2009 ANNUAL REPORT OF THE BOARDS OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE AND FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS

COMMUNICATION

From

**THE BOARDS OF TRUSTEES,
FEDERAL HOSPITAL INSURANCE AND
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE
TRUST FUNDS**

Transmitting

**THE 2009 ANNUAL REPORT OF
THE BOARDS OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE AND
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE
TRUST FUNDS**

LETTER OF TRANSMITTAL

BOARDS OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE AND
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS,
Washington, D.C., May 12, 2009

HONORABLE Nancy Pelosi
Speaker of the House of Representatives
Washington, D.C.

HONORABLE Joseph R. Biden
President of the Senate
Washington, D.C.

DEAR MADAM SPEAKER AND MR. PRESIDENT:

We have the honor of transmitting to you the 2009 Annual Report of the Boards of Trustees of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund, the 44th such report.

Respectfully,

/S/
Timothy F. Geithner, *Secretary of the Treasury, and Managing Trustee of the Trust Funds.*

/S/
Hilda L. Solis, *Secretary of Labor, and Trustee.*

/S/
Kathleen Sebelius, *Secretary of Health and Human Services, and Trustee.*

/S/
Michael J. Astrue, *Commissioner of Social Security, and Trustee.*

Vacant, *Public Trustee.*

Vacant, *Public Trustee.*

/S/
Charlene M. Frizzera, *Acting Administrator of the Centers for Medicare & Medicaid Services, and Secretary, Boards of Trustees.*

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I. INTRODUCTION

The Medicare program has two components. Hospital Insurance (HI), or Medicare Part A, helps pay for hospital, home health, skilled nursing facility, and hospice care for the aged and disabled. Supplementary Medical Insurance (SMI) consists of Medicare Part B and Part D. Part B helps pay for physician, outpatient hospital, home health, and other services for the aged and disabled who have voluntarily enrolled. Part D provides subsidized access to drug insurance coverage on a voluntary basis for all beneficiaries and premium and cost-sharing subsidies for low-income enrollees. Medicare also has a Part C, which serves as an alternative to traditional Part A and Part B coverage. Under this option, beneficiaries can choose to enroll in and receive care from private "Medicare Advantage" and certain other health insurance plans that contract with Medicare. The costs for such beneficiaries are generally paid on a prospective, capitated basis from the HI and SMI Part B trust fund accounts.

The Medicare Board of Trustees was established under the Social Security Act to oversee the financial operations of the HI and SMI trust funds.[1] The Board comprises six members. Four members serve by virtue of their positions in the Federal Government: the Secretary of the Treasury, who is the Managing Trustee; the Secretary of Labor; the Secretary of Health and Human Services; and the Commissioner of Social Security. Two other members are public representatives who are appointed by the President, subject to confirmation by the Senate. These positions are currently vacant. The Administrator of the Centers for Medicare & Medicaid Services (CMS) is designated as Secretary of the Board.

The Social Security Act requires that the Board, among other duties, report annually to the Congress on the financial and actuarial status of the HI and SMI trust funds. The 2009 report is the 44th to be submitted.

[1]Technically, separate boards are established for HI and SMI. Because both boards have the same membership, for convenience they are collectively referred to as the Medicare Board of Trustees in this report.

II. OVERVIEW

A. HIGHLIGHTS

The major findings of this report under the intermediate set of assumptions are summarized below.

In 2008

In 2008, 45.2 million people were covered by Medicare: 37.8 million aged 65 and older, and 7.4 million disabled. About 22 percent of beneficiaries have chosen to enroll in private health plans that contract with Medicare to provide health services. Total benefits paid in 2008 were $462 billion. Income was $481 billion, expenditures were $468 billion, and assets held in special issue U.S. Treasury securities grew to $381 billion.

Short-Range Results

The HI trust fund is not adequately financed over the next 10 years. At the beginning of 2009 the assets of the HI trust fund were $321 billion and are projected to be exhausted during 2017, under the intermediate assumptions. The HI trust fund does not meet the short-range test of financial adequacy. Although the short-range financial status of the HI trust fund has not been considered satisfactory since 2003, the outlook has further deteriorated as a result of the current economic recession.

The SMI trust fund is adequately financed over the next 10 years and beyond because premium and general revenue income for Parts B and D are reset each year to match expected costs. However, further Congressional overrides of scheduled physician fee reductions, together with an existing "hold harmless" provision restricting premium increases for most beneficiaries, could jeopardize Part B solvency and require unusual measures to avoid asset depletion. Part B costs have been increasing rapidly, having averaged 7.8 percent annual growth over the last 5 years, and are likely to continue doing so. Under current law, an average annual growth rate of 5.5 percent is projected for the next 5 years. This rate is unrealistically constrained due to multiple years of physician fee reductions that would occur under current law, including a scheduled reduction of 21.5 percent for 2010. If Congress continues to override these reductions, as they have for 2003 through 2009, the Part B growth rate would instead average roughly 8.5 to 9.0 percent. For Part D, the average annual increase in expenditures is estimated to be 11.1 percent through 2018. The U.S. economy is projected to grow

by 4.5 percent on average during this period, significantly more slowly than either Part B or Part D.

The difference between Medicare's total outlays and its "dedicated financing sources" is estimated to reach 45 percent of outlays in fiscal year 2014, the sixth year of the projection. Based on this result, the Board of Trustees is required to issue a determination of projected "excess general revenue Medicare funding" in this report. This is the fourth consecutive such finding, and it again triggers a statutory "Medicare funding warning," indicating that Federal general revenues are becoming a substantial share of total financing for Medicare. As required by law, the President must submit to Congress proposed legislation to respond to the warning within 15 days after the date of the Budget submission for the succeeding year.

Long-Range Results

Under the intermediate assumptions the HI trust fund is projected to be exhausted in 2017, 2 years earlier than in last year's report, reflecting much lower projected payroll tax income as a result of the recession. For the 75-year projection period, the actuarial deficit has increased from 3.55 to 3.88 percent of taxable payroll.

The HI annual cost rate is projected to increase from 3.31 percent of taxable payroll in 2008 to 12.07 percent in 2083—8.55 percent of taxable payroll more than the projected income rate for 2083. Expressed in relation to the projected Gross Domestic Product (GDP), HI cost is estimated to rise from the current level of 1.6 percent of GDP to 5.0 percent in 2083.

Part B outlays were 1.3 percent of GDP in 2008 and are projected to grow to about 4.5 percent by 2083. These cost projections, however, are understated as a result of the substantial reductions in physician payments that would be required under current law. Actual future Part B costs will depend on the steps Congress takes to address the situation but could exceed the current-law projections by 18 to 21 percent in 2015 and by as much as 10 percent for 2030 and later.

Part D outlays are estimated to increase from 0.4 percent of GDP in 2008 to about 1.8 percent by 2083. These outlay projections are somewhat lower than those shown in last year's report principally because overall prescription drug costs are expected to grow at a slightly slower rate over the next 10 years.

Conclusion

The financial outlook for the Medicare program continues to raise serious concerns. Total Medicare expenditures were $468 billion in 2008 and are expected to increase in future years at a faster pace than either workers' earnings or the economy overall. As a percentage of GDP, expenditures are projected to increase from 3.2 percent in 2008 to 11.4 percent by 2083 (based on our intermediate set of assumptions). Growth of this magnitude, if realized, would substantially increase the strain on the nation's workers, Medicare beneficiaries, and the Federal Budget.

HI tax income and other dedicated revenues are expected to fall short of HI expenditures in all future years. The HI trust fund does not meet our short-range test of financial adequacy, and fund assets are projected to be exhausted in 2017. In the long range, projected expenditures and scheduled tax income are substantially out of balance, and the trust fund does not meet our test of long-range close actuarial balance. Currently, this imbalance is relatively small, with dedicated revenues estimated to cover 88 percent of costs in 2009, but it will grow rapidly in the absence of changes to current law: taxes would cover 81 percent of estimated costs in 2017, and only 29 percent at the end of the long-range period. Closing deficits of this magnitude will require very substantial increases in tax revenues and/or reductions in expenditures.

The Part B and Part D accounts in the SMI trust fund are adequately financed under current law, since premium and general revenue income are reset each year to match expected costs. Such financing, however, would have to increase rapidly to match expected expenditure growth under current law.

These projections demonstrate the need for timely and effective action to address Medicare's financial challenges. Consideration of such reforms should occur in the relatively near future. The sooner the solutions are enacted, the more flexible and gradual they can be. Moreover, the early introduction of reforms increases the time available for affected individuals and organizations—including health care providers, beneficiaries, and taxpayers—to adjust their expectations. We believe that prompt action is necessary to address these challenges—both the exhaustion of the HI trust fund and the anticipated rapid growth in HI, SMI Part B, and SMI Part D expenditures.

B. MEDICARE DATA FOR CALENDAR YEAR 2008

HI and SMI have separate trust funds, sources of revenue, and categories of expenditures. Table II.B1 presents Medicare data for calendar year 2008, in total and for each part of the program. The largest category of HI expenditures is inpatient hospital services, while the largest SMI expenditure categories are physician services and prescription drugs. Payments to private health plans for providing Part A and Part B services represented about one-fourth of total A and B benefits outlays.

Table II.B1.—Medicare Data for Calendar Year 2008

		SMI		
	HI or Part A	Part B	Part D	Total
Assets at end of 2007 (billions)	$326.0	$42.1	$0.8	$368.9
Total income	$230.8	$200.6	$49.4	$480.8
Payroll taxes	198.7	—	—	198.7
Interest	15.6	3.5	0.0	19.1
Taxation of benefits	11.7	—	—	11.7
Premiums	2.9	50.2	5.0	58.2
General revenue	0.7	146.8	37.3	184.8
Transfers from States	—	—	7.1	7.1
Other	1.2	0.1	—	1.3
Total expenditures	$235.6	$183.3	49.3	$468.1
Benefits	232.3	180.3	49.0	461.6
Hospital	130.5	26.8	—	157.3
Skilled nursing facility	24.2	—	—	24.2
Home health care	6.6	10.0	—	16.6
Physician fee schedule services	—	60.8	—	60.8
Private health plans (Part C)	50.6	47.6	—	98.2
Prescription drugs	—	—	49.0	49.0
Other	20.6	35.2	—	55.8
Administrative expenses	$3.3	$3.0	$0.3	$6.5
Net change in assets	−$4.7	$17.3	$0.1	$12.7
Assets at end of 2008	$321.3	$59.4	$0.9	$381.6
Enrollment (millions)				
Aged	37.5	35.2	n/a	36.9
Disabled	7.4	6.6	n/a	7.2
Total	44.9	41.7	32.3	44.1
Average benefit per enrollee	$5,179	$4,322	$1,517	$11,018

Notes: 1. Totals do not necessarily equal the sums of rounded components.
2. "n/a" indicates data are not available.

For HI, the primary source of financing is the payroll tax on covered earnings. Employers and employees each pay 1.45 percent of wages, while self-employed workers pay 2.9 percent of their net income. Other HI revenue sources include a portion of the Federal income taxes that people pay on their Social Security benefits, and interest paid on the U. S. Treasury securities held in the HI trust fund.

For SMI, transfers from the general fund of the Treasury represent the largest source of income, currently covering about 79 percent of program costs. Also, beneficiaries pay monthly premiums for Parts B and D that finance a portion of the total cost. As with HI, interest is paid on the U. S. Treasury securities held in the SMI trust fund.

C. ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS

Actual future Medicare expenditures will depend on a number of factors, including the size and composition of the population eligible for benefits, changes in the volume and intensity of services, and increases in the price per service. For HI, future trust fund income will depend on the size and characteristics of the covered work force and the level of workers' earnings. These factors will depend in turn upon future birth rates, death rates, labor force participation rates, wage increases, and many other economic and demographic circumstances affecting Medicare. To illustrate the uncertainty and sensitivity inherent in estimates of future Medicare trust fund operations, projections have been prepared under a "low-cost" and a "high-cost" set of assumptions as well as under an intermediate set.

Table II.C1 summarizes the key assumptions used in this report. Many of the demographic and economic variables that determine Medicare costs and income are common to the Old-Age, Survivors, and Disability Insurance (OASDI) program and are explained in detail in the report of the OASDI Board of Trustees. These variables include changes in the Consumer Price Index (CPI) and wages, real interest rates, fertility rates, mortality rates, and net immigration levels. ("Real" indicates that the effects of inflation have been removed.) The assumptions vary, in most cases, from year to year during the first 5 to 30 years before reaching their so-called "ultimate" values for the remainder of the 75-year projection period. Other assumptions are specific to Medicare.

The current economic recession is reflected in the economic assumptions, and it has a significant impact on GDP growth, wage increases, and inflation levels. Real economic growth is assumed to resume in the third quarter of 2009, and the unemployment rate is projected to reach a maximum of 8.8 percent in 2010. The assumed impact of the recession on the key economic factors is described in more detail in the OASDI annual report.

As with all of the assumptions underlying the Trustees' financial projections, the Medicare-specific assumptions are reviewed annually and updated based on the latest available data and analysis of trends. In addition, the assumptions and projection methodology are subject to periodic review by independent panels of expert actuaries and economists. The most recent such review was conducted by the 2004 Medicare Technical Review Panel, which issued its findings in December 2004.

Table II.C1.—Ultimate Assumptions

	Intermediate	Low-Cost	High-Cost
Economic:			
Annual percentage change in:			
Gross Domestic Product (GDP) per capita[1]	4.1	3.5	4.6
Average wage in covered employment	3.9	3.5	4.3
Consumer Price Index (CPI)	2.8	1.8	3.8
Real-wage differential (percent)	1.1	1.7	0.5
Real interest rate (percent)	2.9	3.6	2.1
Demographic:			
Total fertility rate (children per woman)	2.00	2.30	1.70
Average annual percentage reduction in total age-sex adjusted death rates from 2033 to 2083	0.77	0.35	1.24
Net annual immigration:			
Legal	750,000	960,000	560,000
Other	275,000	345,000	210,000
Health cost growth:			
Annual percentage change in per beneficiary Medicare expenditures (excluding demographic impacts)[1]	5.1[2]	[3]	[3]

[1]The assumed ultimate increases in per capita GDP and per beneficiary Medicare expenditures can also be expressed in real terms, adjusted to remove the impact of assumed inflation growth. When adjusted by the chain-weighted GDP price index, assumed real per capita GDP growth is 1.5 percent, and real per beneficiary Medicare cost growth is 2.5 percent.
[2]Cost growth assumptions in the last 50 years of the projection vary year by year and follow a smooth downward path that generates the same 75-year HI actuarial balance as a level growth assumption of GDP plus 1 percent for the last 50 years (5.1 percent).
[3]See section III.B for further explanation.

The assumed long-range rate of growth in annual Medicare expenditures per beneficiary is one of the most critical determinants of the projected cost of Medicare-covered health care services in the more distant future. For the 2001-2005 Trustees Reports, the increase in average expenditures per beneficiary for the 25th through 75th years of the projection was assumed to equal the growth in per capita GDP plus 1 percentage point.[2] This assumption was recommended by the 2000 Medicare Technical Review Panel. With the inclusion of infinite-horizon projections starting in the 2004 Trustees Report, per beneficiary expenditures after the 75th year were assumed to increase at the same rate as per capita GDP. The 2004 Technical Review Panel recommended that these assumptions continue to be used, given the limits of current knowledge, but that further research also be conducted.

Three years ago the Board of Trustees adopted a slight refinement of the long-range growth assumption that provides a more gradual transition from current health cost growth rates, which have been roughly 2 to 3 percentage points above the level of GDP growth, to the ultimate assumed level of GDP plus zero percent just after the 75th year and for the indefinite future. The year-by-year growth

[2]This assumed increase in the average expenditures per beneficiary excludes the impacts of the aging of the population and changes in the gender composition of the Medicare population, which are estimated separately.

assumptions are based on a simplified economic model and are determined in a way such that the 75-year actuarial balance for the HI trust fund is consistent with that generated by the "GDP plus 1 percent" assumption. An independent group of experts in health economics and long-range forecasting reviewed the model and advised that its use for this purpose is appropriate. Consistent with the recommendations of this group and those of the 2000 and 2004 Technical Panels, further research is being conducted on long-range health cost growth trends.

As in the past, detailed growth rate assumptions are established for the next 10 years by individual type of service (for example, inpatient hospital care, physician services, etc.), reflecting recent trends and the impact of specific statutory provisions. Under the economic model, in 2033 the growth rate for all Medicare services is assumed to be about 1.4 percentage points above the rate of GDP growth for that year. This differential gradually declines to about 0.8 percentage points in 2053 and to 0.2 percentage points in 2083.[3] Compared to the assumptions used in the 2001-2005 reports, the new growth assumption is initially higher but subsequently lower than the constant "GDP plus 1 percent" assumption. Beyond 75 years, the assumed growth rate of GDP plus zero percent is essentially unchanged.

In HI, for the high-cost assumptions, the annual increase in aggregate costs (relative to increases in taxable payroll) during the initial 25-year period is assumed to be 2 percentage points greater than under the intermediate assumptions. Under low-cost assumptions, the increase during the same period is assumed to be 2 percentage points less than under intermediate assumptions. The 2-percentage-point differentials are assumed to decline gradually until 2058, when the same rate of increase in HI costs (relative to taxable payroll) is assumed for all three sets of assumptions.

Because of its automatic financing provisions for Parts B and D, the SMI trust fund is expected to be adequately financed into the indefinite future, so a long-range analysis using high-cost and low-cost assumptions has not been conducted. The 2004 Technical Panel recommended refining the presentation of long-range uncertainty through stochastic techniques or long-range high- and low-cost alternatives for Parts A, B, and D. The Trustees and their

[3]The cost growth assumptions thus follow a smooth, downward path over the last 50 years of the projection rather than remaining constant.

staffs are considering these and other methods of illustrating the long-range uncertainty in the Medicare projections.

While it is reasonable to expect that actual trust fund experience will fall within the range defined by the three alternative sets of assumptions, there can be no assurances that they will do so in light of the wide variations in experience since the beginning of the Medicare program. In general, a greater degree of confidence can be placed in the assumptions and estimates for the earlier years than for the later years. Nonetheless, even for the earlier years, the estimates are only an indication of the expected trend and the general range of future Medicare experience. For simplicity of presentation, much of the analysis in this overview centers on the projections under the intermediate assumptions.

D. FINANCIAL OUTLOOK FOR THE MEDICARE PROGRAM

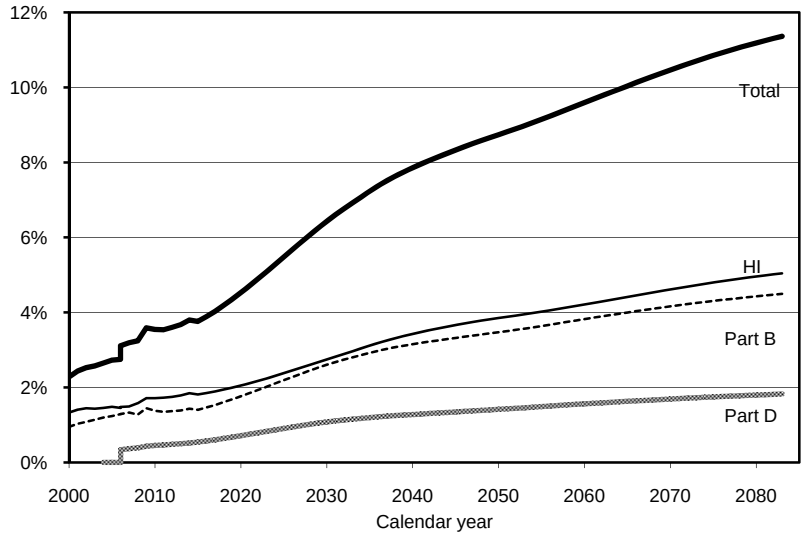
This report evaluates the financial status of the HI and SMI trust funds. For HI, the Trustees apply formal tests of financial status for both the short range and the long range; for SMI, the Trustees assess the ability of the trust fund to meet incurred costs over the period for which financing has been set.

HI and SMI are financed in very different ways. Within SMI, Part B and Part D premiums and general revenue financing are reestablished annually to match expected costs for the following year. In contrast, HI is subject to substantially greater variation in asset growth, since financing is established through statutory tax rates that cannot be adjusted to match expenditures except by enactment of new legislation.

Despite the significant differences in benefit provisions and financing, the two components of Medicare are closely related. HI and SMI operate in an interdependent health care system. Most Medicare enrollees are enrolled in HI and SMI Parts B and D, and many receive services from all three. Thus, efforts to improve and reform either component must necessarily involve the other component as well. In view of the anticipated growth in Medicare expenditures, it is also important to consider the distribution among the various sources of revenues for financing Medicare and the manner in which this distribution will change over time under current law.

In this section, the projected total expenditures for the Medicare program are considered, along with the primary sources of financing. Figure II.D1 shows projected costs as a percentage of GDP. Medicare expenditures represented 3.2 percent of GDP in 2008. Costs increase to about 7.3 percent of GDP by 2035 under the intermediate assumptions and to 11.4 percent of GDP by the end of the 75-year period. However, it is important to note that, after 2009, Medicare expenditures are understated because of unrealistic substantial reductions in physician payments scheduled under current law.

Figure II.D1.—Medicare Expenditures as a Percentage of the Gross Domestic Product



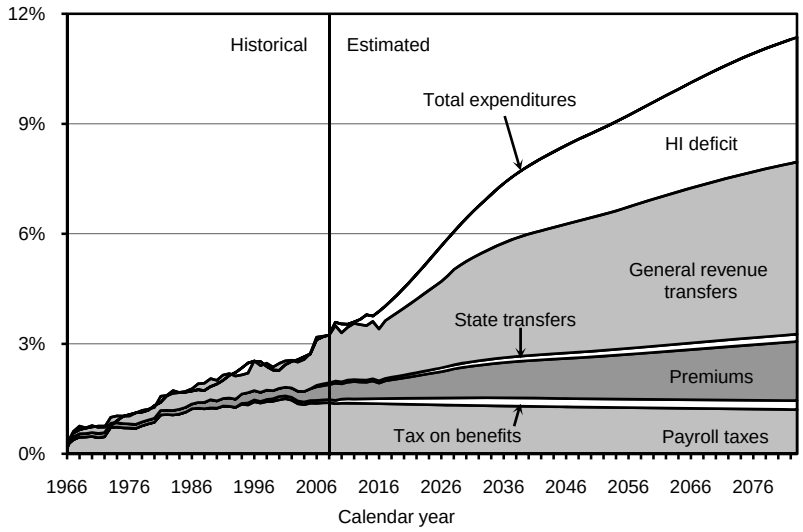
The Medicare projections reflect (i) continuing growth in the volume and intensity of services provided per beneficiary throughout the projection period, (ii) the impact of a large increase in beneficiaries starting in about 2010 as the leading edge of the 1946-65 baby boom generation reaches age 65 and becomes eligible to receive benefits, and (iii) the introduction of the Part D program in 2004, along with the other provisions of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, the Deficit Reduction Act of 2005, the Tax Relief and Health Care Act of 2006, the Medicare, Medicaid, and SCHIP Extension Act of 2007, the Supplemental Appropriations Act of 2008, the Medicare Improvements for Patients and Providers Act of 2008, the QI Program Supplemental Funding Act of 2008, and the American Recovery and Reinvestment Act of 2009. Other key demographic trends are also reflected, including future birth rates at roughly the same level as during the last 2 decades and continuing improvements in life expectancy.

Most beneficiaries have the option to enroll in private health insurance plans that contract with Medicare to provide Part A and Part B medical services and prescription drug coverage under Part D. In 2008, 10 million individuals (22 percent of all beneficiaries) were enrolled in such plans. Plan costs for the standard benefit package can be significantly lower or higher than the corresponding cost for beneficiaries in the "traditional" or "fee-for-service" Medicare program, but under the payment formula in current law, private

plans are generally paid a higher average amount, and the additional payments must be used to reduce enrollee cost-sharing requirements, provide extra benefits, and/or reduce Part B and Part D premiums. These benefit enhancements are valuable to enrollees but also result in higher Medicare costs overall. The proportion of beneficiaries enrolled in private Medicare Advantage health plans is projected to continue increasing during the next 2 years and to stabilize at approximately 24 percent in 2011 and later.

The past and projected amounts of Medicare revenues, under current law, are shown in figure II.D2. Interest income is excluded since it would not be a significant part of program financing in the long range. Medicare revenues—from HI payroll taxes, HI income from the taxation of Social Security benefits, SMI Part D State transfers for certain Medicaid beneficiaries, HI and SMI premiums, and HI and SMI statutory general revenues—are compared to total Medicare expenditures. After 2010 overall expenditures are projected to exceed aggregate revenues to an increasing extent as a result of the projected large financial imbalance in the HI trust fund.

Figure II.D2.—Medicare Sources of Non-Interest Income and Expenditures as a Percentage of the Gross Domestic Product



As shown in figure II.D2 (in the historical period), payroll tax revenues increased steadily as a percentage of GDP due to increases in the HI payroll tax rate and the limit on taxable earnings, the latter of which was eliminated in 1994. In the future, however, payroll taxes

are projected to grow more slowly than GDP.[4] HI revenue from income taxes on Social Security benefits will gradually increase as a share of GDP as additional beneficiaries become subject to such taxes.

By comparison, growth in SMI Part B and Part D premiums and general fund transfers is expected to continue to outpace GDP growth and HI payroll tax growth in the future. This phenomenon occurs primarily because, under current law, SMI revenue increases at the same rate as expenditures, whereas HI revenue does not. Thus, as the HI sources of revenue become increasingly inadequate to cover HI costs, SMI revenues are projected to represent a growing share of total Medicare revenues. Within the next 5 years, general revenue transfers are expected to constitute the largest single source of income to the Medicare program as a whole—and would add significantly to the Federal Budget pressures. Although a smaller share of the total, SMI premiums would grow just as rapidly as general revenue transfers, thereby also placing a growing burden on beneficiaries.

The interrelationship between the Medicare program and the Federal Budget is an important topic—one that will become increasingly so over time as the general revenue requirements for SMI continue to grow. While these transfers are an important source of financing for the SMI trust fund, and are central to the automatic financial balance of the fund's two accounts, they represent a large and growing requirement for the Federal Budget. SMI general revenues currently equal 1.5 percent of GDP and would increase to an estimated 4.7 percent in 2083 under current law. Moreover, in the absence of corrective legislation, the difference between HI dedicated revenues and expenditures would be met for a number of years by interest earnings on trust fund assets and by redeeming those assets. Both of these financial resources for the HI trust fund require cash transfers from the general fund of the Treasury, placing a further obligation on the budget. In 2016, these transactions would require general fund transfers equal to 0.1 percent of GDP. (After asset depletion in 2017, as described in the next section, no provision exists to use general revenues or any other means to cover the HI deficit.) Appendix D describes the interrelationship between the Federal Budget and the Medicare and Social Security trust funds and illustrates the

[4]Although total worker compensation is projected to grow at the same rate as GDP, wages and salaries are expected to increase more slowly and fringe benefits (health insurance costs in particular) more rapidly. Thus, earnings are projected to gradually decline as a percentage of GDP. Absent any change to the tax rate scheduled under current law, HI payroll tax revenue would similarly decrease as a percentage of GDP.

programs' long-range financial outlook from both a "trust fund perspective" and a "budget perspective."

The Medicare Modernization Act requires the Board of Trustees to test whether the difference between program outlays and dedicated financing sources exceeds 45 percent of Medicare outlays.[5] If this level is attained within the first 7 fiscal years of the projection, a determination of projected "excess general revenue Medicare funding" is required. Such determinations were made in the 2006 report, the 2007 report, and the 2008 report. In each case, the difference was projected to reach the 45-percent level in the seventh year of the projection. If such determinations are present in two consecutive Trustees Reports, then a "Medicare funding warning" is triggered. This warning was triggered as a result of the projections in the 2007 report. As required under section 802 of the Medicare Modernization Act, in February 2008 President Bush submitted to Congress proposed legislation to respond to the warning. (No action was taken on the proposed legislation.) In this year's report, the difference is projected to exceed 45 percent in fiscal year 2014—the sixth year of the projection period and the fourth consecutive time that the threshold has been exceeded within the first 7 years of the projection period (2009-2015). Accordingly, a finding of projected "excess general revenue Medicare funding" is again issued, and another "Medicare funding warning" is thereby triggered. (Section III.A contains additional details on these tests.)

This section has summarized the total financial obligation posed by Medicare and the manner in which it is financed. Under current law, however, the HI and SMI components of Medicare have separate and distinct trust funds, each with its own sources of revenues and mandated expenditures. Accordingly, the financial status of each Medicare trust fund must be assessed separately. The next two sections of the overview present such assessments for the HI trust fund and the SMI trust fund, respectively.

[5]The dedicated financing sources are HI payroll taxes, the HI share of income taxes on Social Security benefits, Part D State transfers, and beneficiary premiums. These sources are the first four layers depicted in figure II.D2.

E. FINANCIAL STATUS OF THE HI TRUST FUND

1. 10-Year Actuarial Estimates (2009-2018)

Over the next 10 years, HI expenditures are expected to continue to grow faster than income under current law. Expenditure growth is estimated to average 6.3 percent per year, while HI income growth is estimated to average 3.8 percent per year over this period. In 2009, total income to the HI trust fund is estimated to fall short of expenditures by more than $20 billion, primarily due to the current serious economic recession. Substantial trust fund deficits are projected to continue throughout the next 10 years in the absence of corrective legislation, despite an assumed economic recovery starting late in 2009. Redemption of trust fund assets will be needed to pay expenditures in full and on time, but, without change, HI trust fund assets are projected to be exhausted in 2017.

Table II.E1 presents the projected operations of the HI trust fund under the intermediate assumptions for the next decade. At the beginning of 2009, HI assets significantly exceeded annual expenditures. The Board of Trustees has recommended that assets be maintained at a level at least equal to annual expenditures, to serve as an adequate contingency reserve in the event of adverse economic or other conditions.

Based on the 10-year projection shown in table II.E1, the Board of Trustees applies an explicit test of short-range financial adequacy, which is described in section III.B of this report. The HI trust fund does not meet this test because assets are estimated to fall below 100 percent of annual expenditures in just 2 years. Moreover, the results in this table indicate that, if no action is taken to address the imbalance, all of the existing assets would have to be redeemed within the next 8 years to help cover current benefit commitments, and the trust fund would become exhausted in 2017.

This adverse outlook emphasizes the need for legislative action to restore financial balance to the HI trust fund.

Table II.E1.—Estimated Operations of the HI Trust Fund under Intermediate Assumptions, Calendar Years 2008-2018

[Dollar amounts in billions]

Calendar year	Total income[1]	Total expenditures	Change in fund	Fund at year end	Ratio of assets to expenditures[2]
2008[3]	$230.8	$235.6	−$4.7	$321.3	138%
2009	225.1	245.6	−20.5	300.8	131
2010	237.1	254.2	−17.1	283.7	118
2011	249.4	268.8	−19.3	264.3	106
2012	261.8	289.1	−27.3	237.0	91
2013	274.8	312.9	−38.1	198.9	76
2014	287.4	341.9	−54.5	144.4	58
2015	299.9	352.7	−52.8	91.6	41
2016	312.0	376.5	−64.5	27.1	24
2017	324.6	403.1	−78.5	−51.4	7
2018	336.0	432.8	−96.7	−148.2	−12

[1]Includes interest income.
[2]Ratio of assets in the fund at the beginning of the year to expenditures during the year.
[3]Figures for 2008 represent actual experience.

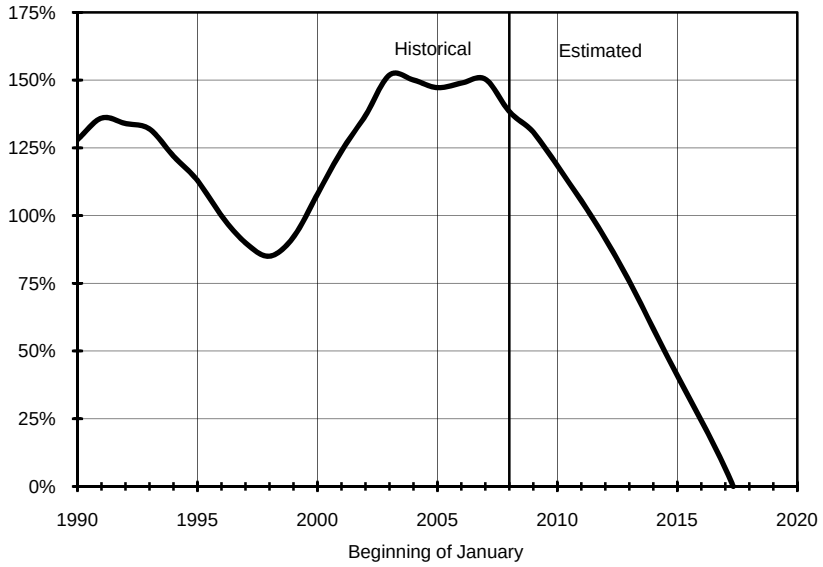
Note: Totals do not necessarily equal the sums of rounded components.

The financial outlook for the HI trust fund is significantly less favorable than projected in last year's annual report. As a result of the serious economic recession that began in December 2007, actual payroll tax income in 2008 and projected future amounts are significantly lower than previously projected, due to lower levels of average wages and fewer covered workers. HI income is also affected in 2015 and later by small downward adjustments to the labor force, productivity, and hours-worked assumptions. Projected HI expenditures are slightly lower over the 10-year period, reflecting the lower rates of increase in the economic assumptions together with other, non-economic factors. The result is a faster depletion of trust fund assets than previously estimated, as well as decreased interest earnings. The cumulative effect of these factors is a lower level of projected HI assets relative to annual expenditures.

Under the intermediate assumptions, the assets of the HI trust fund would continue decreasing, as a percentage of annual expenditures, from about 131 percent of annual expenditures at the beginning of 2009 until becoming exhausted in 2017, as illustrated in figure II.E2. This is 2 years earlier than estimated in the 2008 annual report due to the significantly lower projected income (and only slightly lower projected expenditures) mentioned previously.

In practice, Congress has never allowed the HI trust fund to become depleted. If assets were exhausted, payments to health plans and providers could be made only from ongoing tax revenues, which would be inadequate to cover total costs. Beneficiary access to health care services would rapidly be curtailed.

Figure II.E1.—HI Trust Fund Balance at Beginning of Year as a Percentage of Annual Expenditures



To the extent that actual future conditions vary from the intermediate assumptions, the date of exhaustion could differ substantially in either direction from this estimate. Under the low-cost assumptions, trust fund assets would not be depleted until 2028. Under the high-cost assumptions, however, asset depletion would occur in 2014.

2. 75-Year Actuarial Estimates (2009-2083)

Each year, 75-year estimates of the financial and actuarial status of the HI trust fund are prepared. Although financial outcomes are inherently uncertain, particularly over periods as long as 75 years, such estimates can indicate whether the trust fund—as seen from today's vantage point—is considered to be in satisfactory financial condition.

Because of the difficulty in comparing dollar values for different periods without some type of relative scale, income and expenditure amounts are shown relative to the earnings in covered employment that are taxable under HI (referred to as "taxable payroll"). The ratio of tax income (including both payroll taxes and income from taxation of Social Security benefits, but excluding interest income) to taxable payroll is called the "income rate," and the ratio of expenditures to taxable payroll is the "cost rate."

Overview

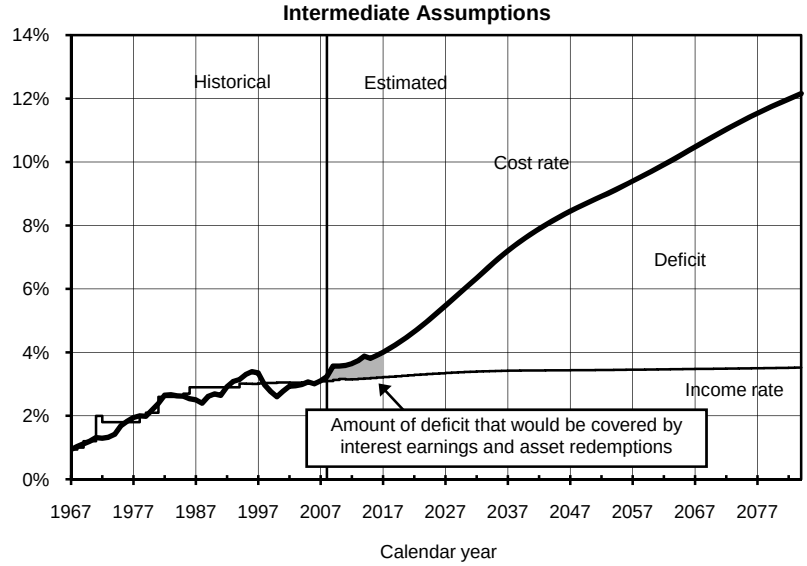
Since HI payroll tax rates are not scheduled to change in the future under current law, payroll tax income as a percentage of taxable payroll will remain constant at 2.90 percent. Income from taxation of benefits will increase only gradually as a greater proportion of Social Security beneficiaries become subject to such taxation over time. Thus, the income rate is not expected to increase significantly over current levels. The cost rate, though, will sharply escalate—both in the immediate future, as a result of the current economic recession, and in the longer term, due to retirements of those in the baby boom generation and continuing health services cost growth, as mentioned in the prior section.

Figure II.E1 compares projected income and cost rates under the intermediate assumptions. As indicated, HI expenditures are projected to continue to exceed tax income by a rapidly growing margin. For example, taxes would cover only 81 percent of estimated expenditures in 2017 and only 39 percent in 2050. By the end of the 75-year period, HI costs would be over three times the level of scheduled tax revenues—a substantial deficit by any standard.

The shaded area in figure II.E1 represents the excess of expenditures over tax income that could be met by interest earnings and the redemption of trust fund assets. Both types of transactions occur through transfers from the general fund of the Treasury. Starting in 2008, the fund began using interest earnings and asset redemptions to cover the excess of expenditures over tax income. In the absence of other changes, this process would continue through 2017, at which time the fund is projected to be exhausted.

The HI trust fund's projected year of exhaustion often receives considerable attention. In practice, however, the demands on general revenue (to pay interest and redeem the Treasury bonds held by the trust fund) have already begun, some 9 years before the exhaustion date. By 2016, without legislation to address the HI deficits, an estimated 18 percent of HI expenditures would have to be met by redeeming assets as opposed to being covered by tax income for that year.

Figure II.E2.—Long-Range HI Income and Cost as a Percentage of Taxable Payroll, Intermediate Assumptions



The year-by-year cost rates and income rates shown in figure II.E1 can be summarized into single values representing, in effect, the average value over a given period. Based on the intermediate assumptions, an actuarial deficit of 3.88 percent of taxable payroll is projected for the 75-year period, representing the difference between the summarized income rate of 3.46 percent and the corresponding cost rate of 7.34 percent. Based on this measure, the HI trust fund fails the Trustees' test for long-range financial balance, as it has for many years.

The long-range financial imbalance could be addressed in several different ways. In theory, the 2.90-percent payroll tax could be immediately increased by the amount of the actuarial deficit to 6.78 percent or expenditures could be reduced by a corresponding amount. Note, however, that these changes would require an immediate 134-percent increase in the tax rate or an immediate 53-percent reduction in expenditures.[6] More realistically, the tax and/or benefit changes could be made gradually, rather than

[6]Under either of these two scenarios, tax income would initially be substantially greater than expenditures, and trust fund assets would accumulate rapidly. Subsequently, however, financing would be increasingly inadequate, and assets would be drawn down to cover the difference. At the end of the 75-year period, tax income would cover only about 65 percent of annual expenditures. Level changes in either taxes or benefits, accordingly, would not permanently address the long-range financial imbalance and would result in unusual patterns of asset accumulation and redemption.

immediately, but would ultimately have to reach much more substantial levels to eliminate the deficit throughout the long range. At the end of the 75-year period, for example, the tax rate would have to be more than three times its current level, or benefit expenditures would have to be less than one-third of their projected amount (or some combination). These examples illustrate the severe magnitude of the projected long-range deficits for the HI trust fund and the need for reform.

F. FINANCIAL STATUS OF THE SMI TRUST FUND

SMI differs fundamentally from HI in regard to the nature of financing and the method by which financial status is evaluated. SMI is composed of two parts, Part B and Part D, each with its own separate account within the SMI trust fund. The financial status of the SMI trust fund must be determined by evaluating the financial status of each account separately, since there is no provision in the law for transferring assets between the Part B and Part D accounts. The nature of the financing for both parts of SMI is similar, in that the Part B premium and the Part D premium, and the corresponding transfers from general revenues for each part, are established annually at a level sufficient to cover the following year's estimated expenditures. Thus, each account within SMI is automatically in financial balance under current law. For OASDI and HI, however, financing established many years earlier may prove significantly higher or lower than subsequent actual costs. Moreover, Part B and Part D are voluntary (whereas OASDI and HI are generally compulsory), and income is not based on payroll taxes. These disparities result in a financial assessment that differs in some respects from that for OASDI or HI, as described in the following sections.

1. 10-Year Actuarial Estimates (2009-2018)

Table II.F1 shows the estimated operations of the Part B account, the Part D account, and the total SMI trust fund under the intermediate assumptions during calendar years 2008 through 2018. For Part B, expenditures grew at an average annual rate of 7.8 percent over the past 5 years, exceeding GDP growth by 2.4 percentage points annually, on average. Part B cost increases are estimated to average about 5.5 percent for the 5-year period 2009 to 2013, about 1.5 percentage points per year faster than GDP. However, the projected future growth rate reflects unrealistic reductions in physician payments required by current law. Legislative changes to the current statute regarding physician payments are nearly certain and could increase the projected Part B growth rates to roughly 8.5 to 9.0 percent through 2013.

Part B income growth is based on expenditure growth projected 1 year in advance, and therefore is normally quite close to expenditure growth. During 1999 through 2004, however, the account experienced a series of deficits, totaling $26.8 billion, as a result of faster-than-expected cost growth and legislative changes that increased Part B costs after the program's financing had been

established. During the last few years, premiums and general revenue financing have been increased at a faster pace than expenditures in an effort to rebuild Part B account assets to an adequate contingency reserve. Assets have been somewhat above the desired range since the end of 2007 and, under current law are projected to remain above this level at the end of 2009. Assets would be lower than projected in 2010 in the likely event that legislation is enacted to address a scheduled 21.5-percent reduction in physician fees for 2010.[7] After 2009, under current law, assets held in the Part B account are projected to maintain an adequate contingency reserve for the Part B account of the trust fund. As described below, however, unusual steps would be required to prevent asset depletion under a likely change from current law.

As noted, due to the structure of physician payment updates under current law, the projected Part B expenditure and income growth is unrealistically low. Future physician payment increases must be adjusted downward if cumulative past actual physician spending exceeds a statutory target. Actual physician spending has exceeded the target spending level in every year since 2000. Legislative changes that increased the actual spending in each year since 2002, but that have not increased the target level of spending in every year, have exacerbated this difference.[8] As a result, physician updates are projected to be about −21.5 percent for 2010, about −5.5 percent for 2011 through 2014, and a small negative update for 2015.

Multiple years of significant reductions in physician payments per service are very unlikely to occur before legislative changes intervene. Scheduled negative physician fee updates in 2003 through 2009 have already been overridden by legislation, and the negative physician fee update scheduled for 2010 is much larger than any of those previously avoided. However, these unlikely payment reductions are required under the current-law payment system and are reflected in the Part B projections shown in this report. Consequently, the Part B,

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[7]The traditional measure used to evaluate the status of the Part B account of the SMI trust fund is defined as the ratio of the excess of Part B assets over Part B liabilities to the next year's Part B incurred expenditures. The normal range for this ratio is 15 to 20 percent; this range was developed based on private health insurance standards and past studies by the CMS Office of the Actuary indicating that this level of excess assets is sufficient to protect against adverse events. Due to the current strong likelihood of Congressional action to override the physician fee reductions required under current law, and to do so after Part B financing has been established for a given year, it is appropriate to maintain a higher level of reserve assets to prevent fund depletion under this contingency.

[8]For additional information about the physician payment updates and the sustainable growth rate system, see section IV.B1.

total SMI, and total Medicare estimates shown for 2010 and thereafter are likely to be somewhat understated and should be interpreted cautiously.

The Part B projections, in particular, may be understated by up to 10 percent in the long range and thus have limited usefulness. At the request of the Trustees, the Office of the Actuary at CMS has prepared two illustrative sets of Part B projections under theoretical alternatives to current law. These projections are available at http://www.cms.hhs.gov/ReportsTrustFunds/05_alternativePartB.asp. No endorsement of these alternatives to current law by the Trustees, CMS, or the Office of the Actuary should be inferred.

Table II.F1.—Estimated Operations of the SMI Trust Fund under Intermediate Assumptions, Calendar Years 2008-2018

[Dollar amounts in billions]

Calendar year	Total income[1]	Total expenditures	Change in fund	Fund at year end
Part B account:				
2008[2]	$200.6	$183.3	$17.3	$59.4
2009	223.6[3]	202.6	21.0	80.3
2010	195.9[3]	201.4	−5.6	74.7
2011	228.7	206.9	21.8	96.5
2012	259.4	222.8	36.6	133.1
2013	268.0	239.1	28.9	162.0
2014	276.1	260.7	15.4	177.4
2015	306.8[3]	268.6	38.1	215.5
2016	273.9[3]	293.4	−19.5	196.0
2017	325.8	321.0	4.8	200.8
2018	357.8	352.5	5.3	206.2
Part D account:				
2008[2]	49.4	49.3	0.1	0.9
2009	62.7[3]	63.0	−0.2	0.7
2010	66.2[3]	66.2	0.0	0.7
2011	72.8	72.7	0.0	0.7
2012	79.9	79.8	0.1	0.8
2013	86.8	86.7	0.1	0.9
2014	94.9	94.8	0.1	0.9
2015	104.8[3]	104.8	0.1	1.0
2016	114.7[3]	114.6	0.1	1.1
2017	127.3	127.2	0.1	1.2
2018	140.9	140.8	0.1	1.3
Total SMI:				
2008[2]	250.0	232.6	17.4	60.3
2009	286.3[3]	265.6	20.7	81.0
2010	262.1[3]	267.6	−5.6	75.4
2011	301.4	279.6	21.8	97.2
2012	339.3	302.6	36.7	133.9
2013	354.7	325.8	29.0	162.9
2014	370.9	355.5	15.4	178.3
2015	411.6[3]	373.4	38.2	216.5
2016	388.6[3]	407.9	−19.4	197.1
2017	453.1	448.2	4.9	202.0
2018	498.8	493.3	5.5	207.5

[1]Includes interest income.

