for the Medicare program appeared to have improved as a result of PPACA, they cautioned that the projections in the report were more uncertain than normal, due to the potential for expenditure reductions not to materialize. As such, the actuaries of the Centers for Medicare & Medicaid Services (CMS) issued a supplemental memorandum that explained and quantified the potentially higher costs than those estimated in the 2010 trustees report.<sup>14</sup> This "illustrative alternative" projected that the HI trust fund would become insolvent in 2028, one year earlier than that projected in the 2010 trustees report.

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<sup>11</sup> The Part D outpatient prescription drug program, which was created by MMA, is funded under SMI; the increased expenditures associated with this new benefit therefore had little impact on projections of Medicare (HI) solvency.

<sup>12</sup> 2010 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, <http://www.cms.gov/ReportsTrustFunds/downloads/tr2010.pdf>.

<sup>13</sup> The expected reductions are primarily due to productivity adjustments to Part A provider payment updates and reduced payments to Medicare Advantage plans.

<sup>14</sup> Memo from John D. Shatto and M. Kent Clemens, "Projected Medicare Expenditures Under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers," August 5, 2010, <http://www.cms.gov/ReportsTrustFunds/downloads/2010TRAlternativeScenario.pdf>.

## Current Insolvency Projections

The 2011 Report of the Medicare trustees, issued on May 13, 2011,<sup>15</sup> projects that the HI trust fund will become insolvent in 2024, five years earlier than projected in the 2010 report. The worsening financial outlook is primarily due to lower than expected payroll taxes stemming from higher than expected unemployment and slow growth in wages in 2010. Over the next 10 years, payroll tax revenue is projected to increase at a faster rate than expenditures (6.0% vs. 4.9%), which will reduce the size of the annual deficits but will not completely eliminate them. Trust fund assets will be used to make up the difference between income and expenditures, until the assets are depleted in 2024. (See **Appendix A** for a discussion of expected HI cash flow through 2024.)

Similar to 2010, the CMS actuaries issued an alternative scenario that assumes that certain PPACA changes that reduce Part A provider reimbursements would be made through 2019, and then gradually phased out starting in 2020. Because the impact of these changes is expected to be relatively minor in the short term, the expected trust fund exhaustion date provided in this scenario is the same as that under the current law scenario, 2024; however, the trust fund is expected to be depleted somewhat earlier in the year under the alternative scenario.

## What Would Happen If the Fund Became Insolvent?

The practical function of the HI trust fund is that it permits the continued payment of bills in the event of a temporary financial strain (e.g., lower income or higher costs than expected) without requiring legislative action. As long as the HI trust fund has a balance (i.e., there are securities credited to the fund), the Treasury Department is authorized to make payments for Medicare Part A services. If the trust fund is not able to pay all of current expenses out of current income and accumulated trust fund assets, it is considered to be *insolvent*.

To date, the HI trust fund has never become insolvent, and there are no provisions in the Social Security Act that govern what would happen if that were to occur. For example, there is no authority in law for the program to use general revenue to fund Part A services in the event of such a shortfall.

In their 2011 report, the Medicare trustees project that the HI trust fund will be exhausted in 2024. At that time, HI would continue to receive tax income from which some benefits could be paid; however, there would be insufficient funds to pay for all Part A benefits. Unless action is taken prior to that date to increase revenue or decrease expenditures (or some combination of the two), Congress would need to pass legislation that would provide for another source of funding (e.g., general revenues or increased taxes) to make up for these deficits.

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<sup>15</sup> 2011 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, <http://www.cms.gov/ReportsTrustFunds/downloads/tr2011.pdf>.

## **Financing Issues**

Concern about the financial status of Medicare tends to focus on the HI trust fund exhaustion date, when benefits scheduled under current law technically can no longer be paid in full. While trust fund solvency issues are important, they present only part of the picture. When viewed from the perspective of the entire federal budget, total Medicare spending obligations (HI and SMI spending combined) are expected to place increasing demands on federal budgetary resources well before the HI trust fund is expected to become insolvent. For example, changes to the physician sustainable growth rate (SGR) payment system to prevent scheduled cuts in Medicare payments to doctors beginning in 2012 would require significant additional federal funding. However, because payments to physicians are made through the SMI trust fund, these additional expenditures would have little to no effect on estimates of Medicare solvency (which reflects only expected HI trust fund spending). For a further discussion of this issue, see CRS Report R41436, *Medicare Financing*.