[2]Figures for 2008 represent actual experience.

[3]Section 708 of the Social Security Act modifies the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January 3, 2010 is expected to occur on December 31, 2009. Consequently, the Part B and Part D premiums withheld from the checks and the associated Part B general revenue contributions are expected to be added to the Part B account and Part D account, respectively, on December 31, 2009. These amounts are excluded from the premium income and general revenue income for 2010. Similarly, delivery of benefit checks normally due January 3, 2016 is expected to occur on December 31, 2015.

Although financial balance for the Part B account can be maintained through annual premium adjustments, unusual steps may be required for the next few years. Specifically, about three-quarters of enrollees will not be subject to Part B premium increases for the next 1 to 3 years under a "hold-harmless" provision of current law. Without action to respond to this situation, the loss of premium revenues from these beneficiaries, and the correspondingly lower level of matching general revenue transfers, could result in the depletion of Part B assets.

The hold-harmless provision prevents a beneficiary's net Social Security benefit from decreasing when the Part B premium increase would be larger than his or her cash benefit increase. No increase in Social Security benefits is expected for December 2009 as a result of significant decreases in the CPI during the last 5 months of 2008. Thus, the normal Part B premium increase for 2010 would be greater than the cost-of-living adjustment for all beneficiaries, and beneficiaries affected by the hold-harmless provision would not have to pay the higher premium level.[9] As a result, Part B premiums and matching general revenues would not increase sufficiently to match the expected growth in Part B expenditures—particularly if the scheduled physician fee reduction is overridden.

Depending on future increases in the CPI, zero cost-of-living adjustments for Social Security benefits could also occur for December 2010 and possibly December 2011. Under the Trustees' economic assumptions, the December benefit increases are projected to be 0 percent, 0 percent, and 1.4 percent for 2009 through 2011, respectively.

To prevent asset exhaustion and maintain an adequate contingency reserve for the Part B trust fund account under such circumstances, under current law premiums would have to be raised substantially more than normal. The increases would be paid only by the State Medicaid programs and the minority of beneficiaries who are not affected by the hold-harmless provision.[10] Under the intermediate economic assumptions, monthly premiums of $104.20, $120.20, and $111.50 are estimated for 2010 through 2012, respectively, compared to the 2009 premium of $96.40. Such premium increases, paid by affected enrollees and Medicaid and matched by general revenue transfers, would prevent a decline in Part B assets and would maintain a contingency reserve at the level necessary to accommodate normal financial variation plus the elevated likelihood of legislative action that would raise costs after financing rates had been established.

The Medicare prescription drug benefit began full operation in 2006. Income and expenditures for the Part D account are projected to grow

[9]New enrollees during the year, and enrollees with high incomes who are subject to the income-related premium adjustment, are not eligible for the hold-harmless provision. Also, State Medicaid programs pay the full premium for dual Medicare-Medicaid beneficiaries. About one-fourth of Part B enrollees are in these categories.

[10]This method of addressing the revenue shortfalls caused by the hold-harmless provision is the only one available under current law. From a policy perspective, other approaches might be preferable but would require legislation to implement.

at an average annual rate of 11.1 percent for the 10-year period 2008 to 2018, due to expected further increases in enrollment and continuing growth in per capita drug costs. As with Part B, income and outgo are projected to remain in balance through the annual adjustment of premium and general revenue income to match costs. Because of the appropriations process for Part D general revenues, it is not necessary to maintain a contingency reserve in the account.

The projected Part D costs shown in table II.F1 and elsewhere in this report are somewhat lower than those in the 2008 report. The difference is attributable to a reduction in the projected growth in prescription drug spending in the U.S. for the next 10 years. The reduced estimates are primarily due to a decline in the number of new drug products that are expected to reach the market during this period.

The primary test of financial adequacy for Parts B and D pertains to the level of the financing that has been formally established for a given period (normally, through the end of the current calendar year). As noted, financial adequacy must be determined for Part B and Part D separately. The financing for each part of SMI is considered satisfactory if it is sufficient to fund all services, including benefits and administrative expenses, provided through a given period. Further, to protect against the possibility that cost increases under either part of SMI will be higher than expected, the accounts of the trust fund would normally need assets adequate to cover a reasonable degree of variation between actual and projected costs. For Part B, as stated previously, the financing established through December 2009 is estimated to be sufficient to cover benefits and administrative costs incurred through that time period, and assets are judged adequate to cover potential variations in costs as a result of new legislation or cost growth factors that exceed expectations. The financing established for Part D, together with the flexible appropriation authority for this trust fund account, is estimated to be sufficient to cover benefits and administrative costs incurred through 2009.

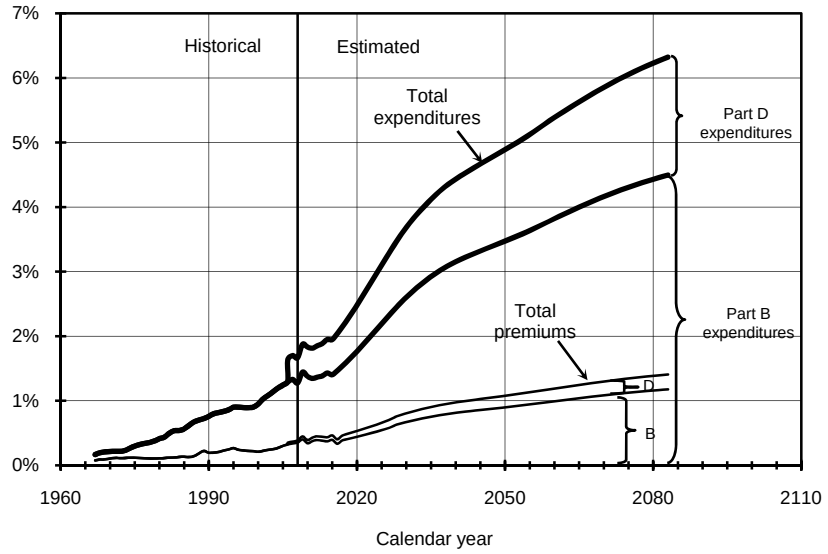
The amount of the contingency reserve needed in Part B is much smaller (both in absolute dollars and as a fraction of annual costs) than in HI or OASDI. This is so because the premium rate and corresponding general revenue transfers for Part B are determined annually based on estimated future costs, while the HI and OASDI payroll tax rates are set in law and are therefore much more difficult to adjust should circumstances change. Part D revenues are also established annually to match estimated costs. Moreover, the flexible appropriation authority established by Congress for Part D allows

additional general fund financing if costs are higher than anticipated, thereby eliminating the need for a contingency reserve.

2. 75-Year Actuarial Estimates (2009-2083)

Figure II.F1 shows past and projected total SMI expenditures and premium income as a percentage of the Gross Domestic Product (GDP). As noted previously, the long-range projections of SMI expenditures are understated as a result of unrealistic physician payment reductions required under current law. Accordingly, the SMI estimates after 2009 should be interpreted cautiously. Annual SMI expenditures grew from about 1.2 percent of GDP in 2005 to 1.6 percent of GDP in 2006 with the commencement of the general prescription drug coverage. Under the intermediate assumptions, SMI expenditures would grow to almost 4 percent of GDP within 25 years and to more than 6 percent by the end of the projection period.

Figure II.F1.—SMI Expenditures and Premiums as a Percentage of the Gross Domestic Product



The projected SMI cost under current law would place steadily increasing demands on beneficiaries and society at large. Average per beneficiary costs for Part B and Part D benefits are projected to increase after 2011 by at least 5 percent annually, despite the significant reductions in Part B physician payments under current law. The associated beneficiary premiums would increase by approximately the same rate, as would the average levels of

beneficiary coinsurance for covered services. In contrast, from one generation to the next, scheduled Social Security benefit levels increase at about the rate of growth in average earnings (estimated at roughly 3.8 percent).[11] Over time, the Part B and Part D premiums and coinsurance amounts paid by beneficiaries would typically represent a growing share of their total Social Security and other income. (Beneficiaries who qualify for Medicaid and the Part D low-income subsidy are an important exception to this trend, since they generally pay little or no premiums and cost-sharing amounts.)

Similarly, aggregate SMI general revenue financing for Parts B and D is expected to increase by roughly 6.4 percent annually, well in excess of the projected 4.6-percent growth in GDP. As a result, if personal and corporate Federal income taxes are maintained at their long-term historical level, relative to the national economy in the future, then SMI general revenue financing would represent a growing share of the total income tax revenue of the Federal Government.

[11]For each generation, after beneficiaries are initially eligible, their benefit level is adjusted to keep up with inflation (estimated at 2.8 percent).

G. CONCLUSION

Total Medicare expenditures were $468 billion in 2008 and are expected to increase in future years at a faster pace than either workers' earnings or the economy overall. As a percentage of GDP, expenditures are projected to increase from 3.2 percent currently to 11.4 percent by 2083 (based on our intermediate set of assumptions). The level of Medicare expenditures is projected to exceed that for Social Security in 2028 and, by 2083, to be 95 percent more than the cost of Social Security. Growth of this magnitude, if realized, would place a substantially greater strain on the nation's workers, Medicare beneficiaries, and the Federal Budget.

Total Medicare outlays, less dedicated revenues, are projected to exceed 45 percent of outlays in fiscal year 2014. Since this is within the first 7 fiscal years of the projection period, the Board has determined that a condition of projected "excess general revenue Medicare funding" exists for the fourth consecutive year. A "Medicare funding warning" is again triggered, as required by the Medicare Modernization Act.

The HI trust fund ratio declined significantly in 2008 and is expected to continue to do so in 2009-2017 under current law. The trust fund is projected to be exhausted in 2017—2 years earlier than in last year's report as a result of significantly lower projected payroll tax income during the current economic recession. The HI trust fund fails to meet our short-range test of financial adequacy.

The long-range financial projections for HI continue to show a substantial financial imbalance. The HI actuarial deficit in this year's report is 3.88 percent of taxable payroll, up significantly from 3.54 percent in last year's report. Tax income is expected to be less than expenditures in all future years, and trust fund assets, which began to decline in 2008, are expected to do so continuously. Without legislation to address these deficits, HI would increasingly rely on interest income and the redemption of fund assets, thereby adding to the draw on the Federal Budget. Scheduled HI tax income would cover only 81 percent of estimated expenditures in 2017 and just 39 percent in 2050. By the end of the 75-year period, less than one-third of HI costs could be paid from HI tax revenues. Accordingly, bringing the HI program into long-range financial balance would require very substantial increases in revenues and/or reductions in expenditures. As in past reports, the HI trust fund fails to meet our long-range test of close actuarial balance.

Overview

The financial outlook for SMI is fundamentally different than for HI, due to the statutory differences in how these two components of Medicare are financed. However, rapid expenditure growth is a serious issue for both. Part B assets at the end of 2008 were at a fully adequate level for only the second year since 2002. Maintaining this status will be challenging as a result of reductions in premiums and general revenues under the "hold harmless" provision of current law. Moreover, if Congress acts to prevent a scheduled 21.5-percent reduction in physician payment rates in 2010 and further reductions in 2011-2015, then actual Part B costs could exceed the current-law projections shown in this report by 18 to 21 percent in the short range and by up to 10 percent in the long range. No financial imbalance is anticipated for the Part D account, since the general revenue subsidy for this benefit is drawn on a daily, as-needed basis. The projected Part D costs shown in the 2009 report are somewhat lower than in previous reports, reflecting the latest data on actual spending and an expected slower drug cost trend generally.

For both the Part B and Part D accounts, income is projected to equal expenditures for all future years—but only because beneficiary premiums and general revenue transfers will be set to meet expected costs each year.

The projections shown in this report continue to demonstrate the need for timely and effective action to address Medicare's financial challenges—including the projected exhaustion of the HI trust fund, this fund's very substantial long-range financial imbalance, and the problem of rapid growth in Medicare expenditures generally. We believe that solutions can and must be found to ensure the financial integrity of HI in the short and long term and to reduce the rate of growth in Medicare costs. Consideration of such reforms should occur in the relatively near future. The sooner the solutions are enacted, the more flexible and gradual they can be. Moreover, the early introduction of reforms increases the time available for affected individuals and organizations—including health care providers, beneficiaries, and taxpayers—to adjust their expectations. We believe that prompt action is necessary to address these challenges.

III. ACTUARIAL ANALYSIS

A. MEDICARE FINANCIAL PROJECTIONS

Medicare is the nation's second largest social insurance program, exceeded only by Social Security (OASDI). Although Medicare's two components—Hospital Insurance and Supplementary Medical Insurance—are very different from each other in many key respects, it is important to consider the overall cost of Medicare and the manner in which that cost is financed. By reviewing Medicare's total expenditures, the financial obligation posed by the program can be assessed. Similarly, the sources and relative magnitudes of HI and SMI revenues are an important policy matter. It should be noted that the projected Part B expenditures shown in this report, and therefore the SMI and total Medicare expenditures, are substantially understated in the short range because projected current-law physician payment updates are unrealistically reduced under the sustainable growth rate system. Consequently, the estimates after 2009 should be used cautiously in evaluating the financial obligation posed by Medicare.

The issues of Medicare's total cost to society and how that cost is paid are different from the question of the financial status of the Medicare trust funds. The latter focuses on whether a specific trust fund's income and expenditures are in balance. As discussed later in this section, such an analysis must be performed for each trust fund individually. The separate HI and SMI financial projections prepared for this purpose, however, can be usefully combined for the broader purposes outlined above. To that end, this section presents information on combined HI and SMI costs and revenues. Sections III.B and III.C of this report present detailed assessments of the financial status of the HI trust fund and the SMI trust fund, respectively.

1. 10-year Actuarial Estimates (2009-2018)

Table III.A1 shows past and projected Medicare income, expenditures, and trust fund assets in dollar amounts for calendar years.[11] Projections are shown under the intermediate set of assumptions for the short-range projection period 2009 through 2018 based on current law (including the unrealistic reductions in physician payment rates). A more detailed breakdown of

[11]Amounts are shown on a "cash" basis, reflecting actual expenditures made during the year, even if the payments were for services performed in an earlier year. Similarly, income figures represent amounts actually received during the year, even if incurred in an earlier year.

expenditures and income for HI and SMI is provided in tables III.B4 and III.C1, respectively.

Table III.A1.—Total Medicare Income, Expenditures, and Trust Fund Assets during Calendar Years 1970-2018

[In billions]

Calendar year	Total income	Total expenditures	Net change in assets	Assets at end of year
Historical data:				
1970	$8.2	$7.5	$0.7	$3.4
1975	17.7	16.3	1.3	12.0
1980	37.0	36.8	0.1	18.3
1985	76.5	72.3	4.2	31.4
1990	126.3	111.0	15.3	114.4
1995	175.3	184.2	−8.9	143.4
2000	257.1	221.8	35.3	221.5
2001	273.3	244.8	28.5	250.0
2002	284.8	265.7	19.1	269.1
2003	291.6	280.8	10.8	280.0
2004	317.7	308.9	8.8	288.8
2005	357.5	336.4	21.0	309.8
2006	437.0	408.3	28.7	338.5
2007	462.1	431.7	30.4	368.9
2008	480.8	468.1	12.7	381.6
Intermediate estimates:				
2009	511.4[1]	511.1	0.2	381.8
2010	499.2[1]	521.9	−22.7	359.1
2011	550.9	548.4	2.5	361.6
2012	601.1	591.7	9.4	370.9
2013	629.5	638.7	−9.2	361.7
2014	658.3	697.4	−39.0	322.7
2015	711.5[1]	726.1	−14.6	308.1
2016	700.5[1]	784.4	−83.9	224.2
2017	777.7	851.3	−73.6	150.6
2018	834.8	926.1	−91.3	59.3

[1]Section 708 of the Social Security Act modifies the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January 3, 2010 is expected to occur on December 31, 2009. Consequently, the Part B and Part D premiums withheld from the checks and the associated Part B general revenue contributions are expected to be added to the Part B account and Part D account, respectively, on December 31, 2009. These amounts are excluded from the premium income and general revenue income for 2010. Similarly, delivery of benefit checks normally due January 3, 2016 is expected to occur on December 31, 2015.

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

As indicated in table III.A1, Medicare expenditures have increased rapidly during most of the program's history and are expected to continue doing so in the future. Health care cost increases, including those for Medicare, Medicaid, and private health insurance, are affected by the following factors:

- Growth in the number of beneficiaries;
- Increases in the prices paid per service, which reflect both higher wages for health care workers and higher prices for the goods and services purchased by health care providers;

- Increases in the average number of services per beneficiary ("utilization"); and

- Increases in the average complexity of services ("intensity").

Medicare expenditures are projected to increase at an average annual rate of 7.1 percent during 2009-2018. The average growth rate reflects the continuing impact of each of the factors listed above, together with the effects of the provisions of the Medicare Modernization Act, the Deficit Reduction Act, the Tax Relief Act, the Medicare, Medicaid, and SCHIP Extension Act, the Supplemental Appropriations Act, the Medicare Improvements for Patients and Providers Act, the QI Program Supplemental Funding Act, the American Recovery and Reinvestment Act, and the scheduled (but unrealistic) physician payment reductions.

Through most of Medicare's history, trust fund income has kept pace with increases in expenditures.[12] In the future, however, Medicare income is projected to increase less rapidly than expenditures, primarily because HI payroll tax revenues would not keep pace with HI benefits under current law. In contrast to the growth factors listed above for health care costs, HI payroll taxes increase only as a function of the number of workers and increases in their average earnings. Moreover, with past declines in birth rates, continuing improvements in life expectancy, and prevailing rates of disability incidence, the number of workers is expected to grow slowly while the number of beneficiaries increases much more rapidly.

Past excesses of income over expenditures have been invested in U.S. Treasury securities, with total fund assets accumulating to $382 billion at the end of calendar year 2008. Combined assets are projected to remain about $382 billion in 2009, to decline significantly in 2010 due to the current recession and the timing of premium receipts, and to rise slightly in 2011 and 2012 before beginning a steady decline.[13]

[12]This balance resulted from periodic increases in HI payroll tax rates and other HI financing, from annual increases in SMI premium and general revenue financing rates (to match the following year's estimated expenditures), and from frequent legislation designed to slow the rate of growth in expenditures.

[13]See sections III.B and III.C regarding the asset projections for HI and SMI, separately.

2. 75-year Actuarial Estimates (2009-2083)

Table III.A2 shows past and projected Medicare expenditures expressed as a percentage of GDP.[14] This measure provides a relative measure of the size of the Medicare program compared to the general economy and represents the portion of the nation's total resources that are dedicated each year to providing health care services to beneficiaries through Medicare. When interpreting these projections, however, it is important to understand that projected Part B, SMI, and total Medicare expenditures are unrealistically low after 2009 because of the current-law physician payment reductions. Should these payment rates, by new legislation, be prevented from declining, the overall Medicare costs shown in this section would be increased—possibly by 6 to 7 percent in the short range and up to 4 percent for 2030 and later, depending on the specific changes enacted.

Medicare expenditures represented 0.7 percent of GDP in 1970 and had grown to 2.7 percent of GDP by 2005, reflecting rapid increases in the factors affecting health care cost growth, as mentioned previously. Starting in 2006, Medicare provided subsidized access to prescription drug coverage through Part D, increasing projected Medicare expenditures to 3.1 percent of GDP. Continuing rapid growth is expected in the long range under current law, with total Medicare expenditures projected to reach about 11.2 percent of GDP by 2080. For comparison, over the last 50 years total Federal income tax receipts have averaged 11 percent of GDP. Projected Medicare costs would exceed those for Social Security in 2028 and would continue to grow more rapidly until, in 2083, the expenditure level for Medicare would be nearly double that for Social Security.

As indicated, part of the projected substantial increase is attributable to the new prescription drug benefit in Medicare. In its first (partial) year of operation, this benefit increased aggregate Medicare costs by about one-eighth.[15] With continuing faster growth in drug costs, relative to the traditional HI and SMI Part B expenditures, this new

[14]In contrast to the expenditure amounts shown in table III.A1, historical and projected expenditures are shown on an incurred basis. Incurred amounts relate to the expenditures for services performed in a given year, even if those expenditures are paid in a later year.

[15]Although the Part D drug benefit became available on January 1, 2006, beneficiaries had until May 15th to enroll. About 62 percent of the ultimate number of enrollees had enrolled as of January 1st.

benefit is projected to increase costs by roughly one-sixth for 2020 and later.[16]

The cost projections shown in table III.A2 for total Medicare, as well as for Parts A, B, and D, are somewhat different than those in the 2008 annual report. These differences arise for a number of reasons, which are described in sections III.B and III.C.

Table III.A2.—HI and SMI Incurred Expenditures as a Percentage of the Gross Domestic Product

	HI	SMI		
Calendar year	Part A	Part B	Part D	Total
Historical data:				
1970	0.52%	0.22%	—	0.74%
1975	0.73	0.30	—	1.03
1980	0.91	0.41	—	1.32
1985	1.12	0.56	—	1.68
1990	1.14	0.76	—	1.90
1995	1.58	0.90	—	2.48
2000	1.33	0.95	—	2.28
2001	1.40	1.03	—	2.43
2002	1.44	1.08	—	2.52
2003	1.43	1.14	—	2.57
2004	1.45	1.20	0.00%	2.65
2005	1.48	1.24	0.01	2.73
2006	1.48	1.29	0.34	3.11
2007	1.49	1.33	0.37	3.19
2008	1.58	1.28	0.39	3.24
Intermediate estimates:				
2009	1.71	1.44	0.43	3.59
2010	1.71	1.38	0.45	3.54
2011	1.72	1.35	0.47	3.54
2012	1.75	1.37	0.49	3.60
2013	1.78	1.38	0.50	3.67
2014	1.85	1.43	0.52	3.80
2015	1.81	1.40	0.54	3.76
2016	1.85	1.46	0.57	3.89
2017	1.89	1.53	0.60	4.03
2018	1.94	1.61	0.64	4.19
2020	2.05	1.76	0.71	4.53
2025	2.38	2.19	0.91	5.47
2030	2.75	2.60	1.08	6.43
2035	3.11	2.92	1.20	7.23
2040	3.43	3.15	1.28	7.86
2045	3.66	3.32	1.35	8.33
2050	3.85	3.47	1.42	8.74
2055	4.02	3.63	1.49	9.14
2060	4.21	3.82	1.57	9.60
2065	4.41	4.00	1.63	10.04
2070	4.61	4.16	1.69	10.46
2075	4.80	4.31	1.75	10.85
2080	4.96	4.43	1.80	11.18

[16]Costs beyond the first 25 years for HI, SMI Part B, and SMI Part D are each based on the assumption that age-sex-adjusted per beneficiary expenditures will increase at the rate determined by the economic model mentioned earlier. This rate is about 1.4 percent faster than the per capita GDP in 2033, decelerating to per capita GDP growth plus 0.2 percent by 2083.

Actuarial Analysis

The 75-year projection period fully allows for the presentation of future developments that are expected to occur, such as the impact of a large increase in enrollees that will begin within the next few years. This increase in the number of beneficiaries will occur because the relatively large number of persons born during the period between the end of World War II and the mid-1960s (known as the baby boom generation) will reach eligibility age and begin to receive benefits. Moreover, as the average age of Medicare beneficiaries increases, these individuals will experience greater health care utilization and costs, thereby adding further to growth in program expenditures. Table III.A3 shows past and projected enrollment in the Medicare program.

As indicated in Table III.A3, the total number of Medicare beneficiaries approximately doubled over the last 35 years and is expected to double again over approximately the next 35 years. During this historical period, however, the number of covered workers also increased rapidly (by 67 percent), while it is projected to increase much more slowly (about 21 percent) over the next 35 years. This relative demographic shift—and its implication for Medicare costs relative to workers' earnings or to the GDP—are fairly well known.

The enrollment data also show that the number of Medicare beneficiaries enrolled in private health plans under Part C has increased substantially in recent years, reflecting the higher Medicare payments to Medicare Advantage plans and the additional benefit coverage that such plans can offer. In 2008, enrollment in private health plans represented 22 percent of total Medicare beneficiaries, with nearly all such enrollees participating in Medicare Advantage health insurance plans.

Table III.A3.—Medicare Enrollment

[In thousands]

Calendar year	HI Part A	SMI Part B	SMI Part D	Part C	Total[1]
Historical data:					
1970	20,104	19,496	—	—	20,398
1975	24,481	23,744	—	—	24,864
1980	28,002	27,278	—	—	28,433
1985	30,621	29,869	—	1,271	31,081
1990	33,747	32,567	—	2,017	34,251
1995	37,175	35,641	—	3,467	37,594
2000	39,257	37,335	—	6,856	39,688
2001	39,669	37,667	—	6,166	40,103
2002	40,065	37,982	—	5,538	40,508
2003	40,738	38,584	—	5,302	41,188
2004	41,485	39,123	1,217	5,375	41,902
2005	42,233	39,752	1,841	5,794	42,606
2006	43,079	40,360	30,536	7,290	43,449
2007	43,943	41,055	31,247	8,661	44,314
2008	44,852	41,747	32,282	9,999	45,221
Intermediate estimates:					
2009	45,554	42,431	33,187	10,883	45,915
2010	46,451	43,164	34,347	11,512	46,801
2011	47,539	44,014	35,609	11,627	47,879
2012	48,971	45,203	37,108	11,986	49,303
2013	50,529	46,531	38,260	12,379	50,852
2014	52,041	47,833	39,378	12,759	52,356
2015	53,576	49,151	40,513	13,125	53,884
2016	55,145	50,504	41,673	13,487	55,446
2017	56,777	51,914	42,880	13,864	57,071
2018	58,468	53,383	44,132	14,258	58,756
2020	62,008	56,477	46,783	15,094	62,286
2025	71,088	64,496	53,590	17,296	71,348
2030	78,924	71,503	59,470	19,246	79,176
2035	83,832	75,898	63,152	[2]	84,078
2040	86,727	78,592	65,325	[2]	86,972
2045	88,694	80,352	66,803	[2]	88,940
2050	91,140	82,564	68,643	[2]	91,389
2055	94,289	85,384	71,010	[2]	94,540
2060	98,205	88,952	73,954	[2]	98,460
2065	101,981	92,368	76,789	[2]	102,235
2070	105,993	96,003	79,800	[2]	106,244
2075	110,226	99,844	82,975	[2]	110,470
2080	114,403	103,632	86,105	[2]	114,637

[1] Number of beneficiaries with HI and/or SMI coverage.
[2] Enrollment in Part C is not explicitly projected beyond 2030.

The past and projected amounts of Medicare revenues as a percentage of total non-interest Medicare income are shown in table III.A4, based on the intermediate assumptions. Interest income is excluded, since, under current law, it would not be a significant part of program financing in the long range.

Table III.A4.—Medicare Sources of Income as a Percentage of Total Income

Calendar year	Payroll taxes	Tax on benefits	Premiums[1]	State transfers	General revenue
Historical data:					
1970	61.8%	—	13.7%	—	24.6%
1980	68.0	—	8.6	—	23.4
1990	62.2	—	9.8	—	27.9
2000	59.8	3.6%	9.1	—	27.6
2008	43.2	2.5	12.6	1.5%	40.1
Intermediate estimates:					
2010	41.9	3.4	12.6	1.7	40.4
2020	34.1	4.0	14.0	2.0	45.9
2030	25.2	4.0	16.0	2.2	52.6
2040	21.6	3.8	17.0	2.3	55.2
2050	19.8	3.5	17.7	2.4	56.6
2060	18.0	3.3	18.4	2.5	57.7
2070	16.6	3.2	19.2	2.5	58.5
2080	15.5	3.1	20.0	2.5	58.9

[1]Includes premium revenue from HI and both accounts in the SMI trust fund.

Note: Due to rounding, the sum of these percentages may not exactly equal 100 percent.

In 2008, HI payroll taxes represented 43 percent of total non-interest income to the Medicare program. General revenues (primarily those for SMI) were the next largest source of overall financing, at 41 percent. Beneficiary premiums (again, primarily for SMI) were third, at 12 percent. Under current law, HI tax revenues are projected to fall increasingly short of HI expenditures. This shortfall began in 2007. In contrast, SMI premium and general revenues will keep pace with SMI expenditure growth, and, once fully phased down,[17] State payments (on behalf of Medicare beneficiaries who also qualify for full Medicaid benefits) will grow with Part D expenditures. Consequently, in the absence of legislation, HI tax income would represent a declining portion of total Medicare revenues. In 2016, for example, just prior to the projected exhaustion of the HI trust fund, currently scheduled HI payroll taxes would represent about 40 percent of total non-interest Medicare income. General revenues and beneficiary premiums would equal about 41 and 13 percent, respectively.[18]

The Medicare Modernization Act (MMA) requires an expanded analysis of the combined expenditures and dedicated revenues of the HI and SMI trust funds. In particular, a determination must be made as to whether projected annual "general revenue funding" exceeds 45 percent of total Medicare outlays within the next 7 fiscal years (2009-2015). For this purpose, general revenue funding is defined in

[17]State payments to Part D amounted to 90 percent of their projected foregone Medicaid prescription drug costs in 2006, with this percentage phasing down over a 10-year period to 75 percent in 2015.

[18]The general revenue share of total Medicare *revenues* cannot be directly compared to the difference between outlays and dedicated revenues as a share of outlays (described previously). Although somewhat similar in magnitude, the former measure does not reflect the HI deficit, whereas the latter measure does.

the law as total Medicare outlays minus dedicated Medicare financing sources. Dedicated Medicare financing sources include HI payroll taxes; income from taxation of Social Security benefits; State transfers for the prescription drug benefit; premiums paid under Parts A, B, and D; fines and penalties collected as a result of program integrity efforts; and any gifts received by the Medicare trust funds. The test is applied using expenditures adjusted to avoid temporary distortions arising from the payment of Medicare Advantage capitation amounts in September when the normal October payment date is a Saturday or Sunday. Figure III.A1 shows the projected difference between total Medicare outlays and dedicated funding sources as a percentage of total outlays over the long-range projection period.

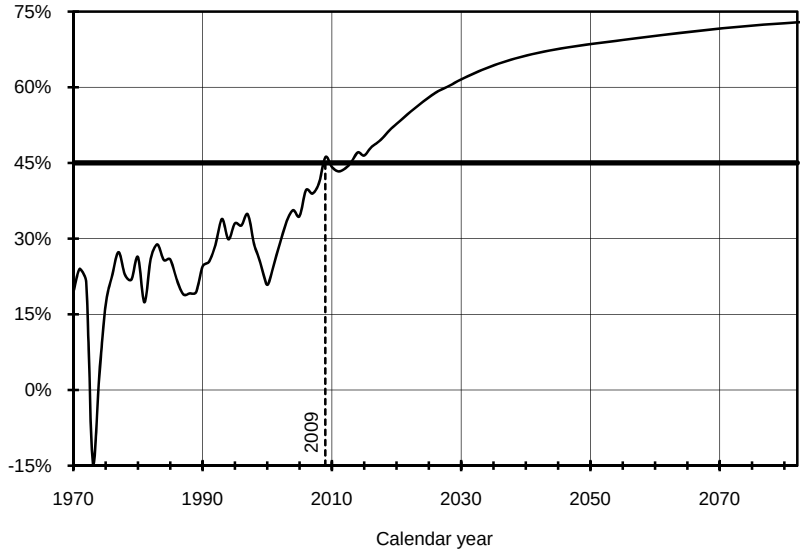
Congress established the 45-percent test to help call attention to Medicare's impact on the Federal Budget. Determinations of "excess general revenue Medicare funding" were made in each of the Trustees Reports for 2006, 2007, and 2008. Two consecutive such determinations trigger a "Medicare funding warning," indicating that a trust fund's financing is inadequate or that the general revenues provided under current law are becoming unduly large. "Medicare funding warnings" were thus prompted by both the 2007 and 2008 reports. Such findings require the President to submit to Congress, within 15 days after the date of the Budget submission for the succeeding year, proposed legislation to respond to the warning. In February 2008, President Bush submitted legislation in response to the 2007 warning, and President Obama's Fiscal Year 2010 Budget is expected to address this requirement stemming from the 2008 warning.[19]

Figure III.A1 displays the historical and projected ratio of the difference between total Medicare outlays and dedicated financing sources, to total Medicare outlays, on a calendar-year basis. As indicated, this ratio is estimated to temporarily exceed 45 percent at the end of calendar year 2009 (as a result of the lower payroll tax and benefit tax receipts caused by the current economic recession). The test, however, is formally applied on a fiscal-year basis. Because of the estimated timing of the recession, the ratio does not exceed 45 percent until fiscal year 2014, which is the sixth year of the

[19]Congress is required to consider the legislation proposed in response to "Medicare funding warnings" on an expedited basis. No action was taken regarding the response to the 2007 warning. In January 2009, the House of Representatives passed a resolution (H.Res.5, section 3(e)) stating than section 803 of the MMA, governing the action required by the House in response to a funding warning, will not apply to the 111th Congress.

projection. Accordingly, a determination of "excess general revenue Medicare funding" is made again this year. With this fourth consecutive finding, another "Medicare funding warning" is triggered this year.[20] Revenue increases or benefit reductions in the range of $25 billion to $45 billion would be required to reduce the ratio below 45 percent through 2015; much larger changes would be required in subsequent years.

Figure III.A1.—Projected Difference between Total Medicare Outlays and Dedicated Financing Sources, as a Percentage of Total Outlays



As is also indicated in figure III.A1, the difference between outlays and dedicated funding sources is projected to continue growing throughout the 75-year period, reaching 63 percent of total outlays in 2033 and 73 percent in 2083. Although the law characterizes this difference as "general revenue funding," it is important to recognize that current law provides for general revenue transfers only for certain purposes related to Parts A, B, and D, as follows:

- Financing specified portions of SMI Part B and SMI Part D expenditures;
- Reimbursing the HI trust fund for the costs of certain uninsured beneficiaries;

[20]A legislative proposal in response to this funding warning will be required within 15 days of the President's Fiscal Year 2011 Budget, which will be released in early February 2010.

- Paying interest on invested assets of the trust funds; and
- Redeeming the special Treasury securities held as assets by the trust funds.

The difference between outlays and dedicated funding sources, as shown in figure III.A1, will reflect all of these general revenue transfers, plus the imbalance between HI expenditures and dedicated revenues after HI asset exhaustion in 2017, for which there is no provision under current law to cover the shortfall. In particular, transfers from the general fund of the Treasury could not be made for this purpose without new legislation.

The MMA also requires that projected growth in the difference between outlays and dedicated revenues be compared with other health spending growth rates. Table III.A5 contains this comparison.

Table III.A5.—Comparative Growth Rates of Medicare, Private Health Insurance, National Health Expenditures, and GDP

	Average annual growth in:				
Calendar year	Incurred outlays minus dedicated revenues	Incurred Medicare outlays	GDP	National health expenditures[1]	Private health insurance[1]
2003	24.6%	6.7%	4.7%	8.3%	9.5%
2004	16.9	9.9	6.6	6.9	7.0
2005	6.6	9.4	6.3	6.8	6.8
2006	38.3	21.0	6.1	6.7	6.0
2007	8.4	7.5	4.8	6.1	6.0
2008	5.1	5.0	3.3	6.1	5.5
2009	23.9	9.3	-1.2	5.5	4.5
2010	-2.0	2.2	3.5	4.6	4.3
2011	4.3	5.7	5.8	5.6	4.8
2012	9.3	8.0	6.1	5.8	4.8
2013	11.4	8.1	5.9	6.2	5.1
2014	13.9	9.2	5.6	6.5	5.7
2015	2.7	4.1	5.1	6.9	6.0
2016	12.0	8.2	4.7	7.0	6.1
2017	10.7	8.5	4.7	7.2	6.2
2018	11.4	8.8	4.6	7.2	6.1
2019-2033	9.8	8.2	4.6	—	—
2034-2058	6.3	5.9	4.6	—	—
2059-2083	5.5	5.3	4.5	—	—

[1]Source: National health expenditure (NHE) projections article published on February 24, 2009. This article, along with the paper outlining the methodology, is available at http://www.cms.hhs.gov/NationalHealthExpendData/03_NationalHealthAccountsProjected.asp.

As shown in table III.A5, the gap between outlays and dedicated revenues, and Medicare outlays, both increased substantially when the prescription drug benefit was fully implemented in 2006. In addition, the outlay gap will increase faster than outlays throughout the 75-year period, since the dedicated sources of income to the HI trust fund will cover a decreasing percentage of HI outlays.

Actuarial Analysis

In addition to projected Medicare outlay growth, table III.A5 shows projected growth in GDP, total expenditures on health care in the U.S., and private health insurance expenditures. Each of the health expenditure categories is expected to increase more rapidly than GDP, continuing a longstanding trend. Private health insurance expenditures equal the total premiums earned by private health insurers, including benefits incurred and the net cost of insurance. The net cost of insurance includes administrative costs, additions to reserves, rate credits and dividends, premium taxes, and profits or losses. Comparisons between aggregate Medicare and private health insurance cost growth are affected by several factors:

- The number of Medicare beneficiaries is currently increasing by about 1.5 percent per year, and this growth rate will approximately double after 2010 as the post-World War II baby boom generation reaches eligibility age. As a result of the recession, the number of individuals with private health insurance is projected to decline through 2010 and increase only slowly in the future.

- The benefits covered by Medicare and private health insurance plans can vary. In particular, though most prescription drugs are currently covered by Medicare, this was not the case prior to 2006. Moreover, many Medicare beneficiaries who had private drug insurance coverage (such as Medigap policies) switched to the subsidized Part D coverage in 2006, thereby accelerating Medicare outlay growth while slowing private health insurance growth.

- The use of health care services differs significantly between Medicare beneficiaries (who are generally over 65) and individuals with private health insurance (who are predominantly below age 65). The former group, for example, has a higher incidence of hospitalization, skilled nursing care, and home health care. For the latter group, physician services represent a greater proportion of their total health care needs. Different cost growth trends by type of service will affect overall growth rates, reflecting the distribution of services for each category of people.

A number of research studies have attempted to control for some or all of these differences in comparing growth trends. Over long historical periods, average, demographically adjusted, per capita growth rates for common benefits have been somewhat lower for Medicare than for private health insurance. For shorter periods, however, the rates of growth have often diverged substantially, and the differential has been negative in some years and positive in others. More information on past and projected national and private

health expenditures, and comparisons to Medicare growth rates, is available in the sources cited in table III.A5.

Under current law, the HI and SMI trust funds are separate and distinct, each with its own sources of financing. There are no provisions for using HI revenues to finance SMI expenditures, or vice versa, or for lending assets between the two trust funds. Moreover, the benefit provisions, financing methods, and, to a lesser degree, eligibility rules are very different between these Medicare components. In particular, both accounts of the SMI trust fund are automatically in financial balance under current law, whereas the HI fund is not.

For these reasons, the financial status of the Medicare trust funds can be evaluated only by separately assessing the status of each fund. The following two sections of this report present such assessments for HI and SMI, respectively.

B. HI FINANCIAL STATUS

1. Financial Operations in Calendar Year 2008

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

A statement of the revenue and expenditures of the fund in calendar year 2008, and of its assets at the beginning and end of the calendar year, is presented in table III.B1.

The total assets of the trust fund amounted to $326.0 billion on January 1, 2008. During calendar year 2008, total revenue amounted to $230.8 billion, and total expenditures were $235.6 billion. Total assets thus decreased by $4.7 billion during the year, to $321.3 billion on December 31, 2008.

Table III.B1.—Statement of Operations of the HI Trust Fund during Calendar Year 2008
[In thousands]

Total assets of the trust fund, beginning of period	$326,011,338
Revenue:	
Payroll taxes	$198,693,157
Income from taxation of OASDI benefits	11,733,000
Interest on investments	16,410,406
Premiums collected from voluntary participants	2,938,081
Premiums collected from Medicare Advantage participants	92,456
Transfer from Railroad Retirement account	493,600
Reimbursement, transitional uninsured coverage	506,000
Reimbursement, program management general fund	192,000
CMS interfund interest receipts[1]	487
CMS interfund interest payments[1]	-1,340
SSA interfund interest payments to SSA trust funds[1]	-1,344
Interest adjustment, hospice payment error correction[2]	-853,199
Interest on reimbursements, Railroad Retirement	32,092
Other	2,064
Reimbursement, Union activity	980
Fraud and abuse control receipts:	
Criminal fines	5,340
Civil monetary penalties	15,404
Civil penalties and damages, CMS	20,697
Civil penalties and damages, Department of Justice	400,983
3% administrative expense reimbursement, Department of Justice	12,963
Fraud and abuse appropriation for FBI	120,937
Total revenue	$230,814,764
Expenditures:	
Net benefit payments	$223,815,081
Principal adjustment, hospice payment error correction[2]	8,483,566
Administrative expenses:	
Treasury administrative expenses	170,649
Salaries and expenses, SSA[3]	840,111
Salaries and expenses, CMS[4]	1,098,061
Salaries and expenses, Office of the Secretary, HHS	37,432
Medicare Payment Advisory Commission	6,336
Fraud and abuse control expenses:	
HHS Medicare integrity program	705,855
HHS Office of Inspector General	213,136
Department of Justice	64,522
FBI	120,937
Total administrative expenses	3,257,040
Total expenditures	$235,555,687
Net addition to the trust fund	-4,740,923
Total assets of the trust fund, end of period	$321,270,415

[1]A positive figure represents a transfer to the HI trust fund from the other trust funds. A negative figure represents a transfer from the HI trust fund to the other funds.
[2]Amounts transferred to the general fund of the Treasury for Part A hospice costs that were misallocated to the Part B trust fund account.
[3]For facilities, goods, and services provided by SSA.
[4]Includes administrative expenses of the intermediaries.

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

a. Revenues

The trust fund's primary source of income consists of amounts appropriated to it, under permanent authority, on the basis of taxes paid by workers, their employers, and individuals with self-employment income, in work covered by HI. Included in HI are

workers covered under the OASDI program, those covered under the Railroad Retirement program, and certain Federal, State, and local employees not otherwise covered under the OASDI program.

HI taxes are payable on a covered individual's total wages and self-employment income, without limit. For calendar years prior to 1994, taxes were computed on a person's annual earnings up to a specified maximum annual amount, called the maximum tax base. The maximum tax bases for 1966-1993 are presented in table III.B2. (Legislation enacted in 1993 removed the limit on taxable income beginning in calendar year 1994.)

The HI tax rates applicable in each of the calendar years 1966 and later are also shown in table III.B2. For 2010 and thereafter, the tax rates shown are the rates scheduled in current law.

Table III.B2.—Tax Rates and Maximum Tax Bases

		Tax rate (Percentage of taxable earnings)	
Calendar years	Maximum tax base	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
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
1994-2009	no limit	1.45	2.90
Scheduled in current law:			
2010 & later	no limit	1.45	2.90

Total HI payroll tax income in calendar year 2008 amounted to $198.7 billion—an increase of 3.5 percent over the amount of $191.9 billion for the preceding 12-month period. This increase in tax

income resulted primarily from increases in the number of workers and in their average earnings.

Up to 85 percent of an individual's or couple's OASDI benefits may be subject to Federal income taxation if their income exceeds certain thresholds. The income tax revenue attributable to the first 50 percent of OASDI benefits is allocated to the OASI and DI trust funds. The revenue associated with the amount between 50 and 85 percent of benefits is allocated to the HI trust fund. Income from the taxation of OASDI benefits amounted to $11.7 billion in calendar year 2008.

Another substantial source of trust fund income is interest credited from investments in government securities held by the fund. In calendar year 2008, $16.4 billion in interest was credited to the fund. The trust fund's investment procedures are described later in this section.

Section 1818 of the Social Security Act provides that certain persons not otherwise eligible for HI protection may obtain coverage by enrolling in HI and paying a monthly premium. Premiums collected from such voluntary participants in calendar year 2008 amounted to about $2.9 billion.

The Railroad Retirement Act provides for a system of coordination and financial interchange between the Railroad Retirement program and the HI trust fund. This financial interchange requires a transfer that would place the HI trust fund in the same position in which it would have been if railroad employment had always been covered under the Social Security Act. In accordance with these provisions, a transfer of $494 million in principal and about $15 million in interest from the Railroad Retirement program's Social Security Equivalent Benefit Account to the HI trust fund balanced the two systems as of September 30, 2007. This amount, together with interest to the date of transfer totaling about $17 million, was transferred to the trust fund in June 2008.

Two sections of the statute authorize HI benefits for certain uninsured persons aged 65 and over. Entitlement to HI benefits was provided to almost all persons aged 65 and over, or near that age, when the HI trust fund first began operations. Legislation in 1982 added similar transitional entitlement for those Federal employees who would retire before having had a chance to earn sufficient quarters of Medicare-qualified Federal employment. The costs of this coverage, including administrative expenses, are reimbursed from the

general fund of the Treasury. In calendar year 2008, such reimbursement amounted to $506 million (all for estimated benefit payments). The $506 million for benefit payments consisted of $269 million for non-Federal uninsured and $237 million for Federal uninsured beneficiaries.

The Health Insurance Portability and Accountability Act of 1996 established a health care fraud and abuse control account within the HI trust fund. Monies derived from the fraud and abuse control program are transferred from the general fund of the Treasury to the HI trust fund. During calendar year 2008, the trust fund was credited with about $576 million in receipts from this program.

b. Expenditures

Expenditures for HI benefit payments and administrative expenses are paid out of the trust fund. All expenses incurred by the Department of Health and Human Services, the Social Security Administration, the Department of the Treasury (including the Internal Revenue Service), and the Department of Justice in administering HI are charged to the trust fund. Such administrative duties include payment of benefits, the collection of taxes, fraud and abuse control activities, and 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 HI and SMI.

In addition, Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of HI. These costs are included in trust fund expenditures. The net worth of facilities and other fixed capital assets, however, is not carried in the statement of trust fund assets presented in this report, since the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and is not, therefore, considered in assessing the actuarial status of the funds.

Of the $235.6 billion in total HI expenditures, $223.8 billion represented net benefits paid from the trust fund for health services.[21] Net benefit payments increased 11.8 percent in calendar year 2008 over the corresponding amount of $200.2 billion paid

[21]Net benefits equal the total gross amounts initially paid from the trust fund during the year, less recoveries of overpayments identified through fraud and abuse control activities.

during the preceding calendar year. This increase was larger than usual due to an upsurge in inpatient hospital admissions, together with a significant increase in the average complexity of cases as coded under the new MS-DRG system for classifying discharges by cost category. Further information on HI benefits by type of service is available in section IV.A.

An additional amount of $8.5 billion was transferred from the HI trust fund to the general fund of the Treasury as part of a correction for Part A hospice benefits that were erroneously paid from the SMI Part B trust fund account during 2005-2007. This amount plus $0.9 billion of interest (which is reflected as a negative amount in the "interest and other" column in table III.B4) was transferred in June 2008. Corresponding transfers were made from the general fund to the Part B account.

The $3.3 billion of the remaining expenditures was for net HI administrative expenses, after adjustments to the preliminary allocation of administrative costs among the Social Security and Medicare trust funds and the general fund of the Treasury. This amount includes $1.1 billion for the health care fraud and abuse control program.

c. Actual experience versus prior estimates

Table III.B3 compares the actual experience in calendar year 2008 with the estimates presented in the 2007 and 2008 annual reports. A number of factors can contribute to differences between estimates and subsequent actual experience. In particular, actual values for key economic and other variables can differ from assumed levels, and legislative and regulatory changes may be adopted after a report's preparation. The comparison in table III.B3 indicates that actual HI tax income in 2008 was slightly lower than estimated in the 2007 and 2008 reports primarily because actual wage growth and the number of covered workers were lower than the earlier estimates due to the economic recession that began in December 2007. Actual HI benefit payments in calendar year 2008 were slightly higher than the amounts projected in the 2007 report and slightly lower than the amounts projected in the 2008 report largely as a result of the Part A hospice costs that were misallocated to the Part B account, as described earlier.

Table III.B3.—Comparison of Actual and Estimated Operations of the HI Trust Fund, Calendar Year 2008
[Dollar amounts in millions]

Item	Actual amount	Comparison of actual experience with estimates for calendar year 2008 published in—			
		2008 report		2007 report	
		Estimated amount[1]	Actual as percentage of estimate	Estimated amount[1]	Actual as percentage of estimate
Payroll taxes	$198,693	$200,178	99%	$200,954	99%
Benefit payments	223,815	226,691	99	221,102	101

[1]Under the intermediate assumptions.

d. Assets

The portion of the trust fund that is not needed to meet current expenditures for benefits and administration is invested, on a daily basis, in interest-bearing obligations of the U.S. government. The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that these special public-debt obligations 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 immediately preceding the date of such issue), on all marketable interest-bearing obligations of the United States forming a part of the public debt that are not due or callable until after 4 years from the end of that month. Currently, all invested assets of the HI trust fund are in the form of such special-issue securities.[22] Table V.E9, presented in appendix E, shows the assets of the HI trust fund at the end of fiscal years 2007 and 2008.

2. 10-Year Actuarial Estimates (2009-2018)

While the previous section addressed the transactions of the HI trust fund during the preceding calendar year, this section presents estimates of the trust fund's operations and financial status for the next 10 years. The long-range actuarial status of the trust fund is discussed in the next section. In both this and the following section, no changes are assumed to occur in the present statutory provisions and regulations under which HI operates.

The estimates shown in this section provide detailed information concerning the short-range financial status of the trust fund. The estimated levels of future income and outgo, annual differences between income and outgo, and annual trust fund balances are explained and examined. Two particularly important indicators of

[22]Investments may also be made in obligations guaranteed as to both principal and interest by the United States, including certain federally sponsored agency obligations.

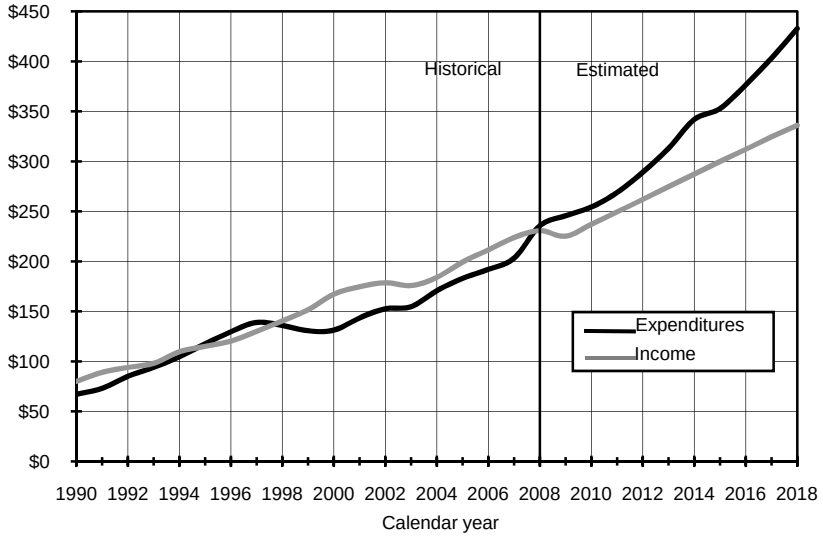
solvency for the HI trust fund—the estimated year of exhaustion and the test of short-range financial adequacy—are also discussed.

To illustrate the sensitivity of future costs to different economic and demographic trends, estimates are shown under three alternative sets of assumptions, which are intended to portray a reasonable range of possible future trends. Due to the uncertainty inherent in such projections, however, the actual operations of the HI trust fund in the future could differ significantly from these estimates.

Figure III.B1 shows past and projected income and expenditures for the HI trust fund. Following the Balanced Budget Act of 1997, the fund experienced annual surpluses in the range of $21 billion to $36 billion through 2003. This difference decreased to between $13 billion and $16 billion in 2004 and 2005, but then reached about $20 billion in 2006 and 2007 (in large part, again, as a result of the misallocated hospice costs described in the prior section). Beginning in 2008, expenditures exceeded income, and this situation is expected to continue throughout the projection period.

The impact of the current serious economic recession on HI payroll tax income is apparent in figure III.B1. In 2009, in particular, higher unemployment and slow growth in wages are expected to cause a decrease in payroll tax revenues. In addition, a significant increase in expenditures is expected due to increased utilization of services and the continued increase in the complexity of cases as coded under the new MS-DRG system. Together these factors result in an expected trust fund deficit of $20.5 billion in 2009.

Figure III.B1.—HI Expenditures and Income
[In billions]



The expected operations of the HI trust fund during calendar years 2009 to 2018, together with the past experience, are shown in table III.B4. The estimates shown in this table are based on the intermediate set of assumptions. The detailed assumptions underlying the intermediate projections are presented in section IV.A of this report.

Table III.B4.—Operations of the HI Trust Fund during Calendar Years 1970-2018

[In billions]

	Income								Expenditures			Trust fund	
Calendar year	Payroll taxes	Income from taxation of benefits	Railroad Retirement account transfers	Reimburse-ment for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest and other[1,2]	Total	Benefit payments[2,3]	Adminis-trative expenses[4]	Total	Net change	Fund at end of year
Historical data:													
1970	$4.9	—	$0.1	$0.9	—	$0.0	$0.2	$6.0	$5.1	$0.2	$5.3	$0.7	$3.2
1975	11.5	—	0.1	0.6	$0.0	0.0	0.7	13.0	11.3	0.3	11.6	1.4	10.5
1980	23.8	—	0.2	0.7	0.0	0.1	1.1	26.1	25.1	0.5	25.6	0.5	13.7
1985	47.6	—	0.4	0.8	0.0	−0.7[5]	3.4	51.4	47.6	0.8	48.4	4.8[6]	20.5
1990	72.0	—	0.4	0.4	0.1	−1.0[7]	8.5	80.4	66.2	0.8	67.0	13.4	98.9
1995	98.4	$3.9	0.4	0.5	1.0	0.1	10.8	115.0	116.4	1.2	117.6	−2.6	130.3
2000	144.4	8.8	0.5	0.5	1.4	0.0	11.7	167.2	128.5[8]	2.6	131.1	36.1	177.5
2001	152.0	7.5	0.5	0.5	1.4	−1.2[9]	14.0	174.6	141.2[8]	2.2	143.4	31.3	208.7
2002	152.7	8.3	0.4	0.4	1.6	0.0	15.1	178.6	149.9[8]	2.6	152.5	26.1	234.8
2003	149.2	8.3	0.4	0.4	1.6	0.0	15.8	175.8	152.1[8]	2.5	154.6	21.2	256.0
2004	156.5	8.6	0.4	0.4	1.9	0.2	16.0	183.9	167.6	3.0	170.6	13.3	269.3
2005	171.4	8.8	0.4	0.3	2.4	0.0	16.1	199.4	180.0	2.9	182.9	16.4	285.8
2006	181.3	10.3	0.5	0.4	2.6	0.0	16.4	211.5	189.0	2.9	191.9	19.6	305.4
2007	191.9	10.6	0.5	0.5	2.8	0.0	17.5	223.7	200.2	2.9	203.1	20.7	326.0
2008	198.7	11.7	0.5	0.5	2.9	0.0	16.4	230.8	232.3[10]	3.3	235.6	−4.7	321.3
Intermediate estimates:													
2009	192.7	12.2	0.5	0.6	3.1	0.0	15.9	225.1	242.3	3.3	245.6	−20.5	300.8
2010	201.0	16.4	0.5	−0.1	3.3	1.0[11]	15.0	237.1	249.6	3.4	254.2[12]	−17.1	283.7
2011	213.5	17.7	0.5	0.3	3.5	0.0	14.0	249.4	265.1	3.6	268.8	−19.3	264.3
2012	226.2	18.3	0.5	0.3	3.7	0.0	12.8	261.8	285.2	3.9	289.1	−27.3	237.0
2013	238.8	20.1	0.6	0.3	3.9	0.0	11.2	274.8	308.8	4.2	312.9	−38.1	198.9
2014	251.2	22.4	0.6	0.3	4.2	0.0	8.8	287.4	337.4	4.5	341.9	−54.5	144.4
2015	263.8	24.6	0.6	0.3	4.4	0.0	6.3	299.9	347.9	4.8	352.7	−52.8	91.6
2016	275.5	27.0	0.6	0.3	4.6	0.0	3.9	312.0	371.3	5.1	376.5	−64.5	27.1
2017[13]	287.7	29.7	0.7	0.2	4.9	0.0	1.3	324.6	397.6	5.5	403.1	−78.5	−51.4
2018[13]	300.6	32.4	0.7	0.2	5.2	0.0	−3.0	336.0	426.9	5.9	432.8	−96.7	−148.2

[1]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund, receipts from the fraud and abuse control program, and a small amount of miscellaneous income. These amount to $0.6-$1.0 billion each year for the 10-year projection period. In 2008, includes an adjustment of −$0.9 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.
[2]Values after 2005 include additional premiums for Medicare Advantage (MA) plans that are deducted from beneficiaries' Social Security checks. These additional premiums are beneficiary obligations and occur when a beneficiary chooses an MA plan whose monthly plan payment exceeds the benchmark amount. Beneficiaries subject to such premiums may choose to either reimburse the plans directly or have the premiums deducted from their Social Security checks. The premiums deducted from the Social Security checks are transferred to the HI and SMI trust funds and then transferred from the trust funds to the plans.
[3]Includes costs of Peer Review Organizations from 1983 through 2001 (beginning with the implementation of the prospective payment system on October 1, 1983) and costs of Quality Improvement Organizations beginning in 2002.
[4]Includes costs of experiments and demonstration projects. Beginning in 1997, includes fraud and abuse control expenses, as provided for by Public Law 104-191.
[5]Includes the lump-sum general revenue adjustment of −$0.8 billion, as provided for by section 151 of Public Law 98-21.
[6]Includes repayment of loan principal, from the OASI trust fund, of $1.8 billion.
[7]Includes the lump-sum general revenue adjustment of −$1.1 billion, as provided for by section 151 of Public Law 98-21.
[8]For 1998 to 2003, includes monies transferred to the SMI trust fund for home health agency costs, as provided for by Public Law 105-33.
[9]Includes the lump-sum general revenue adjustment of −$1.2 billion, as provided for by section 151 of Public Law 98-21.
[10]Includes monies ($8.5 billion) transferred to the general fund of the Treasury for Part A hospice costs that were previously misallocated to the Part B trust fund account.
[11]Includes the lump-sum general revenue adjustment of $1.0 billion, as provided for by section 151 of Public Law 98-21.
[12]Includes payment of estimated contingent liability payable to States (to reimburse them for payments they have made on behalf of beneficiaries) for probable unasserted claims that resulted from processing errors in which incorrect Medicare eligibility determinations were made ($1.2 billion).
[13]Estimates for 2017 and later are hypothetical, since the HI trust fund would be exhausted in those years.

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

The increases in estimated income shown in table III.B4 primarily reflect increases in payroll tax income to the trust fund. As noted previously, the main source of HI financing is the payroll tax on covered earnings paid by employees, employers, and self-employed workers. While the payroll tax rate is scheduled to remain constant, covered earnings are assumed to increase every year after 2009 through 2018 under the intermediate assumptions. These increases in taxable earnings are due largely to projected increases in both the number of HI workers covered and the average earnings of these workers.

Over the next 10 years, most of the smaller sources of financing for the HI trust fund are projected to increase as well. More detailed descriptions of these sources of income can be found in section III.B1.

Interest earnings have been a significant source of income to the trust fund for many years, surpassed only by payroll taxes. As the trust fund declines over time (as income falls short of expenditures), in the absence of corrective legislation, interest earnings would follow the same pattern.

Benefit expenditures are projected to increase each year from 2009 to 2018. For the entire short-range period and beyond, benefits are expected to increase at a faster rate than income.

Since future economic, demographic, and health care usage and cost experience may differ considerably from the intermediate assumptions on which the cost estimates shown in table III.B4 were based, projections have also been prepared on the basis of two different sets of assumptions, labeled "low-cost" and "high-cost." The three sets of assumptions were selected to illustrate the sensitivity of costs to different economic and demographic trends, and to provide an indication of the uncertainty associated with HI financial projections. The low-cost and high-cost alternatives provide for a fairly wide range of possible experience. While actual experience may be expected to fall within the range, no assurance can be made that this will be the case, particularly in light of the wide variations in experience that have occurred in the past. The assumptions used in preparing projections under the low-cost and high-cost alternatives, as well as under the intermediate assumptions, are discussed more fully in section IV.A of this report.

The estimated operations of the HI trust fund during calendar years 2008 to 2018, under all three alternatives, are summarized in table III.B5. The trust fund ratio, defined as the ratio of assets at the

beginning of the year to expenditures during the year, was 138 percent for 2008. Under the intermediate assumptions, the trust fund ratio is projected to steadily decline to a level of 7 percent at the beginning of 2017 under current law. Without legislation to correct the financial imbalance, the fund would use up all its remaining assets during 2017 and would thus become exhausted under the intermediate assumptions.

Under the low-cost alternative, exhaustion would occur in 2028, while under the high-cost alternative, exhaustion would occur in 2014. Without corrective legislation, therefore, the assets of the HI trust fund would be exhausted within the next 5 to 19 years under all three sets of assumptions. The fact that exhaustion would occur under a fairly broad range of future economic conditions, and is expected to occur in the relatively near future, indicates the importance of promptly addressing the HI trust fund's financial imbalance. Moreover, early corrections—that is, those made while HI trust fund assets are still at an adequate level—would require addressing only the underlying financial imbalance. If corrections are delayed until HI assets are significantly depleted, then the underlying imbalance must still be addressed and assets restored to an appropriate level for future contingencies.

Table III.B5.—Estimated Operations of the HI Trust Fund during Calendar Years 2008-2018, under Alternative Sets of Assumptions

[Dollar amounts in billions]

Calendar year	Total income	Total expenditures	Net increase in fund	Fund at end of year	Ratio of assets to expenditures[1] (percent)
Intermediate:					
2008[2]	$230.8	$235.6	−$4.7	$321.3	138%
2009	225.1	245.6	−20.5	300.8	131
2010	237.1	254.2	−17.1	283.7	118
2011	249.4	268.8	−19.3	264.3	106
2012	261.8	289.1	−27.3	237.0	91
2013	274.8	312.9	−38.1	198.9	76
2014	287.4	341.9	−54.5	144.4	58
2015	299.9	352.7	−52.8	91.6	41
2016	312.0	376.5	−64.5	27.1	24
2017[3]	324.6	403.1	−78.5	−51.4	7
2018[3]	336.0	432.8	−96.7	−148.2	−12
Low-cost:					
2008[2]	230.8	235.6	−4.7	321.3	138
2009	226.6	239.5	−12.9	308.3	134
2010	241.0	244.1	−3.1	305.3	126
2011	253.5	253.4	0.1	305.4	120
2012	266.7	267.1	−0.4	305.0	114
2013	280.3	283.1	−2.8	302.2	108
2014	292.7	302.5	−9.9	292.3	100
2015	305.5	302.9	2.6	294.9	97
2016	318.9	316.1	2.9	297.8	93
2017	333.1	331.2	1.9	299.7	90
2018	347.9	348.0	−0.1	299.6	86
High-cost:					
2008[2]	230.8	235.6	−4.7	321.3	138
2009	224.7	251.8	−27.1	294.2	128
2010	235.5	265.1	−29.6	264.6	111
2011	247.3	285.0	−37.7	226.9	93
2012	254.9	309.0	−54.2	172.7	73
2013	266.9	341.5	−74.6	98.1	51
2014[4]	285.8	387.5	−101.7	−3.6	25
2015[4]	303.1	418.3	−115.2	−118.9	−1
2016[4]	315.7	462.3	−146.6	−265.5	−26
2017[4]	326.2	508.9	−182.7	−448.2	−52
2018[4]	334.0	558.7	−224.7	−672.9	−80

[1]Ratio of assets in the fund at the beginning of the year to expenditures during the year.
[2]Figures for 2008 represent actual experience.
[3]Estimates for 2017 and later are hypothetical, since the HI trust fund would be exhausted in those years.
[4]Estimates for 2014 and later are hypothetical, since the HI trust fund would be exhausted in those years.

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

The Board of Trustees has established an explicit test of short-range financial adequacy. The requirements of this test are as follows: (i) if the HI trust fund ratio is at least 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; (ii) 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 5 years (and the trust fund not be depleted at any time during this period), and then remain at or above 100 percent throughout the rest

of the 10-year period. This test is applied to trust fund projections made under the intermediate assumptions.

Failure of the trust fund to meet this test is an indication that HI solvency over the next 10 years is in question and that action is needed to improve the short-range financial adequacy of the fund. As can be seen from table III.B5, the HI trust fund does not meet this short-range test. The trust fund ratio, which was above the 100-percent level at the beginning of 2008, is projected to decrease through 2017, becoming less than 100 percent by 2012. Accordingly, the financing for HI is not considered adequate in the short-range projection period (2009-2018).

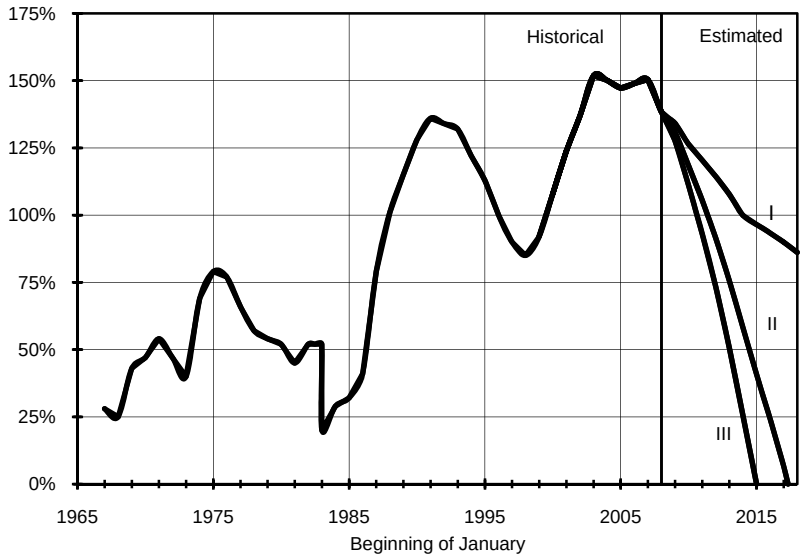
The ratios of assets in the HI trust fund at the beginning of a calendar year to total expenditures during that year are shown in table III.B6 for selected historical years.

Table III.B6.—Ratio of Assets at the Beginning of the Year to Expenditures during the Year for the HI Trust Fund

Calendar year	Ratio
1967	28%
1970	47
1975	79
1980	52
1985	32
1990	128
1995	113
2000	108
2001	124
2002	137
2003	152
2004	150
2005	147
2006	149
2007	150
2008	138

Figure III.B2 shows the historical trust fund ratios and the projected ratios under the three sets of assumptions. The labels "I," "II," and "III" indicate projections under the low-cost, intermediate, and high-cost alternatives, respectively. Figure III.B2 shows the declining level of assets (as a percentage of expenditures) in the immediate future under all three sets of assumptions, reflecting the current economic recession. The fund ratio is projected to continue declining rapidly under the intermediate and high-cost alternatives. Only under conditions of robust economic growth and modest health care cost increases, as assumed in the low-cost alternative, would HI assets remain about the same relative to expenditures, absent legislative changes.

Figure III.B2.—HI Trust Fund Balance at Beginning of Year as a Percentage of Annual Expenditures



The Trustees have recommended that HI trust fund assets be maintained at a level of at least 100 percent of annual expenditures. Such a level is estimated to provide a cushion of roughly 5 years or more in the event that income falls short of expenditures, thereby allowing time for policy makers to devise and implement legislative corrections. Thus, while the short-range test is stringent, it is intended to ensure that health care benefits continue to be available without interruption to the millions of aged and disabled Americans who rely on such coverage.

3. Long-Range Estimates

Section III.B2 presented expected HI trust fund operations over the next 10 years. In this section, the long-range actuarial status of the trust fund is examined under the three alternative sets of assumptions. The assumptions used in preparing projections are summarized in section IV.A of this report. Since the vast majority of total HI costs are related to insured beneficiaries, and since general revenue appropriations and premium payments are expected to support the uninsured segments (those paying the HI premium and those receiving HI coverage through special statutes requiring general revenue transfers to cover their costs), the remainder of this section will focus on the financing for insured beneficiaries only.

The long-range actuarial status of the HI trust fund is measured by comparing, on a year-by-year basis, the income (from payroll taxes and from taxation of OASDI benefits) with the corresponding incurred costs, expressed as percentages of taxable payroll.[23] These percentages are referred to as "income rates" and "cost rates," respectively. Incurred amounts include the costs for the misallocated hospice benefit payments (described earlier in this report) in the years in which they should have been paid from the HI trust fund rather than the year in which the SMI fund was reimbursed.

The historical and projected HI costs under the intermediate assumptions, expressed as percentages of taxable payroll, and the income rates under current law for selected years over the 75-year period, are shown in table III.B7. The ratio of expenditures to taxable payroll has generally increased over time, rising from 0.94 percent in 1967 to 3.39 percent in 1996, reflecting both the higher rate of increase in medical care costs than in average earnings subject to HI taxes, and the more rapid increase in the number of HI beneficiaries than in the number of covered workers. Cost rates declined significantly between 1996 and 2000 to 2.60 percent due to favorable economic performance, the impact of the Balanced Budget Act of 1997, and efforts to curb fraud and abuse in the Medicare program. The cost rate increased to 2.78 in 2001, 2.93 in 2002, and 2.97 in 2003 as a result of the Benefits Improvement and Protection Act of 2000 and the 2001 economic recession. In 2004 and 2005, the cost rate increased to 3.03 percent and 3.12 percent, respectively, in part as a result of the Medicare Modernization Act of 2003. In 2006, the cost rate decreased slightly to 3.11 percent due to slower inpatient hospital growth. In 2007, it increased again to 3.12 percent. In 2008, reflecting the impact of the recession, it increased to 3.31 percent due to the lower amount of taxable payroll, which was not offset by lower spending. The resulting deficit as a percentage of taxable payroll was the largest since before the Balanced Budget Act of 1997.

[23]Taxable payroll is the total amount of wages, salaries, tips, self-employment income, and other earnings subject to the HI payroll tax.

Table III.B7.—HI Cost and Income Rates[1]

Calendar year	Cost rates[2]	Income rates	Difference[3]
Historical data:			
1967	0.94%	1.00%	+0.06%
1970	1.20	1.20	0.00
1975	1.69	1.80	+0.11
1980	2.19	2.10	−0.09
1985	2.62	2.70	+0.08
1990	2.70	2.90	+0.20
1995	3.30	3.01	−0.29
2000	2.60	3.07	+0.47
2001	2.78	3.07	+0.29
2002	2.93	3.06	+0.13
2003	2.97	3.07	+0.10
2004	3.03	3.08	+0.05
2005	3.12	3.07	−0.05
2006	3.11	3.07	−0.04
2007	3.12	3.09	−0.03
2008	3.31	3.08	−0.23
Intermediate estimates:			
2009	3.57	3.13	−0.44
2010	3.57	3.16	−0.41
2011	3.59	3.15	−0.45
2012	3.65	3.15	−0.50
2013	3.74	3.17	−0.57
2014	3.88	3.18	−0.70
2015	3.81	3.19	−0.62
2016	3.90	3.21	−0.69
2017	4.00	3.22	−0.78
2018	4.12	3.23	−0.88
2020	4.37	3.26	−1.10
2025	5.13	3.33	−1.80
2030	6.00	3.38	−2.62
2035	6.87	3.42	−3.46
2040	7.64	3.43	−4.21
2045	8.24	3.44	−4.81
2050	8.74	3.44	−5.30
2055	9.20	3.45	−5.75
2060	9.71	3.46	−6.24
2065	10.25	3.47	−6.78
2070	10.81	3.49	−7.32
2075	11.34	3.50	−7.84
2080	11.81	3.51	−8.30

[1]Under the intermediate assumptions.
[2]Estimated 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. Statutory wage credits for military service for 1957-2001 are included in taxable payroll.
[3]Difference between the income rates and cost rates. Negative values represent deficits.

After 2008, the income rates under current law are projected to be insufficient, by a growing margin, to support the projected costs. By the end of the long-range projection period, HI tax income is estimated to cover less than one-third of the cost. As a result, the trust fund is seriously out of financial balance in the long range, and substantial reform will be required.

Figure III.B3 shows the year-by-year costs as a percentage of taxable payroll for each of the three sets of assumptions. The labels "I," "II," and "III" indicate projections under the low-cost, intermediate, and

high-cost alternatives, respectively. The income rates are also shown, but only for the intermediate assumptions, in order to simplify the graphical presentation—and because the variation in the income rates by alternative is very small (by 2083, the annual income rates under the low-cost and high-cost alternatives differ by less than 0.5 percent of taxable payroll).

Figure III.B3.—Estimated HI Cost and Income Rates as a Percentage of Taxable Payroll

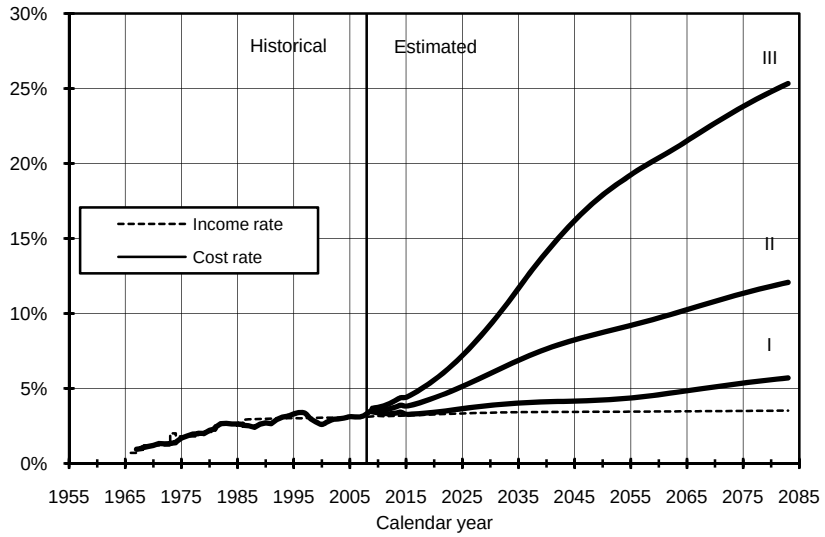


Figure III.B3 further reinforces the financial imbalance projected under the intermediate assumptions. Cost rates are projected to continue to exceed income rates under current law by a steadily and rapidly growing margin. By the end of the 75-year period, this differential would be more than 8 percent of taxable payroll and would continue to worsen thereafter. Under the more favorable economic and demographic conditions assumed in the low-cost assumptions, HI costs exceed scheduled income beginning in 2008, but with a more modest yet steadily growing deficit thereafter. The high-cost projections illustrate the severe financial imbalance that could occur if future economic conditions resemble those of the 1973-95 period, if HI expenditure growth accelerates toward pre-1997 levels, and if fertility rates decline to the levels currently experienced in key European countries such as the United Kingdom.[24]

[24]Actual experience during these periods was similar on average to the high-cost economic and programmatic assumptions for the future.

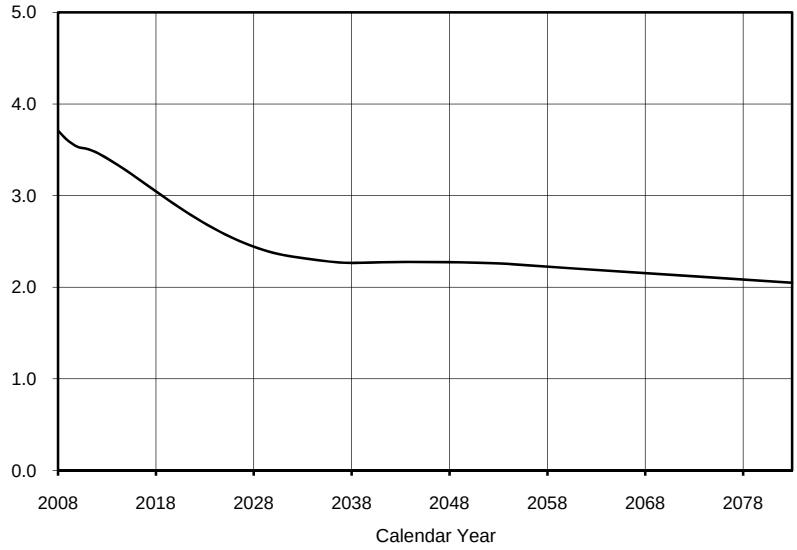
Costs beyond the initial 25-year projection period for the intermediate estimate are based upon the assumption that average HI expenditures per beneficiary will increase at a rate determined by the economic model described in sections II.C and IV.D. This rate is about 1.4 percent faster than the Gross Domestic Product (GDP) per capita in 2033, slowing down to about 0.2 percent faster by 2083. Therefore, changes in the next 75 years of the projection period reflect both the impact of the changing demographic composition of the population and average benefits that increase more rapidly than average wages. Beyond the initial 25-year projection period, the low-cost and high-cost alternatives assume that HI cost increases, relative to taxable payroll increases, are initially 2 percentage points less rapid and 2 percentage points more rapid, respectively, than the results under the intermediate assumptions. The initial 2-percentage-point differentials are assumed to gradually decrease until the year 2058, when HI cost increases (relative to taxable payroll) are assumed to be the same as under the intermediate assumptions.

The cost rates and income rates are shown over a 75-year valuation period in order to fully present the future economic and demographic developments that may reasonably be expected to occur, such as the impact of the large shift in the demographic composition of the population that will take place beginning in the next decade. As figure III.B3 indicates, estimated HI expenditures, expressed as percentages of taxable payroll, increase rapidly in 2008-2009 and continue growing thereafter. The later growth occurs in part because the relatively large number of persons born during the period between the end of World War II and the mid-1960s (known as the baby boom generation) will reach eligibility age and begin to receive benefits, while the relatively smaller number of persons born during later years will comprise the labor force. During the last 25 years of the projection period, the demographic impacts moderate somewhat.[25]

For the most part, current benefits are paid for by current workers. Consequently, the baby boom generation will be financed by the relatively small number of persons born after the baby boom. Figure III.B4 shows the projected ratio of workers per HI beneficiary from 2008 to 2083.

[25]HI costs as a percentage of taxable payroll are projected to continue to increase due to demographic changes, reflecting assumed further improvements in life expectancy and assumed birth rates that are at roughly the same level as those experienced during the last 2 decades.

Figure III.B4.—Workers per HI Beneficiary
[Based on intermediate assumptions]



As figure III.B4 indicates, while every beneficiary in 2008 had about 3.7 workers to pay for his or her HI benefit, in 2030 there would be only about 2.4 workers. This ratio would then continue to decline until there are only 2.1 workers per beneficiary by 2080.

While year-by-year comparisons of revenues and costs are necessary to measure the adequacy of HI financing, the financial status of the trust fund is often summarized, over a specific valuation period, by a single measure known as the actuarial balance. The actuarial balance of the HI trust fund is defined as the difference between the summarized income rate for the valuation period and the summarized cost rate for the same period.

The summarized income rates, cost rates, and actuarial balance are based upon the present values of future income, costs, and taxable payroll. The present values are calculated, as of the beginning of the valuation period, by discounting the future annual amounts of income and outgo at the assumed rates of interest credited to the HI trust fund. The summarized income and cost rates over the projection period are then obtained by dividing the present value of income and cost, respectively, by the present value of taxable payroll. The difference between the summarized income 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 a target trust

fund balance at the end of the valuation period, is 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 1 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 ensure that the trust fund will maintain such a balance on a year-by-year basis.

The actuarial balances under all three alternative sets of assumptions, for the next 25, 50, and 75 years, are shown in table III.B8. The summarized income rate for the entire 75-year period under the intermediate assumptions is 3.46 percent of taxable payroll. The summarized HI cost rate under the intermediate assumptions, for the entire 75-year period, is 7.34 percent. As a result, the actuarial balance is −3.88 percent, and the HI trust fund fails to meet the Trustees' long-range test of close actuarial balance by a wide margin. (Section V.F contains the definition of this test.)

The actuarial balance can be interpreted as the percentage that could be added to the current-law income rates and/or subtracted from the current-law cost rates immediately and throughout the entire valuation period in order for the financing to support HI costs and provide for the targeted trust fund balance at the end of the projection period. The income rate increase according to this method is 3.88 percent of taxable payroll. However, if no such changes were made until 2017, when the trust fund would be exhausted under current law, then the required increase would be 4.46 percent of taxable payroll under the intermediate assumptions. If changes were instead made year by year, as needed to balance each year's costs and tax revenues, then the changes would be 0.50 to 1.00 percent over the next 10 years and would grow rapidly thereafter to more than 8 percent of taxable payroll by the end of the projection period.

Table III.B8.—HI Actuarial Balances under Three Sets of Assumptions

	Intermediate assumptions	Alternative	
		Low-Cost	High-Cost
Valuation periods:[1]			
25 years, 2009-2033:			
Summarized income rate	3.47%	3.44%	3.51%
Summarized cost rate	4.88	3.67	6.58
Actuarial balance	−1.40	−0.23	−3.07
50 years, 2009-2058:			
Summarized income rate	3.46	3.40	3.53
Summarized cost rate	6.29	3.88	10.62
Actuarial balance	−2.83	−0.48	−7.09
75 years, 2009-2083:			
Summarized income rate	3.46	3.38	3.57
Summarized cost rate	7.34	4.19	13.31
Actuarial balance	−3.88	−0.81	−9.74

[1]Income rates include beginning trust fund balances, and cost rates include the cost of attaining a trust fund balance at the end of the period equal to 100 percent of the following year's estimated expenditures.

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

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 III.B2) and in the 75-year summarized costs. The variations in the underlying assumptions can be characterized as (i) moderate in terms of magnitude of the differences on a year-by-year basis, and (ii) persistent over the duration of the projection period. Under the low-cost alternative, the summarized cost rate for the 75-year valuation period is 4.19 percent of taxable payroll, and the summarized income rate is 3.38 percent of taxable payroll, meaning that HI income rates provided in current law would not be adequate even under the low-cost alternative. Under the high-cost alternative, the summarized cost rate for the 75-year projection period is 13.31 percent of taxable payroll, nearly four times the summarized income rate of 3.57 percent of taxable payroll.

As suggested earlier, past experience has indicated that economic and demographic conditions that are as financially adverse as those assumed under the high-cost alternative can, in fact, occur. None of the alternative projections should be viewed as unlikely or unrealistic. The wide range of results under the three alternatives is indicative of the uncertainty of HI's future cost and its sensitivity to future economic and demographic conditions. Accordingly, it is important that an adequate balance be maintained in the HI trust fund, as a reserve for contingencies, and that financial imbalances be addressed promptly through corrective legislation.

Table III.B9 shows the long-range actuarial balance under the intermediate projections with its component parts—the present values of tax income, expenditures, and asset requirement of the HI

program over the next 75 years. The estimates are for the "open-group" population—all persons who will participate during the period as either taxpayers or beneficiaries, or both—and consist of payments from, and on behalf of, employees now in the workforce, as well as those who will enter the workforce over the next 75 years. The estimates also include expenditures attributable to these current and future workers, in addition to current beneficiaries.

Table III.B9.—Components of 75-Year HI Actuarial Balance under Intermediate Assumptions (2009-2083)

Present value as of January 1, 2009 (in billions):	
a. Payroll tax income	$10,320
b. Taxation of benefits income	1,640
c. Fraud and abuse control receipts	46
d. Total income (a + b + c)	12,006
e. Expenditures	25,774
f. Expenditures minus income (e − d)	13,768
g. Trust fund assets at start of period	321
h. Open-group unfunded obligation (f − g)	13,447
i. Ending target trust fund[1]	348
j. Present value of actuarial balance (d − e + g − i)	−13,796
k. Taxable payroll	355,845
Percent of taxable payroll:	
Actuarial balance (j ÷ k)	−3.88%

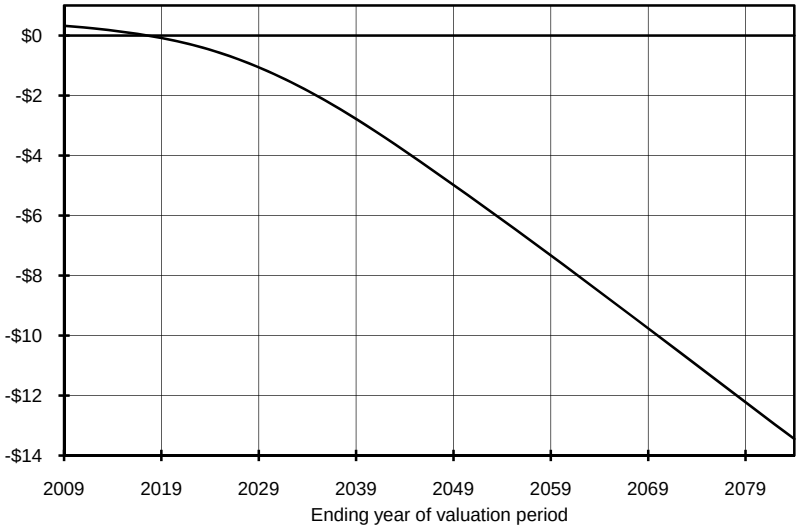
[1]The calculation of the actuarial balance includes the cost of accumulating a target trust fund balance equal to 100 percent of annual expenditures by the end of the period.

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

The present value of future expenditures less future tax income, decreased by the amount of HI trust fund assets on hand at the beginning of the projection, amounts to $13.4 trillion. This value is referred to as the 75-year "unfunded obligation" for the HI trust fund and is 8 percent larger than last year's value of $12.4 trillion. The primary reasons for the increase are (i) the later valuation date, and (ii) the addition of a large deficit year to the calculation. Other reasons for the change are discussed in more detail later in this section. The unfunded obligation (adjusted for the ending target trust fund) can be expressed as a percentage of the present value of future taxable payroll to calculate the traditional actuarial balance of the HI program. Under the intermediate assumptions, the present value of the actuarial deficit is $13.8 trillion. Dividing by the present value of future taxable payroll (estimated to be $356 trillion) results in the actuarial balance of −3.88 percent shown in table III.B9.

Figure III.B5 shows the present values, as of January 1, 2009, of cumulative HI taxes less expenditures (plus the 2009 trust fund) through each of the next 75 years. These values are estimated under current-law legislated expenditures and tax rates.

Figure III.B5.—Present Value of Cumulative HI Taxes Less Expenditures through Year Shown, Evaluated under Current Law Tax Rates and Legislated Expenditures
[Present value as of January 1, 2009; in trillions]



The cumulative annual balance of the trust fund is highest at the beginning of 2008, reflecting the beginning trust fund assets of about $0.3 trillion. The cumulative present value trends steadily downward over the projection period, reflecting the anticipated shortfall of tax revenues, relative to expenditures, in 2009 and later. The trust fund is projected to become exhausted in 2017, at which time cumulative expenditures would have exceeded cumulative tax revenues by enough to equal the initial fund assets accumulated with interest. The continuing downward slope in the line thereafter further illustrates the unsustainable difference between the HI expenditures promised under current law and the financing currently scheduled to support these expenditures. As noted previously, over the full 75-year period, the fund has a projected present value unfunded obligation of $13.4 trillion. This unfunded obligation indicates that if $13.4 trillion were added to the trust fund at the beginning of 2009, the program could meet the projected cost of current-law expenditures over the next 75 years. More realistically, additional annual revenues and/or reductions in expenditures, with a present value totaling $13.4 trillion, would be required to reach financial balance.

The estimated unfunded obligation of $13.4 trillion and the closely associated present value of the actuarial deficit ($13.8 trillion) are useful indicators of the sizable responsibility facing the American

public. In other words, increases in revenues and/or reductions in benefit expenditures—equivalent to a lump-sum amount today of more than $13 trillion—would be required to bring the HI trust fund into long-range financial balance. At the same time, long-range measures expressed in dollar amounts, even when expressed as present values, can be difficult to interpret. For this reason, the Board of Trustees has customarily emphasized relative measures such as the income rate and cost rate comparisons shown earlier in this section and comparisons to the present value of future taxable payroll or GDP as shown in the following two tables.

Consistent with the practice of previous reports, this report focuses on the 75-year period from 2009 to 2083 for the evaluation of the long-run financial status of the HI program on an open-group basis (i.e., including past, current, and future participants). Table III.B10 shows that the present value of open-group unfunded obligations for the program over that period is $13.4 trillion, which is equivalent to 3.8 percent of taxable payroll or 1.7 percent of GDP. Some experts, however, have expressed concern that overemphasis on summary measures (such as the actuarial balance and open-group unfunded obligations) can obscure the underlying year-by-year patterns of the long-range financial deficits. If legislative solutions were designed only to eliminate the overall actuarial deficit, without consideration of such year-by-year patterns, then under some scenarios a substantial financial imbalance could still remain at the end of the period, and the long-range sustainability of the program could still be in doubt.

Reflecting these same concerns, the Medicare Trustees Report has traditionally focused on the projected year-by-year pattern of HI income versus expenditures and placed less emphasis on summary measures. As noted previously in this section, the scheduled tax revenues for HI represent less than one-third of projected expenditures at the end of the 75-year projection period, and the projected financial imbalance worsens throughout this period.

Concern has also been expressed that limiting the projections to 75 years understates the magnitude of the long-range unfunded obligations for HI, because summary measures reflect the full amount of taxes paid by the next two or three generations of workers, but not the full amount of their benefits. One approach to addressing the limitations of 75-year summary measures is to extend the projection horizon indefinitely, so that the projected large deficits after the first

75 years are reflected in the overall results.[26] Such extended projections can also help indicate whether the HI financial imbalance would be improving or continuing to worsen beyond the normal 75-year period. Accordingly, table III.B10 presents estimates of HI unfunded obligations that extend to the infinite horizon. The extension assumes that the current-law HI program and the demographic and economic trends used for the 75-year projection continue indefinitely except that average HI expenditures per beneficiary will increase at the same rate as GDP per capita beginning in 2084. Extending the calculations beyond 2083 adds $23.0 trillion in unfunded obligations to the amount estimated through 2083. That is, over the infinite horizon, the HI unfunded obligations are projected to be $36.4 trillion. This amount represents 6.5 percent of the present value of future HI taxable payroll over the infinite horizon, or 2.8 percent of GDP.

Table III.B10.—Unfunded HI Obligations from Program Inception through the Infinite Horizon

[Present values as of January 1, 2009; dollar amounts in trillions]

		As a percentage of:	
	Present value	HI taxable payroll	GDP
Unfunded obligations through the infinite horizon[1]	$36.4	6.5%	2.8%
Unfunded obligations from program inception through 2083[1]	13.4	3.8	1.7

[1]Present value of future expenditures less income, reduced by the amount of trust fund assets at the beginning of the period.

Notes: 1. The present values of future HI taxable payroll for 2009-2083 and for 2009 through the infinite horizon are $355.9 trillion and $557.5 trillion, respectively.
2. The present values of GDP for 2009-2083 and for 2009 through the infinite horizon are $790.9 trillion and $1,313.1 trillion, respectively. (These present values differ slightly from the corresponding amounts shown in the OASDI Trustees Report due to the use of HI-specific interest discount factors.)
3. Totals do not necessarily equal the sums of rounded components.

The projected HI unfunded obligation over the infinite horizon can be separated into the portions associated with current participants versus future participants. The first line of table III.B11 shows the present value of future expenditures less future taxes for all current participants, including both beneficiaries and covered workers. Subtracting the current value of the HI trust fund (the accumulated value of past HI taxes less outlays) results in a "closed group" unfunded obligation of $14.2 trillion. The remaining $22.2 trillion of

[26]The calculation of present values, in effect, applies successively less weight to future amounts over time, through the process of interest discounting. For example, the weights associated with the 25th, 75th, and 200th years of the projection would be about 28 percent, 2 percent, and 0.0015 percent, respectively, of the weight for the first year. In this way, a finite summary measure can be calculated for an infinite projection period.

the total unfunded obligation is the projected difference between taxes and expenditures for future participants.

The year-by-year HI deficits described previously in this section have shown that HI taxes will not be adequate to finance the program on a "pay-as-you-go" basis (whereby payroll taxes from today's workers are used to provide benefits to today's beneficiaries).[27] The unfunded obligations shown in table III.B11 further indicate that workers' HI taxes are not adequate to cover their own future costs when they become eligible for HI benefits—and that this situation has occurred for workers in the past and will continue to be true for future workers under current law. In practice, the projected HI deficits could be addressed by raising additional revenue or reducing benefits (or some combination of these actions). The impact of such changes on the unfunded obligation amounts for current versus future participants would depend on the specific policies selected.