## Appendix A. Operation of the Hospital Insurance Trust Fund

Beginning in 2004, expenditures began exceeding *tax* income (from payroll taxes and from the taxation of Social Security benefits). Expenditures began to exceed *total* income (tax income plus all other sources of revenue) in 2008. At that time, HI assets (the balance of the HI trust fund at the beginning of the year) were used to meet the portion of expenditures that exceeded income. Expenditures have exceeded income every year since then and are expected to continue doing so until 2024 when the asset balance is depleted. At that time, the trust fund will no longer have sufficient funds to fully pay for Part A expenditures (see **Table A-1** below).

**Table A-1. Operation of the Hospital Insurance Trust Fund,  
Calendar Years 1970-2020**

(\$ in billions)

Year	Income		Expenditures			Trust Fund		
	Payroll Taxes	Interest, Transfers, Other	Total	Benefit Payments	Admin. Expenses	Total	Net Change	Balance at End of Year
<i>Historical Data</i>								
1970	\$4.9	\$1.2	\$6.0	\$5.1	\$0.2	\$5.3	\$0.7	\$3.2
1975	11.5	1.4	13.0	11.3	0.3	11.6	1.4	10.5
1980	23.8	2.1	26.1	25.1	0.5	25.6	0.5	13.7
1985	47.6	3.9	51.4	47.6	0.8	48.4	4.8	20.5
1990	72.0	8.4	80.4	66.2	0.8	67.0	13.4	98.9
1995	98.4	16.7	115.0	116.4	1.2	117.6	-2.6	130.3
2000	144.4	22.9	167.2	128.5	2.6	131.1	36.1	177.5
2001	152.0	22.7	174.6	141.2	2.2	143.4	31.3	208.7
2002	152.7	25.8	178.6	149.9	2.6	152.5	26.1	234.8
2003	149.2	26.5	175.8	152.1	2.5	154.6	21.2	256.0
2004	156.5	27.5	183.9	167.6	3.0	170.6	13.3	269.3
2005	171.4	28	199.4	180.0	2.9	182.9	16.4	285.8
2006	181.3	30.2	211.5	189.0	2.9	191.9	19.6	305.4
2007	191.9	31.9	223.7	200.2	2.9	203.1	20.7	326.0
2008	198.7	32	230.8	232.3	3.3	235.6	-4.7	321.3
2009	190.9	34.5	225.4	239.3	3.2	242.5	-17.1	304.2
2010	182.0	33.6	215.6	244.5	3.5	247.9	-32.3	271.9
<i>Intermediate Estimate</i>								
2011	196.6	32.2	228.7	259.1	3.7	262.8	-34.1	237.9
2012	211.0	32.5	243.5	271.3	4.0	275.3	-31.8	206.1
2013	228.3	33.9	262.2	283.2	4.4	287.7	-25.5	180.6

Year	Income		Expenditures			Trust Fund		
	Payroll Taxes	Interest, Transfers, Other	Total	Benefit Payments	Admin. Expenses	Total	Net Change	Balance at End of Year
2014	244.1	36.8	280.8	295.6	4.9	300.5	-19.7	160.9
2015	257.8	39.6	297.3	302.7	5.4	308.1	-10.7	150.2
2016	271.9	42.3	314.1	316.3	5.9	322.2	-8.1	142.1
2017	285.9	45.5	331.3	331.3	6.4	337.4	-6.0	136.0
2018	301.1	48.6	349.7	348.4	6.9	355.3	-5.6	130.5
2019	315.8	51.6	367.5	368.1	7.4	375.5	-8.0	122.5
2020	330.0	54.9	384.9	391.1	7.9	399.0	-14.1	108.4

**Source:** 2011 Medicare Trustees Report, Table III.B4.

**Notes:** Sums may not equal totals due to rounding.

## Appendix B. Historical Payroll Tax Rates

**Table B-I. Tax Rates and Maximum Tax Bases**

Calendar Year	Maximum tax base	Tax rate (percentage of taxable earnings)	
		Employees and employers, each	Self-employed
<i>Past experience</i>			
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
1990	51,300	1.45	2.90
1991	125,000	1.45	2.90
1992	130,200	1.45	2.90
1993	135,000	1.45	2.90
1994-2010	no limit	1.45	2.90
<i>Scheduled in current law</i>			
2011 and later	no limit	1.45	2.90

**Source:** 2011 Report of the Medicare Trustees, Table III.B2.

**Notes:** Beginning in 2013, workers will pay an additional 0.9% of their earnings above \$200,000 (those who file individual tax returns) or \$250,000 (those who file joint tax returns).

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