Table III.B11.—Unfunded HI Obligations for Current and Future Program Participants through the Infinite Horizon

[Present values as of January 1, 2009; dollar amounts in trillions]

	Present value	As a percentage of: HI taxable payroll	GDP
Future expenditures less income for current participants	$14.5	2.6%	1.1%
Less current trust fund (income minus expenditures to date for past and current participants)	0.3	0.1	0.0
Equals unfunded obligations for past and current participants[1]	14.2	2.6	1.1
Plus expenditures less income for future participants for the infinite horizon	22.2	4.0	1.7
Equals unfunded obligations for all participants for the infinite future	36.4	6.5	2.8

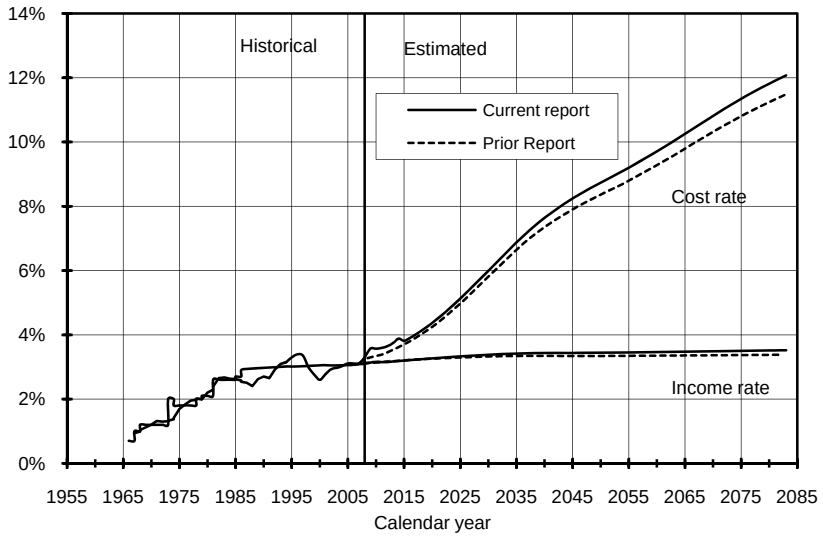
[1]This concept is also referred to as the closed-group unfunded obligation.

Notes: 1. The estimated present value of future HI taxable payroll for 2009 through the infinite horizon is $557.5 trillion.
2. The estimated present value of GDP for 2009 through the infinite horizon is $1,313.1 trillion. See note 2 in table III.B10.
3. Totals do not necessarily equal the sums of rounded components.

The remainder of this section describes the changes in long-range HI actuarial projections made since the prior year's annual report to Congress was released. Figure III.B6 compares the year-by-year HI cost and income rates for the current annual report with the corresponding projections from the 2008 report.

[27]As noted previously, small amounts of income are also received in the form of income taxes on OASDI benefits, interest, and general revenue reimbursements for certain uninsured beneficiaries.

Figure III.B6.—Comparison of HI Cost and Income Rate Projections: Current versus Prior Year's Reports



As figure III.B6 indicates, the intermediate HI cost rate projections in this year's report are similar to those in the 2008 report although slightly higher for the whole projection period. The projected income rates are not perceptibly different in the chart (although they are very slightly higher).

The cost differentials described above reflect projected long-range rates of increase in HI costs that are basically the same as those from last year's report. For both reports, the long-range growth rates are drawn from a simplified economic model that produces a smoother transition from the current faster rates of growth to the ultimate assumption for the infinite horizon based on the GDP increase plus zero percent. The detailed reasons for the change in the actuarial deficit are described below.

As mentioned earlier, the 75-year HI actuarial balance, under the intermediate assumptions, is estimated to be −3.88 percent of taxable payroll. The actuarial balance under the intermediate assumptions as shown in the 2008 annual report was −3.54 percent. The major reasons for the change in the 75-year actuarial balance are summarized in table III.B12. In more detail, these changes consist of the following:

(1) Change in valuation period: Changing the valuation period from 2008-2082 to 2009-2083 adds a large deficit year to

the calculation of the actuarial balance. The effect on the actuarial balance is −0.10 percent of taxable payroll.

(2) Updating the projection base: The actual cost as a percentage of payroll for 2008 was higher than what was estimated in last year's report. This result is based on a number of factors:
   — A slightly larger-than-expected surge in inpatient hospital admissions and significant upcoding of discharges by cost category results in a −0.05-percent change in the actuarial balance.
   — A decrease in the cost due to the real mix of cases from what had been assumed last year results in a +0.07-percent change in the actuarial balance.
   — The larger-than-expected skilled nursing facility and home health agency utilization and case mix increases in 2008 result in a −0.02-percent change in the actuarial balance.
   — Finally, the effect of the economic recession in 2008 on both expenditures and taxable payroll results in a −0.17-percent change in the actuarial balance.

   The total impact of these base-year factors is a change of −0.17 percent of taxable payroll in the actuarial balance.

(3) Private health plan assumptions: The projected rate of growth in enrollment in private health plans is now somewhat lower compared to last year's rate of growth, based on data on such enrollees. In addition, a new actuarial model was developed to project the costs of these enrollees, which resulted in slightly higher costs. The net effect of these changes is a −0.02-percent change in the actuarial balance.

(4) Hospital assumptions: Changes in the hospital assumptions are described in section IV.A. The increase in the average recorded complexity of hospital admissions ("case mix") is assumed to be somewhat higher during 2009 and lower during 2010 than previously assumed, based on the latest actual data. This factor, along with other minor changes, results in a +0.01-percent change in the actuarial balance.

(5) Other provider assumptions: Skilled nursing facility utilization and case mix increases are assumed to be slightly higher this year than what was assumed last year. The same is true for home health agency utilization. Finally, a new model was used for administrative costs, which resulted in slightly higher projections. The effect of

these changes is a −0.06-percent difference in the actuarial balance.

(6) Legislative changes: Four pieces of legislation were signed into law this past year. More details are available in section V.A of this report. The legislation is estimated to change the actuarial balance by −0.02 percent of taxable payroll.

(7) Economic and demographic assumptions: Changes to the economic and demographic assumptions result in a net change of +0.02 percent in the actuarial balance. Several factors with largely offsetting effects contribute to this change, including:

— The short-range revisions in the economic assumptions due to the current recession, and small adjustments to the long-range labor force, productivity, and hours-worked assumptions, have a negative impact on projected HI taxable payroll and affect the actuarial balance by roughly −0.21 percent of payroll.

— The short-range revisions in the economic assumptions also affect HI expenditure growth through lower increases in the CPI and in average hourly earnings. The lower level of HI expenditures results in a change in the actuarial balance of about +0.17 percent of payroll.

— Revisions to the assumed rate of mortality improvement at ages 65 and above produce an increase in the projected number of HI beneficiaries and a change in the actuarial balance of −0.03 percent of payroll.

— Refinements to the long-range projection of HI revenues from income taxes on OASDI benefits result in a change of +0.08 percent of payroll in the actuarial balance.

Table III.B12.—Change in the 75-Year Actuarial Balance since the 2008 Report

1. Actuarial balance, intermediate assumptions, 2008 report	−3.54%
2. Changes:	
a. Valuation period	−0.10
b. Base estimate	−0.17
c. Private health plan assumptions	−0.02
d. Hospital assumptions	0.01
e. Other provider assumptions	−0.06
f. Legislation	−0.02
g. Economic and demographic assumptions	0.02
Net effect, above changes	−0.34
3. Actuarial balance, intermediate assumptions, 2009 report	−3.88

4. Long-Range Sensitivity Analysis

This section presents estimates that illustrate the sensitivity of the long-range cost rate and actuarial balance of HI to changes in

selected individual assumptions. The estimates based on the three alternative sets of assumptions (that is, intermediate, low-cost, and high-cost) demonstrate the effects of varying all of the principal assumptions simultaneously in order to portray a generally more optimistic or pessimistic future, in terms of the projected financial status of the HI trust fund. In the sensitivity analysis presented in this section, the intermediate set of assumptions is used as the reference point, and one assumption at a time is varied within that alternative.

Each table that follows shows the effects of changing a particular assumption on the HI summarized income rates, summarized cost rates, and actuarial balances (as defined earlier in this report) for 25-year, 50-year, and 75-year valuation periods. Because the income rate varies only slightly with changes in assumptions, it is not considered in the discussion of the tables. The change in each of the actuarial balances is approximately equal to the change in the corresponding cost rate, but in the opposite direction. For example, a lower projected cost rate would result in an improvement or increase in the corresponding projected actuarial balance.

a. Real-Wage Differential

Table III.B13 shows the estimated HI income rates, cost rates, and actuarial balances on the basis of the intermediate assumptions, with various assumptions about the real-wage differential. These assumptions are that the ultimate real-wage differential will be 0.5 percentage point (as assumed for the high-cost alternative), 1.1 percentage points (as assumed for the intermediate assumptions), and 1.7 percentage points (as assumed for the low-cost alternative). In each case, the ultimate annual increase in the Consumer Price Index (CPI) is assumed to be 2.8 percent (as assumed for the intermediate assumptions), yielding ultimate percentage increases in average annual wages in covered employment of 3.3, 3.9, and 4.5 percent under the three illustrations, respectively.

Past increases in real earnings have exhibited substantial variation. During 1951-1970, real earnings grew by an average of 2.2 percent per year. During 1972-1996, however, the average annual increase in real earnings amounted to only 0.53 percent.[28] Poor performance in real-wage growth would be a matter of some concern; as shown in table III.B13, projected HI cost rates are fairly sensitive to the

[28]This period was chosen because it begins and ends with years in which the economy reached full employment. The period thus allows measurement of trend growth over complete economic cycles.

assumed growth rates in real wages. For the 75-year period 2009-2083, the summarized cost rate decreases from 7.70 percent (for a real-wage differential of 0.5 percentage point) to 6.95 percent (for a differential of 1.7 percentage points). The HI actuarial balance over this period shows a corresponding improvement for faster rates of growth in real wages.

Table III.B13—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various Real-Wage Assumptions

[As a percentage of taxable payroll]

	Ultimate percentage increase in wages-CPI[1]		
Valuation period	3.3-2.8	3.9-2.8	4.5-2.8
Summarized income rate:			
25-year: 2009-2033	3.51%	3.47%	3.44%
50-year: 2009-2058	3.51	3.46	3.41
75-year: 2009-2083	3.52	3.46	3.41
Summarized cost rate:			
25-year: 2009-2033	5.01	4.88	4.75
50-year: 2009-2058	6.54	6.29	6.03
75-year: 2009-2083	7.70	7.34	6.95
Actuarial balance:			
25-year: 2009-2033	−1.50	−1.40	−1.32
50-year: 2009-2058	−3.03	−2.83	−2.62
75-year: 2009-2083	−4.18	−3.88	−3.53

[1]The first value in each pair is the assumed ultimate annual percentage increase in average wages in covered employment. The second value is the assumed ultimate annual percentage increase in the CPI. The difference between the two values is the real-wage differential.

The sensitivity of the HI actuarial balance to different real-wage assumptions is significant, but not as substantial as one might intuitively expect. Higher real-wage differentials immediately increase both HI expenditures for health care and wages for all workers. Though there is a full effect on wages and payroll taxes, the effect on benefits is only partial, since not all health care costs are wage-related. Thus, the HI cost rate decreases with increasing real-wage differentials, because the higher real-wage levels increase the taxable payroll to a greater extent than they increase HI benefits. In particular, each 0.5-percentage-point increase in the assumed real-wage differential increases the long-range HI actuarial balance, on average, by about 0.27 percent of taxable payroll.

b. Consumer Price Index

Table III.B14 shows the estimated HI income rates, cost rates, and actuarial balances on the basis of the intermediate alternative, with various assumptions about the rate of increase for the CPI. These assumptions are that the ultimate annual increase in the CPI will be 1.8 percent (as assumed for the low-cost alternative), 2.8 percent (as assumed for the intermediate assumptions), and 3.8 percent (as assumed for the high-cost alternative). In each case, the ultimate real-wage differential is assumed to be 1.1 percent (as assumed for the intermediate assumptions), yielding ultimate percentage increases in average annual wages in covered employment of 2.9, 3.9, and 4.9 percent under the three illustrations.

Table III.B14.—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various CPI-Increase Assumptions

[As a percentage of taxable payroll]

	Ultimate percentage increase in wages-CPI[1]		
Valuation period	2.9-1.8	3.9-2.8	4.9-3.8
Summarized income rate:			
25-year: 2009-2033	3.49%	3.47%	3.45%
50-year: 2009-2058	3.48	3.46	3.42
75-year: 2009-2083	3.49	3.46	3.42
Summarized cost rate:			
25-year: 2009-2033	4.89	4.88	4.85
50-year: 2009-2058	6.30	6.29	6.25
75-year: 2009-2083	7.35	7.34	7.30
Actuarial balance:			
25-year: 2009-2033	−1.40	−1.40	−1.40
50-year: 2009-2058	−2.82	−2.83	−2.83
75-year: 2009-2083	−3.87	−3.88	−3.87

[1]The first value in each pair is the assumed ultimate annual percentage increase in average wages in covered employment. The second value is the assumed ultimate annual percentage increase in the CPI.

The cost rate remains about the same with greater assumed rates of increase in the CPI. Over the 75-year projection period, for example, the cost rate decreases from 7.35 percent (for CPI increases of 1.8 percent) to 7.30 percent (for CPI increases of 3.8 percent). The relative insensitivity of projected HI cost rates to different levels of general inflation occurs because inflation is assumed to affect both the taxable payroll of workers and medical care costs about equally.[29] In practice, differing rates of inflation could occur between the economy in general and the medical-care sector. The effect of such a difference can be judged from the sensitivity analysis shown in the subsequent section on miscellaneous health care cost factors. Variation in the rate of change assumed for the CPI has only a negligible effect on the long-range actuarial balance.

[29]The slight sensitivity shown in the table results primarily from the fact that the fiscal year 2009 payment rates for all providers have already been set before the actual CPI is known.

c. Real-Interest Rate

Table III.B15 shows the estimated HI income rates, cost rates, and actuarial balances under the intermediate alternative, with various assumptions about the annual real-interest rate for special public-debt obligations issuable to the trust fund. These assumptions are that the ultimate annual real-interest rate will be 2.1 percent (as assumed for the high-cost alternative), 2.9 percent (as assumed for the intermediate assumptions), and 3.6 percent (as assumed for the low-cost alternative). In each case, the ultimate annual increase in the CPI is assumed to be 2.8 percent (as assumed for the intermediate assumptions), resulting in ultimate annual yields of 4.9, 5.7, and 6.4 percent under the three illustrations.

Table III.B15.—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various Real-Interest Assumptions

[As a percentage of taxable payroll]

	Ultimate annual real-interest rate		
Valuation period	2.1 percent	2.9 percent	3.6 percent
Summarized income rate:			
25-year: 2009-2033	3.46%	3.47%	3.48%
50-year: 2009-2058	3.45	3.46	3.46
75-year: 2009-2083	3.46	3.46	3.47
Summarized cost rate:			
25-year: 2009-2033	4.94	4.88	4.82
50-year: 2009-2058	6.52	6.29	6.09
75-year: 2009-2083	7.79	7.34	6.96
Actuarial balance:			
25-year: 2009-2033	−1.48	−1.40	−1.34
50-year: 2009-2058	−3.07	−2.83	−2.62
75-year: 2009-2083	−4.33	−3.88	−3.50

For all periods, the cost rate decreases with increasing real-interest rates. Over 2009-2083, for example, the summarized HI cost rate would decline from 7.79 percent (for an ultimate real-interest rate of 2.1 percent) to 6.96 percent (for an ultimate real-interest rate of 3.6 percent). Thus, each 1.0-percentage-point increase in the assumed real-interest rate increases the long-range actuarial balance, on average, by about 0.55 percent of taxable payroll. The fact that the HI actuarial balance is sensitive to the interest assumption is not an indication of the actual role that interest plays in the financing. In reality, interest finances only a minimal portion of the HI cost. The sensitivity of the actuarial balance to the interest assumption is implicit in the present-value method used to determine the actuarial balance, since the present-value calculations are very sensitive to the interest rates used to discount future amounts to their present equivalent values.

d. Health Care Cost Factors

Table III.B16 shows the estimated HI income rates, cost rates, and actuarial balances on the basis of the intermediate set of assumptions, with two variations on the relative annual growth rate in the aggregate cost of providing covered health care services to HI beneficiaries. These alternative assumptions are that the ultimate annual growth rate in such costs, relative to the growth in taxable payroll, will be 1 percentage point slower than the intermediate assumption, the same as the intermediate assumption, and 1 percentage point faster than the intermediate assumption. In each case, the taxable payroll will be the same as assumed for the intermediate assumptions.

As noted previously, factors such as wage and price increases may simultaneously affect HI tax income and the costs incurred by hospitals and other providers of medical care to HI beneficiaries. (The sensitivity of the trust fund's financial status to these factors is evaluated in sections III.B4a and III.B4b.) Other factors, such as the utilization of services by beneficiaries or the relative complexity of the services provided, can affect provider costs without affecting HI tax income. The sensitivity analysis shown in table III.B16 illustrates the financial effect of any combination of these factors that results in aggregate provider costs increasing by 1 percentage point faster or slower than the intermediate assumptions, relative to growth in taxable payroll under the intermediate assumptions.

Table III.B16.—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various Health Care Cost Growth Rate Assumptions

[As a percentage of taxable payroll]

	Annual cost/payroll relative growth rate		
Valuation period	−1 percentage point	0 percentage point	+1 percentage point
Summarized income rate:			
25-year: 2009-2033	3.47%	3.47%	3.47%
50-year: 2009-2058	3.46	3.46	3.46
75-year: 2009-2083	3.46	3.46	3.46
Summarized cost rate:			
25-year: 2009-2033	4.24	4.88	5.63
50-year: 2009-2058	4.82	6.29	8.34
75-year: 2009-2083	5.04	7.34	11.11
Actuarial balance:			
25-year: 2009-2033	−0.77	−1.40	−2.16
50-year: 2009-2058	−1.36	−2.83	−4.88
75-year: 2009-2083	−1.58	−3.88	−7.65

As illustrated in table III.B16, the financial status of the HI trust fund is extremely sensitive to the relative growth rates for health care service costs versus taxable payroll. For the 75-year period, the cost rate increases from 5.04 percent (for an annual cost/payroll

growth rate of 1 percentage point less than the intermediate assumptions) to 11.11 percent (for an annual cost/payroll growth rate of 1 percentage point more than the intermediate assumptions). Each 1.0-percentage-point increase in the assumed cost/payroll relative growth rate decreases the long-range actuarial balance, on average, by about 3.04 percent of taxable payroll.

C. SMI FINANCIAL STATUS

1. Total SMI

The Federal Supplementary Medical Insurance Trust Fund was established on July 30, 1965 as a separate account in the U.S. Treasury. All the financial operations of SMI are handled through this fund. Beginning in 2004, the trust fund consists of two separate accounts—one for Part B and one for Part D. The purpose of the two accounts is to ensure that funds from one part are not used to finance the other.

In order to evaluate the financial status of the SMI trust fund, each account needs to be assessed individually, since the financing rates for each part are established separately, their program benefits are quite different in nature, and there is no provision for transferring assets. Sections III.C2 and III.C3 will discuss the financial status of Parts B and D individually. The purpose of this section is to present the expected operations of the SMI trust fund in total, of both Part B and Part D combined, and to discuss the implications of continuing rapid SMI cost growth.

It is important to note that projected SMI expenditures are significantly understated because future reductions in physician payment rates, required under current law, are unrealistic and very likely to be overridden by Congress.[30] This annual report to Congress on the financial status of Medicare is necessarily based on current

[30]The Medicare Part B expenditure projections shown in this report reflect the direct impact of the substantial reductions in physician payment rates that would be required under the current-law sustainable growth rate (SGR) provisions. Secondary SGR impacts on Parts A, B, and D are not reflected, but could include (i) substantially reduced beneficiary access to physician services, (ii) a significant shift in enrollment to Medicare Advantage plans, (iii) an increase in emergency room services, (iv) an increase in mortality rates, and/or (v) an increase in hospital services. Such secondary impacts are excluded because of their speculative nature, the minimal likelihood that the physician payment reductions will occur in practice, and to retain the usefulness of the current-law projections for hospital and other non-physician expenditure categories.

law, including the substantial reduction in physician payments that would be required, absent any legislative change. This limitation should be considered in assessing the projected cost for the SMI trust fund and the Part B account in particular. Part B projections under two illustrative alternatives to the current "sustainable growth rate" payment mechanism are shown in a supplemental memorandum, prepared by the Office of the Actuary, CMS, at the Board of Trustees' request.[31]

The projected financial status for the Part B account reflects an unusual situation for the next few years. Specifically, about three-quarters of enrollees will not be subject to Part B premium increases for the next 1 to 3 years under a "hold-harmless" provision of current law. The hold-harmless provision prevents a beneficiary's net Social Security benefit from decreasing when the Part B premium increase would be larger than his or her cash benefit increase.[32]

No increase in Social Security benefits is expected for December 2009 as a result of significant decreases in the CPI during the last 5 months of 2008. Thus, the normal Part B premium increase for 2010 would be greater than the cost-of-living adjustment for all beneficiaries, and beneficiaries affected by the hold-harmless provision would not have to pay the higher premium level.

Future increases in the CPI are uncertain, particularly in light of the current economic situation. In a low inflation or deflationary period, zero cost-of-living adjustments for Social Security benefits would also occur in several more years. Under the Trustees' economic assumptions, the December benefit increases are projected to be 0 percent, 0 percent, and 1.4 percent for 2009 through 2011, respectively. Without action to respond to this situation, the loss of premium revenues, and the correspondingly lower level of matching general revenue transfers, could result in the depletion of Part B assets.

To prevent asset exhaustion and maintain an adequate contingency reserve for the Part B trust fund account under such circumstances, premiums would have to be raised substantially more than normal

[31]This memorandum is available on the CMS website at http://www.cms.hhs.gov/ReportsTrustFunds/05_alternativePartB.asp. No endorsement of these alternative payment mechanisms by the Board of Trustees, CMS, or the CMS Office of the Actuary should be inferred.

[32]New enrollees during the year, and enrollees with high incomes who are subject to the income-related premium adjustment, are not eligible for the hold-harmless provision. Also, State Medicaid programs pay the full premium for dual Medicare-Medicaid beneficiaries. About one-fourth of Part B enrollees are in these categories.

under current law. The increases would be paid only by higher-income Part B enrollees, new Part B enrollees, and the State Medicaid programs (on behalf of Part B enrollees who are also Medicaid enrollees). Under the intermediate economic assumptions, monthly premiums of $104.20, $120.20, and $111.50 are estimated for 2010 through 2012, respectively, compared to $96.40 in 2009. Such premium increases, paid by affected enrollees and Medicaid and matched by general revenue transfers, would prevent a decline in Part B assets and would maintain a contingency reserve at the level necessary to accommodate normal financial variation plus the elevated likelihood of the scheduled physician payment cuts being avoided through legislation, which would raise Part B costs after financing rates were established.

This approach to preventing exhaustion of the Part B trust fund account is the only one available under current law. Given its unorthodox nature, however, and the equity issues it would raise, Congress will likely consider other means of ensuring an adequate revenue supply for financing Part B.

a. 10-Year Actuarial Estimates (2009-2018)

Future operations of the SMI trust fund are projected using the Trustees' economic and demographic assumptions, as detailed in the OASDI Trustees Report, as well as other assumptions unique to SMI. Section IV.B presents an explanation of the effects of the Trustees' intermediate assumptions, and of the other assumptions unique to SMI, on the estimates in this report. In addition, although Part B financing rates have been set only through December 31, 2009, it is assumed that financing for future periods will be determined according to the statutory provisions described in section III.C2 for Part B and section III.C3 for Part D. For Part B, in particular, the effects of 0-percent cost-of-living adjustments for Social Security benefits, projected for 2010 and 2011, impact financing in 2010, 2011, and 2012 through the hold-harmless provision, as discussed earlier.

Table III.C1 shows the estimated operations of the SMI trust fund under the intermediate assumptions on a calendar-year basis through 2018. The estimates are based on current law, including estimated physician payment updates of −21.5 percent for 2010 and about −5.5 percent for 2011 through 2014. This table combines the operations of the Part B and Part D accounts to present the expected operations of the trust fund in total.

Table III.C1.—Operations of the SMI Trust Fund (Cash Basis) during Calendar Years 1970-2018

[In billions]

	Income					Expenditures			Trust fund	
Calendar year	Premium income[1]	General revenue[2]	Transfers from States	Interest and other[3,4]	Total	Benefit payments[4,5]	Administrative expense	Total	Net change	Balance at end of year[6]
Historical data:										
1970	$1.1	$1.1	—	$0.0	$2.2	$2.0	$0.2	$2.2	−$0.0	$0.2
1975	1.9	2.6	—	0.1	4.7	4.3	0.5	4.7	−0.1	1.4
1980	3.0	7.5	—	0.4	10.9	10.6	0.6	11.2	−0.4	4.5
1985	5.6	18.3	—	1.2	25.1	22.9	0.9	23.9	1.2	10.9
1990	11.3	33.0	—	1.6	45.9	42.5	1.5	44.0	1.9	15.5
1995	19.7	39.0	—	1.6	60.3	65.0	1.6	66.6	−6.3	13.1
2000	20.6	65.9	—	3.4	89.9	88.9[7]	1.8	90.7	−0.8	44.0
2001	22.8	72.8	—	3.1	98.6	99.7[7]	1.7	101.4	−2.8	41.3
2002	25.1	78.3	—	2.8	106.2	111.0[7]	2.2	113.2	−7.0	34.3
2003	27.4	86.4	—	2.0	115.8	123.8[7]	2.3	126.1	−10.3	24.0
2004	31.4	100.9	—	1.5	133.8	135.4	2.9	138.3	−4.5	19.4
2005	37.5	119.2	—	1.4	158.1	150.3	3.2	153.5	4.6	24.0
2006	46.3	171.9	$5.5	1.8	225.5	213.0	3.4	216.4	9.1	33.1
2007	50.8	178.4	6.9	2.3	238.4	225.2	3.4	228.6	9.7	42.9
2008	55.2	184.1	7.1	3.6	250.0	229.3[8]	3.3	232.6	17.4	60.3
Intermediate estimates:										
2009	63.0[9]	212.3[9]	7.9	3.1	286.3	262.2	3.4	265.6	20.7	81.0
2010	57.1[9]	193.2[9]	8.3	3.5	262.1	263.3	3.5	267.6[10]	−5.6	75.4
2011	66.5	221.8	8.8	4.3	301.4	275.9	3.7	279.6	21.8	97.2
2012	73.8	250.1	9.4	5.9	339.3	298.7	4.0	302.6	36.7	133.9
2013	76.7	260.1	10.1	7.8	354.7	321.5	4.2	325.8	29.0	162.9
2014	79.6	271.1	10.8	9.4	370.9	351.0	4.5	355.5	15.4	178.3
2015	89.4[9]	300.3[9]	11.5	10.4	411.6	368.6	4.8	373.4	38.2	216.5
2016	81.3[9]	283.7[9]	12.6	11.0	388.6	402.8	5.1	407.9	−19.4	197.1
2017	97.0	330.8	13.9	11.4	453.1	442.7	5.5	448.2	4.9	202.0
2018	107.2	364.4	15.4	11.8	498.8	487.5	5.8	493.3	5.5	207.5

[1]Premiums for Part D include amounts withheld from Social Security benefit checks or other Federal payments, as well as premiums paid directly to Part D plans by enrollees.

[2]Includes Part B general fund matching payments, Part D subsidy costs, and certain interest-adjustment items.

[3]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income. In 2008, includes an adjustment of $0.8 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.

[4]See footnote 2 of table III.B4.

[5]Includes costs of Peer Review Organizations from 1983 through 2001, and costs of Quality Improvement Organizations beginning in 2002. Values after 2005 include additional premiums collected from beneficiaries and transferred to private health plans, for which the monthly plan cost exceeds the benchmark amount, and Part D drug premiums to Medicare Advantage plans and private drug plans.

[6]The financial status of SMI depends on both the assets and the liabilities of the trust fund (see table III.C12).

[7]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.

[8]Benefits shown for 2008 are reduced by monies transferred ($8.5 billion) from the general fund of the Treasury to reimburse Part B for Part A hospice costs that were previously misallocated to the Part B trust fund account.

[9]Section 708 of the Social Security Act modifies the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January 3, 2010 will occur on December 31, 2009, and delivery of benefit checks normally due on January 3, 2016 will occur on December 31, 2015.

[10]Includes payment of estimated contingent liability payable to States (to reimburse them for payments they have made on behalf of beneficiaries) for probable unasserted claims that resulted from processing errors in which incorrect Medicare eligibility determinations were made ($0.8 billion).

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

b. 75-Year Actuarial Estimates (2009-2083)

Table III.C2 shows the estimated SMI incurred expenditures under the intermediate assumptions expressed as a percentage of GDP, for selected years over the calendar-year period 2008-2080. As noted, these current-law costs are understated, possibly by 13 to 15 percent in the short range and up to 7 percent after 2030, depending on what action Congress takes to address the substantial physician payment reductions required under current law. The 75-year projection period fully allows for the presentation of future trends that may reasonably be expected to occur, such as the impact of the large increase in enrollees after 2010 when the baby boom generation will reach eligibility age and begin to receive benefits.

Table III.C2.—SMI Expenditures (Incurred Basis) as a Percentage of the Gross Domestic Product[1]

Calendar year	SMI expenditures as a percentage of GDP
2008	1.67%
2009	1.87
2010	1.83
2011	1.81
2012	1.85
2013	1.89
2014	1.95
2015	1.95
2016	2.04
2017	2.14
2018	2.25
2020	2.48
2025	3.10
2030	3.69
2035	4.12
2040	4.43
2045	4.67
2050	4.89
2055	5.12
2060	5.39
2065	5.63
2070	5.85
2075	6.05
2080	6.23

[1]Expenditures are the sum of benefit payments and administrative expenses.

c. Implications of SMI Cost Growth

The SMI trust fund is adequately financed because beneficiary premiums and general revenue contributions, for both Part B and Part D, are established annually to cover the expected costs for the upcoming year. Should actual costs exceed those anticipated when the financing is determined, future rates can include adjustments to recover the shortfall. Likewise, should actual costs be less than those anticipated, the savings would be passed along in lower future rates. As long as the financing rates are reasonably set, both parts of the SMI trust fund will remain financially solvent under current law.

However, a critical issue for the SMI program is the impact of the rapid growth of SMI costs, which places steadily increasing demands on beneficiaries and taxpayers. This section compares the past and projected growth in SMI costs with GDP growth and assesses the implications of the rapid growth on beneficiaries and the budget of the Federal government. These implications are significantly understated because projected physician payment updates are unrealistically reduced under the current-law sustainable growth rate system.

Table III.C3 compares the growth in SMI expenditures with that of the economy as a whole. Based on the current-law estimates, SMI costs will continue to outpace growth in GDP. Compared to the last 10 years, the growth differential in the next 25 years is generally estimated to be somewhat smaller, reflecting the net effects of (i) the increase in the SMI population as the baby boom generation turns age 65, enrolls, and is eligible to receive benefits, (ii) the faster growth trend associated with the Part D prescription drug benefit, and (iii) the negative physician payment updates that would occur under current law during 2010-2015. The introduction of the full drug benefit in 2006 caused a one-time very large increase in the growth rate.

Table III.C3.—Average Annual Rates of Growth in SMI and the Economy
[In percent]

	SMI			U.S. Economy			
Calendar years	Beneficiary population	Per capita expenditures	Total expenditures	Total population	Per capita GDP	Total GDP	Growth differential[1]
Historical data:							
1968-1988	2.7%	13.6%	16.7%	1.0%	8.0%	9.0%	7.1%
1989-1998	1.5	6.5	8.2	1.0	4.4	5.5	2.5
1999-2008	1.3	10.3[2]	11.7[2]	1.0	4.0	5.0	6.4[2]
Intermediate estimates:							
2009-2018	2.5	5.0	7.6	0.9	3.6	4.5	3.0
2019-2033	2.2	6.2	8.6	0.7	3.8	4.6	3.8
2034-2058	0.7	5.1	5.8	0.5	4.1	4.6	1.2
2059-2083	0.8	4.5	5.3	0.5	4.1	4.5	0.7

[1]Excess of total SMI expenditure growth above total GDP growth, calculated as a multiplicative differential.
[2]Includes the addition of the prescription drug benefit to the SMI program in 2006. Excluding 2006, the average annual per capita expenditure increase is 7.7 percent, the total expenditure increase is 9.0 percent, and the growth differential is 4.0 percent.

Since SMI per capita benefits are expected to continue to grow faster than average income or per capita GDP, the premiums and coinsurance amounts paid by beneficiaries would generally represent a growing share of their total income. Figure III.C1 compares past and projected growth in average benefits for SMI versus Social Security. Amounts are also shown for the average SMI premium payments and average cost-sharing payments. (Each of these SMI

amounts increased in 2006 with the introduction of the Part D prescription drug benefit, as discussed below.) To facilitate comparison across long time periods, all values are shown in constant 2008 dollars.

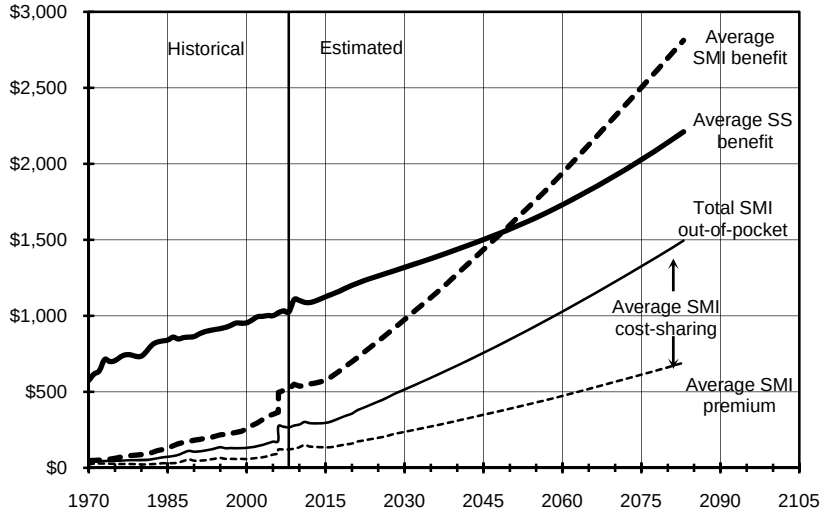
Over time, the average Social Security benefit tends to increase at about the rate of growth in average earnings. As noted previously, health care costs generally reflect increases in the earnings of health care professionals, other medical cost inflation, and growth in the utilization and intensity of services. As indicated in figure III.C1, average SMI benefits in 1970 were only about one-twelfth the level of average Social Security benefits but had grown to more than one-third by 2005. Under the intermediate projections, SMI benefits would continue increasing at a faster rate and would exceed the average Social Security retired worker benefit after 2047.

Average beneficiary premiums and cost-sharing payments for SMI will increase at about the same rate as average SMI benefits.[33] Thus, a growing proportion of beneficiaries' Social Security and other income would generally be required over time to pay total out-of-pocket costs for SMI, including both premiums and cost-sharing amounts. Most SMI enrollees have other income in addition to Social Security benefits. Other possible sources include earnings from employment, employer-sponsored pension benefits, and investment earnings. For simplicity, the comparisons in figure III.C1 are relative to Social Security benefits only; a comparison of average SMI premiums and cost-sharing amounts to average total beneficiary income would lead to similar conclusions. For illustration, the average Part B plus Part D premium in 2010 is estimated to equal about 12 percent of the average Social Security benefit but would increase to an estimated 31 percent in 2080. Similarly, an average cost-sharing amount in 2010 would be equivalent to about 15 percent of the Social Security benefit, increasing to about 36 percent in 2080.

It is important to note that the availability of SMI Part B and Part D benefits greatly reduces the costs that beneficiaries would otherwise face for health care services. The introduction of the prescription drug benefit increased beneficiaries' costs for SMI premiums and cost sharing, but reduced their costs for previously uncovered services by substantially more. The purpose of the illustrations in figure III.C1 is to highlight the impact of rapid cost growth for a given SMI benefit package.

[33]As a result, the ratio of average SMI out-of-pocket payments to average SMI benefits is projected to be nearly constant over time.

Figure III.C1.—Comparison of Average Monthly SMI Benefits, Premiums, and Cost Sharing to the Average Monthly Social Security Benefit
[Amounts in constant 2008 dollars]



The Social Security benefits shown in figure III.C1 are based on the average OASI benefit amount for all retired workers; individual retirees may receive significantly more or less than the average, depending on their past earnings. The value of SMI benefits to individual enrollees, and their cost-sharing payments, vary even more substantially, depending on their income, assets, and use of covered health services in a given year. In particular, Part B premiums and cost-sharing amounts for beneficiaries with very low incomes are paid by Medicaid, and (except for nominal copayments) the corresponding Part D amounts are paid through the Medicare low-income drug subsidy. Moreover, Part B beneficiaries with very high incomes pay a higher income-related premium beginning in 2007. For purposes of illustration, the average SMI benefit value and cost-sharing liability for all beneficiaries are shown. Results for individual beneficiaries can vary substantially from these illustrations. Further information on the nature of this comparison, and on the variations from the illustrative average results, is available in a memorandum by the CMS Office of the Actuary at http://www.cms.hhs.gov/ReportsTrustFunds/04_Beneficiaryoop.asp.

Another way to evaluate the implications of rapid SMI growth is to compare the government contributions to the SMI trust fund with total Federal income taxes (personal and corporate income taxes). Table III.C4 indicates that SMI general revenues in fiscal year 2008

were equivalent to about 10.9 percent of total Federal income taxes collected in that year. Should such taxes in the future maintain their historical average level of the last 50 years, relative to the national economy, then SMI general revenue financing in 2080 would represent over 40 percent of total income taxes, based on the intermediate projections.

Table III.C4.—SMI General Revenues as a Percentage of Personal and Corporate Federal Income Taxes

Fiscal year	Percentage of income taxes[1]
Historical data:	
1970	0.8%
1980	2.2
1990	5.9
2000	5.4
2008	10.9
Intermediate estimates:	
2010	12.2
2020	15.8
2030	24.0
2040	28.9
2050	31.9
2060	35.1
2070	38.1
2080	40.5

[1]Includes the Part D prescription drug benefit beginning in 2006.

These examples illustrate the significant impact that SMI expenditure growth has had to date on beneficiaries and the Federal Budget. Under current law, the projected SMI expenditure increases associated with the cost of providing health care generally, plus the impact of the baby boom generation reaching eligibility age, would continue to exert growing pressure, despite being understated due to the unrealistic current-law physician payment reductions. This outlook reinforces the Trustees' recommendation for development and enactment of reforms to reduce the rate of growth in SMI expenditures.

2. Part B Account

a. Financial Operations in Calendar Year 2008

A statement of the revenue and expenditures of the Part B account of the SMI trust fund in calendar year 2008, and of its assets at the beginning and end of the fiscal year, is presented in table III.C5.

Table III.C5.—Statement of Operations of the Part B Account in the SMI Trust Fund during Calendar Year 2008

[In thousands]

Total assets of the Part B account in the trust fund, beginning of period		$42,062,411
Revenue:		
Premiums from enrollees:		
Enrollees aged 65 and over	$42,334,847	
Disabled enrollees under age 65	7,897,350	
Total premiums		50,232,197
Premiums collected from Medicare Advantage participants		81,990
Government contributions:		
Enrollees aged 65 and over	120,431,969	
Disabled enrollees under age 65	26,367,764	
Total Government contributions		146,799,733
Other		10,620
Interest on investments		2,686,367
SSA interfund interest payment to SSA trust funds[1]		-1,208
CMS interfund interest payments[1]		-487
CMS interfund interest receipts[1]		1,340
Interest adjustment, hospice payment error correction[2]		812,234
Total revenue		$200,622,786
Expenditures:		
Net Part B benefit payments		$188,796,891
Principal adjustment, hospice payment error correction[2]		-8,483,566
Administrative expenses:		
Transfer to Medicaid[3]	396,612	
Treasury administrative expenses	284	
Salaries and expenses, CMS[4]	1,715,447	
Salaries and expenses, Office of the Secretary, HHS	35,347	
Salaries and expenses, SSA	827,356	
Medicare Payment Advisory Commission	4,224	
Railroad Retirement administrative expenses	7,880	
Transitional assistance administrative expenses	201	
Prescription drug administrative expenses	2,691	
Total administrative expenses		2,990,042
Total expenditures		$183,303,367
Net addition to the trust fund		17,319,419
Total assets of the Part B account in the trust fund, end of period		$59,381,831

[1]A positive figure represents a transfer to the Part B account in the SMI trust fund from the other trust funds. A negative figure represents a transfer from the Part B account in the SMI trust fund to the other funds.

[2]Amounts transferred from the general fund of the Treasury for Part A hospice costs that were misallocated to the Part B trust fund account.

[3]Represents amount transferred from the Part B account in the SMI trust fund to Medicaid to pay the Part B premium for certain qualified individuals, as legislated by the Balanced Budget Act of 1997.

[4]Includes administrative expenses of the carriers and intermediaries.

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

The total assets of the account amounted to $42.1 billion on December 31, 2007. During calendar year 2008, total revenue amounted to $200.6 billion, and total expenditures were $183.3 billion. Total assets thus increased $17.3 billion during the year, to $59.4 billion as of December 31, 2008. The increase in assets occurred because the Part B financing was set to intentionally increase the assets in the Part B account of the SMI trust fund to a more adequate level, and because the Part B account was reimbursed

for funds that were inadvertently used to pay a portion of Part A hospice benefits during 2005-2007.

(1) Revenues

The major sources of revenue for the Part B account are (i) contributions of the Federal government that are authorized to be appropriated and transferred from the general fund of the Treasury, and (ii) premiums paid by eligible persons who are voluntarily enrolled. Eligible persons aged 65 and over have been able to enroll in Part B since its inception in July 1966. Since July 1973, disabled persons who are under age 65 and who have met certain eligibility requirements have also been able to enroll.

Of the total Part B revenue, $50.2 billion represented premium payments by (or on behalf of) aged and disabled enrollees—an increase of 7.4 percent over the amount of $46.8 billion for the preceding year. This increase resulted from the growth in the number of persons enrolled in Part B and the 3.1-percent increase in the Part B premium to $96.40 for calendar year 2008. In addition, enrollees with high incomes were required to pay a larger share of average Part B per capita costs in 2008 compared to 2007.

Premiums paid for fiscal years 1967 through 1973 were matched by an equal amount of government contributions. Beginning July 1973, the amount of government contributions corresponding to premiums paid by each of the two groups of enrollees is determined by applying a "matching ratio," prescribed in the law for each group, to the amount of premiums received from that group. The ratio is equal to (i) twice the monthly actuarial rate applicable to the particular group of enrollees, minus the standard monthly premium rate, divided by (ii) the standard monthly premium rate.

Standard monthly premium rates and actuarial rates are promulgated each year by the Secretary of Health and Human Services. Past monthly premium rates and actuarial rates are shown in table III.C6, together with the corresponding percentages of Part B costs covered by the premium rate. Estimated future premium amounts under the intermediate set of assumptions appear in section V.C.

Table III.C6.—Standard Part B Monthly Premium Rates, Actuarial Rates, and Premium Rates as a Percentage of Part B Cost

		Monthly actuarial rate		Premium rates as a percentage of Part B cost	
	Standard monthly premium rate[1]	Enrollees aged 65 and over	Disabled enrollees under age 65	Enrollees aged 65 and over	Disabled enrollees under age 65
July 1966-March 1968	$3.00	—	—	50.0%	—
April 1968-June 1970	4.00	—	—	50.0	—
12-month period ending June 30 of					
1971	5.30	—	—	50.0	—
1972	5.60	—	—	50.0	—
1973	5.80	—	—	50.0	—
1974[2]	6.30	$6.30	$14.50	50.0	21.7%
1975	6.70	6.70	18.00	50.0	18.6
1976	6.70	7.50	18.50	44.7	18.1
1977	7.20	10.70	19.00	33.6	18.9
1978	7.70	12.30	25.00	31.3	15.4
1979	8.20	13.40	25.00	30.6	16.4
1980	8.70	13.40	25.00	32.5	17.4
1981	9.60	16.30	25.50	29.4	18.8
1982	11.00	22.60	36.60	24.3	15.0
1983	12.20	24.60	42.10	24.8	14.5
July 1983-December 1983	12.20	27.00	46.10	22.6	13.2
Calendar year					
1984	14.60	29.20	54.30	25.0	13.4
1985	15.50	31.00	52.70	25.0	14.7
1986	15.50	31.00	40.80	25.0	19.0
1987	17.90	35.80	53.00	25.0	16.9
1988	24.80	49.60	48.60	25.0	25.5
1989	31.90[3]	55.80	34.30	25.0[4]	40.7[4]
1990	28.60	57.20	44.10	25.0	32.4
1991	29.90	62.60	56.00	23.9	26.7
1992	31.80	60.80	80.80	26.2	19.7
1993	36.60	70.50	82.90	26.0	22.1
1994	41.10	61.80	76.10	33.3	27.0
1995	46.10	73.10	105.80	31.5	21.8
1996	42.50	84.90	105.10	25.0	20.2
1997	43.80	87.60	110.40	25.0	19.8
1998	43.80	87.90	97.10	24.9	22.6
1999	45.50	92.30	103.00	24.6	22.1
2000	45.50	91.90	121.10	24.8	18.8
2001	50.00	101.00	132.20	24.8	18.9
2002	54.00	109.30	123.10	24.7	21.9
2003	58.70	118.70	141.00	24.7	20.8
2004	66.60	133.20	175.50	25.0	19.0
2005	78.20	156.40	191.80	25.0	20.4
2006	88.50	176.90	203.70	25.0	21.7
2007	93.50	187.00	197.30	25.0	23.7
2008	96.40	192.70	209.70	25.0	23.0
2009	96.40	192.70	224.20	25.0	21.5

[1]The amount shown for each year represents the standard Part B premium paid by, or on behalf of, most Part B enrollees. It does not reflect other amounts that certain beneficiaries are required to pay, such as the income-related monthly adjustment amount to be paid by beneficiaries with high income, starting in 2007, and the premium surcharge to be paid by beneficiaries who enroll late. In addition, it does not reflect a reduction in premium for beneficiaries who are affected by the hold-harmless provision. These amounts are described in more detail in section V.C.

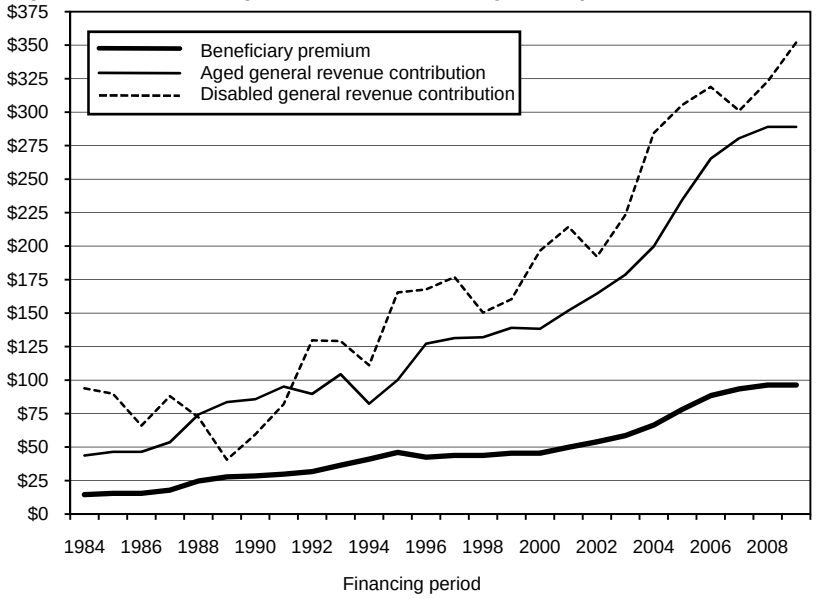
[2]In accordance with limitations on the costs of health care imposed under Phase III of the Economic Stabilization program, the standard premium rates for July and August 1973 were set at $5.80 and $6.10, respectively. Effective September 1973, the rate increased to $6.30.

[3]This rate includes the $4.00 catastrophic coverage monthly premium that was paid by most enrollees under the Medicare Catastrophic Coverage Act of 1988 (subsequently repealed).

[4]The premium rates as a percentage of Part B cost for calendar year 1989 apply to the non-catastrophic portion of the standard monthly premium rate.

Figure III.C2 is a graphical representation of the monthly per capita financing rates, for financing periods after 1983, for enrollees aged 65 and over and for disabled individuals under age 65. The graph shows the portion of the financing contributed by the beneficiaries and by general revenues. As indicated, general revenue financing is the largest income source for Part B.

Figure III.C2.—Part B Aged and Disabled Monthly Per Capita Trust Fund Income



Note: The amounts shown do not include the catastrophic coverage monthly premium rate for 1989.

In calendar year 2008, contributions received from the general fund of the Treasury amounted to $146.8 billion, which accounted for 73.2 percent of total revenue.

Another source of Part B revenue is interest received on investments held by the Part B account. The investment procedures of the Part B account are described later in this section. In calendar year 2008, $3.5 billion of revenue consisted of $2.7 billion in interest on the investments of the account and $0.8 billion in interest on funds to restore the Part B account for inadvertent payments made from the Part B account for a portion of the Part A hospice services.

The Managing Trustee may accept and deposit in the Part B account unconditional money gifts or bequests made for the benefit of the fund. Contributions in the amount of $11 million were made in calendar year 2008.

(2) Expenditures

Expenditures for Part B benefit payments and administrative expenses are paid out of the account. All expenses incurred by the Department of Health and Human Services, the Social Security Administration, and the Department of the Treasury in administering Part B are charged to the account. Such administrative duties include payment of benefits, fraud and abuse control activities, and experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of these services.

In addition, Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of Part B. Such costs are included in the account expenditures. The net worth of facilities and other fixed capital assets, however, is not carried in the statement of Part B assets presented in this report, since the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and is not, therefore, pertinent in assessing the actuarial status of the funds.

Of total Part B expenditures, $188.8 billion represented net benefits paid from the account for health services.[34] Net benefits increased 7.0 percent over the corresponding amount of $176.4 billion paid during the preceding calendar year. In addition to growth attributable to the number of beneficiaries, and increases in volume and intensity of services, this increase reflects (i) the impact of the Medicare Improvement for Patients and Providers Act, which increased payments to physicians starting in 2008, and (ii) increases in certain other Part B benefit categories. Additional information on Part B benefits by type of service is available in section IV.B1.

An adjustment of $8.5 billion in favor of the Part B account was made from the general fund of the Treasury, effective June 30, 2008. This adjustment was accounted for as a negative Part B expenditure and represents the repayment of the Part B account for the inadvertent payment from this account of a portion of Part A hospice benefits from 2005 through 2007.

[34]Net benefits equal the total gross amounts initially paid from the trust fund during the year less recoveries of overpayments identified through fraud and abuse control activities.

The remaining $3.0 billion of expenditures was for administrative expenses and represented 1.6 percent of total Part B expenditures in 2008. Administrative expenses were made up of (i) the net Part B administrative expenses, after adjustments to the preliminary allocation of administrative costs among the Social Security and Medicare trust funds and the general fund of the Treasury, (ii) the net transitional drug assistance administrative expenses, and (iii) certain other net Part D administrative expenses. The start-up administrative expenses for transitional assistance and Part D were paid out of the Part B account, as specified by the MMA.

(3) Actual experience versus prior estimates

Table III.C7 compares the actual experience in calendar year 2008 with the estimates presented in the 2007 and 2008 annual reports. A number of factors can contribute to differences between estimates and subsequent actual experience. In particular, actual values for key economic and other variables can differ from assumed levels, and legislative and regulatory changes may be adopted after a report's preparation. Table III.C7 indicates that actual Part B benefit payments were slightly higher than what was estimated in the 2007 and 2008 reports, as legislation increased physician payments in 2008 after these reports were issued. Actual premiums and actual government contributions were nearly identical to those estimated in both reports.

Table III.C7.—Comparison of Actual and Estimated Operations of the Part B Account in the SMI Trust Fund, Calendar Year 2008

[Dollar amounts in millions]

		Comparison of actual experience with estimates for calendar year 2008 published in:			
		2008 report		2007 report	
Item	Actual amount	Estimated amount[1]	Actual as a percentage of estimate	Estimated amount[1]	Actual as a percentage of estimate
Premiums from enrollees	$50,232	$49,995	100%	$50,259	100%
Government contributions	146,800	146,448	100	145,444	101
Benefit payments	188,797	184,468	102	187,667	101

[1]Under the intermediate assumptions.

(4) Assets

The portion of the Part B account that is not needed to meet current expenditures for benefits and administration is invested in interest-bearing obligations of the U.S. Government.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the account. The law requires that these 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 immediately preceding the date of such issue), on all marketable interest-bearing obligations of the United States forming a part of the public debt that are not due or callable until after 4 years from the end of that month. Since the inception of the SMI trust fund, the assets have always been invested in special public-debt obligations.[35] Table V.E10, presented in appendix E, shows the assets of the Part B account at the end of fiscal years 2007 and 2008.

b. 10-Year Actuarial Estimates (2009-2018)

Future operations of the Part B account are projected using the Trustees' economic and demographic assumptions, as detailed in the OASDI Trustees Report, as well as other assumptions unique to Part B. Section IV.B1 presents an explanation of the effects of these assumptions on the estimates in this report. It is also assumed that financing for future periods will be determined according to the statutory provisions described in section III.C2a, although Part B financing rates have been set only through December 31, 2009. However, unusual steps may be required for the next few years in order to maintain an adequate financial balance in the Part B account as a result of the "hold-harmless" provision of current law.

The hold-harmless provision prevents a beneficiary's net Social Security benefit from decreasing when the Part B premium increase would be larger than his or her cash benefit increase. No increase in Social Security benefits is expected for December 2009 as a result of significant decreases in the CPI during the last 5 months of 2008. Thus, the normal Part B premium increase for 2010 would be greater than the cost-of-living adjustment for all beneficiaries, and beneficiaries affected by the hold-harmless provision would not have to pay the higher premium level. As a result, Part B premiums and matching general revenues would not increase sufficiently to match the expected growth in Part B expenditures—particularly if the scheduled physician fee reduction is overridden.

Depending on future increases in the CPI, zero cost-of-living adjustments for Social Security benefits could also occur for December 2010 and possibly December 2011. Under the Trustees' economic assumptions, the December benefit increases are projected

[35]Investments may also be made in obligations guaranteed as to both principal and interest by the United States, including certain federally sponsored agency obligations.

to be 0 percent, 0 percent, and 1.4 percent for 2009 through 2011, respectively.

To prevent asset exhaustion and maintain an adequate contingency reserve for the Part B trust fund account under such circumstances, premiums would have to be raised substantially more than normal under current law. The increases would be paid only by those Part B enrollees who are not subject to the hold-harmless provision, such as high-income enrollees, the State Medicaid programs (on behalf of Part B enrollees who are also Medicaid enrollees), and new enrollees. Under the intermediate economic assumptions, monthly premiums of $104.20, $120.20, and $111.50 are estimated for 2010 through 2012, respectively, compared to the 2009 premium of $96.40. Such premium increases, paid by affected enrollees and Medicaid and matched by general revenue transfers, would prevent a decline in Part B assets and would maintain a contingency reserve at the level necessary to accommodate normal financial variation plus the elevated likelihood of legislative action that would raise costs after financing rates had been established.[36]

For the benefit expenditure estimates and associated financing, it is assumed that current statutory provisions are maintained, despite the extremely low probability of the substantial current-law physician payment reductions actually occurring. Only the direct impacts of the negative payment updates on physician expenditures are included. Potential secondary effects on other Medicare outlays have not been incorporated.

As noted, the Part B expenditures are substantially understated in the short range (and significantly so in the long range) because projected current-law physician payment rates are unrealistically reduced under the sustainable growth rate system—by 21.5 percent in 2010, and about 5.5 percent for 2011 through 2014. In practice, Congress is virtually certain to prevent some or all of these scheduled reductions through new legislation, as it has for 2003 through 2009. Depending on the specific legislated changes, Part B costs and

[36]In the highly unlikely event that the current-law negative physician payment updates are allowed to occur, no increase in Part B financing would be needed for 2010 and 2011 above the 2009 financing levels in order to maintain an adequate level of assets in the Part B account. However, Part B financing rates are set prospectively, and they need to include a margin that accounts for the magnitude and probability of legislative changes that would increase Part B costs after the financing had been determined. For 2003 through 2009, Congress has avoided negative updates, which were smaller than the currently scheduled physician payment cut of about −21.5 percent.

revenues could be about 18 to 21 percent higher in 2015 than shown here under current law.

Table III.C8 shows the estimated operations of the Part B account under the intermediate assumptions on a calendar-year basis through 2018. As mentioned previously, the estimates for 2010 and later should be interpreted cautiously, given the near certainty of further legislation addressing physician payments.

Table III.C8.—Operations of the Part B Account in the SMI Trust Fund (Cash Basis) during Calendar Years 1970-2018

[In billions]

	Income				Expenditures			Account	
Calendar year	Premium income	General revenue[1]	Interest and other[2,3]	Total	Benefit payments[3,4]	Adminis-trative expenses	Total	Net change	Balance at end of year[5]
Historical data:									
1970	$1.1	$1.1	$0.0	$2.2	$2.0	$0.2	$2.2	−$0.0	$0.2
1975	1.9	2.6	0.1	4.7	4.3	0.5	4.7	−0.1	1.4
1980	3.0	7.5	0.4	10.9	10.6	0.6	11.2	−0.4	4.5
1985	5.6	18.3	1.2	25.1	22.9	0.9	23.9	1.2	10.9
1990	11.3	33.0	1.6	45.9	42.5	1.5	44.0	1.9	15.5
1995	19.7	39.0	1.6	60.3	65.0	1.6	66.6	−6.3	13.1
2000	20.6	65.9	3.4	89.9	88.9[6]	1.8	90.7	−0.8	44.0
2001	22.8	72.8	3.1	98.6	99.7[6]	1.7	101.4	−2.8	41.3
2002	25.1	78.3	2.8	106.2	111.0[6]	2.2	113.2	−7.0	34.3
2003	27.4	86.4	2.0	115.8	123.8[6]	2.3	126.1	−10.3	24.0
2004	31.4	100.4	1.5	133.3	135.0	2.9	137.9	−4.5	19.4
2005	37.5	118.1	1.4	157.0	149.2	3.2	152.4	4.6	24.0
2006	42.9	132.7	1.8	177.3	165.9	3.1	169.0	8.3	32.3
2007	46.8	139.6	2.2	188.7	176.4	2.5	178.9	9.7	42.1
2008	50.2	146.8	3.6	200.6	180.3[7]	3.0	183.3	17.3	59.4
Intermediate estimates:									
2009	56.7[8]	163.8[8]	3.1	223.6	199.6	3.0	202.6	21.0	80.3
2010	49.8[8]	142.6[8]	3.4	195.9	197.5	3.1	201.4[9]	−5.6	74.7
2011	58.1	166.3	4.3	228.7	203.6	3.3	206.9	21.8	96.5
2012	64.3	189.3	5.9	259.4	219.3	3.5	222.8	36.6	133.1
2013	66.2	194.0	7.8	268.0	235.3	3.8	239.1	28.9	162.0
2014	68.0	198.7	9.4	276.1	256.7	4.0	260.7	15.4	177.4
2015	76.0[8]	220.4[8]	10.3	306.8	264.3	4.3	268.6	38.1	215.5
2016	67.4[8]	195.5[8]	10.9	273.9	288.8	4.6	293.4	−19.5	196.0
2017	81.1	233.4	11.3	325.8	316.1	4.9	321.0	4.8	200.8
2018	89.5	256.6	11.8	357.8	347.2	5.2	352.5	5.3	206.2

[1]General fund matching payments, plus certain interest-adjustment items.

[2]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income. In 2008, includes an adjustment of $0.8 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.

[3]See footnote 2 of table III.B4.

[4]Includes costs of Peer Review Organizations from 1983 through 2001, and costs of Quality Improvement Organizations beginning in 2002.

[5]The financial status of Part B depends on both the assets and the liabilities of the trust fund (see table III.C12).

[6]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.

[7]Benefits shown for 2008 are reduced by monies transferred ($8.5 billion) from the general fund of the Treasury to reimburse Part B for Part A hospice costs that were previously misallocated to the Part B trust fund account.

[8]Section 708 of the Social Security Act modifies the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January 3, 2010 will occur on December 31, 2009. Consequently, the

Part B premiums withheld from the checks and the associated general revenue contributions will be added to the SMI trust fund on December 31, 2009. Likewise, January 3, 2016 will fall on a Sunday, and therefore delivery of the majority of Social Security checks is expected to occur on December 31, 2015.
[9]Includes payment of estimated contingent liability payable to States (to reimburse them for payments they have made on behalf of beneficiaries) for probable unasserted claims that resulted from processing errors in which incorrect Medicare eligibility determinations were made ($0.8 billion).

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

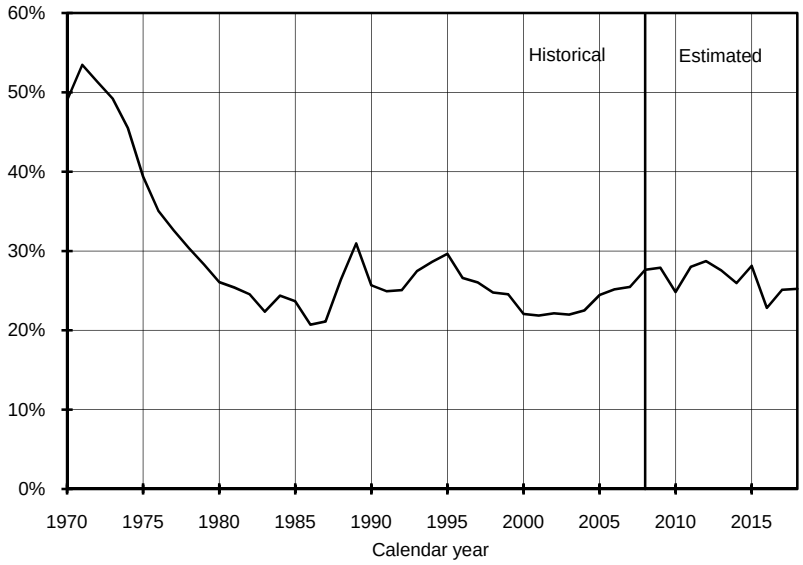
As shown in table III.C8, the Part B account is estimated to increase during 2009 to an estimated $80.3 billion by the end of the year. The beneficiary premiums and actuarial rates for calendar year 2009 were promulgated with specific margins to maintain an adequate asset level. [37]

Starting in 2010, the Part B projections are heavily influenced by the current-law physician payment updates, which are scheduled to be −21.5 percent in 2010 and about −5.5 percent each year for 2011 through 2014. These updates are nearly certain to be overridden by legislation, as has occurred in each of the past 7 years. However, the Part B financing margins, beginning in 2010, are set in such a way that the account assets will increase with the estimated current-law expenditures plus a significant margin to adjust for the very strong probability that Part B expenditures will be higher, so that the preferred contingency level will be maintained. This high contingency margin is used for 2010 through 2012 in order to (i) reflect the best estimate of the 2010 Part B financing, and (ii) capture the impact of the hold-harmless provision on Part B. Therefore, table III.C8 shows rapidly increasing Part B asset levels, as expenditures reflect the current-law physician cuts and income reflects current-law expenditures plus a large margin for the reasonable expectation that the current-law cuts will not occur.[38]

The statutory provisions governing Part B financing have changed over time. Most recently, the Balanced Budget Act of 1997 provided for the permanent establishment of the standard Part B premium at the level of about 25 percent of average expenditures for beneficiaries 65 and over. Figure III.C3 shows historical and projected ratios of premium income to Part B expenditures.

[37]The unusually large increase in assets estimated for 2009, as shown in table III.C8, is primarily due to receipt of 13 months' premium and general revenues.
[38]This rise in assets is unlikely to occur. Each year as the current-law physician payment cuts are either implemented or overridden by legislation, the Part B financing will be determined in a way that balances stability in the premium increases with financial soundness.

Figure III.C3.—Premium Income as a Percentage of Part B Expenditures



The amount and rate of growth of benefit payments have been a source of some concern for many years. In table III.C9, amounts of payments are considered in the aggregate, on a per capita basis, and relative to the Gross Domestic Product (GDP). Rates of growth are shown historically and for the next 10 years, based on the intermediate estimates under current law, which is likely to change to prevent scheduled substantial reductions in physician fees.

Part B benefit growth has averaged 7.8 percent annually over the past 5 years. The large increases in recent years arose, in part, due to the inadvertent payment of certain Part A hospice benefits by Part B during 2005, 2006, and 2007. (These inadvertent payments continued until October 2007.) During 2008, Part B benefits grew 2.2 percent on an aggregate basis and decreased to 1.26 percent of GDP. This relatively slow growth rate is attributable to the $9.3-billion trust fund reimbursement to correct for the misallocation of hospice costs. Excluding the impact of this adjustment, Part B benefits increased by 7.0 percent in 2008—a relatively rapid rate of growth considering that physician payment rates increased by only 0.5 percent.

Table III.C9.—Growth in Part B Benefits (Cash Basis) through December 31, 2018

Calendar year	Aggregate benefits [billions]	Percent change	Per capita benefits	Percent change	Part B benefits as a percentage of GDP
Historical data:					
1970	$2.0	5.9%	$101	3.5%	0.19%
1975	4.3	28.8	180	24.6	0.26
1980	10.6	22.1	390	19.3	0.38
1985	22.9	16.7	768	14.5	0.54
1990	42.5	10.9	1,304	9.1	0.73
1995	65.0	10.8	1,823	9.2	0.88
2000	88.9[1]	10.1	2,381	9.2	0.91
2001	99.7[1]	12.1	2,646	11.1	0.98
2002	111.0[1]	11.3	2,922	10.4	1.06
2003	123.8[1]	11.6	3,209	9.8	1.13
2004	135.0	9.0	3,450	7.5	1.16
2005	149.2	10.6	3,754	8.8	1.20
2006	165.9	11.2	4,111	9.5	1.26
2007	176.4	6.3	4,297	4.5	1.28
2008	180.3[2]	2.2	4,319	0.5	1.26
Intermediate estimates:					
2009	199.6	13.1	4,704	9.5	1.42
2010	197.5	−1.0	4,576	−2.7	1.35
2011	203.6	3.1	4,626	1.1	1.32
2012	219.3	7.7	4,851	4.9	1.34
2013	235.3	7.3	5,056	4.2	1.36
2014	256.7	9.1	5,366	6.1	1.40
2015	264.3	3.0	5,377	0.2	1.37
2016	288.8	9.3	5,718	6.3	1.43
2017	316.1	9.5	6,089	6.5	1.50
2018	347.2	9.8	6,505	6.8	1.57

[1]See footnote 6 of table III.C8.
[2]See footnote 7 of table III.C8.

The projected growth in Part B benefits slows dramatically during the next 7 years under current law. This deceleration occurs principally because the physician fee schedule payment updates are determined based on the sustainable growth rate system (SGR). The SGR requires that future physician payment increases be adjusted for past actual physician spending relative to a target spending level.[39] The SGR provision was enacted in 1997, and by 2002 actual cumulative physician spending exceeded the target levels. This comparison was subsequently exacerbated by further significant growth in the volume and intensity of physician services. In addition, the physician updates legislated in the Medicare Modernization Act, the Consolidated Appropriations Resolution, the Deficit Reduction Act, the Tax Relief and Health Care Act, and the Medicare, Medicaid, and SCHIP Extension Act all raised actual payment levels, but not all the updates raised the target spending levels. To address the accumulated difference between actual and allowed spending levels, the SGR mechanism will require projected physician payment updates of about −21.5 percent for 2010, and about −5.5 percent for

[39]Additional information about the SGR system and the physician spending targets including the original target levels is available at http://www.cms.hhs.gov/SustainableGRatesConFact/Downloads/sgr2010p.pdf.

each year from 2011 through 2014. Multiple years of significant reductions in physician payments per service are extremely unlikely to occur before legislative changes intervene, but these payment reductions are required under the current-law SGR system and are included in the physician fee schedule projections. Consequently, the current-law Part B projections shown in this report are expected to substantially understate actual future expenditures in 2010-2015 and (to a lesser extent) thereafter. The degree of understatement depends on the specific actions subsequently taken by Congress but could be about 18 to 21 percent in 2015, decreasing to roughly 10 percent or less for 2030 and later.

Despite the unrealistic statutory reductions to physician payments, Part B costs in the 2009 annual report are projected to continue increasing faster than GDP in most years, as indicated in table III.C9.

Since future economic, demographic, and health care usage and cost experience may vary considerably from the intermediate assumptions on which the preceding cost estimates were based, estimates have also been prepared using two alternative sets of assumptions: low-cost and high-cost. The estimated operations of the Part B account for all three alternatives are summarized in table III.C10. The assumptions underlying the intermediate assumptions are presented in substantial detail in section IV.B1. The assumptions used in preparing estimates under the low-cost and high-cost alternatives are also summarized in that section.

Table III.C10.—Estimated Operations of the Part B Account in the SMI Trust Fund during Calendar Years 2008-2018, under Alternative Sets of Assumptions

[Dollar amounts in billions]

Calendar year	Premiums from enrollees	Other income[1]	Total income	Total expenditures	Balance in fund at end of year
Intermediate:					
2008[2]	$50.2	$150.4	$200.6	$183.3	$59.4
2009	56.7	166.9	223.6	202.6	80.3
2010	49.8[3]	146.0[3]	195.9	201.4	74.7
2011	58.1[3]	170.6[3]	228.7	206.9	96.5
2012	64.3	195.2	259.4	222.8	133.1
2013	66.2	201.8	268.0	239.1	162.0
2014	68.0	208.0	276.1	260.7	177.4
2015	76.0	230.7	306.8	268.6	215.5
2016	67.4[3]	206.5[3]	273.9	293.4	196.0
2017	81.1[3]	244.7[3]	325.8	321.0	200.8
2018	89.5	268.3	357.8	352.5	206.2
Low-cost:					
2008[2]	$50.2	$150.4	$200.6	$183.3	$59.4
2009	56.6	166.7	223.3	196.9	85.8
2010	48.7[3]	143.7[3]	192.3	192.5	85.7
2011	54.3[3]	161.0[3]	215.4	193.7	107.3
2012	58.4	178.3	236.7	204.3	139.7
2013	60.1	180.3	240.4	214.4	165.7
2014	61.8	187.1	248.9	228.1	186.5
2015	68.9	207.4	276.3	228.0	234.8
2016	59.8[3]	183.1[3]	242.9	243.5	234.2
2017	67.1[3]	205.3[3]	272.4	260.5	246.0
2018	69.7	214.2	283.9	279.7	250.2
High-cost:					
2008[2]	$50.2	$150.4	$200.6	$183.3	$59.4
2009	57.1	167.9	225.0	210.1	74.3
2010	54.7[3]	158.4[3]	213.1	212.4	75.0
2011	65.6[3]	186.8[3]	252.3	222.4	105.0
2012	70.0	211.5	281.4	240.3	146.1
2013	72.0	215.8	287.8	264.5	169.4
2014	75.6	230.7	306.3	302.2	173.5
2015	89.5	270.9	360.4	325.6	208.3
2016	85.4[3]	257.7[3]	343.0	367.7	183.6
2017	105.6[3]	314.6[3]	420.1	413.8	189.9
2018	119.0	352.8	471.8	464.7	197.0

[1]Other income contains government contributions and interest.
[2]Figures for 2008 represent actual experience.
[3]See footnote 8 of table III.C8.

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

The three sets of assumptions were selected in order to indicate the general range in which the cost might reasonably be expected to fall. The low- and high-cost alternatives provide for a fairly wide projected range. Actual experience, if current law were allowed to continue, would be expected to fall within the range, but no assurance can be given that this would be the case, considering the wide variations in experience that have occurred since Part B began and the potential secondary effects of the current-law physician payment updates that are not included in this report. Although physician fees would be reduced substantially by the SGR system under current law, actual changes in utilization and/or intensity of physician and other Part B services could readily result in costs as high or low as the current-law

alternative projections. Under the more likely scenario, actual costs would probably fall outside of this range during 2010-2014 as a result of new legislation, particularly in light of the near certainty that the current-law physician payment updates will be overridden by legislation.[40]

Part B expenditures are estimated to grow significantly faster than GDP in most years under the intermediate and high-cost assumptions. Based on the low-cost assumptions, expenditures would increase more slowly than GDP in 2010 through 2015.

The alternative projections shown in table III.C10 illustrate two important aspects of the financial operations of the Part B account:

- Despite the widely differing assumptions underlying the three alternatives, the balance between Part B income and expenditures remains relatively stable. Under the low-cost assumptions, for example, by 2018 both income and expenditures would be around 20 percent lower than projected under the intermediate assumptions. The corresponding amounts under the high-cost assumptions would be around 32 percent higher than the intermediate estimates.

  This result occurs because the premiums and general revenue contributions underlying Part B financing are reestablished annually to match each year's anticipated incurred benefit costs and other expenditures, plus a margin that reflects the uncertainty of the projection. Thus, Part B income will automatically track Part B expenditures fairly closely, regardless of the specific economic and other conditions.

- As a result of the close matching of income and expenditures described above, projected account assets show similar, stable patterns of change under all three sets of assumptions. The annual adjustment of premiums and general revenue contributions permits the maintenance of a Part B account balance that, while typically relatively small, is sufficient to guard against chance fluctuations.

[40]Prior Trustees Reports have also included an appendix with supplementary information on the possible range of future Part B expenditures, projected using a statistical analysis of past variations in cost growth rates. Because of the limited usefulness of Part B projections under current law, this auxiliary analysis has not been prepared this year.

- It should be noted, however, that continued enactment of legislation to prevent a reduction in physician fees, after financing for a year has been set, jeopardizes the adequacy of Part B assets. The substantially increased uncertainty surrounding future Part B expenditures requires larger than usual margins in the financing and, therefore, larger than usual projected Part B account balances.

- Past legislative actions to override scheduled physician fee reductions contributed to a substantial decline in Part B assets, which, minus corresponding liabilities, in 2004 reached their lowest level relative to annual expenditures in nearly 30 years. Restoration of assets to the 2008 adequate level required substantial premium and general revenue increases over several years.

Adequacy of Part B Financing Established for Calendar Year 2009

The traditional concept of financial adequacy, as it applies to Part B, is closely related to the concept as it applies to many private group insurance plans. Part B is somewhat similar to yearly renewable term insurance, with financing from premium income paid by the enrollees and from income contributed from general revenue by the Federal government. Consequently, the income during a 12-month period for which financing is being established should be sufficient to cover the costs of services expected to be rendered during that period (including associated administrative costs), even though payment for some of these services will not be made until after the period closes. The portion of income required to cover those benefits not paid until after the end of the year is added to the account. Thus, the assets that are in the account at any time should be no less than the costs of the benefits and the administrative expenses incurred but not yet paid.

Since the income per enrollee (premium plus government contribution) is established prospectively each year, it is subject to projection error. Additionally, legislation enacted after the financing has been established, but effective for the period for which financing has been set, may affect costs. Account assets, therefore, should be maintained at a level that is adequate to cover not only the value of incurred but unpaid expenses but also a reasonable degree of variation between actual and projected costs (in case actual costs exceed projected).

The actuarial status or financial adequacy of the Part B account is traditionally evaluated over the period for which the enrollee

premium rates and level of general revenue financing have been established. The primary tests are that (i) the assets and income for years for which financing has been established should be sufficient to meet the projected benefits and associated administrative expenses incurred for that period; and (ii) the assets should be sufficient to cover projected liabilities that have not yet been paid as of the end of the period. If these adequacy tests are not met, Part B can still continue to operate if the account remains at a level adequate to permit the payment of claims as presented. However, to protect against the possibility that costs will be higher than assumed, assets should be sufficient to include contingency levels that cover a reasonable degree of variation between actual and projected costs.

As noted above, the tests of financial adequacy for Part B rely on the incurred experience of the account, including a liability for the costs of services performed in a year but not yet paid. Table III.C11 shows the estimated transactions of the account on an incurred basis. The incurred experience must be viewed as an estimate, even for historical years.[41]

[41]Part B experience is substantially more difficult to determine on an incurred basis than on a cash basis. Payment for some services is reported only on a cash basis, and the incurred experience must be inferred from the cash payment information. Moreover, for recent time periods, the tabulations of bills are incomplete due to normal processing time lags.

Table III.C11.—Estimated Part B Income and Expenditures (Incurred Basis) for Financing Periods through December 31, 2009

[In millions]

	Income				Expenditures			
Financing period	Premium income	General revenue	Interest and other	Total	Benefit payments	Adminis-trative expenses	Total	Net operations in year
Historical data:								
12-month period ending June 30,								
1970	$936	$936	$12	$1,884	$1,928	$213	$2,141	−$257
1975	1,887	2,396	105	4,388	3,957	438	4,395	−7
1980	2,823	6,627	421	9,871	9,840	645	10,485	−614
Calendar year								
1985	5,613	18,243	1,248	25,104	22,750	986	23,736	1,368
1990	11,320	33,035	1,558	45,913	42,577	1,541	44,118	1,795
1995	19,717	45,743	1,739	67,199	64,918	1,607	66,525	674
2000	20,555	65,898	3,450	89,903	89,757[1]	1,770	91,526	−1,623
2001	22,764	72,793	3,071	98,629	100,286[1]	2,008	102,294	−3,665
2002	25,066	78,338	2,792	106,196	112,223[1]	2,196	114,419	−8,223
2003	27,402	86,402	1,992	115,796	122,094[1]	2,318	124,412	−8,616
2004	31,435	100,418	1,495	133,347	137,822	2,893	140,715[2]	−7,368
2005	37,535	118,091	1,365	156,992	149,515	3,185	152,700	4,291
2006	42,853	132,673	1,791	177,317	167,244	3,062	170,306	7,012
2007	46,773	148,717[3]	2,238	197,728	177,515	2,492	180,007	17,721
2008	50,232	137,731[3]	3,591	191,554	178,775	2,990	181,765	9,789
Intermediate estimates:								
2009	52,146	150,825	3,090	206,061	200,233	2,995	203,229	2,832

[1]See footnote 7 of table III.C8.

[2]Includes $0.8 billion assumed to be paid to States in 2009 to correct for Medicaid overpayments arising from administrative errors in adjudicating certain disability benefits.

[3]A July 1, 2008 general revenue transfer was made in the amount of $9.3 billion to restore the Part B account assets for hospice benefit accounting errors that occurred from 2005 through September 2007. An estimated $9.1 billion was due but unpaid by the end of 2007 when the error was discovered, and an additional estimated $0.2 billion in interest accrued until July 1, 2008 when the payment was made.

The liability outstanding at any time, for the cost of services performed for which no payment has been made, is referred to as "benefits incurred but unpaid." Estimates of the amount of benefits incurred but unpaid as of the end of each financing period, and of the administrative expenses related to processing these benefits, appear in table III.C12. In some years, account assets have not been as large as liabilities. Nonetheless, the fund has remained positive, allowing claims to be paid.

Table III.C12.—Summary of Estimated Part B Assets and Liabilities as of the End of the Financing Period, for Periods through December 31, 2009

[Dollar amounts in millions]

	Balance in trust fund	General revenue due but unpaid	Total assets	Benefits incurred but unpaid	Administrative costs incurred but unpaid	Total liabilities	Excess of assets over liabilities	Ratio[1]
Historical data:								
As of June 30,								
1970	$57	$15	$72	$567	—	$567	−$495	−0.21
1975	1,424	67	1,491	1,257	$14	1,271	—	0.04
1980	4,657	—	4,657	2,621	188	2,809	1,848	0.15
As of December 31,								
1985	10,924	—	10,924	3,142	−38	3,104	7,820	0.28
1990	15,482	—	15,482	4,060	20	4,080	11,402	0.24
1995	13,130	6,893[2]	20,023	4,282	−214	4,068	15,954	0.23
2000	44,027	—	44,027	7,176	−285	6,891	37,136	0.36
2001	41,269	—	41,269	7,799	—	7,799	33,471	0.29
2002	34,301	—	34,301	9,053	—	9,053	25,248	0.20
2003	23,953	—	23,953	7,322	—	7,322	16,631	0.12
2004	19,430	—	19,430	10,166	—	10,166	9,264	0.06
2005	24,008	—	24,008	10,453	—	10,453	13,555	0.08
2006	32,325	—	32,325	11,758	—	11,758	20,567	0.11
2007	42,062	9,069[3]	51,131	12,617	—	12,617	38,515	0.21
2008	59,382	—	59,382	11,306	—	11,306	48,076	0.24
Intermediate estimates:								
2009	62,840	—	62,840	11,932	—	11,932	50,909	0.25

[1]Ratio of the excess of assets over liabilities to the following year's total incurred expenditures.

[2]This amount includes both the principal of $6,736 million and the accumulated interest through December 31, 1995 for the shortfall in the fiscal year 1995 appropriation for government contributions. Normally, this transfer would have been made on December 31, 1995 and, therefore, would have been reflected in the trust fund balance. However, due to absence of funding, the transfer of the principal and the appropriate interest was delayed until March 1, 1996.

[3]Certain Part A benefits were erroneously paid by Part B from 2005 through September 2007. Therefore, the Part B account of the SMI trust fund received a general revenue transfer on July 1, 2008 of $9,296 million to restore the Part B account. Beginning in 2007, the year in which the errors were discovered, these amounts to be repaid to the Part B account are recognized. The 2007 amount shown includes both the estimated principal of $8,484 million and the estimated accumulated interest through December 31, 2007.

The amount of assets minus liabilities can be compared with the estimated incurred expenditures for the following calendar year to form a relative measure of the Part B account's financial status. The last column in table III.C12 shows such ratios for past years and the estimated ratio at the end of 2009. Past studies have indicated that a ratio of roughly 15-20 percent is sufficient to protect against unforeseen contingencies, such as unusually large increases in Part B expenditures. At the end of 2008, the Part B reserve ratio was 24 percent, or above normal requirements.

This favorable result for the financial status of the Part B account is due, in part, to the sustained efforts to rebuild account assets following the deficits experienced through 2004, as described previously. In addition, the correction of the Part A hospice payment error included a transfer effectively from the HI trust fund to the Part B account, which totaled $9.3 billion and was received in

July 2008. In the absence of this transfer, the reserve ratio at the end of 2008 would have been approximately 19 percent.

Part B financing has been established through December 31, 2009 and was designed with specific margins to maintain a contingency reserve slightly above the range of 15-20 percent. Incurred income is now estimated to exceed incurred expenditures in 2009, as shown in table III.C11, and the excess of assets over liabilities is expected to increase by $2.8 billion at the end of December 2009, as indicated in table III.C12. The reserve ratio is expected to increase from 24 percent as of December 31, 2008 to 25 percent at the end of 2009 under current law. A legislative override of the estimated 21.5-percent physician payment reduction for 2010, which would otherwise be required under current law, would reduce the reserve ratio, but probably not below the adequate range of 15-20 percent of incurred expenditures.

Since the financing rates are set prospectively, the actuarial status of the Part B account could be affected by variations between assumed cost increases and subsequent actual experience. To test the status of the account under varying assumptions, a lower growth range projection and an upper growth range projection were prepared by varying the key assumptions for 2008. These two alternative sets of assumptions provide a range of financial outcomes within which the actual experience of Part B might reasonably be expected to fall under current law. The values for the lower and upper growth range assumptions were determined from a statistical analysis of the historical variation in the respective increase factors.

This sensitivity analysis differs from the low-cost and high-cost projections discussed previously in this section in that this analysis examines the variation in the projection factors in the period for which the financing has been established (2009 for this report). The low-cost and high-cost projections, on the other hand, illustrate the financial impact of slower or faster growth trends throughout the short-range projection period.

Table III.C13 indicates that, under the lower growth range scenario, account assets would exceed liabilities at the end of December 2009 by a margin equivalent to 33.2 percent of the following year's incurred expenditures. Under the upper growth range scenario, account assets would still exceed liabilities, but by a margin of 19.1 percent of incurred expenditures in 2009. Therefore, under either scenario, assets would be sufficient to cover outstanding liabilities. However, if the higher growth range scenario were actually

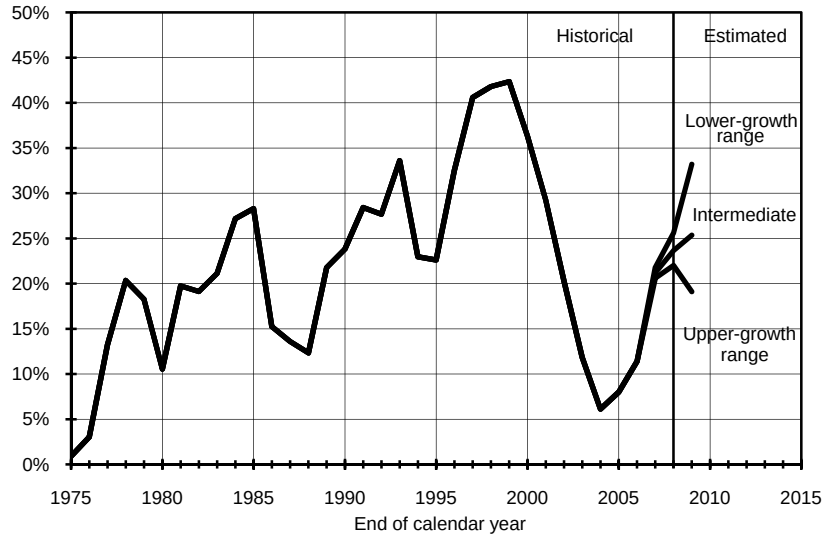
to materialize, then subsequent financing rates would have to be adjusted to maintain an appropriate contingency level in the account. Figure III.C4 shows the reserve ratio for historical years and for 2009 under the three cost growth scenarios.

Table III.C13.—Actuarial Status of the Part B Account in the SMI Trust Fund under Three Cost Sensitivity Scenarios for Financing Periods through December 31, 2009

As of December 31,	2007	2008	2009
Intermediate scenario:			
Actuarial status (in millions)			
Assets	$51,358	$59,382	$62,840
Liabilities	12,844	11,306	11,932
Assets less liabilities	38,514	48,076	50,909
Ratio[1]	21.2%	23.7%	25.4%
Low-range scenario:			
Actuarial status (in millions)			
Assets	$51,358	$59,382	$70,752
Liabilities	12,844	10,834	11,049
Assets less liabilities	38,514	48,548	59,704
Ratio[1]	21.8%	25.6%	33.2%
Upper-range scenario:			
Actuarial status (in millions)			
Assets	$51,358	$59,382	$55,163
Liabilities	12,844	11,782	12,789
Assets less liabilities	38,514	47,600	42,374
Ratio[1]	20.6%	22.0%	19.1%

[1]Ratio of assets less liabilities at the end of the year to the total incurred expenditures during the following year, expressed as a percent.

Figure III.C4.—Actuarial Status of the Part B Account in the SMI Trust Fund through Calendar Year 2008



Note: The actuarial status of the Part B account in the SMI trust fund is measured by the ratio of (i) assets minus liabilities at the end of the year to (ii) the following year's incurred expenditures.

Based on the tests described above, the Trustees conclude that the financing established for the Part B account for calendar year 2009 is adequate to cover 2009 expected expenditures and to maintain the financial status of the Part B account in 2009 at a satisfactory level. The 2009 reserve ratio is subject to a greater than usual degree of uncertainty as a result of likely legislation to override the scheduled negative physician payment update for 2010.

c. Long-Range Estimates

In the prior section, the expected operations of the Part B account over the next 10 years were presented. In this section, the long-range expenditures of the account are examined under the intermediate assumptions. As noted, Part B expenditures after 2009 are substantially understated in the short range and could be significantly so in the long range. The projections in this report do not include any potential secondary impacts of the large statutory physician payment reductions. Because of its automatic financing provisions, the Part B account is expected to be adequately financed into the indefinite future, so a long-range analysis using high-cost and low-cost assumptions is not currently conducted.

Table III.C14 shows the estimated Part B incurred expenditures under the intermediate assumptions expressed as a percentage of GDP, for selected years over the calendar-year period 2008-2080.[42] The 75-year projection period fully allows for the presentation of future trends that may reasonably be expected to occur, such as the impact of the large increase in enrollees after 2010 when the baby boom generation will reach eligibility age and begin to receive benefits.

Table III.C14.—Part B Expenditures (Incurred Basis) as a Percentage of the Gross Domestic Product[1]

Calendar year	Part B expenditures as a percentage of GDP
2008	1.28%
2009	1.44
2010	1.38
2011	1.35
2012	1.37
2013	1.38
2014	1.43
2015	1.40
2016	1.46
2017	1.53
2018	1.61
2020	1.76
2025	2.19
2030	2.60
2035	2.92
2040	3.15
2045	3.32
2050	3.47
2055	3.63
2060	3.82
2065	4.00
2070	4.16
2075	4.31
2080	4.43

[1]Expenditures are the sum of benefit payments and administrative expenses.

Part B costs per enrollee after the initial 25-year period are assumed to increase at a rate determined by the economic model described in sections II.C and IV.D. Based on these assumptions, incurred Part B expenditures as a percentage of GDP would increase rapidly from 1.28 percent in 2008 to 4.43 percent in 2080.

This report focuses on the 75-year period from 2008 to 2083 for the evaluation of the long-range financial status of Part B on an open-group basis (that is, including past, current, and future participants). Table III.C15 shows that because of the automatic financing of Part B, there is no unfunded obligation.

[42]These estimated incurred expenditures are for benefit payments and administrative expenses combined, unlike the values in table III.C9, which express only benefit payments on a cash basis as a percentage of GDP.

In section III.B of this report, an extended projection of HI revenues and expenditures was presented, beyond the normal 75-year projection period, to highlight the continuing financial imbalance over an infinite horizon. Tables III.C15 and III.C16 present corresponding estimates for Part B that extend to the infinite horizon. The extension assumes no change to current law, and the demographic and economic trends used for the 75-year projection continue indefinitely except that average Part B expenditures per beneficiary are assumed to increase at the same rate as GDP per capita beginning in about 2084.

Table III.C15 shows an estimated present value of Part B expenditures through the infinite horizon of $50.1 trillion, of which $23.2 trillion would occur during the first 75 years. Because such amounts, calculated over extremely long-time horizons, can be difficult to interpret, they are also shown as percentages of the present value of future GDP. So expressed, the corresponding figures are 3.8 percent and 2.9 percent of GDP, respectively. The table also indicates that approximately 26 percent of expenditures for each time period would be financed through beneficiary premiums, with the remaining 74 percent paid by general revenues, as mandated by current law.

Table III.C15.—Unfunded Part B Obligations from Program Inception through the Infinite Horizon

[Present values as of January 1, 2009; dollar amounts in trillions]

	Present value	As a percentage of GDP
Unfunded obligations through the infinite horizon[1]	$0.0	0.0%
Expenditures	50.1	3.8
Income	50.1	3.8
Beneficiary premiums	13.0	1.0
General revenue contributions	37.0	2.8
Unfunded obligations from program inception through 2083[1]	0.0	0.0
Expenditures	23.2	2.9
Income	23.2	2.9
Beneficiary premiums	6.0	0.8
General revenue contributions	17.2	2.2

[1]Present value of future expenditures less income, reduced by the amount of trust fund assets at the beginning of the period.

Notes: 1. The present values of GDP for 2009-2083 and for 2009 through the infinite horizon are $790.9 trillion and $1,313.1 trillion, respectively. See note 2 of table III.B10.
2. Totals do not necessarily equal the sums of rounded components.

Table III.C16 shows corresponding projections separately for current versus future beneficiaries. As indicated, about 37 percent of the total, infinite-horizon cost is associated with current beneficiaries, with the remaining 63 percent attributable to beneficiaries becoming eligible for Part B benefits after January 1, 2009.

Table III.C16.—Unfunded Part B Obligations for Current and Future Program Participants through the Infinite Horizon

[Present values as of January 1, 2009; dollar amounts in trillions]

	Present value	As a percentage of GDP
Future expenditures less income for current participants	$0.2	0.0%
Expenditures	18.5	1.4
Income	18.2	1.4
Beneficiary premiums	4.8	0.4
General revenue contributions	13.5	1.0
Less current trust fund (Income minus expenditures to date for past and current participants)	0.0	0.0
Equals unfunded obligations for past and current participants[1]	0.2	0.0
Expenditures	18.5	1.4
Income	18.2	1.4
Beneficiary premiums	4.8	0.4
General revenue contributions	13.5	1.0
Plus expenditures less income for future participants for the infinite horizon	−0.2	−0.0
Expenditures	31.6	2.4
Income	31.8	2.4
Beneficiary premiums	8.3	0.6
General revenue contributions	23.5	1.8
Equals unfunded obligations for all participants for the infinite future	0.0	0.0
Expenditures	50.1	3.8
Income	50.1	3.8
Beneficiary premiums	13.0	1.0
General revenue contributions	37.0	2.8

[1]This concept is also referred to as the closed-group unfunded obligation.

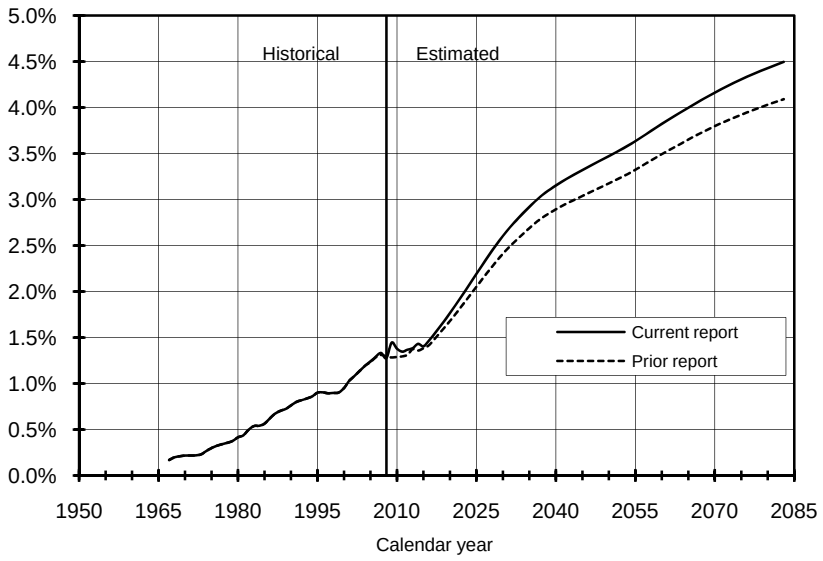
Notes: 1. The estimated present value of GDP for 2009 through the infinite horizon is $1,313.1 trillion. See note 2 of table III.B10.
2 Totals do not necessarily equal the sums of rounded components.

Figure III.C5 compares the year-by-year Part B costs as a percentage of GDP for the current annual report with the corresponding projections from the 2008 report.

The long-range projections of Part B costs as shown in this report differ somewhat from those in the 2008 annual report. The costs as a share of GDP are higher as a result of several factors. The GDP projections are lower than in last year's report due to the current economic conditions. This difference accounts for about half of the change from the 2008 report. A second factor is higher projected Part B enrollment, which results in higher projected expenditures. Additionally, the Medicare Improvements for Patients and Providers Act and the American Recovery and Reinvestment Act increased physician updates for 2008 and 2009. These higher updates together with additional historical Part B spending data lead to higher Part B spending and to a different pattern of physician updates through 2018 than projected in last year's report. In particular, 2018 is now within the 10-year projection window rather than being the first year for the long-range projection methodology, as was the case in the 2008 report. There is a 15-year transition from the end of the 10-year

projection to the long range growth rates. The 2009 report starts at a higher growth rate than in the 2008 report, as a result of a high projected physician update in 2018, and grades to nearly the same long-range growth rates as in last year's report. This differential results in a higher Part B expenditure projection than in the 2008 report.

Figure III.C5.—Comparison of Part B Projections as a Percentage of the Gross Domestic Product: Current versus Prior Year's Reports



As figure III.C5 indicates, the intermediate Part B cost projections as a percentage of GDP in this report are somewhat higher than in last year's report. The differential gradually increases to +0.40 percent of GDP in 2080.

3. Part D Account

The Medicare Modernization Act, enacted on December 8, 2003, established within SMI two Part D accounts related to prescription drug benefits: the Medicare Prescription Drug Account and the Transitional Assistance Account. The Medicare Prescription Drug Account is used in conjunction with the broad, voluntary prescription drug benefits that commenced in 2006. The Transitional Assistance Account was used to provide transitional assistance benefits, beginning in 2004 and extending through 2005, for certain low-income beneficiaries prior to the start of the new prescription drug benefit. For simplicity, in this report both accounts are combined and referred to as the "Part D account."

The new Medicare prescription drug benefit is significantly different from the usual HI and SMI Part B fee-for-service benefits. In particular, beneficiaries obtain the drug benefit by voluntarily purchasing insurance policies from private stand-alone drug plans or through private Medicare Advantage health plans. The premiums established by these plans are heavily subsidized by Medicare. In addition, Medicare pays some or all of the remaining beneficiary drug premiums and cost-sharing liabilities for low-income beneficiaries. Medicare also pays special subsidies on behalf of beneficiaries retaining primary drug coverage through qualifying employer-sponsored retiree health plans. Collectively, the various Medicare drug subsidies are financed primarily by general revenues. In addition, a declining portion of the subsidy costs associated with beneficiaries who also qualify for full Medicaid benefits are financed through special payments from State governments. Beneficiaries may have their drug insurance premiums withheld from their Social Security benefits, if they wish, and then forwarded to the drug plans on their behalf. In 2008, around 37 percent of the enrollees in Part D drug plans exercised this option.

a. Financial Operations in Calendar Year 2008

The total assets of the account amounted to $0.8 billion on December 31, 2007. During calendar year 2008, total Part D expenditures were approximately $49.3 billion. General revenue was provided on an as-needed basis to cover the portion of these expenditures supported through Medicare subsidies. Total Part D receipts were $49.4 billion. As a result, total assets in the Part D account increased very slightly to $0.9 billion as of December 31, 2008.

A statement of the revenue and expenditures of the Part D account of the SMI trust fund in calendar year 2008, and of its assets at the beginning and end of the calendar year, is presented in table III.C17.

Table III.C17—Statement of Operations of the Part D Account in the SMI Trust Fund during Calendar Year 2008
[In thousands]

Total assets of the Part D account in the trust fund, beginning of period		$801,031
Revenue:		
Premiums from enrollees:		
Premiums deducted from Social Security benefit checks	$1,873,266	
Premiums paid directly to plans[1]	3,125,310	
Total premiums		4,998,577
Government contributions:		
Prescription drug benefits	36,979,304	
Prescription drug administrative expenses	276,112	
Total government contributions		37,255,416
Payments from States		7,104,824
Interest on investments		12,723
Total revenue		$49,371,540
Expenditures:		
Part D benefit payments[1]		$48,982,114
Part D administrative expenses		279,084
Total expenditures		$49,261,198
Net addition to the trust fund		110,343
Total assets of the Part D account in the trust fund, end of period		$911,374

[1]Premiums paid directly to plans are not displayed on Treasury statements and are estimated. These premiums have been added to the benefit payments reported on the Treasury statement to obtain an estimate of total Part D benefits. Direct data on such benefit amounts are not yet available.

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

(1) Revenues

The major sources of revenue for the Part D account are (i) contributions of the Federal government that are authorized to be appropriated and transferred from the general fund of the Treasury, (ii) premiums paid by eligible persons who voluntarily enroll, and (iii) contributions from the States.

Of the total Part D revenue, $1.9 billion represented premium amounts withheld from Social Security benefit checks or other Federal benefit payments. Total premium payments, including those paid directly to the Part D plans, are estimated to be $5.0 billion.

In calendar year 2008, contributions received from the general fund of the Treasury amounted to $37.3 billion, which accounted for 75.5 percent of total revenue.

With the availability of Part D drug coverage and low-income subsidies beginning in 2006, Medicaid is no longer the primary payer of drug costs for full-benefit dual eligibles. States are subject to a contribution requirement and must pay the Part D account in the SMI trust fund a portion of their estimated forgone drug costs for this population. Starting in 2006, States must pay 90 percent of the

estimated costs, with this percentage phasing down over a 10-year period to 75 percent in 2015. For calendar year 2008, these State payments amounted to $7.1 billion.

Another source of Part D revenue is interest received on investments held by the Part D account. Because this account holds only a very low amount of assets, and only for brief periods of time, the interest on the investments of the account in calendar year 2008 was virtually negligible ($13 million).

(2) Expenditures

Part D expenditures include both the costs of prescription drugs provided by Part D plans to enrollees and Medicare payments to employer-sponsored retiree health plans on behalf of beneficiaries who obtain their primary drug coverage through such plans. Unlike Parts A and B of Medicare, not all Part D expenditures are made or supported directly from the Part D account in the SMI trust fund. In particular, a portion of these expenditures are financed by enrollee premiums that are paid directly to Part D plans and that, consequently, do not flow through the Part D account. To determine total Part D expenditures, the Part D account operations are adjusted to reflect the direct premium payments. Total expenditures are characterized as either "benefits" (representing the gross cost of enrollees' prescription drug coverage plus employer subsidy payments) or Federal administrative expenses.

All expenses incurred by the Department of Health and Human Services, the Social Security Administration, and the Department of the Treasury in administering Part D are charged to the account. Such administrative duties include making payments to Part D plans, the fraud and abuse control activities, and experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services while maintaining the quality of these services.

In addition, Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of Part D. Such costs are included in the account expenditures. The net worth of facilities and other fixed capital assets, however, is not carried in the statement of Part D assets presented in this report, since the value of fixed capital assets does not represent funds available for benefit or administrative

expenditures and is not, therefore, pertinent in assessing the actuarial status of the funds.

Of the $49.3 billion in total Part D expenditures, $49.0 billion represented benefits, as defined above, and the remaining $0.3 billion of expenditures was for Federal administrative expenses. (Administrative expenses incurred by Part D plans are covered implicitly by the Medicare direct premium subsidy and reinsurance subsidy, together with enrollee premiums.)

(3) Actual experience versus prior estimates

Table III.C18 compares the actual experience in calendar year 2008 with the estimates presented in the 2007 and 2008 annual reports. A number of factors can contribute to differences between estimates and subsequent actual experience. This is especially true in the case of a new program for which the costs were largely unknown.

Table III.C18.—Comparison of Actual and Estimated Operations of the Part D Account in the SMI Trust Fund, Calendar Year 2008

[Dollar amounts in millions]

Item	Actual amount	Comparison of actual experience with estimates for calendar year 2008 published in: 2008 report: Estimated amount[1]	2008 report: Actual as a percentage of estimate	2007 report: Estimated amount[1]	2007 report: Actual as a percentage of estimate
Premiums from enrollees	$4,999	$4,731	106%	$5,584	90%
State transfers	7,105	7,010	101	6,918	103
Government contributions	37,255	39,776	94	49,386	75
Benefit payments	48,982	50,708	97	60,995	80

[1]Under the intermediate assumptions.

Actual Part D benefit costs in calendar year 2008 were slightly lower than projected last year, and premium revenues represented a somewhat greater share of total projected costs than previously estimated. Costs were substantially lower than predicted in the 2007 report, because actual Part D spending in 2006 (the base year for plan estimates) was significantly lower than anticipated and rebates from prescription drug manufacturers were higher than expected.

(4) Assets

The portion of the Part D account that is not needed to meet current expenditures for benefits and administration is invested in interest-bearing obligations of the U.S. government.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the account. The law requires that these 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 immediately preceding the date of such issue), on all marketable interest-bearing obligations of the United States forming a part of the public debt that are not due or callable until after 4 years from the end of that month. Since the inception of the SMI trust fund, the assets have always been invested in special public-debt obligations.[43] Table V.E10, presented in appendix E, shows the assets of the SMI trust fund, including Parts B and D, at the end of fiscal years 2007 and 2008.

As noted previously, the flexible appropriation of general revenues for Part D eliminates the need to maintain a normal contingency reserve. As a result, Part D assets are very low and are held only briefly in anticipation of immediate expenditures.

b. 10-Year Actuarial Estimates (2009-2018)

Future operations of the Part D account are projected using the Trustees' economic and demographic assumptions, as detailed in the OASDI Trustees Report, as well as other assumptions unique to Part D. Section IV.B2 presents an explanation of the effects of the Trustees' intermediate assumptions, and of the other assumptions unique to Part D, on the estimates in this report.

Generally, the income to the Medicare Prescription Drug Account includes the beneficiary premiums described above and transfers from the general fund of the Treasury that are established annually to match each year's anticipated incurred benefit costs and other expenditures. The transfers from the Treasury are based on the calculated direct premium subsidy rate and the anticipated levels of reinsurance payments, employer subsidies, low-income subsidies, net risk-sharing payments, and administrative expenses. The beneficiary premiums and direct subsidy rate are calculated based on the national average bid amounts and are defined prior to the annual appropriation, with the average premium amounting to 25.5 percent of the expected total plan costs for basic coverage. The appropriation language provides resources for benefit payments under the Part D drug benefit program, without further Congressional action, in the event that the annual appropriation is insufficient. As a result of this authority there is no need for a contingency margin.

Expenditures from the account include the premiums withheld from beneficiaries' Social Security or other Federal payments and

[43]Investments may also be made in obligations guaranteed as to both principal and interest by the United States, including certain federally sponsored agency obligations.

transferred to the private drug plans, the direct subsidy payments, reinsurance payments, employer subsidy amounts, low-income subsidy payments, risk-sharing payments, and administrative expenses. As noted previously, these direct expenditures are adjusted to include the amount of enrollee premiums paid directly to Part D plans, thereby providing an estimate of total Part D benefit payments and other expenditures.

The Part D cost estimates shown in this year's Trustees Report are somewhat lower than those in the 2008 report. The difference is attributable in part to a reduction in the projected growth in prescription drug spending in the U.S. for the next 10 years. The slower growth estimates are primarily due to a decline in the number of new drug products that are expected to reach the market.

In addition, Part D premium income is projected to be somewhat higher than that in the previous report due to an expected methodology change in the normalization of risk scores beginning in 2010.[44] Since the inception of the Part D program, risk scores have been normalized yearly based on the population of Medicare beneficiaries eligible for Part D coverage (whether or not enrolled in drug plans). Since the average risk score of Part D enrollees has been higher than the average risk score of those beneficiaries who haven't enrolled, Medicare has been paying a higher than intended portion of the total costs. This year's report assumes that the risk scores will be normalized based only on actual Part D enrollees starting in 2010 to restore Medicare's intended share of the total Part D costs.

Table III.C19 shows the estimated operations of the Part D account under the intermediate assumptions on a calendar-year basis through 2018.

[44]Risk adjustment increases Part D payments to drug plans for enrollees who are less healthy than average and reduces payments for enrollees who are in above-average health. "Normalization" adjusts the risk adjustment formula so that the average adjustment corresponds to the average health status of the overall group.

Table III.C19.—Operations of the Part D Account in the SMI Trust Fund (Cash Basis) during Calendar Years 2004-2018

[In billions]

	Income					Expenditures			Account	
Calendar year	Premium income[1]	General revenue[2]	Transfers from States[3]	Interest and other	Total	Benefit payments[4]	Administrative expense	Total	Net change	Balance at end of year[5]
Historical data:										
2004	—	$0.4	—	—	$0.4	$0.4	—	$0.4	—	—
2005	—	1.1	—	—	1.1	1.1	—	1.1	—	—
2006	$3.5	39.2	$5.5	$0.0	48.2	47.1	$0.3	47.4	$0.8	$0.8
2007	4.0	38.8	6.9	0.0	49.7	48.8	0.9	49.7	0.0	0.8
2008	5.0	37.3	7.1	0.0	49.4	49.0	0.3	49.3	0.1	0.9
Intermediate estimates:										
2009	6.3[6]	48.5	7.9	0.0	62.7	62.6	0.4	63.0	−0.2	0.7
2010	7.2[6]	50.7	8.3	0.0	66.2	65.8	0.4	66.2	0.0	0.7
2011	8.4	55.5	8.8	0.0	72.8	72.3	0.4	72.7	0.0	0.7
2012	9.6	60.8	9.4	0.0	79.9	79.4	0.5	79.8	0.1	0.8
2013	10.6	66.1	10.1	0.0	86.8	86.2	0.5	86.7	0.1	0.9
2014	11.6	72.4	10.8	0.0	94.9	94.3	0.5	94.8	0.1	0.9
2015	13.3[6]	79.9	11.5	0.0	104.8	104.2	0.5	104.8	0.1	1.0
2016	13.8[6]	88.2	12.6	0.0	114.7	114.0	0.5	114.6	0.1	1.1
2017	15.9	97.4	13.9	0.0	127.3	126.6	0.5	127.2	0.1	1.2
2018	17.7	107.8	15.4	0.0	140.9	140.2	0.6	140.8	0.1	1.3

[1]Premiums include both amounts withheld from Social Security benefit checks or other Federal payments and those paid directly to Part D plans.

[2]Includes all government transfers including amounts for the general subsidy, reinsurance, low-income subsidy, administrative expenses, risk sharing, and State expenses for making low-income eligibility determinations. Includes amounts for the Transitional Assistance program of $0.4, $1.0, and $0.1 billion in 2004-2006, respectively.

[3]Payments from the States with respect to the phased-in Federal assumption of Medicaid responsibility for premium and cost-sharing subsidies for dually eligible individuals.

[4]Includes subsidies to employer retiree prescription drug plans and payments to States for making low-income eligibility determinations. Includes amounts for the Transitional Assistance program of $0.4, $1.0, and $0.1 billion in 2004-2006, respectively.

[5]See text concerning nature of general revenue appropriations process and implications for contingency reserve assets.

[6]Section 708 of the Social Security Act modifies the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January 3, 2010 is expected to occur on December 31, 2009. Consequently, the Part B and Part D premiums withheld from the checks and the associated Part B general revenue contributions are expected to be added to the Part B account and Part D account, respectively, on December 31, 2009. These amounts are excluded from the premium income and general revenue income for 2010. Similarly, delivery of benefit checks normally due January 3, 2016 is expected to occur on December 31, 2015.

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

In table III.C20, prescription drug payment amounts are considered in the aggregate, on a per capita basis, and relative to the Gross Domestic Product (GDP). Rates of growth are shown for the next 10 years, based on the intermediate set of assumptions.

Table III.C20.—Growth in Part D Benefits (Cash Basis) through December 31, 2018

Calendar year	Aggregate benefits [billions]	Percent change	Per capita benefits	Percent change	Part D benefits as a percentage of GDP
Historical data:					
2004	$0.4	—	$362	—	0.0%
2005	1.1	—	596	—	0.0
2006	47.1	—	1,709	—	0.4
2007	48.8	3.6%	1,562	−8.6%	0.4
2008	49.0	0.4	1,517	−2.9	0.3
Intermediate estimates:					
2009[1]	62.6	27.7	1,885	24.3	0.4
2010[1]	65.8	5.1	1,915	1.6	0.5
2011	72.3	9.9	2,031	6.0	0.5
2012	79.4	9.8	2,139	5.3	0.5
2013	86.2	8.7	2,254	5.4	0.5
2014	94.3	9.4	2,396	6.3	0.5
2015[1]	104.2	10.5	2,573	7.4	0.5
2016[1]	114.0	9.4	2,736	6.3	0.6
2017	126.6	11.0	2,953	7.9	0.6
2018	140.2	10.8	3,177	7.6	0.6

[1]See footnote 1 of table III.A1.

The relatively rapid cost increases shown in table III.C20 result in part from projected further increases in Part D enrollment, changes in the distribution of enrollees by coverage category, and the expected resumption of per capita drug cost growth rates that exceed the rate of increase in other categories of medical spending. Since actual prescription drug expenditures in 2006 were substantially less than the plan bids, the plans owed the Part D program over $4 billion in the form of risk-sharing returns and reimbursement of overpayments for reinsurance and low-income subsidy capitation amounts. These reconciliation payments reduced Part D spending in 2007 and 2008, resulting in per capita drug cost growth rates that are lower than normal for those years and higher than normal for 2009.

In addition to the variability in economic, demographic, and health care usage and cost experience that underlies the cost projections prepared for other parts of Medicare, the intermediate projections for Part D have an added uncertainty in that they were prepared for a relatively new benefit, so there is little current experience upon which to base conclusions. Accordingly, there remains a very substantial level of uncertainty surrounding these cost projections. High- and low-cost estimates have also been prepared using two alternative sets of assumptions that reflect variation from the intermediate assumptions in both the projection and the base cost calculation. The estimated operations of the Part D account for all three alternatives are summarized in table III.C21. The assumptions underlying the intermediate estimates are presented in substantial detail in section IV.B2. The assumptions used in preparing estimates under the low-cost and high-cost alternatives are also summarized in that section. Part D expenditures are estimated to grow significantly

faster than GDP under the intermediate, low, and high-cost assumptions.

Table III.C21.—Estimated Operations of the Part D Account in the SMI Trust Fund during Calendar Years 2008-2018, under Alternative Sets of Assumptions

[In billions]

Calendar year	Premiums from enrollees	Other income[1]	Total income	Total expenditures	Balance in account at end of year
Intermediate:					
2008	$5.0	$44.4	$49.4	$49.3	$0.9
2009	6.3[2]	56.4	62.7	63.0	0.7
2010	7.2[2]	59.0	66.2	66.2	0.7
2011	8.4	64.4	72.8	72.7	0.7
2012	9.6	70.3	79.9	79.8	0.8
2013	10.6	76.2	86.8	86.7	0.9
2014	11.6	83.3	94.9	94.8	0.9
2015	13.3[2]	91.5	104.8	104.8	1.0
2016	13.8[2]	100.8	114.7	114.6	1.1
2017	15.9	111.4	127.3	127.2	1.2
2018	17.7	123.2	140.9	140.8	1.3
Low-cost:					
2008	5.0	44.4	49.4	49.3	0.9
2009	6.3[2]	55.1	61.4	61.6	0.7
2010	6.7[2]	53.8	60.5	60.5	0.7
2011	7.2	56.3	63.6	63.6	0.7
2012	7.7	59.1	66.8	66.8	0.7
2013	8.3	63.8	72.1	72.1	0.7
2014	9.0	68.5	77.5	77.4	0.8
2015	10.1[2]	73.9	84.0	84.0	0.8
2016	10.4[2]	80.0	90.3	90.3	0.9
2017	11.7	86.8	98.5	98.4	0.9
2018	12.8	94.3	107.1	107.0	1.0
High-cost:					
2008	5.0	44.4	49.4	49.3	0.9
2009	6.3[2]	57.8	64.1	64.4	0.7
2010	7.8[2]	64.6	72.3	72.3	0.7
2011	9.7	73.2	82.9	82.8	0.8
2012	11.8	83.0	94.8	94.8	0.9
2013	13.2	90.6	103.8	103.7	1.0
2014	14.8	100.7	115.6	115.5	1.1
2015	17.3[2]	112.7	130.0	129.9	1.2
2016	18.2[2]	126.5	144.7	144.6	1.3
2017	21.3	142.2	163.5	163.4	1.5
2018	24.2	160.2	184.4	184.2	1.6

[1]Other income contains Federal and State government contributions and interest.
[2]See footnote 1 of table III.A1.

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

The three sets of assumptions were selected in order to indicate the general range in which the cost might reasonably be expected to fall. The low- and high-cost alternatives provide for a wide range of possible experience. Actual experience is likely to fall within the range, but no assurance can be given that this will be the case, especially since the Part D benefits are a relatively new, voluntary program with which there is little actual experience.

The alternative projections shown in table III.C21 illustrate two important aspects of the financial operations of the Part D account:

- Despite the widely differing assumptions underlying the three alternatives, the balance between Part D income and expenditures remains relatively stable. Under the low-cost assumptions, for example, by 2018 both income and expenditures would be around 24 percent lower than projected under the intermediate assumptions. The corresponding amounts under the high-cost assumptions would be around 31 percent higher than the intermediate estimates.

  This result occurs because the premiums and general revenue contributions underlying the Part D financing will be reestablished annually. Thus, Part D income will automatically track Part D expenditures fairly closely, regardless of the specific economic and other conditions.

- As a result of the close matching of income and expenditures described above, together with anticipated continuing flexibility in the appropriations of general revenues, the need for a contingency reserve to handle unanticipated fluctuations is minimal. (The next section describes this issue in more detail.)

Adequacy of Part D Financing Established for Calendar Year 2008

As noted previously, the Part D account in the SMI trust fund will be in financial balance indefinitely, as a result of the basis for program financing. Specifically, Part D expenditures are financed through the premiums paid by enrollees, special State payments to Medicare, and appropriations from the general fund of the Treasury. Moreover, the appropriation language adopted for the Part D account provides substantial flexibility in the amount of general revenues available to the account. Although a specific appropriation amount is referenced, based on estimates from the President's Budget, the appropriations language also allows indefinite budget authority for Part D in the event that the annual appropriation amount is insufficient. Thus, further Congressional action would not be required to cover a higher-than-expected level of Part D expenditures.[45] Similar flexibility is anticipated for future Part D appropriations.

This basis for appropriations was used for the 2004-2005 transitional drug card subsidies and the 2006-2008 Part D payment transactions. It has also been used for many years in setting appropriations for Federal matching funds for the Medicaid program.

[45]The indefinite authority applies to all Part D outlays other than Federal administrative expenses.

As a consequence of this approach to appropriations for Part D, general revenues are transferred to the account in the amount necessary to cover expenditures. The indefinite authority provision allows such appropriations to continue even if the specific annual appropriated amount is exceeded. Consequently, no deficit will occur in the Part D account, and no contingency fund will be necessary to cover deficits.

As described in the section on the financial status of the Part B account, an appropriate level of assets should be maintained to cover the liability for claims that have been incurred but not yet reported or paid. In the case of Part D, however, most such claims are the responsibility of the prescription drug plans rather than the Part D program. Accordingly, the Part D account is generally not at risk for incurred-but-unreported claim amounts, and no asset reserve is necessary for this purpose.[46]

Another potential Part D liability exists to the extent that Part D reinsurance payments and employer subsidy payments are based on plan estimates. (These estimates are subject to actuarial review by the Office of the Actuary at the CMS.) Since actual Part D costs, as subsequently determined, will generally differ somewhat from the plan bids, payment adjustments after the close of the year are expected to occur. Any settlements in favor of the plans would be made by Medicare from the following year's appropriated general revenues. Thus, creation of a reserve for payment of such settlement amounts seems unnecessary.

For these reasons, the Board of Trustees has tentatively concluded that maintenance of Part D account assets for contingency or liability purposes is unnecessary. Accordingly, evaluation of the adequacy of Part D assets is also unnecessary, and the Part D account is considered to be in satisfactory financial condition for 2009 (and all future years under current law) as a consequence of its basis for financing.

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[46]A potential exception to this principle would arise if one or more Federal "fall-back" prescription drug plans were created. Fall-back plans would be established in regions that did not have at least two prescription drug plans, and the Part D program would be at risk for the drug benefit costs. In this instance, incurred-but-unreported claim amounts would be the responsibility of the Part D program. The Part D estimates shown in this report are based on the assumption that no fall-back plans will be necessary, and no Part D account assets are included in the estimates for the purpose of covering potential incurred-but-unreported claims from fall-back plans.

To the extent that actual future account transactions and appropriation measures differ from the current expectations, it may be necessary to revise this conclusion.

c. Long-Range Estimates

In section III.C3b, the expected operations of the Part D accounts over the next 10 years were presented. In this section, the long-range expenditures of the accounts are examined under the intermediate assumptions. Because of their automatic financing provisions, the Part D accounts are expected to be adequately financed into the indefinite future, so a long-range analysis using high-cost and low-cost assumptions is not currently conducted.

Table III.C22 shows the estimated Part D incurred expenditures under the intermediate assumptions expressed as a percentage of GDP, for selected years over the calendar-year period 2008-2080.[47] The 75-year projection period fully allows for the presentation of future trends that may reasonably be expected to occur, such as the impact of the large increase in enrollees after 2010 when the baby boom generation will reach eligibility age and begin to receive benefits.

[47]These estimated incurred expenditures are for benefit payments and administrative expenses combined, unlike the values in table III.C20, which express only benefit payments on a cash basis as a percentage of GDP.

Table III.C22.—Part D Expenditures (Incurred Basis) as a Percentage of the Gross Domestic Product[1]

Calendar year	Part D expenditures as a percentage of GDP
2008	0.39%
2009	0.43
2010	0.45
2011	0.47
2012	0.49
2013	0.50
2014	0.52
2015	0.54
2016	0.57
2017	0.60
2018	0.64
2020	0.71
2025	0.91
2030	1.08
2035	1.20
2040	1.28
2045	1.35
2050	1.42
2055	1.49
2060	1.57
2065	1.63
2070	1.69
2075	1.75
2080	1.80

[1]Expenditures are the sum of benefit payments and administrative expenses.

Increases in Part D costs per enrollee during the initial 25-year period are assumed to decline gradually to the rate determined by the economic model described in sections II.C and IV.D. Based on these assumptions, incurred Part D expenditures as a percentage of GDP would increase rapidly from 0.39 percent in 2008 to 1.80 percent in 2080.

This report focuses on the 75-year period from 2009 to 2083 for the evaluation of the long-range financial status of Part D on an open-group basis (that is, including past, current, and future participants). Table III.C23 shows that because of the automatic financing of Part D, there is no unfunded obligation.

In section III.B of this report, an extended projection of HI revenues and expenditures was presented, beyond the normal 75-year projection period, to highlight the continuing financial imbalance over an infinite horizon.

Tables III.C23 and III.C24 present corresponding estimates for Part D that extend to the infinite horizon. The extension assumes no change to current law, and the demographic and economic trends used for the 75-year projection continue indefinitely except that average Part D expenditures per beneficiary are assumed to increase at the same rate as GDP per capita beginning in about 2084.

Table III.C23 shows an estimated present value of Part D expenditures through the infinite horizon of $20.3 trillion, of which $9.4 trillion would occur during the first 75 years. Because such amounts, calculated over extremely long-time horizons, can be difficult to interpret, they are also shown as percentages of the present value of future GDP. So expressed, the corresponding figures are 1.5 percent and 1.2 percent of GDP, respectively. The table also indicates that, for each time period, approximately 12 percent of expenditures would be financed through beneficiary premiums and 11 percent through State transfers, with the remaining 77 percent paid by general revenues, as mandated by current law.

Table III.C23.—Unfunded Part D Obligations from Program Inception through the Infinite Horizon

[Present values as of January 1, 2009; dollar amounts in trillions]

	Present value	As a percentage of GDP
Unfunded obligations through the infinite horizon[1]	$0.0	0.0%
Expenditures	20.3	1.5
Income	20.3	1.5
Beneficiary premiums	2.5	0.2
State transfers	2.2	0.2
General revenue contributions	15.5	1.2
Unfunded obligations from program inception through 2083[1]	0.0	0.0
Expenditures	9.4	1.2
Income	9.4	1.2
Beneficiary premiums	1.2	0.1
State transfers	1.0	0.1
General revenue contributions	7.2	0.9

[1]Present value of future expenditures less income, reduced by the amount of trust fund assets at the beginning of the period.

Notes: 1. The present values of GDP for 2009-2083 and for 2009 through the infinite horizon are $790.9 trillion and $1,313.1 trillion, respectively. See note 2 of table III.B10.
2 Totals do not necessarily equal the sums of rounded components.

Table III.C24 shows corresponding projections separately for current versus future beneficiaries. As indicated, about 33 percent of the total, infinite-horizon cost is associated with current beneficiaries, with the remaining 67 percent attributable to beneficiaries becoming eligible for Part D benefits after January 1, 2009.

Table III.C24.—Unfunded Part D Obligations for Current and Future Program Participants through the Infinite Horizon

[Present values as of January 1, 2009; dollar amounts in trillions]

	Present value	As a percentage of GDP
Future expenditures less income for current participants	$0.0	0.0%
Expenditures	6.7	0.5
Income	6.7	0.5
Beneficiary premiums	0.8	0.1
State transfers	0.7	0.1
General revenue contributions	5.2	0.4
Less current trust fund (Income minus expenditures to date for past and current participants)	0.0	0.0
Equals unfunded obligations for past and current participants[1]	0.0	0.0
Expenditures	6.7	0.5
Income	6.7	0.5
Beneficiary premiums	0.8	0.1
State transfers	0.7	0.1
General revenue contributions	5.2	0.4
Plus expenditures less income for future participants for the infinite horizon	0.0	0.0
Expenditures	13.6	1.0
Income	13.6	1.0
Beneficiary premiums	1.7	0.1
State transfers	1.5	0.1
General revenue contributions	10.4	0.8
Equals unfunded obligations for all participants for the infinite future	0.0	0.0
Expenditures	20.3	1.5
Income	20.3	1.5
Beneficiary premiums	2.5	0.2
State transfers	2.2	0.2
General revenue contributions	15.5	1.2

[1] This concept is also referred to as the closed-group unfunded obligation.

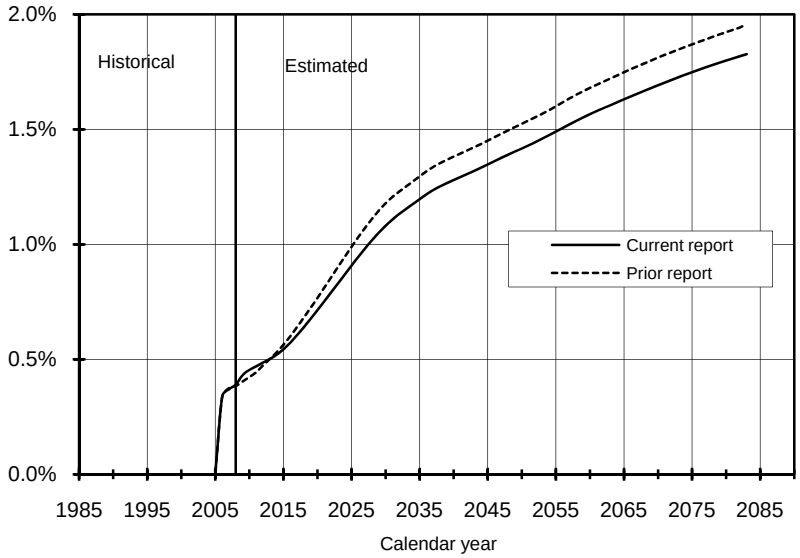
Notes: 1. The estimated present value of GDP for 2009 through the infinite horizon is $1,313.1 trillion. See note 2 of table III.B10.
2 Totals do not necessarily equal the sums of rounded components.

The long-range Part D projections are based on an economic model described previously for HI and SMI Part B. More information on these assumptions is available in section IV.D of this report. Section IV.B2 describes the data sources and assumptions underlying the updated Part D estimates.

It is important to note that the Trustees' Part D projections show the expected cost to the Medicare program and the income and expenditure transactions of the Part D account in the SMI trust fund. The net cost to Medicare, after accounting for premium income and State payments to Medicare, is not the same as the net cost to the Federal government under the Medicare Modernization Act. In particular, this legislation substantially reduced Federal Medicaid outlays, thereby offsetting a portion of the increased cost to Medicare. The reduction in Medicaid outlays is not reflected in the operations of the Part D account, as shown in this report, since it is not a Medicare financial transaction.

Figure III.C6 compares the year-by-year Part D costs as a percentage of GDP for the current annual report with the corresponding projections from the 2008 report.

Figure III.C6.—Comparison of Part D Projections as a Percentage of the Gross Domestic Product: Current versus Prior Year's Reports



As figure III.C6 indicates, the intermediate Part D cost projections as a percentage of GDP in this report are generally somewhat lower than in last year's report. An exception occurs in 2008-2013 because the GDP is expected to contract under the current economic recession. The percentage differential turns negative at −0.01 percent of GDP in 2014 and grows to −0.13 percent of GDP in 2083, primarily due to the lower assumed growth rates for prescription drug expenditures in the U.S. overall.

The present values of the projected revenue and cost components of the 75-year, open-group financial obligations for HI, SMI, and OASDI are summarized in appendix table V.D2. These estimates are shown from both a trust fund perspective and a Federal Budget perspective.

IV. ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR COST ESTIMATES FOR THE HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS

This section describes the basic methodology and assumptions used in the estimates for the HI and SMI trust funds under the intermediate assumptions. In addition, projections of HI and SMI costs under two alternative sets of assumptions are presented.

The economic and demographic assumptions underlying the projections of HI and SMI costs shown in this report are consistent with those in the 2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. These assumptions are described in more detail in that report.

A. HOSPITAL INSURANCE

1. Cost Projection Methodology

The principal steps involved in projecting the future HI costs are (i) establishing the present cost of services provided to beneficiaries, by type of service, to serve as a projection base; (ii) projecting increases in HI payments for inpatient hospital services; (iii) projecting increases in HI payments for skilled nursing, home health, and hospice services covered; (iv) projecting increases in payments to private health plans; and (v) projecting increases in administrative costs.

a. Projection Base

To establish a suitable base from which to project the future HI costs, the incurred payments for services provided must be reconstructed for the most recent period for which a reliable determination can be made. Therefore, 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, and of any items affecting only the timing and flow of payments to providers, must be eliminated. As a result, the rates of increase in the HI incurred costs differ from the increases in cash expenditures shown in the tables in section III.B.

For those expenses still reimbursed on a reasonable-cost basis, the costs for covered services are determined on the basis of provider cost reports. 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 original costs by as much as several years for some providers. Additional complications are posed by legislative, regulatory, and administrative changes, the effects of which cannot always be determined precisely.

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

b. Fee-for-Service Payments for Inpatient Hospital Costs

Almost all inpatient hospital services covered by HI are paid under a prospective payment system. The law stipulates that the annual increase in the payment rate for each admission be related to a hospital input price index (also known as the hospital market basket), which measures the increase in prices for goods and services purchased by hospitals for use in providing care to hospital inpatients. For fiscal year 2009, the prospective payment rates have already been determined. For fiscal years 2010 and later, the statute mandates that the annual increase in the payment rate per admission equal the annual increase in the hospital input price index for those hospitals submitting required quality measure data. For this report, we assume that all hospitals will submit these data.

Increases in aggregate payments for inpatient hospital care covered under HI can be analyzed in five broad categories, all of which are presented in table IV.A1:

(1) Labor factors—the increase in the hospital input price index that is attributable to increases in hospital workers' hourly earnings (including fringe benefits);

(2) Non-labor factors—the increase in the hospital input price index that 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 amount added to or subtracted from the input price index (generally as a result of legislation) to yield the prospective payment update factor;

(4) Volume of services—the increase in total output of units of service (as measured by covered HI hospital admissions); and

(5) Other sources—a residual category, reflecting all other factors affecting hospital cost increases (such as intensity increases).

Table IV.A1 shows the estimated historical values of these principal components, as well as the projected trends used in the estimates. Unless otherwise indicated, the following discussions apply to projections under the intermediate assumptions.

Table IV.A1.—Components of Historical and Projected Increases in HI Inpatient Hospital Payments[1]

	Labor			Non-labor					Units of service				
Calendar year	Average hourly earnings	Hospital hourly earnings differential	Hospital hourly earnings	CPI	Hospital price differential	Non-labor hospital prices	Input price index	Unit input intensity allowance[2]	HI enrollment	Managed care shift effect	Admission incidence	Other sources	HI inpatient hospital payments
Historical data:													
1999	4.9%	−1.8%	3.0%	2.2%	−0.5%	1.7%	2.5%	−2.1%	0.8%	−1.8%	1.2%	1.7%	2.2%
2000	6.6	−2.6	3.8	3.5	−0.5	3.0	3.5	−2.1	1.3	0.4	−0.1	−1.6	1.3
2001	4.2	1.1	5.3	2.7	0.0	2.7	4.2	−0.9	1.0	2.3	1.1	1.6	9.7
2002	1.9	3.1	5.1	1.4	0.3	1.7	3.7	−1.2	1.0	2.1	−0.1	2.5	8.2
2003	3.6	0.6	4.2	2.2	1.6	3.8	4.0	−0.9	1.7	0.9	−0.2	−0.7	5.0
2004	5.2	−1.2	3.9	2.6	1.8	4.4	4.1	−0.8	1.8	0.0	−0.4	1.5	6.4
2005	3.6	0.3	3.9	3.5	1.4	4.9	4.3	−0.8	1.8	−0.9	0.0	1.5	6.0
2006	4.3	−0.5	3.8	3.2	1.2	4.4	4.1	−0.4	1.8	−3.8	−0.9	0.0	0.6
2007	4.6	−1.0	3.6	2.9	0.4	3.3	3.5	−0.4	2.2	−3.3	−0.6	−0.8	0.4
2008	3.1	0.3	3.4	4.3	1.4	5.8	4.4	−0.3	2.1	−3.2	3.0	−0.4	5.5
Intermediate estimates:													
2009	2.0	1.0	3.0	−1.0	0.2	−0.8	1.4	1.1	1.6	−2.1	0.0	2.3	4.3
2010	4.1	0.0	4.1	1.7	0.8	2.5	3.5	0.0	2.0	−1.2	−0.2	−2.2	1.7
2011	3.8	0.0	3.8	2.3	0.6	2.9	3.4	0.0	2.3	0.4	−0.4	1.6	7.6
2012	3.7	0.0	3.7	2.7	0.4	3.1	3.5	0.0	3.0	0.0	−0.6	1.8	7.8
2013	4.0	0.0	4.0	3.1	0.2	3.3	3.7	0.0	3.2	0.0	−0.6	0.6	7.0
2014	4.0	0.0	4.0	3.1	0.0	3.1	3.7	0.0	3.0	0.0	−0.4	0.6	6.9
2015	4.1	0.0	4.1	2.8	0.0	2.8	3.6	0.0	3.0	0.0	−0.4	0.2	6.5
2016	3.9	0.0	3.9	2.8	0.0	2.8	3.5	0.0	2.9	0.0	−0.3	0.5	6.7
2017	3.9	0.0	3.9	2.8	0.0	2.8	3.5	0.0	3.0	0.0	−0.2	0.7	7.1
2018	4.0	0.0	4.0	2.8	0.0	2.8	3.5	0.0	3.0	0.0	−0.1	0.9	7.5
2020	3.9	0.0	3.9	2.8	0.0	2.8	3.5	0.0	3.0	0.0	0.0	0.9	7.5
2025	3.9	0.0	3.9	2.8	0.0	2.8	3.5	0.0	2.6	0.0	0.4	0.9	7.6
2030	3.9	0.0	3.9	2.8	0.0	2.8	3.5	0.0	1.7	0.0	0.9	0.9	7.2

[1]Percent increase in year indicated over previous year, on an incurred basis.
[2]Reflects the allowances provided for in the prospective payment update factors.

Note: Historical and projected data reflect the hospital input price index, which was recalibrated to a 2002 base year in 2005.

Increases in hospital workers' hourly earnings can be analyzed and projected in terms of (i) the assumed increases in hourly earnings in employment in the general economy, and (ii) the difference between increases in hourly earnings in the general economy and the hospital hourly earnings used in the hospital input price index. Since HI began, the differential between hospital workers' hourly earnings and hourly earnings in the general economy has fluctuated widely, averaging about −0.2 percent since 1999. This differential is assumed to quickly level off at zero and to remain there for the rest of the projection period.

Non-labor cost increases can similarly be analyzed in terms of a known, economy-wide price measure (the Consumer Price Index, or CPI) and a differential between the CPI and hospital-specific prices. This differential reflects price increases for non-labor goods and services that are purchased by hospitals and that do not parallel increases in the CPI. Although the price differential has fluctuated erratically in the past, it has averaged about 0.7 percent during 1999-2008. Over the short term, the hospital price differential is assumed to gradually decrease from recent levels, leveling off to zero for the remainder of the projection period.

The final input price index is calculated as a weighted average of the labor and non-labor factors described above. The weights reflect the relative use of each factor by hospitals (currently about 60 percent labor and 40 percent non-labor).

The unit input intensity allowance is generally a downward adjustment provided for by law in the prospective payment update factor; that is, it is the amount subtracted from the input price index to yield the update factor.[49] Beginning in fiscal year 2004, the law provides that increases in payments to prospective payment system hospitals for covered admissions will equal the increase in the hospital input price index for those hospitals that submit the required quality measure data. For other hospitals, the increase will be slightly smaller. For this report, we assume that all hospitals will

[49]It should be noted that the update factors are generally prescribed on a fiscal-year basis, while table IV.A1 is on a calendar-year basis. Calculations have therefore been performed to estimate the unit input intensity allowance on a calendar-year basis. Also, because the displayed input price index amounts are the latest estimates available, as opposed to the estimates used when each prospective payment update factor was originally prescribed, the unit input intensity allowance includes, if necessary, an adjustment to offset this change. (Therefore, the sum of the input price index and the unit input intensity allowance generally reflects the prescribed prospective payment update factor, but on a calendar-year, rather than a fiscal-year, basis.

submit these data. Thus, the unit input intensity allowance, as indicated in table IV.A1, is assumed to equal zero for all of the first 25-year projection period except in 2009. For 2009, the change in the estimated input price index from the time the prospective update factor was prescribed to this report's publication was significant due to the economic recession, so the unit input intensity allowance reflects this change.

Increases in payments for inpatient hospital services also reflect increases in the number of inpatient hospital admissions covered under HI. As shown in table IV.A1, increases in admissions are attributable to increases in both HI fee-for-service enrollment and admission incidence (admissions per beneficiary).[50] The historical and projected increases in enrollment reflect a more rapid increase in the population aged 65 and over than in the total population of the United States, as well as increasing numbers of disabled beneficiaries and persons with end-stage renal disease. Increases in enrollment are expected to continue and to mirror the ongoing demographic shift into categories of the population that are eligible for HI benefits.

In the 1990s, the choice of more beneficiaries to join private health plans was an offsetting factor to the HI enrollment growth during this period, as shown in the managed care shift effect column of table IV.A1. In other words, greater enrollment in private health plans reduces the number of beneficiaries with fee-for-service Medicare coverage and thereby reduces hospital admissions paid through fee-for-service. This factor reversed during 2000-2003, when significant numbers of beneficiaries left private health plans. More recently, with the changes introduced in the Medicare Modernization Act, more beneficiaries are again enrolling in Medicare Advantage plans. This current shift is expected to continue for a couple of years before leveling off throughout the rest of the short-range projection period.

Since the beginning of the prospective payment system (PPS), increases in inpatient hospital payments from "other sources" are primarily due to three factors: (i) the changes in diagnosis-related group (DRG) coding as hospitals continue to adjust to the PPS; (ii) the trend toward treating less complicated (and thus less expensive) cases in outpatient settings, resulting in an increase in the average

[50]For 2010-2020, this factor is estimated to be negative, reflecting the influx of beneficiaries aged 65 (and the resulting reduction in the average age of beneficiaries) due to the retirement of the baby boom. By 2025, the aging of the baby boom is expected to increase the incidence of admissions.

prospective payment per admission; and (iii) legislation affecting the payment rates.

The impact of several budget reconciliation acts, sequesters as required by the Gramm-Rudman-Hollings Act, and additional legislative effects are reflected in other sources, as appropriate. Also included in the other sources column are the estimated bonus payments and penalties for hospitals due to the health information technology incentive provisions of the American Recovery and Reinvestment Act of 2009, which is described in section V.A of this report.

The average complexity of hospital admissions (case mix) is expected to increase by 1.0 percent annually in fiscal years 2009 through 2033 as a result of an assumed continuation of the current trend toward treating less complicated cases in outpatient settings, ongoing changes in DRG coding, and the overall impact of new technology. Moreover, with the advent of the new MS-DRG system, further significant increases in case mix are expected due to the coding of cases, though most of the MS-DRG impact is offset due to statutory budget neutrality adjustments for the new system. The budget neutrality adjustments are limited by law in 2008 and 2009, but the law then allows recovery of any extra payments that resulted. All of these anticipated effects and adjustments are reflected in the other sources column. 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, that are generally growing at a rate slower than the input price index. These other costs include capital, medical education (both direct and indirect), "disproportionate share" payments, and payments to hospitals not included in the prospective payment system.

Other possible sources of changes in payments include (i) a shift to more or less expensive admissions due to changes in the demographic characteristics of the covered population; (ii) changes in medical practice patterns; and (iii) adjustments in the relative payment levels for various DRGs, or addition/deletion of DRGs, in response to changes in technology.

The increases in the input price index (less any intensity allowance specified in the law), units of service, and other sources are compounded to calculate the total increase in payments for inpatient hospital services. These overall increases are shown in the last column of table IV.A1.

c. Fee-for-Service Payments for Skilled Nursing Facility, Home Health Agency, and Hospice Services

Historical experience with the number of days of care covered in skilled nursing facilities (SNFs) under HI has been characterized by wide swings. This extremely volatile experience has resulted, in part, from legislative and regulatory changes and from judicial decisions affecting the scope of coverage. At the start of the prospective payment system (PPS) in 1998 and 1999, there were large decreases in utilization. Since then, utilization rates have increased at fairly high rates. The intermediate projections assume that these increases will decline until they reflect modest increases in covered SNF days based on growth and aging of the population.

Increases in the average HI cost per day[51] in SNFs are caused principally by rising payroll costs for nurses and other required skilled labor. From 1991 through 1996, large rates of increase in cost per day occurred due to nursing home reform regulations. For 1997 and 1998, this increase was smaller than during the previous 6 years, but still large by historical standards. For 1998 and later, adjustments are included to reflect the implementation of the new PPS for SNFs, as required by the Balanced Budget Act of 1997. Increases in reimbursement per day also reflect implementation and expiration of special provisions from the Balanced Budget Refinement Act of 1999 and the Benefits Improvement and Protection Act of 2000. The implementation of the new RUG-53 system of payment in 2006 was accompanied by an increase of over 7 percent in case mix for 2006 and more than 3 percent for 2007, which is expected to gradually slow to more historical values over the next few years. Projected rates of increase in cost per day are assumed to decline to a level slightly higher than increases in general earnings throughout the projection period.

The resulting increases in fee-for-service expenditures for SNF services are shown in table IV.A2.

[51]Cost is defined to be the total of HI reimbursement and beneficiary cost sharing.

Table IV.A2.—Relationship between Increases in HI Expenditures and Increases in Taxable Payroll[1]

Calendar year	Inpatient hospital[2,3]	Skilled nursing facility[3]	Home health agency[3]	Managed care	Weighted average[3,4]	HI administrative costs[3,5]	HI expenditures[3,5]	HI taxable payroll	Growth rate differential[6]
Historical data:									
1999	2.1%	−18.0%	−39.0%	11.4%	−1.1%	2.9%	−1.1%	6.8%	−7.3%
2000	1.1	8.2	−29.2	2.5	0.8	41.3	1.5	7.9	−5.9
2001	9.6	22.5	47.7	−6.0	9.6	−14.0	9.1	2.3	6.7
2002	8.7	9.8	−5.1	−8.5	5.9	14.4	6.1	0.4	5.7
2003	5.2	2.7	−12.8	0.1	4.1	−0.5	4.0	2.7	1.3
2004	5.9	13.3	9.6	10.5	7.8	18.3	8.0	5.9	1.9
2005	5.7	10.9	7.0	21.0	8.7	−2.6	8.5	5.4	2.9
2006	0.7	7.6	2.2	28.0	6.1	0.0	6.0	6.4	−0.4
2007	0.3	8.2	3.8	22.6	5.7	−1.0	5.6	5.3	0.3
2008	5.4	8.2	6.7	21.4	9.2	10.6	9.3	2.9	6.2
Intermediate estimates:									
2009	4.2	6.5	4.2	17.0	7.5	0.2	7.4	−0.6	8.0
2010	1.7	5.2	2.5	6.1	3.4	4.2	3.4	3.5	−0.1
2011	7.6	5.6	3.2	5.0	6.6	7.0	6.6	5.9	0.7
2012	7.9	5.6	6.0	7.8	7.5	7.2	7.5	5.9	1.5
2013	7.0	6.1	6.6	8.7	8.3	7.5	8.3	5.6	2.5
2014	7.0	6.2	6.7	9.6	9.3	7.2	9.2	5.2	3.9
2015	6.5	6.4	6.8	3.2	3.1	7.3	3.2	5.0	−1.7
2016	6.8	6.5	6.9	6.9	6.8	6.8	6.8	4.4	2.3
2017	7.2	6.8	7.2	7.1	7.1	6.9	7.1	4.4	2.6
2018	7.5	7.1	7.4	7.3	7.4	6.9	7.4	4.4	2.9
2020	7.5	7.2	7.5	7.4	7.4	6.9	7.4	4.3	3.0
2025	7.6	8.2	8.1	7.8	7.7	6.5	7.7	4.3	3.3
2030	7.2	8.4	8.0	7.6	7.5	5.6	7.5	4.4	3.0

[1]Percent increase in year indicated over previous year.
[2]This column may differ slightly from the last column of table IV.A1, since table IV.A1 includes all persons eligible for HI protection while this table excludes noninsured persons.
[3]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.
[4]Includes costs for hospice care.
[5]Includes costs of Peer Review Organizations through 2001 and Quality Improvement Organizations beginning in 2002.
[6]The ratio of the increase in HI costs to the increase in taxable payroll. This ratio is equivalent to the percent increase in the ratio of HI expenditures to taxable payroll (the cost rate).

Historically, HI experience with home health agency (HHA) payments had shown a generally upward trend, frequently with sharp increases in the number of visits from year to year. During 1989-1995, extremely large increases in the number of visits occurred. Growth slowed dramatically in 1996 and 1997, in part as a result of intensified efforts to identify fraudulent activities in this area. The growth in the benefit was also heavily affected by the enactment of the Balanced Budget Act of 1997, which introduced interim per beneficiary cost limits at levels resulting in substantially lower aggregate payments. These cost limits were used until the prospective payment system was implemented in October 2000. For 1998 through 2001, data show large decreases in utilization, with utilization leveling off in 2002 and 2003. For 2004 through 2007, slightly larger increases have been observed. In 2008, based on preliminary data, a very large increase in utilization occurred. In

addition, in certain areas of the country, outlier payments for treatment episodes have increased at extraordinary rates in recent years, prompting special rules to limit abusive practices. For 2009 and later, these utilization and intensity increases are expected to slow, so more modest increases are assumed for the rest of the projection period, based on growth and aging of the population.

In addition, beginning in 1998, certain categories of HHA services were transferred from HI to SMI, but with a portion of the cost of the transferred services met through the HI trust fund during a 6-year transitional period. At the start of the HHA prospective payment system, the transferred services represented a little over one-half of all HHA services. The HHA estimates shown in this report represent the total cost to HI from (i) HI-covered HHA services, and (ii) the transitional payments to the SMI trust fund for the applicable portion of SMI HHA costs, as specified by the Balanced Budget Act of 1997. Reimbursement per episode of care[52] is assumed to increase at a slightly higher rate than increases in general earnings, but adjustments to reflect statutory limits on HHA reimbursement per episode are included where appropriate. In particular, payments were set to be equivalent to a 15-percent reduction in the prior interim cost limits, effective October 2002. Reimbursement per episode also includes any change in the mix of services being provided. During the first year that the prospective payment system was in effect, this mix of services was much higher than anticipated. Since then, more modest levels of case mix have been observed. CMS is adjusting HHA payment levels over the next several years to gradually offset the unanticipated mix of services in the first year; these regulatory adjustments are reflected in projected HHA costs. The resulting increases in fee-for-service expenditures for HHA services are shown in table IV.A2.

HI covers certain hospice care for terminally ill beneficiaries. Hospice payments are very small relative to total HI benefit payments, but they have grown rapidly in most years. This growth rate slowed dramatically in the mid-to-late 1990s but rebounded sharply in 1999 through 2006. In 2007 and 2008, the growth slowed, and this growth rate is expected to continue to decline until reaching levels that are equivalent to the other Part A services. Although detailed hospice data are scant at this time, estimates for hospice benefit payment increases are based on mandated daily payment rates and annual payment caps, and these estimates assume a deceleration in

[52]Under the HHA prospective payment system, Medicare payments are made for each episode of care, rather than for each individual home health visit.

the growth in the number of covered days. Increases in hospice payments are not shown separately in table IV.A2 due to their extremely small contribution to the weighted average increase for all HI types of service; they are, however, included in the average.

d. Private Health Plan Costs

HI payments to private health plans have generally increased significantly from the time that such plans began to participate in the Medicare program in the early 1980s. Most of the increase in expenditures has been associated with the increasing numbers of beneficiaries who have enrolled in these plans. A description of the private health plan assumptions and methodology is contained in section IV.C of this report.

e. Administrative Expenses

Historically, the cost of administering the HI trust fund has remained relatively small in comparison with benefit amounts. The ratio of administrative expenses to benefit payments has generally fallen within the range of 1 to 3 percent. The short-range projection of administrative cost is based on estimates of workloads and approved budgets for intermediaries and the Centers for Medicare & Medicaid Services. 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 that are shown in table IV.A1.

2. Financing Analysis Methodology

Because the HI trust fund is supported by payroll taxes, HI costs must be compared on a year-by-year basis with the taxable payroll in order to analyze costs and evaluate the financing. Since the vast majority of total HI 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 section will focus on the financing for insured beneficiaries only.

a. Taxable Payroll

Taxable payroll increases occur as a result of increases in both average covered earnings and the number of covered workers. The taxable payroll projection used in this report is based on the same economic assumptions used in the 2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and

Disability Insurance Trust Funds. The projected increases in taxable payroll for this report, under the intermediate assumptions, are shown in table IV.A2.

b. Relationship between HI Costs and Taxable Payroll

The single most meaningful measure of cost increases, with reference to the financing of the system, is the relationship between cost increases and taxable payroll increases. If costs increase more rapidly than taxable payroll, either income rates must be increased or costs reduced (or some combination thereof) to finance the system in the future. Table IV.A2 shows the projected increases in HI costs relative to taxable payroll over the first 25-year projection period. These relative increases fluctuate, reaching −0.1 percent per year in 2010, and then increasing to a level of about 3.0 percent per year by 2030 for the intermediate assumption, as the baby boom population becomes eligible for benefits.

The result of these relative growth rates is a steady increase in the year-by-year ratios of HI expenditures to taxable payroll, as shown in table IV.A3. Under the low-cost alternative, increases in HI expenditures follow a similar pattern relative to increases in taxable payroll, but at a somewhat lower rate; the rate becomes about 2 percent less than the rate for taxable payroll by 2010 but then increases, reaching about 1.0 percent more per year than taxable payroll by 2030. The high-cost alternative follows a comparable pattern but at a somewhat higher rate than under the intermediate assumptions, gradually becoming about 1.9 percent more than taxable payroll by 2010 and then increasing to about 5.0 percent more than taxable payroll by 2030.

Table IV.A3.—Summary of HI Alternative Projections

Calendar year	Increases in aggregate HI inpatient hospital payments[1]				Changes in the relationship between expenditures and payroll[1]			Expenditures as a percent of taxable payroll[3,4,5]
	Average hourly earnings	CPI	Other factors[2]	Total[3]	HI expenditures[3,4,5]	Taxable payroll	Ratio of expenditures to payroll	
Intermediate:								
2009	2.0%	−1.0%	3.4%	4.3%	7.4%	−0.6%	8.0%	3.57%
2010	4.1	1.7	−1.4	1.7	3.4	3.5	−0.1	3.57
2011	3.8	2.3	4.3	7.6	6.6	5.9	0.7	3.59
2012	3.7	2.7	4.4	7.8	7.5	5.9	1.5	3.65
2013	4.0	3.1	3.2	7.0	8.3	5.6	2.5	3.74
2014	4.0	3.1	3.2	6.9	9.2	5.2	3.9	3.88
2015	4.1	2.8	2.8	6.5	3.2	5.0	−1.7	3.81
2016	3.9	2.8	3.1	6.7	6.8	4.4	2.3	3.90
2017	3.9	2.8	3.5	7.1	7.1	4.4	2.6	4.00
2018	4.0	2.8	3.8	7.5	7.4	4.4	2.9	4.12
2020	3.9	2.8	3.8	7.5	7.4	4.3	3.0	4.37
2025	3.9	2.8	4.0	7.6	7.7	4.3	3.3	5.13
2030	3.9	2.8	3.6	7.2	7.5	4.4	3.0	6.00
Low-cost:								
2009	2.3	−1.2	0.4	1.3	5.2	0.4	4.7	3.44
2010	3.8	1.3	−2.6	0.1	1.8	3.8	−2.0	3.37
2011	3.4	1.4	2.9	5.6	4.6	5.9	−1.2	3.33
2012	3.1	1.7	3.0	5.7	5.3	5.9	−0.5	3.32
2013	3.3	2.1	1.7	4.6	6.0	5.3	0.7	3.34
2014	3.1	2.1	1.5	4.2	6.9	4.3	2.4	3.42
2015	3.5	1.8	0.9	3.8	0.1	4.4	−4.1	3.28
2016	3.4	1.8	1.5	4.3	4.4	4.2	0.2	3.29
2017	3.5	1.8	1.9	4.8	4.8	4.2	0.6	3.31
2018	3.6	1.8	2.2	5.2	5.1	4.2	0.9	3.34
2020	3.4	1.8	2.2	5.1	5.1	4.0	1.1	3.41
2025	3.4	1.8	2.3	5.2	5.4	4.0	1.4	3.65
2030	3.4	1.8	1.9	4.8	5.1	4.0	1.0	3.88
High-cost:								
2009	2.4	−0.4	5.9	7.2	9.7	−0.7	10.5	3.68
2010	4.3	2.2	0.1	3.6	5.2	3.2	1.9	3.75
2011	3.9	2.5	5.7	9.2	8.2	5.9	2.2	3.83
2012	3.0	4.3	5.2	8.9	8.5	4.0	4.3	4.00
2013	6.5	6.0	3.2	9.7	10.8	6.1	4.5	4.18
2014	7.1	5.8	4.6	11.5	13.5	8.3	4.8	4.38
2015	6.0	4.7	5.2	11.0	7.9	7.2	0.7	4.41
2016	5.0	3.9	5.6	10.5	10.5	5.9	4.3	4.60
2017	4.4	3.8	5.7	10.1	10.1	5.3	4.6	4.81
2018	4.2	3.8	5.6	9.9	9.8	4.6	5.0	5.05
2020	4.4	3.8	5.5	9.9	9.8	4.6	4.9	5.56
2025	4.5	3.8	5.6	10.1	10.2	4.7	5.2	7.18
2030	4.5	3.8	5.2	9.7	10.0	4.7	5.0	9.25

[1]Percent increase for the year indicated over the previous year.
[2]Other factors include hospital hourly earnings, hospital price input intensity, unit input intensity allowance, units of service as measured by admissions, and additional sources.
[3]On an incurred basis.
[4]Includes expenditures attributable to insured beneficiaries only.
[5]Includes hospital, SNF, HHA, private health plan, and hospice expenditures; administrative costs; and costs of Quality Improvement Organizations.

3. Projections under Alternative Assumptions

In almost every year since the trust fund was established, average HI expenditures per beneficiary have increased substantially faster than increases in average earnings and prices in the general economy. Table IV.A2 shows the estimated past experience of HI from 1999 to

2008. As mentioned earlier, HI now makes most payments to hospitals on a prospective basis. Payments to skilled nursing facilities have been made prospectively since mid-1998, and home health reimbursement became prospective in October 2000. The prospective payment systems have made (and are expected to continue to make) HI outlays potentially less vulnerable to excessive rates of growth in the health care industry. However, there is still considerable uncertainty in projecting HI expenditures—for inpatient hospital services as well as for other types of covered services—due to the uncertainty of the underlying economic assumptions and utilization increases. Uncertainty in projecting HI expenditures also exists because of the possibility that future legislation will affect unit payment levels, particularly for inpatient hospital services. Although current law is assumed throughout the estimates shown in this report, legislation has been enacted affecting the inpatient PPS payment levels to hospitals for each of the past 24 years, and future legislation is probable.

In view of the uncertainty of future cost trends, projected HI costs have been prepared under three alternative sets of assumptions. A summary of the assumptions and results is shown in table IV.A3. Increases in the economic factors (average hourly earnings and CPI) for the three alternatives are consistent with those underlying the OASDI report.

HI costs beyond the first 25-year projection period are based on the assumption that average per beneficiary expenditures (excluding demographic impacts) will increase at a rate determined by the economic model described in sections II.C and IV.D. This rate is about 1.4 percent faster than the Gross Domestic Product (GDP) per capita in 2033, slowing down to about 0.2 percent faster than GDP per capita by 2083. HI expenditures, which were 3.3 percent of taxable payroll in 2008, will increase to 6.0 percent by 2030 and to 11.8 percent by 2080 under the intermediate assumptions. Hence, if all of the projection assumptions are realized over time, the HI income rates provided in current law (3.46 percent of taxable payroll) will be grossly inadequate to support the HI cost.

During the first 25-year projection period, the low-cost and high-cost alternatives contain assumptions that result in HI costs increasing, relative to taxable payroll increases, approximately 2 percentage points less rapidly and 2 percentage points more rapidly, respectively, than the results under the intermediate assumptions. Costs beyond the first 25-year projection period assume that the 2-percentage-point differential gradually decreases until 2058, when HI cost increases

relative to taxable payroll are approximately the same as under the intermediate assumptions. Under the low-cost alternative, HI expenditures would be 3.9 percent of taxable payroll in 2030, increasing to 5.6 percent of taxable payroll by 2080. Under the high-cost alternative, HI expenditures would increase in 2030 to 9.3 percent of taxable payroll, and to 24.8 percent of taxable payroll in 2080.

B. SUPPLEMENTARY MEDICAL INSURANCE

SMI consists of Part B and, beginning in 2004, Part D. The benefits provided by each part are quite different in nature. The actuarial methodologies used to produce the estimates for each part reflect these differences and, accordingly, are presented in separate sections.

1. Part B

a. Cost Projection Methodology

Estimates under the intermediate assumptions are calculated separately for each category of enrollee and for each type of service. The estimates are prepared by establishing the allowed charges or costs incurred per enrollee for a recent year (to serve as a projection base) and then projecting these charges through the estimation period. The per enrollee charges are then converted to reimbursement amounts by subtracting the per enrollee values of the deductible and coinsurance. Aggregate reimbursement amounts are calculated by multiplying the per enrollee reimbursement amounts by the projected enrollment. In order to estimate cash expenditures, an allowance is made for the delay between receipt of, and payment for, the service.

(1) Projection Base

To establish a suitable base from which to project the future Part B costs, the incurred payments for services provided must be reconstructed for the most recent period for which a reliable determination can be made. Therefore, 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, and of any items affecting only the timing and flow of payments to providers, must be eliminated. As a result, the rates of increase in the Part B incurred cost differ from the increases in cash expenditures.

(a) Carrier Services

Reimbursement amounts for physician services, durable medical equipment (DME), laboratory tests performed in physician offices and independent laboratories, and other services (such as physician-administered drugs, free-standing ambulatory surgical center facility services, ambulance, and supplies) are paid through organizations acting for the Centers for Medicare & Medicaid Services (CMS). These organizations, referred to as "carriers," determine whether billed services are covered under Part B and establish the allowed charges for covered services. A record of the allowed charges, the applicable deductible and coinsurance, and the amount reimbursed after reduction for coinsurance and the deductible is transmitted to CMS.

The data are tabulated on an incurred basis. As a check on the validity of the projection base, incurred reimbursement amounts are compared with carrier cash expenditures.

(b) Intermediary Services

Reimbursement amounts for institutional services under Part B are paid by the same "fiscal intermediaries" that pay for HI services. Institutional care covered under Part B includes outpatient hospital services, home health agency services, laboratory services performed in hospital outpatient departments, and other services (such as renal dialysis performed in free-standing dialysis facilities, services in outpatient rehabilitation facilities, and services in rural health clinics).

Currently, there are separate payment systems for almost all the Part B institutional services. For these systems, the intermediaries determine whether billed services are covered under Part B and establish the allowed payment for covered services. A record of the allowed payment, the applicable deductible and coinsurance, and the amount reimbursed after reduction for coinsurance and the deductible is transmitted to CMS.

For those services still reimbursed on a reasonable-cost basis, the costs for covered services are determined on the basis of provider cost reports. Reimbursement for these services occurs in two stages. First, bills are submitted to the intermediaries, and interim payments are made on the basis of these bills. The second stage takes place at the close of a provider's accounting period, when a cost report is submitted and lump-sum payments or recoveries are made to correct

for the difference between interim payments and final settlement amounts for providing covered services (net of coinsurance and deductible amounts). Tabulations of the bills are prepared by date of service, and the lump-sum settlements, which are reported only on a cash basis, are adjusted (using approximations) to allocate them to the time of service.

(c) Private Health Plan Services

Private health plans with contracts to provide health services to Medicare beneficiaries are reimbursed directly by CMS on either a reasonable-cost or capitation basis. A description of the assumptions and methodology used to estimate payments to private plans is contained in section IV.C of this report.

(2) Fee-for-Service Payments for Aged Enrollees and Disabled Enrollees without End-Stage Renal Disease

Part B enrollees with end-stage renal disease (ESRD) have per enrollee costs that are substantially higher and quite different in nature from those of most other beneficiaries. Hence, Part B costs for them have been excluded from the analysis in this section and are contained in a later section. In addition, costs associated with beneficiaries enrolled in private health plans are discussed separately.

(a) Carrier Services

i. Physician Services

Medicare payments for physician services are based on a fee schedule, which reflects the relative level of resources required for each service. The fee schedule amount is equal to the product of the procedure's relative value, a conversion factor, and a geographic adjustment factor. Payments are based on the lower of the actual charge and the fee schedule amount. Increases in physician fees are based on growth in the Medicare Economic Index (MEI),[53] plus an update adjustment factor (UAF) that reflects whether past growth in the volume and intensity of services met specified targets under the sustainable growth rate mechanism. Table IV.B1 shows the projected MEI increases and update adjustment factors for 2010 through 2018. The physician fee updates and MEI increases shown through 2009 are actual values. For 2010-2014, the physician updates are unrealistically low, due to the requirements of the current-law

[53]The MEI is a measure of inflation in physician practice costs and general wage levels.

sustainable growth rate system (SGR), and are extremely unlikely to actually occur. The modified update shown in column 4 reflects the growth in the MEI, the update adjustment factor, and legislative impacts, such as the addition of preventive services.

Table IV.B1.—Components of Increases in Total Allowed Charges per Fee-for-Service Enrollee for Carrier Services

[In percent]

	Physician fee schedule									
	Increase due to price changes									
Calendar year	MEI	UAF[1]	Physician update[2]	Modified update[3]	Residual factors	Total increase[4]	CPI	DME	Lab	Other carrier
Aged:										
1999	2.3%	0.0%	2.3%	2.6%	1.3%	3.9%	2.2%	5.0%	−0.0%	10.7%
2000	2.4	3.0	5.5	5.9	3.6	9.6	3.5	10.2	7.6	14.3
2001	2.1	3.0	4.8	5.3	4.1	9.7	2.7	12.6	7.4	16.1
2002	2.6	−7.0	−4.8	−4.2	6.1	1.7	1.4	12.8	7.0	17.0
2003	3.0[5]	−1.1[5]	1.7[5]	1.4	4.5	6.0	2.2	13.8	6.9	16.2
2004	2.9	−1.4	1.5	3.8	5.9	10.0	2.6	−0.5	7.6	7.6
2005	3.1	−1.6	1.5	2.1	3.2	5.4	3.5	1.4	6.3	3.1
2006	2.8	−2.6	0.2	0.2	4.6	4.7	3.2	4.8	7.7	5.5
2007	2.1	−2.1	0.0	−1.4	3.5	2.0	2.9	2.0	9.8	4.6
2008	1.8	−1.3	0.5	0.4	3.6	4.0	4.1	7.9	7.3	3.3
2009	1.6	−0.5	1.1	1.7	2.6	4.4	−1.0	3.7	11.0	7.8
2010	0.8	−22.1	−21.5	−22.0	8.1	−15.6	1.7	2.7	5.0	4.3
2011	1.5	−7.0	−5.6	−5.5	2.8	−2.9	2.3	5.0	0.3	6.1
2012	1.8	−7.0	−5.3	−5.9	9.3	2.8	2.7	5.9	6.2	6.2
2013	1.5	−7.0	−5.6	−5.7	2.1	−3.7	3.1	4.0	5.8	6.4
2014	1.4	−7.0	−5.7	−5.3	2.2	−3.2	3.1	4.8	6.2	6.7
2015	1.7	−1.9	−0.2	0.0	1.8	1.8	2.8	6.2	6.5	6.2
2016	2.1	3.0	5.2	5.0	1.7	6.8	2.8	6.0	6.3	6.2
2017	2.2	3.0	5.3	4.9	2.3	7.3	2.8	5.4	6.5	6.6
2018	2.3	2.5	4.9	5.0	3.1	8.3	2.8	5.4	6.6	6.9
Disabled (excluding ESRD):										
1999	2.3	0.0	2.3	2.6	0.9	3.5	2.2	2.6	3.1	11.2
2000	2.4	3.0	5.5	5.9	5.9	12.1	3.5	9.3	9.3	17.4
2001	2.1	3.0	4.8	5.3	3.9	9.5	2.7	14.5	6.2	16.8
2002	2.6	−7.0	−4.8	−4.2	7.3	2.8	1.4	19.8	10.9	20.8
2003	3.0[5]	−1.1[5]	1.7[5]	1.4	4.6	6.1	2.2	14.9	6.8	23.3
2004	2.9	−1.4	1.5	3.8	5.5	9.6	2.6	−0.3	8.5	12.8
2005	3.1	−1.6	1.5	2.1	2.4	4.6	3.5	2.2	6.8	6.5
2006	2.8	−2.6	0.2	0.2	3.5	3.7	3.2	6.9	9.5	−3.6
2007	2.1	−2.1	0.0	−1.4	3.3	1.8	2.9	2.8	13.2	5.8
2008	1.8	−1.3	0.5	0.4	3.4	3.9	4.1	8.6	11.6	6.8
2009	1.6	−0.5	1.1	1.7	2.6	4.4	−1.0	4.1	10.9	8.1
2010	0.8	−22.1	−21.5	−22.0	8.1	−15.6	1.7	3.0	4.9	3.5
2011	1.5	−7.0	−5.6	−5.5	2.7	−2.9	2.3	5.3	0.3	5.9
2012	1.8	−7.0	−5.3	−5.9	9.3	2.9	2.7	6.4	6.1	6.1
2013	1.5	−7.0	−5.6	−5.7	2.1	−3.7	3.1	4.4	5.8	6.3
2014	1.4	−7.0	−5.7	−5.3	2.2	−3.3	3.1	5.1	6.2	6.5
2015	1.7	−1.9	−0.2	0.0	1.7	1.7	2.8	6.5	6.5	6.3
2016	2.1	3.0	5.2	5.0	1.7	6.8	2.8	6.2	6.3	6.2
2017	2.2	3.0	5.3	4.9	2.3	7.3	2.8	5.3	6.5	6.6
2018	2.3	2.5	4.9	5.0	3.1	8.3	2.8	5.3	6.5	6.8

[1]Update adjustment factor.

[2]Reflects the growth in the MEI, the update adjustment, and legislation that impacts the physician fee schedule update. The legislative impact is −0.2 percent in 2001-2003. For 2004 and 2005, the Medicare Modernization Act established a minimum update of 1.5 percent. For 2006, the Deficit Reduction Act froze the physician fee schedule conversion factor. The conversion factor freeze, along with refinements to the relative value units, results in an update of 0.2 percent for 2006. The conversion factor was frozen again for 2007 by the Tax Relief and Health Care Act of 2006. The Medicare, Medicaid, and SCHIP

Extension Act together with the Medicare Improvements for Patients and Providers Act (MIPPA) specified an update of 0.5 percent for 2008. MIPPA also specified an update of 1.1 percent for 2009.
[3]Reflects the growth in the MEI, the update adjustment, and all legislation affecting physician services—for example, the addition of new preventative services enacted in 1997 and 2000. The legislative impacts would include those listed in footnote 2.
[4]Equals combined increases in allowed fees and residual factors.
[5]The physician payment price changes for 2003 occurred on March 1, 2003.

The projected physician fee schedule expenditures should be considered unrealistically low due to the current-law structure of physician payment updates under the SGR system. The SGR requires that future physician payment increases be adjusted for past actual physician spending relative to a target spending level. The system would have led to significant reductions in physician fee schedule rates in each of 2003 through 2009. The Consolidated Appropriation Resolution established a 1.7-percent update beginning in March 2003 that applied to the rest of calendar year 2003. To avoid the reductions from 2004 through 2006, the Medicare Modernization Act established minimum updates of 1.5 percent for 2004 and 2005, and the Deficit Reduction Act established a 0.2-percent update for 2006.[54] However, the target spending level was not adjusted for the amendments that avoided the reductions in 2004, 2005, and 2006. Therefore, the cumulative actual physician expenditures were substantially above the cumulative SGR targets at the end of 2006.

The Tax Relief and Health Care Act (TRA) established a 0.0-percent update for 2007, increased the target spending level for 1 year, and specified that the 2008 physician fee schedule conversion factor be computed as if the 2007 physician update had not been changed by the TRA. The Medicare, Medicaid, and SCHIP Extension Act (MMSEA) established a 0.5-percent update for the first 6 months of 2008. The Medicare Improvements for Patients and Providers Act (MIPPA) extended the 0.5-percent update for the rest of calendar year 2008 and provided for a 1.1-percent update for 2009. The MMSEA and the MIPPA also increased the target spending level for 2008 and 2009 and specified that the conversion factor for 2010 be calculated as if the physician updates for 2008 and 2009 had not been changed by the MMSEA and the MIPPA.

As a result, under current law, these recent amendments would cause projected physician updates to be about −21.5 percent for 2010, about −5.5 percent for 2011 through 2014, and about −0.2 percent for

[54]The Deficit Reduction Act froze the conversion factor for 2006. Changes in relative value units (RVUs), which increased the average RVU by about 0.2 percent, resulted in a physician fee schedule update of 0.2 percent for 2006.

2015.[55] The cumulative reduction in the payment rates for physician services would be approximately 38 percent from 2010 through 2015. In contrast, the MEI is expected to increase by about 9 percent over the same time frame. Many years of significant reductions in physician payments per service are nearly certain not to occur before legislative changes intervene. (As noted, Congress has overridden the scheduled negative update for each of the past 7 years.) Despite the extremely low probability of these payment reductions actually occurring, the payment reductions are required under the current-law SGR system and are included in the physician fee schedule projections shown in this report. Therefore, the physician estimates after 2009 are of limited use for assessing the likely future state of Part B, and these estimates should be interpreted cautiously.[56]

The current-law projections in this report reflect only the direct impacts of the SGR provisions. Potential secondary SGR effects on Parts A, B, and D are not reflected; accordingly, these projections do not illustrate the full consequences of the current-law physician payment mechanism on Medicare beneficiaries, providers, and financial operations.[57] The secondary impacts have been excluded because of the minimal likelihood that the physician payment reductions will occur in practice, in order to retain the integrity of the non-physician current-law projections, and because of the speculative nature of these secondary impacts.

Per capita physician charges also have changed each year as a result of a number of other factors besides fee increases, including more physician visits and related services per enrollee, the aging of the Medicare population, greater use of specialists and more expensive techniques, and certain administrative actions. The fifth column of table IV.B1 shows the increases in charges per enrollee resulting from these residual factors. Because the measurement of increased allowed charges per service is subject to error, any such errors are included implicitly under residual causes.

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[55]Additional information about the SGR system and the physician spending targets including the original target levels is available at http://www.cms.hhs.gov/SustainableGRatesConFact/Downloads/sgr2010p.pdf.

[56]Part B projections under illustrative alternatives to the current sustainable growth rate system are shown on the CMS website at http://www.cms.hhs.gov/ReportsTrustFunds/05_alternativePartB.asp. No endorsement of these alternatives by the Board of Trustees, CMS, or the Office of the Actuary should be inferred.

[57]Such secondary effects could include (i) substantially reduced beneficiary access to physicians, (ii) a significant shift in enrollment to Medicare private health plans, (iii) an increase in emergency room services, (iv) an increase in mortality rates, and/or (v) an increase in hospital services.

Based on the increases in table IV.B1, table IV.B2 shows the estimates of the average incurred reimbursement for carrier services per fee-for-service enrollee.

Table IV.B2.—Incurred Reimbursement Amounts per Fee-for-Service Enrollee for Carrier Services

Calendar year	Fee-for-service enrollment [millions]	Physician fee schedule	DME	Lab	Other carrier
Aged:					
1999	26.003	$1,134.08	$133.74	$68.35	$219.30
2000	26.163	1,248.46	147.52	73.29	250.62
2001	26.959	1,373.57	166.49	78.73	291.31
2002	27.686	1,397.76	188.03	84.23	340.63
2003	28.232	1,484.88	214.19	89.84	396.38
2004	28.440	1,638.83	212.88	96.88	426.24
2005	28.433	1,724.37	215.42	103.02	440.40
2006	27.614	1,801.38	224.79	110.98	464.64
2007	26.933	1,836.72	229.24	121.86	486.30
2008	26.319	1,911.42	247.23	130.92	499.87
2009	26.064	1,999.41	258.46	145.55	534.22
2010	26.065	1,671.11	265.18	152.83	556.66
2011	26.649	1,606.59	277.92	153.34	589.92
2012	27.387	1,688.89	295.22	162.81	628.10
2013	28.225	1,619.10	307.12	172.32	668.63
2014	29.042	1,559.79	322.08	183.09	713.76
2015	29.890	1,583.08	342.39	195.07	758.60
2016	30.785	1,687.79	363.18	207.29	806.29
2017	31.737	1,805.35	382.58	220.74	859.67
2018	32.740	1,953.82	403.25	235.21	918.63
Disabled (excluding ESRD):					
1999	3.989	936.88	187.30	62.06	184.79
2000	4.137	1,055.96	204.68	67.83	216.55
2001	4.355	1,160.01	234.68	71.99	251.95
2002	4.563	1,195.45	281.70	79.86	303.45
2003	4.847	1,274.30	323.73	85.31	374.44
2004	5.100	1,403.25	322.26	92.61	422.60
2005	5.309	1,466.39	328.96	98.94	451.05
2006	5.238	1,517.92	350.94	108.50	434.21
2007	5.240	1,550.85	360.74	122.88	459.99
2008	5.209	1,617.02	393.37	137.61	493.30
2009	5.261	1,681.84	415.06	153.18	537.72
2010	5.360	1,406.34	427.14	160.70	556.19
2011	5.508	1,351.52	449.37	161.18	588.50
2012	5.598	1,425.43	478.88	171.06	625.37
2013	5.692	1,365.72	500.07	180.99	664.95
2014	5.793	1,314.71	525.94	192.26	708.82
2015	5.895	1,332.79	560.48	204.80	753.51
2016	5.987	1,419.05	595.32	217.61	800.71
2017	6.067	1,516.34	626.88	231.71	853.35
2018	6.137	1,640.20	660.17	246.87	911.08

ii. Durable Medical Equipment (DME), Laboratory, and Other Carrier Services

As with physician services, over time unique fee schedules or reimbursement mechanisms have been established for virtually all other non-physician carrier services. Table IV.B1 shows the increases

in the allowed charges per fee-for-service enrollee for DME, laboratory services, and other carrier services. Based on the increases in table IV.B1, table IV.B2 shows the corresponding estimates of the average incurred reimbursement for these services per fee-for-service enrollee. The fee schedules for each of these expenditure categories are updated by increases in the CPI, together with any applicable legislated limits on payment updates. In addition, per capita charges for these expenditure categories have grown as a result of a number of other factors, including increased number of services provided, the aging of the Medicare population, more expensive services, and certain administrative actions. This growth is projected based on recent past trends in growth per enrollee.

(b) Intermediary Services

Over the years, legislation has been enacted to establish new payment systems for virtually all Part B intermediary services. A fee schedule was established for tests performed in laboratories in hospital outpatient departments. The Balanced Budget Act of 1997 (BBA) implemented a prospective payment system (PPS), which began August 1, 2000, for services performed in the outpatient department of a hospital. It also implemented a PPS for home health agency services, which began October 1, 2000.

In 2007, accounting errors were discovered among the payments for intermediary services. A transition to a new national accounting system for intermediaries began in early 2005. This new accounting system mistakenly paid Part A hospice claims from the Part B account of the SMI trust fund, rather than from the HI trust fund. Intermediaries that had been transitioned to the new accounting system continued to make these accounting errors until the process was corrected on October 1, 2007.[58]

The historical and projected increases in charges and costs per fee-for-service enrollee for intermediary services are shown in table IV.B3.

[58]The Part B account and the HI trust fund were restored to their correct asset position on July 1, 2008, when $9.3 billion was paid into the Part B account and a similar amount came out of the HI trust fund.

Table IV.B3.—Components of Increases in Recognized Charges and Costs per Fee-for-Service Enrollee for Intermediary Services

[In percent]

Calendar year	Outpatient hospital	Home health agency[1]	Outpatient lab	Other intermediary
Aged:				
1999	9.5%	−1.4%[2,3]	12.6%	−20.7%
2000	−0.8	14.5[3]	5.3	21.8
2001	12.5	−51.0[3]	0.7	14.7
2002	−1.4	3.1[3]	13.5	20.7
2003	5.4	4.5[3]	7.8	3.9
2004	10.0	14.6	8.4	15.2
2005	9.8	15.9	4.4	13.1
2006	4.1	17.6	4.3	7.5
2007	8.4	18.8	3.4	8.5
2008	3.8	10.9	2.2	5.1
2009	6.1	5.0	7.5	8.1
2010	5.8	2.3	−0.5	−3.3
2011	6.1	0.9	−1.5	6.3
2012	6.3	3.2	5.0	6.0
2013	6.9	3.4	5.4	5.1
2014	7.2	3.7	6.4	4.8
2015	7.1	3.8	6.7	4.7
2016	7.1	3.9	6.4	4.8
2017	7.3	4.1	6.5	4.5
2018	7.3	4.3	6.6	5.0
Disabled (excluding ESRD):				
1999	8.8	−1.5[2,3]	14.3	−11.1
2000	2.0	14.0[3]	7.4	−16.0
2001	13.4	−44.2[3]	7.3	1.4
2002	3.9	4.7[3]	13.9	21.9
2003	5.1	5.0[3]	6.4	−2.6
2004	12.9	14.2	10.2	21.6
2005	8.8	16.8	5.5	11.5
2006	4.7	20.1	6.3	15.6
2007	8.9	20.7	6.3	14.1
2008	5.0	9.1	4.4	6.7
2009	6.0	5.8	7.5	9.6
2010	5.7	2.7	−0.5	0.5
2011	6.0	1.3	−1.5	7.7
2012	6.3	4.2	5.0	7.2
2013	6.9	4.5	5.4	6.3
2014	7.2	4.6	6.4	5.7
2015	7.1	4.7	6.7	5.7
2016	7.1	4.5	6.4	5.8
2017	7.3	4.5	6.5	5.7
2018	7.3	4.6	6.6	6.0

[1]From July 1, 1981 to December 31, 1997, home health agency (HHA) services were almost exclusively provided by Part A. However, for those Part B enrollees not entitled to Part A, the coverage of these services was provided by Part B. During that time, since all Part B disabled enrollees were also entitled to Part A, their coverage of these services was provided by Part A.

[2]Effective January 1, 1998, the coverage of a majority of HHA services for those individuals entitled to Part A and enrolled in Part B was transferred from Part A to Part B. As a result, as of January 1, 1998, there was a large increase in Part B expenditures for these services for the aged enrollees, and Part B coverage for these services resumed for disabled enrollees.

[3]Does not reflect the impact of monies transferred from the Part A trust fund for HHA costs, as provided for by the Balanced Budget Act of 1997.

Based on the increases in table IV.B3, table IV.B4 shows the estimates of the incurred reimbursement for the various intermediary services per fee-for-service enrollee. Each of these expenditure categories is projected on the basis of recent past trends in growth per

enrollee, together with applicable legislated limits on payment updates.

Table IV.B4.—Incurred Reimbursement Amounts per Fee-for-Service Enrollee for Intermediary Services

Calendar year	Fee-for-service enrollment [millions]	Outpatient hospital	Home health agency	Outpatient lab	Other intermediary
Aged:					
1999	26.003	$292.92	$270.85[1]	$54.68	$120.60
2000	26.163	297.41	310.16[1]	57.56	146.73
2001	26.959	396.89	151.98[1]	57.94	168.24
2002	27.686	396.10	156.67[1]	65.74	206.24
2003	28.232	444.59	163.78[1]	70.86	211.37
2004	28.440	504.84	187.68	76.77	242.07
2005	28.433	573.40	217.43	80.14	269.84
2006	27.614	615.96	255.68	83.61	287.08
2007	26.933	678.74	303.81	86.44	311.05
2008	26.319	717.62	336.87	88.37	327.60
2009	26.064	768.61	353.67	95.03	355.39
2010	26.065	820.21	361.67	94.58	343.75
2011	26.649	877.02	364.88	93.20	364.84
2012	27.387	941.21	376.52	97.91	386.99
2013	28.225	1,014.42	389.36	103.21	406.75
2014	29.042	1,096.46	403.80	109.82	426.19
2015	29.890	1,183.67	419.23	117.15	446.22
2016	30.785	1,272.49	435.45	124.60	467.44
2017	31.737	1,365.61	453.28	132.74	488.43
2018	32.740	1,465.57	472.64	141.46	512.47
Disabled (excluding ESRD):					
1999	3.989	304.92	179.26[1]	61.28	140.41
2000	4.137	322.54	204.34[1]	65.80	119.98
2001	4.355	436.17	114.01[1]	70.61	124.94
2002	4.563	456.21	119.34[1]	80.46	155.01
2003	4.847	503.63	125.31[1]	85.61	147.69
2004	5.100	583.80	143.06	94.38	177.45
2005	5.309	652.68	167.09	99.57	193.69
2006	5.238	702.42	200.75	105.80	221.03
2007	5.240	774.47	242.26	112.43	251.92
2008	5.209	824.78	264.41	117.40	268.36
2009	5.261	883.27	279.75	126.19	296.56
2010	5.360	942.09	287.33	125.54	297.91
2011	5.508	1,006.50	290.99	123.71	320.65
2012	5.598	1,080.91	303.30	129.93	344.60
2013	5.692	1,165.42	317.09	136.95	366.48
2014	5.793	1,260.25	331.82	145.70	387.72
2015	5.895	1,361.16	347.28	155.42	410.06
2016	5.987	1,465.43	363.02	165.30	433.96
2017	6.067	1,571.96	379.40	176.10	458.63
2018	6.137	1,686.95	396.68	187.66	486.18

[1]See footnote 3 of table IV.B3.

As indicated in table IV.B4, expenditures for outpatient hospital services are expected to increase significantly due to provisions in the BBA, the Balanced Budget Refinement Act of 1999, and the Benefits Improvement and Protection Act of 2000 that reduce beneficiaries' coinsurance payments to normal levels but maintain the same total payment to the hospital. The result is that Medicare pays a larger portion of the total outpatient hospital costs.

Part B expenditures for home health services have increased very rapidly in recent years, in part due to suspected fraud and abuse in South Florida and certain other parts of the country. In late 2008, CMS suspended payments to a number of home health agencies and increased program integrity efforts for this category of services. Assumed growth rates for home health expenditures reflect this initiative, along with the ongoing effects in growth in the number of beneficiaries, payment rates, and utilization of services.

(3) Fee-for-Service Payments for Persons with End-Stage Renal Disease

Most persons with ESRD are eligible to enroll for Part B coverage. For analytical purposes, enrollees with ESRD who are also eligible as Disability Insurance beneficiaries are included in this section because their per enrollee costs are both higher and different in nature from those of most other disabled persons. Specifically, most of the Part B reimbursements for these persons are related to kidney transplants and renal dialysis.

The estimates under the intermediate assumptions reflect the payment mechanism through which ESRD services are reimbursed under Medicare. Dialysis services are paid through a bundled payment system that will receive an annual ESRD market basket update beginning in 2011. Also, the estimates assume a continued increase in enrollment. The historical and projected enrollment and costs for Part B benefits are shown in table IV.B5.

Table IV.B5.—Enrollment and Incurred Reimbursement for End-Stage Renal Disease

	Average enrollment [thousands]		Reimbursement [millions]	
Calendar year	Disabled ESRD	ESRD only	Disabled ESRD	ESRD only
1999	93	80	$1,500	$1,295
2000	98	82	1,562	1,272
2001	104	84	1,858	1,415
2002	109	87	2,096	1,684
2003	114	88	2,413	1,717
2004	120	89	2,745	1,829
2005	124	92	3,082	1,943
2006	123	95	3,324	2,048
2007	123	98	3,443	2,101
2008	121	100	3,571	2,163
2009	122	102	3,710	2,268
2010	123	103	3,732	2,313
2011	125	105	3,893	2,413
2012	127	106	4,092	2,519
2013	129	107	4,259	2,611
2014	131	108	4,446	2,707
2015	133	108	4,672	2,817
2016	135	109	4,931	2,940
2017	137	110	5,203	3,069
2018	138	110	5,495	3,206

(4) Private Health Plan Costs

Part B payments to private health plans have generally increased significantly from the time that such plans began to participate in the Medicare program in the early 1980s. Most of the increase in expenditures has been associated with the increasing numbers of beneficiaries who have enrolled in these plans. A description of the assumptions and methodology for the private health plans that provide coverage of Part B services for certain enrollees is contained in section IV.C of this report.

(5) Administrative Expenses

The ratio of Part B administrative expenses to benefit payments has declined to about 1.5 percent in recent years and is projected to continue to decline in future years. Projections of administrative costs are based on estimates of changes in average annual wages and fee-for-service enrollment.

b. Summary of Aggregate Reimbursement Amounts on a Cash Basis under the Intermediate Assumptions

Table IV.B6 shows aggregate historical and projected reimbursement amounts on a cash basis under the intermediate assumptions, by type of service. The difference between reimbursement amounts on a cash versus incurred basis results from the lag between the time of service and the time of payment. This lag has been gradually decreasing.

Table IV.B6.—Aggregate Reimbursement Amounts on a Cash Basis[1]

[In millions]

Calendar year	Carrier					Intermediary							
	Physician fee schedule	DME	Lab	Other	Total	Hospital	Lab	Home health agency	Other	Total	Total FFS	Private health plans	Total Part B
Historical data:													
1999	$33,354	$4,279	$2,078	$6,451	$46,163	$8,790	$1,680	$6,792[1]	$5,773	$23,036[1]	$69,199[1]	$17,702[1]	$86,901[1]
2000	36,963	4,718	2,226	7,408	51,315	8,435	1,770	9,169[1]	6,208	25,582[1]	76,897[1]	18,358[1]	95,256[1]
2001	42,034	5,439	2,436	8,904	58,813	12,767	1,936	4,513[1]	7,119	26,336[1]	85,149[1]	17,560[1]	102,709[1]
2002	44,824	6,529	2,788	10,873	65,014	13,569	2,235	5,019[1]	8,709	29,532[1]	94,545[1]	17,497[1]	112,042[1]
2003	48,325	7,534	2,983	12,933	71,775	15,293	2,479	5,096[1]	9,687	32,556[1]	104,331[1]	17,250[1]	121,582[1]
2004	54,080	7,739	3,318	14,177	79,314	17,425	2,733	5,852	10,856	36,866	116,179	18,672	134,852
2005	57,679	8,007	3,548	15,283	84,516	19,245	2,787	7,079	11,418	40,529	125,045	22,012	147,057
2006	58,155	8,305	3,694	15,507	85,662	21,263	2,975	7,812	12,533	44,583	130,245	31,460	161,704
2007	58,857	8,104	4,146	15,788	86,894	22,408	2,961	9,191	13,156	47,716	134,610	38,858	173,468
2008	60,777	8,852	4,309	16,570	90,508	23,762	3,034	10,027	13,671	50,494	141,003	47,623	188,625
Intermediate estimates:													
2009	61,664	9,033	4,714	17,044	92,456	24,998	3,203	10,573	14,501	53,275	145,732	52,990	198,722
2010	52,485	9,323	4,983	17,836	84,626	26,771	3,233	10,896	14,497	55,398	140,024	57,101	197,126
2011	50,991	9,981	5,121	19,271	85,364	29,176	3,254	11,241	15,407	59,078	144,442	58,876	203,318
2012	55,018	10,870	5,556	21,037	92,481	32,111	3,474	11,873	16,589	64,048	156,529	62,567	219,095
2013	54,232	11,638	6,044	23,014	94,928	35,545	3,760	12,626	17,780	69,712	164,640	67,589	232,229
2014	53,642	12,526	6,591	25,215	97,974	39,428	4,100	13,466	18,987	75,981	173,955	74,048	248,004
2015	55,726	13,661	7,209	27,531	104,127	43,710	4,488	14,377	20,266	82,840	186,967	77,078	264,045
2016	60,853	14,877	7,869	30,057	113,656	48,267	4,901	15,361	21,645	90,174	203,830	84,680	288,510
2017	66,908	16,091	8,608	32,924	124,531	53,238	5,360	16,448	23,091	98,137	222,668	93,173	315,841
2018	74,461	17,407	9,425	36,156	137,450	58,716	5,866	17,646	24,707	106,935	244,384	102,556	346,940

[1]Amounts shown exclude payments inadvertently made from the Part B account in 2005-2007 to cover the costs of certain Part A hospice benefits. Similarly, the full amount of Part B payments to private health plans is shown for 2007; an adjustment has been made to remove the effect of certain Part D benefit reconciliation receipts that were initially credited to the Part B account.

[2]See footnote 3 of table IV.B3.

c. Projections under Alternative Assumptions

Part B cash expenditures for the low-cost and high-cost alternatives were developed by modifying the growth rates estimated under the intermediate assumptions. Beginning in calendar year 2008, the low-cost and high-cost incurred benefits for the following 4 quarters reflect some variation relative to the intermediate assumptions. Thereafter, the low-cost and high-cost alternatives contain assumptions that result in incurred benefits increasing, relative to the Gross Domestic Product (GDP), 2 percent less rapidly and 2 percent more rapidly, respectively, than the results under the intermediate assumptions. Administrative expenses under the low-cost and the high-cost alternatives are projected on the basis of their respective wage series growth. Based on the above methodology, cash expenditures as a percentage of GDP were calculated for all three sets of assumptions and are displayed in table IV.B7.

Table IV.B7.—Part B Cash Expenditures as a Percentage of the Gross Domestic Product for Calendar Years 2008-2018[1]

		Alternatives	
Calendar year	Intermediate assumptions	Low-cost	High-cost
2008	1.34%	1.32%	1.37%
2009	1.43	1.38	1.49
2010	1.37	1.29	1.46
2011	1.34	1.24	1.45
2012	1.36	1.23	1.50
2013	1.36	1.21	1.53
2014	1.38	1.20	1.58
2015	1.39	1.19	1.63
2016	1.45	1.22	1.73
2017	1.52	1.25	1.85
2018	1.59	1.28	1.98

[1]Expenditures are the sum of benefit payments and administrative expenses.

2. Part D

Part D is a voluntary Medicare prescription drug benefit that offers beneficiaries enrolled in either Part A or Part B a choice of private drug insurance plans in which to enroll. The cost of the drug coverage is substantially subsidized by Medicare. Low-income beneficiaries can receive additional assistance on the cost sharing and premiums, depending on their resource levels. Each year the drug plan sponsors submit bids that include estimated total plan costs, prospective reinsurance payments (which are roughly 80 percent of the cost above the Part D catastrophic threshold), and low-income cost-sharing subsidies according to their experience and their expectations for the coming year. Once these bids are approved, a national average bid amount and premium are calculated, and the individual plan premiums are determined dollar-for-dollar above or below the

national average premium, based on the plan's bid relative to the national average bid.

The drug plans receive direct subsidies (calculated as the risk-adjusted plan bid amount minus the plan premium), prospective reinsurance payments, and low-income cost-sharing subsidies from Medicare, as well as premiums from the beneficiaries. At the end of the year, the prospective reinsurance and low-income cost-subsidy payments are reconciled to match plans' actual experience. In addition, if actual experience differs from the plan's bid beyond specified risk corridors, Medicare shares in the plan's experience gain or loss.

Expenditures for this voluntary prescription drug benefit, which started on January 1, 2006, were determined by combining estimated Part D enrollment with projections of per capita spending. Actual Part D spending information for 2008 was used as the projection base.

a. Participation Rates

All individuals enrolled in Medicare Part A or Part B are eligible to enroll in the voluntary prescription drug benefit.

(1) Employer-Sponsored Plans

There are several options for employer-sponsored plans to benefit from the Part D program. One option is the retiree drug subsidy (RDS), in which Medicare subsidizes qualifying employer-sponsored plans a portion of their qualifying retiree drug expenses (which are determined without regard to plan reimbursement). About 20 percent of beneficiaries participating in Part D were covered by this subsidy in 2008. This proportion is assumed to decline gradually to about 15 percent in 2018.

Other options for an employer-sponsored plan are to enroll in an employer/union-only group welfare plan, wrap around an existing Part D plan, or become a prescription drug plan itself. The subsidies for these types of arrangements will generally be calculated in the same way as for other Part D plans. It is expected that such plans will offer additional benefits beyond the standard Part D benefit package, resulting in lower Part D reinsurance payments. About 6 percent of beneficiaries participating in Part D were covered by these employer-sponsored plans in 2008, increasing gradually to about 8 percent in 2018.

(2) Low-Income Subsidy

Qualifying low-income beneficiaries can receive additional Part D subsidies to help finance premium and cost-sharing payments. Subsidies are estimated for beneficiaries who apply for this assistance and meet the income and asset requirements. (Most beneficiaries qualified for both Medicare and Medicaid are automatically enrolled in plans with premiums below the low-income premium benchmarks within their regions, thereby receiving full subsidization of their Part D premiums.) With the continuing outreach effort and the enactment of MIPPA, which expanded the number of individuals eligible for low-income status, the estimated number of low-income enrollees is projected to increase slightly, from about 30 percent of the total beneficiaries participating in Part D in 2008 to 31 percent in 2018.

(3) Other Part D Beneficiaries

Medicare beneficiaries who are not qualified for the low-income subsidy and who are not covered by employer plans can choose to enroll in any Part D plan they wish. Once enrolled, they will pay for premiums and any applicable deductible, coinsurance, and/or copayment. After accounting for the enrollees discussed above, about 52 percent of the remaining beneficiaries eligible for Part D were enrolled in 2008. This participation rate is projected to grow to 58 percent by 2012. Table IV.B8 provides a summary of the estimated average enrollment in Part D, by category. If those Part D eligibles are accounted for who are receiving creditable coverage through another source (such as the Federal Employees Health Benefits Program, TRICARE for Life, the Veterans Administration, and the Indian Health Service), the participation rate is projected to grow from 67 percent to about 75 percent. The participation rate is slightly lower than projected in last year's report.

Table IV.B8.—Part D Enrollment

[In millions]

Calendar year	Employer subsidy[1]	Low-income subsidy: Medicaid full dual eligible	Low-income subsidy: Other, with full subsidy	Low-income subsidy: Other, with partial subsidy	Low-income subsidy: Total	All others	Total
Historical data:							
2006	7.2	5.7	2.3	0.2	8.3	12.1	27.6
2007	7.0	5.9	3.0	0.3	9.2	15.0	31.2
2008	6.6	6.3	3.2	0.3	9.7	15.9	32.3
Intermediate estimates:							
2009	6.3	6.4	3.5	0.3	10.2	16.7	33.2
2010	6.3	6.6	3.7	0.3	10.6	17.4	34.3
2011	6.3	6.7	3.9	0.4	11.0	18.3	35.6
2012	6.4	6.9	4.0	0.4	11.3	19.4	37.1
2013	6.4	7.1	4.2	0.4	11.7	20.2	38.3
2014	6.5	7.3	4.3	0.4	12.0	20.9	39.4
2015	6.5	7.6	4.4	0.4	12.4	21.6	40.5
2016	6.6	7.8	4.5	0.4	12.7	22.3	41.7
2017	6.7	8.0	4.7	0.4	13.1	23.1	42.9
2018	6.7	8.2	4.8	0.4	13.5	23.9	44.1

[1]Excludes Federal government and military retirees covered by either the Federal Employees Health Benefit Program or the TRICARE for Life program. Such programs qualify for the Medicare employer subsidy, but the subsidy will not be paid since it would amount to the Federal government subsidizing itself.

b. Cost Projection Methodology on an Incurred Basis

(1) Drug Benefit Categories

Projected drug expenses are allocated to the beneficiary premium, direct subsidy, and reinsurance subsidy by the Part D premium formula together with the benefit formula specifications (deductible, coinsurance, initial benefit limit, and catastrophic threshold) for beneficiaries in prescription drug plans and Medicare Advantage drug plans. Low-income beneficiaries receive additional subsidies to help finance premium and cost-sharing payments. Subsidies are estimated for beneficiaries who meet the income and asset requirements.

The statute specifies that the base beneficiary premium is equal to 25.5 percent of the sum of the national average monthly bid amount[59] and the estimated catastrophic reinsurance. The actual premium is greater, dollar for dollar, for plans with bids above the national average and lower for plans with lower bids. The estimated average premium amount is based on the base beneficiary premium with an adjustment to reflect enrollees' tendency to select plans with below-average premiums.

[59]In 2006, the national average bid was calculated as an unweighted average. For 2009 and later, the calculation is based on a weighted average, using plan enrollments as weights. A demonstration program to transition between the two calculations ended in 2008.

(2) Projection Base

Actual Part D spending data from 2006 to 2008 were used this year. These data included amounts for total prescription drug costs, costs above the catastrophic threshold, plan payments, and low-income cost-sharing payments.

Estimates under the intermediate assumptions were calculated by establishing the total prescription drug costs for 2008 and then projecting these costs through the estimation period. Since the data for 2008 were incomplete, development tables were used to estimate the completed prescription drug spending totals for the year. These amounts formed the base level of Part D spending. Because the Part D program did not begin until 2006, not enough actual experience was available to determine a cost trend. Therefore, future drug costs were updated based on the projected increases in per capita drug expenses for the total U.S. population from the National Health Expenditure (NHE) Accounts. However, Part D spending growth was somewhat higher than the NHE in 2008 (5.4 percent versus 2.6 percent, respectively). As a result, somewhat higher growth rates than the projected NHE were used for Part D in 2009 and 2010 (5.1 percent and 5.2 percent, respectively), though the NHE growth estimates were used again for 2011 through 2018. These NHE growth rates are shown in table IV.B9.

To determine the estimated benefits for Part D, the drug costs are adjusted for two key factors. First, Part D benefits are reduced for the total amount of rebates that the prescription drug plans receive from drug manufacturers. In addition, these plans incur administrative costs for plan operation and earn profits. Since drug expenses grow faster than administrative costs, the administrative expenses as a percentage of benefit and costs slowly decrease over time. Table IV.B9 displays these key factors affecting Part D expenditure estimates.

Table IV.B9.—Key Factors for Part D Expenditure Estimates

Calendar year	National Health Expenditure (NHE) Projections[1]	Manufacturer rebates	Plan administrative expenses and profits[2]
Historical data:			
2006	7.5%	8.6%	12.4%
2007	3.9	9.6	13.5
Intermediate estimates:			
2008	2.6[3]	9.6	12.7
2009	3.1[3]	9.5	11.7
2010	3.8[3]	9.5	11.5
2011	5.3	9.5	11.4
2012	5.5	9.5	11.3
2013	5.7	9.5	11.2
2014	6.3	9.5	11.0
2015	7.0	9.5	10.8
2016	7.3	9.5	10.6
2017	7.6	9.5	10.4
2018	7.7	9.5	10.1

[1]Published February 24, 2009.
[2]Expressed as a percentage of plan benefit payments.
[3]See text regarding assumed growth rates for Part D per-enrollee costs in these years.

(3) Manufacturer Rebates

Prescription drug plans can negotiate rebates with drug manufacturers. The estimated rebates in this report are slightly higher than in last year's report. Actual rebates for 2007 were approximately 9.6 percent of total prescription drug costs, or somewhat higher than the plans estimated in their 2007 bid submissions. Since the estimated average rebate from the 2009 plan bids was very close to the actual 2007 rebates, it is now estimated that the average rebate will remain relatively stable at around 9.5 percent through 2018, as shown in table IV.B9.[60]

(4) Administrative Expenses

The plans' expected administrative costs and projected profit margins from their bids are used to determine administrative expenses. These expenses are projected forward with wage increases and are reduced by about 1 percentage point per year through 2009 to account for the phasing-out of start-up costs. The plan profit margins are projected using the per capita benefit trend. Since the per capita benefit trend is expected to be higher than wage increases, the administrative expenses and profit margins as a percentage of plan benefit payments are projected to decline slowly through 2018.

[60]These are average rebate percentages across all prescription drugs. Generic drugs, which represent somewhat over 60 percent of all Part D drug use, typically do not carry manufacturer rebates. Many brand-name prescription drugs carry substantial rebates, often as much as 20-30 percent.

(5) Incurred Per Capita Reimbursements

Table IV.B10 shows estimated enrollments and per capita reimbursements for beneficiaries in private prescription drug plans, low-income beneficiaries, and beneficiaries in employer-sponsored retiree health plans.

Table IV.B10.—Incurred Reimbursement Amounts per Enrollee for Part D Expenditures

	Private plans (PDPs and MA-PDs)						
	All beneficiaries			Low-income		Employer plans	
Calendar year	Enrollment (millions)	Direct subsidy	Reinsur-ance	Enrollment (millions)	Low-income subsidy	Enrollment (millions)	Employer subsidy
Historical data:							
2006	20.3	$867.23	$296.29	8.3	$1,817.05	7.2	$532.41
2007	24.2	746.52	331.84	9.2	1,819.63	7.0	532.61
2008	25.7	680.01	377.13	9.7	1,878.57	6.6	561.37
Intermediate estimates:							
2009	26.9	700.66	404.84	10.2	1,949.85	6.3	594.54
2010	28.1	709.52	432.80	10.6	2,036.04	6.3	628.48
2011	29.3	748.58	460.74	11.0	2,135.27	6.3	665.31
2012	30.7	792.79	486.26	11.3	2,254.10	6.4	705.73
2013	31.8	836.60	517.86	11.7	2,381.43	6.4	748.52
2014	32.9	884.45	552.74	12.0	2,521.29	6.5	795.67
2015	34.0	940.91	594.21	12.4	2,688.02	6.5	851.66
2016	35.1	1,002.64	640.46	12.7	2,872.66	6.6	913.84
2017	36.2	1,071.17	692.18	13.1	3,078.05	6.7	983.15
2018	37.4	1,145.70	748.97	13.5	3,301.78	6.7	1,058.96

c. Cost Projection Methodology on a Cash Basis

(1) Prospective payments

Prospective payments are made to the drug plans each month based on their actuarial bid submissions for that year. These data represent the plans' expectations of costs for pharmacy expenses (including discounts, rebates, and utilization management savings) and administrative costs (including profit margins). Separate amounts are determined for the direct subsidy, reinsurance, and low-income cost-sharing payments. All Part D plans initially receive the same direct subsidy (before risk adjustment). In contrast, the prospective payments for reinsurance and low-income cost sharing are unique to each plan.

For 2008, actual average spending by the plans exceeded their average bid by about 5 percent. This difference might be attributed to aggressive bidding and/or a lack of reliable data. In 2009, bids increased by more than the expected trend, an occurrence that should reduce this differential. Since aggressive bidding is expected to continue, but to a lesser extent, in the future, this difference between

the bids and actual spending is assumed to converge to roughly 1 percent within a few years.

(2) Reconciliation

After each plan year, the prospective payments are reconciled with actual plan costs. Either additional payments to plans or refunds to Part D will result from this reconciliation. Since the reinsurance and low-income benefits are fully funded by the Federal government, the prospective reinsurance and low-income cost-sharing payments to drug plans will be reconciled with actual expenses on a dollar-for-dollar basis. Costs for the basic Part D benefit are subject to an arrangement in which the Federal government shares in the risk that these costs will differ from the plan's expectation.

For 2007, the total prospective reinsurance payments were very close to the actual reinsurance costs. As a result, the reconciliation payments for reinsurance costs were less than $0.1 billion. In 2008, the prospective reinsurance payments from plan bids were similar to 2007. Based on preliminary data, actual reinsurance costs in 2008 are estimated to be significantly higher than the prospective payments, which will result in substantial reconciliation payments from Medicare to the Part D plans of about $1.5 billion. It is expected that the reconciliation amounts will decrease over the next few years and that ultimately the Part D plans' estimates of reinsurance payments will match closely with actual costs.

The prospective low-income cost-sharing payments in 2007 were lower than the actual low-income cost-sharing amounts. As a result, there were reconciliation payments totaling $0.4 billion from Medicare to the Part D plans. For 2008, it is expected that substantial low-income reconciliation payments of about $1.5 billion will be made from Medicare to the Part D plans because the actual payments are expected to grow while the prospective payments have remained relatively flat. Actual payments are projected to exceed the bid expectations to a lesser extent for 2009 and beyond, resulting in smaller expected net reconciliation payments to the drug plans.

Risk-sharing payments are calculated based on the actual level of expenditures compared to the expected level of expenditures included in the plan bids for the basic Part D benefit. Each plan's differential is allocated to the appropriate risk corridor using the statutory formula and the risk corridor thresholds for each year, and the risk-sharing percentages within each threshold layer. To estimate

aggregate net risk-sharing amounts, payments or receipts are calculated for each plan and then aggregated.

Risk-sharing payments of about $0.5 billion were made from the drug plans to Medicare in 2008 because the 2007 bids were higher than the actual experience. For 2008, plan bids declined slightly while actual costs increased. As a result, substantial risk-sharing payments to the drug plans are expected, totaling about $1.3 billion. For 2009 and beyond, actual costs are estimated to be slightly higher than the plan bids. Therefore, smaller net risk corridor payments to plans are estimated for each year after 2008.

The reconciliation payments for the 2007 experience were made in 2008. Future reconciliation payments are also assumed to be made in the following year.

(3) Aggregate Reimbursements

Table IV.B11 shows aggregate projected reimbursements to plans and employers by type of payment. Since plan bids are expected to more closely match actual spending as the plans gain more experience with the Part D program, cash and incurred amounts are generally about the same after 2009.

Table IV.B11.—Aggregate Reimbursement Amounts on a Cash Basis

[In billions]

Calendar year	Premiums[1]	Direct subsidy	Reinsurance	Low-income subsidy	Employer subsidy	Risk sharing[2]	Total
Historical data:							
2006	$3.5	$17.3	$8.6	$15.1	$2.1	$0.3	$47.0
2007	4.0	18.4	7.1	16.5	3.5	-0.7	48.8
2008	5.0	17.5	6.7	17.4	3.8	-1.3	49.0
Intermediate estimates:							
2009	6.3	18.8	11.8	21.0	3.8	0.9	62.6
2010	7.2	19.9	12.3	21.7	3.9	0.8	65.8
2011	8.3	21.9	13.7	23.6	4.1	0.7	72.3
2012	9.5	24.4	15.1	25.6	4.3	0.4	79.3
2013	10.4	26.6	16.5	27.8	4.7	0.3	86.2
2014	11.5	29.1	18.2	30.3	5.0	0.3	94.3
2015	13.2	32.0	20.2	33.2	5.4	0.3	104.2
2016	13.7	35.2	22.4	36.5	5.8	0.4	114.0
2017	15.7	38.8	25.0	40.3	6.3	0.4	126.6
2018	17.6	42.9	28.0	44.5	6.8	0.5	140.2

[1]Total premiums paid to Part D plans by enrollees (directly, or indirectly through premium withholding from Social Security benefits).
[2]Positive amounts represent net loss-sharing payments to plans, and negative amounts are net gain-sharing receipts from plans. Amount shown in 2006 is the reimbursement of state costs under the Medicare Part D transition demonstration.

d. Projections under Alternative Assumptions

Part D expenditures for the low-cost and high-cost alternatives were developed by modifying the estimates under the intermediate assumptions. The 2008 per capita estimates increased by about 3 percent under the high-cost scenario and decreased by about 3 percent under the low-cost scenario.

The 2008 base modifications include the following:

- ±2 percent to account for the uncertainty of the completeness of the actual spending in 2008. The high-cost scenario increases the spending by 2 percent, and the low-cost scenario decreases the spending by 2 percent.

- ±1 percent for the average manufacturer rebate that drug plans negotiate. The high-cost scenario decreases the average rebate by 1 percent, and the low-cost scenario increases the average rebate by 1 percent.

For the projections beyond 2008, the drug per capita increases from the NHE projections are increased by 2 percent for the high-cost scenario and decreased by 2 percent for the low-cost scenario. In addition, assumptions regarding employer-sponsored plan participation, participation in the low-income subsidies, and the participation rate for individuals who do not qualify for the low-income subsidy or receive coverage through an employer-sponsored retiree plan vary in the alternative scenarios. Table IV.B12 compares these varying assumptions.

Table IV.B12.—Part D Assumptions under Alternative Scenarios for Calendar Years 2008-2018

Calendar year	Intermediate assumptions	Alternatives	
		Low-cost	High-cost
Percentage of beneficiaries enrolled in subsidized employer-sponsored plans			
2008	14.6%	14.6%	14.6%
2009	13.7	13.7	13.7
2010	13.4	13.8	13.1
2011	13.2	13.8	12.5
2012	12.9	13.9	12.0
2013	12.7	13.6	11.7
2014	12.4	13.4	11.5
2015	12.2	13.1	11.3
2016	11.9	12.8	11.0
2017	11.7	12.6	10.8
2018	11.4	12.3	10.6
Low-income participation as a percentage of Part D enrollees			
2008	30.2	30.2	30.2
2009	30.8	30.8	30.8
2010	31.0	30.7	31.3
2011	30.9	30.3	31.5
2012	30.5	29.6	31.5
2013	30.5	29.6	31.5
2014	30.5	29.6	31.5
2015	30.5	29.6	31.5
2016	30.5	29.7	31.5
2017	30.6	29.7	31.5
2018	30.6	29.7	31.5
Percentage of non-employer, non-low-income beneficiaries enrolled			
2008	51.8	51.8	51.8
2009	53.3	53.3	53.3
2010	54.9	53.2	56.5
2011	56.4	53.1	59.8
2012	58.0	53.0	63.0
2013	58.0	53.0	63.0
2014	58.0	53.0	63.0
2015	58.0	53.0	63.0
2016	58.0	53.0	63.0
2017	58.0	53.0	63.0
2018	58.0	53.0	63.0

Table IV.B13 compares Part D expenditures as a percentage of the Gross Domestic Product under the intermediate, low, and high-cost alternatives.

Table IV.B13.—Part D Cash Expenditures as a Percentage of the Gross Domestic Product for Calendar Years 2008-2018[1]

Calendar year	Intermediate assumptions	Alternatives	
		Low-cost	High-cost
2008	0.35%	0.35%	0.35%
2009	0.45	0.43	0.46
2010	0.45	0.41	0.50
2011	0.47	0.41	0.54
2012	0.49	0.40	0.59
2013	0.50	0.41	0.61
2014	0.52	0.42	0.62
2015	0.54	0.44	0.65
2016	0.57	0.45	0.68
2017	0.60	0.47	0.73
2018	0.64	0.49	0.78

[1]Expenditures are the sum of benefit payments and administrative expenses.

C. PRIVATE HEALTH PLANS

1. Legislative History

Dating back to the 1970s, some Medicare beneficiaries have had the opportunity to receive their coverage for Part A and Part B services through private health plans. Initially, this coverage was available only through demonstrations and plans reimbursed on a reasonable cost basis.

The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 mandated that CMS negotiate with private health maintenance organizations (HMOs) to offer Medicare A/B coverage on a risk basis.[61] TEFRA set the capitated reimbursement amount to plans at 95 percent of the estimated county-level fee-for-service cost adjusted for enrollee demographics.

The Balanced Budget Act (BBA) of 1997 expanded the coverage options and payment rules of the Medicare risk system and named the program Medicare+Choice. The BBA also permitted CMS to enter into risk contracts with preferred provider organizations (PPOs), provider-sponsored organizations (PSOs), and private fee-for-service (PFFS) plans. Although other Medicare health plans are required to establish provider networks, PFFS products were not required to do so; they were, however, required to set payment rules that reimburse providers at least equal to Medicare fee-for-service payments.

Another effect of the BBA was that it eliminated the direct link between Medicare plan payments and county-level fee-for-service costs. Beginning in 1998, annual payment rates were based on the largest of three amounts: a minimum payment amount, or "floor"; a blended national and local rate; or a 2-percent minimum increase over the prior year's rate. The BBA also began the process of risk adjusting the plan payment rates to account for beneficiary health status.

The Medicare Modernization Act (MMA) revamped Medicare+Choice and renamed the system Medicare Advantage (MA). The MMA also

[61]Under these arrangements, the private health plan is paid a prospectively determined capitation amount per enrollee and accepts the insurance risk that actual costs could prove to be greater than expected.

formally designated all private health insurance coverage options available through Medicare as "Part C."[62]

One of the goals of the Medicare Modernization Act was to increase the number of beneficiaries enrolled in private plans. This aim was accomplished by significantly increasing the level of the payment rates for private health plans for 2004 and 2005. The higher payment rates enabled MA plans to offer attractive benefit packages with lower cost sharing requirements and/or additional benefits, compared to the standard Medicare fee-for-service benefit package. Although the additional benefits were very valuable to beneficiaries choosing to enroll in MA plans, they increased Medicare costs substantially compared to fee-for-service beneficiary costs. Other Medicare Modernization Act changes included adding a fourth factor—the local fee-for-service minimum—to the ratebook "greater of" formula; increasing the existing minimum update to the greater of the growth in Medicare per-capita costs overall or 2 percent; and implementing several other steps to increase payment rates.

In addition to the plan types that already existed, the MMA provided for the establishment of Regional Preferred Provider Organizations (RPPOs) and special needs plans (SNPs). Unlike other MA plans, which define their own service areas, RPPOs operate in pre-defined service areas referred to as "regions." RPPOs are available to all beneficiaries residing in their region and the plans must ensure that enrollees have appropriate access to care. RPPOs also have special rules for capitation payment "benchmarks," and they received special incentives under the MMA, including Medicare risk-sharing arrangements for 2006 and 2007 and access to stabilization funding, which will be available beginning in 2014.

SNPs are products that are designed for, and marketed to, these special population groups: Medicaid dual-eligible beneficiaries, individuals with specialized chronic conditions, and institutionalized beneficiaries. The statutory authority for SNPs will expire January 1, 2011.

The minimum update of 2 percent in the ratebook was eliminated by the Deficit Reduction Act of 2005.

The Medicare Improvement for Patients and Providers Act (MIPPA) of 2008 mandated that, beginning in 2011, all non-group PFFS plans

[62]Of Medicare beneficiaries enrolled in private plans, about 97 percent are in MA plans, with the remainder in certain holdover plans reimbursed on a cost basis, rather than through capitation payments.

must establish provider networks in counties in which they operate that have two or more competing coordinated care plans. Also, MIPPA required that PFFS plans available only to employer or union groups must have networks in each county of their service area beginning in 2011.

It is important to note that Medicare coverage provided through private health plans, or Part C, does not have separate financing or an associated trust fund. Rather, the Part A and Part B trust funds are the source for payments to such private health plans.

2. Participation Rates

a. Background

To account for the distinct benefit, enrollment, and payment characteristics of private health plans, enrollment and spending trends for such plans are analyzed at the primary coverage level:

- Local coordinated care plans (LCCPs), which include HMOs, HMOs with point-of-service option, local PPOs, PSOs, and Medical Savings Accounts.
- Private Fee-for-Service (PFFS) plans.
- Regional PPO (RPPO) plans.
- Special needs (SNPs) plans.
- Other products, which include cost plans and Program of All-Inclusive Care for the Elderly (PACE) plans.

All types of coverage except for those represented in the "other" category are Medicare Advantage plans. Also, the values represented in each category include enrollment not only in plans available to all beneficiaries residing in the plan's service area, but also in plans available only to members of employer or union groups.

b. Historical

The past trend in private health plan enrollment can largely be traced to the corresponding legislated payment policies. During the period 1985 through 1999, private plan enrollment grew steadily, reaching a peak in 1999—shortly after the passage of the BBA in 1997.

One intent of the BBA was to expand the availability of plans by providing for new coverage options and by increasing payment rates in rural areas through the addition of the payment floors. However, instead of increasing plan availability, many of the contracts existing in 1997 were eventually withdrawn primarily because their costs were growing faster than the annual payment, which generally rose at 2 percent.[63] As a direct consequence of the plan terminations, the percentage of Medicare beneficiaries that enrolled in private health plans declined each year from 2000 through 2004.

These declines were reversed after the MMA established higher payment rates in 2005, which was the first post-MMA opportunity for plan expansion. The largest growth was in PFFS plans, which represented 47 percent of the increase from 2004 to 2008. In contrast, RPPOs represented only 3 percent of the private health plan enrollment in 2008.

The 2008 enrollment includes 1.7 million beneficiaries with coverage through employer-only or union-only plans—1.1 million in LCCPs and 0.6 million in PFFS plans.

c. Projected

The projected participation in private health plans is based on 2008 enrollment levels adjusted for anticipated trend. The growth factors are based on historical enrollment patterns, statutory and regulatory provisions, and professional judgment. With the exceptions stated below, the growth rates for 2014 and later match those of the beneficiaries eligible for Part A and enrolled in Part B.

The growth in PFFS plans is expected to flatten beginning in 2009 due to product maturity, recent changes in CMS' policies on plan marketing and sales, and plan reaction to statutory provider network requirements. A drop in enrollment is forecast for 2011 because most of the PFFS enrollment is in counties in which plans must establish provider networks beginning in 2011. In response to this requirement, it is expected that some sponsors will reduce their PFFS plan availability, and/or change plan offerings from PFFS to local CCP.

[63]The BBA included numerous provisions affecting Medicare fee-for-service payment rates. As a result, the "floor" payment levels and "blended" private plan payment rates increased very slowly for several years, and the statutory rates for most plans increased by the 2-percent minimum.

Actuarial Methodology

Based on historical trends and the impact of stabilization funding beginning in 2014, the growth rates in RPPO enrollment are expected to remain high through 2015. However, the absolute level of RPPO enrollment is estimated to remain relatively low—reaching a peak share of private plan coverage of less than 5 percent.

The statutory authority for SNPs will expire as of January 1, 2011. Beginning in 2011, it is expected that the majority of existing SNP enrollees will join in local coordinated care plans and that the remaining enrollees will transfer to the Medicare fee-for-service program.

The growth in local CCPs in 2009 and 2010 is expected be consistent with recent historical trends. For 2011, it is projected that local CCPs will experience a spike in enrollment due to beneficiaries transferring from PFFS plans and SNPs.

The historical negative enrollment trend in the other coverage category is projected to persist due to continued loss of membership in plans reimbursed on a reasonable cost basis. The statute provides that expansions in cost plans will be limited to areas where there are fewer than two competing coordinated care plans.

Table IV.C1 shows past and projected enrollment for private health plans.

Table IV.C1.—Private Health Plan Enrollment[1]

[In thousands]

Calendar year	Local CCP	PFFS	Regional PPO	SNP	Other	Total private health plan	Total Medicare	Ratio of private health plan to total Medicare
1985	498	—	—	—	773	1,271	31,081	4.1%
1990	1,263	—	—	—	754	2,017	34,251	5.9
1995	2,735	—	—	—	732	3,467	37,594	9.2
2000	6,435	1	—	—	420	6,856	39,688	17.3
2001	5,742	17	—	—	407	6,166	40,103	15.4
2002	5,119	23	—	—	396	5,538	40,508	13.7
2003	4,842	23	—	—	437	5,302	41,188	12.9
2004	4,908	37	—	—	430	5,375	41,902	12.8
2005	5,248	125	—	—	421	5,794	42,606	13.6
2006	5,428	712	74	660	416	7,290	43,449	16.8
2007	5,525	1,622	182	929	403	8,661	44,314	19.5
2008	5,960	2,240	289	1,147	362	9,999	45,221	22.1
2009	6,453	2,412	383	1,275	359	10,883	45,915	23.7
2010	6,872	2,527	448	1,312	353	11,512	46,801	24.6
2011	9,320	1,492	490	—	325	11,627	47,879	24.3
2012	9,833	1,323	515	—	315	11,986	49,303	24.3
2013	10,152	1,378	539	—	310	12,379	50,852	24.3
2014	10,450	1,420	584	—	305	12,759	52,356	24.4
2015	10,749	1,460	615	—	301	13,125	53,884	24.4
2016	11,056	1,501	634	—	296	13,487	55,446	24.3
2017	11,377	1,544	652	—	291	13,864	57,071	24.3
2018	11,712	1,589	671	—	286	14,258	58,756	24.3
2020	12,424	1,683	709	—	277	15,094	62,286	24.2
2025	14,298	1,931	810	—	257	17,296	71,348	24.2
2030	15,959	2,150	899	—	238	19,246	79,176	24.3

[1]Most private plan enrollees are eligible for Medicare Part A and enrolled in Medicare Part B. Some enrollees have coverage for only Medicare Part B. For example, in 2008 the Part B-only private plan enrollment consisted of 2,000 in local CCPs, 4,000 in PFFS plans, and 75,000 in the other coverage category.

In the 2008 report, an ultimate Medicare Advantage penetration rate of 31 percent was assumed to be reached by 2022. This coverage level was relative to beneficiaries eligible for Part A and enrolled in Part B. The corresponding participation rate was 28 percent for those eligible for Part A or enrolled in Part B.

The current projection of the ultimate participation rate for private health plans is 24 percent relative to beneficiaries eligible for Part A or enrolled in Part B. This participation level, which is expected to be reached in 2012, is primarily due to the revised expectation for PFFS growth due to the recent legislation affecting PFFS network requirements.

3. Cost Projection Methodology

a. Background

Prior to 2006, payments to private health plans were directly based on a published capitation ratebook. Beginning in 2006, payments are

based on competitive bids and their relationship to corresponding benchmarks, which are based on the ratebook.

Benchmarks form the foundation for payments to Medicare Advantage (MA) plans. Along with geographic, demographic, and risk characteristics of plan enrollees, these values determine the monthly prospective payments made to private health plans. MA benchmarks vary substantially by county and range from 100 percent of local fee-for-service costs (for Parts A and B) to more than 200 percent of such costs.

For non-RPPO plans, the benchmark is an average of the statutory capitation ratebook values, weighted by projected plan enrollment in each county in the plan's service area. For RPPOs, the benchmark is a blend of the weighted ratebook values for all Medicare-eligible beneficiaries in the region and an enrollment-weighted average of RPPO bids for the region. The weight applied to the bid component of the benchmark is the national Medicare Advantage participation rate.

Plans submit bids equal to their projected cost of providing the standard Medicare Part A and Part B benefits. Plans with bids below the benchmark apply 75 percent of the "savings" to benefit plan enrollees through coverage of Part A and Part B cost sharing, coverage of additional non-drug benefits, and/or reduction in the Part B or Part D premium. This value is often referred to as the MA rebate. The remaining 25 percent of the savings is retained by the government. For RPPOs, half of the remaining 25 percent is being accrued in a separate account within the trust funds and will be available for additional RPPO funding beginning in 2014. Beneficiaries choosing plans with bids above the benchmark are required to pay for both the full amount of the difference between the bid and the benchmark and the projected cost of the plans' supplemental benefits.

Bid-based payments are a product of the standardized plan bid, which is equal to the bid divided by the plan's projected risk score, and the actual enrollee risk score, which is based on demographic characteristics and medical diagnosis data. The risk score for a given enrollee may be adjusted retrospectively due to CMS' receipt of diagnosis data after the payment date.

Rebate payments are based on projected risk profile of the plan and are not adjusted based on actual risk scores.

b. Incurred Basis

Private health expenditures are forecast on an incurred basis by coverage type. The bid-based expenditures for each quarter are a product of the average enrollment and the projected average per capita bid. Similarly, the rebate expenditures are a product of enrollment and projected average rebates.

Annual per capita benchmarks, bids, and rebates were determined on an incurred basis for calendar years 2006-2008 for each coverage category. These amounts include adjustments processed after the payment due date for retroactive enrollment and risk score updates. The annual benchmark per capita values are calculated as the prior year's value increased with the projected increase in the benchmark rates for each plan category. The rebates are equal to 75 percent of the positive difference, if any, between benchmarks and bids.

Factors that are accounted for in the benchmark growth trend include the projected increase in the fee-for-service per-capita costs (USPCCs), the scheduled phase-out of the ratebook indirect medical expenses, and assumed changes in the risk-coding practices of private health plans relative to Medicare fee-for-service providers.

The bid growth trend was assumed to be equal to the benchmark growth rates.

c. Cash Basis

Cash expenditures are developed from incurred spending by accounting for the payment lag that results from CMS' receipt of post-payment diagnosis data, retroactive enrollment notification, and corrections in enrollees' demographic characteristics.

Table IV.C2 shows Medicare private plan expenditures on an incurred and cash basis, separate for the Part A and Part B trust funds. The incurred payments are reported separately for the bid-related and rebate expenditures. Most payments to plans are made as they are incurred, and cash and incurred amounts are generally the same.

Table IV.C2.—Medicare Payments to Private Health Plans, by Trust Fund

[In billions]

Calendar year	Incurred basis[1]			Cash basis
	Bid	Rebate	Total	
Expenditures from the HI (Part A) trust fund:				
2006	$29.7	$3.5	$33.2	$32.9
2007	36.5	4.3	40.7	39.0
2008	44.0	5.4	49.4	50.6
2009	51.5	6.3	57.8	58.0
2010	54.6	6.7	61.3	61.3
2011	57.3	7.1	64.4	64.3
2012	61.8	7.6	69.4	69.3
2013	67.1	8.3	75.4	75.3
2014	73.6	9.1	82.7	82.5
2015	76.0	9.4	85.3	85.3
2016	81.2	10.0	91.2	91.1
2017	87.0	10.7	97.7	97.6
2018	93.4	11.5	104.9	104.7
Expenditures from the Part B account of the SMI trust fund:				
2006	28.9	3.2	32.0	31.5
2007	35.5	3.9	39.5	38.9
2008	42.8	5.0	47.9	47.6
2009	47.5	5.6	53.1	53.0
2010	51.2	6.0	57.2	57.1
2011	52.7	6.2	58.9	58.9
2012	56.0	6.7	62.6	62.6
2013	60.5	7.2	67.7	67.6
2014	66.3	7.9	74.2	74.0
2015	68.9	8.2	77.1	77.1
2016	75.8	9.0	84.8	84.7
2017	83.4	10.0	93.3	93.2
2018	91.7	11.0	102.7	102.6

[1]All expenditures are included in the bid category for non-Medicare Advantage coverage.

d. Incurred Expenditures per Enrollee

Table IV.C3 shows estimated incurred per-enrollee expenditures for beneficiaries enrolled in private health plans. The values are combined for expenditures from the Part A and Part B trust funds.

Table IV.C3.—Incurred Expenditures per Private Health Plan Enrollee[1]

Calendar year	Local CCP	PFFS	Regional PPO	SNP	Other	Total
Bid-based expenditures[2]						
2006	$8,203	$6,925	$7,623	$10,039	$4,847	$8,085
2007	8,559	7,362	8,314	9,990	5,042	8,348
2008	8,792	8,079	9,149	10,337	5,349	8,719
2009	9,188	8,479	9,213	10,797	5,752	9,129
2010	9,285	8,578	9,098	10,921	5,812	9,223
2011	9,741	8,582	9,233	n/a	6,135	9,488
2012	10,078	8,954	9,549	n/a	6,482	9,854
2013	10,567	9,421	9,986	n/a	6,920	10,340
2014	11,221	10,041	10,639	n/a	7,507	10,991
2015	11,294	10,122	10,679	n/a	7,726	11,069
2016	11,900	10,665	11,245	n/a	8,332	11,669
2017	12,556	11,251	11,858	n/a	8,985	12,318
2018	13,259	11,880	12,514	n/a	9,697	13,013
Rebate expenditures[2]						
2006	958	616	565	1,489	—	920
2007	948	703	954	1,777	—	951
2008	1,123	613	785	1,874	—	1,049
2009	1,177	623	748	1,973	—	1,097
2010	1,194	614	712	1,990	—	1,106
2011	1,256	718	711	n/a	—	1,149
2012	1,294	739	733	n/a	—	1,196
2013	1,357	779	766	n/a	—	1,255
2014	1,442	831	814	n/a	—	1,335
2015	1,451	837	814	n/a	—	1,343
2016	1,529	883	858	n/a	—	1,416
2017	1,613	931	905	n/a	—	1,496
2018	1,703	984	956	n/a	—	1,581
Total expenditures						
2006	9,161	7,541	8,189	11,527	4,847	9,005
2007	9,506	8,064	9,267	11,767	5,042	9,299
2008	9,916	8,691	9,934	12,211	5,349	9,768
2009	10,365	9,102	9,960	12,770	5,752	10,226
2010	10,479	9,192	9,809	12,911	5,812	10,329
2011	10,996	9,299	9,945	n/a	6,135	10,637
2012	11,372	9,693	10,282	n/a	6,482	11,050
2013	11,924	10,200	10,753	n/a	6,920	11,595
2014	12,664	10,872	11,452	n/a	7,507	12,326
2015	12,745	10,960	11,494	n/a	7,726	12,412
2016	13,429	11,547	12,103	n/a	8,332	13,085
2017	14,169	12,183	12,763	n/a	8,985	13,813
2018	14,962	12,863	13,470	n/a	9,697	14,594

[1]Values represent the sum of per-capita expenditures for Part A and Part B.
[2]All expenditures are included in the bid category for non-Medicare Advantage coverages.

Average Medicare payments per private plan enrollee vary by geographic location of the plan, plan efficiency, and average reported health status of plan enrollees. Local coordinated care plans and special needs plans tend to be located in urban areas where prevailing health care costs tend to be above average. Conversely, private fee-for-service plans and regional PPOs generally reflect a more rural enrollment. These factors complicate meaningful comparisons of average per capita costs by plan category.

After 2018, Medicare payments to private plans follow the aggregate trends of the HI and SMI Part B benefits to the end of the first

25-year period projection period. Beyond the 25-year period, average expenditures will increase at a rate determined by the economic model described in section IV.D of this report.

D. LONG-RANGE MEDICARE COST GROWTH ASSUMPTIONS

The prior three sections have described the detailed assumptions and methodology underlying the projected expenditures for HI and SMI (Parts B and D) during 2009 through 2018. These projections are made for individual categories of Medicare-covered services, such as inpatient hospital care and physicians' services.

As the projection horizon lengthens, it becomes increasingly difficult to anticipate changes in the delivery of health care, the development of new medical technologies, and other factors that will affect future health care cost increases. Thus Medicare projections after the first 10 years are made in aggregate for each of HI, SMI Part B, and SMI Part D, rather than preparing estimates for each individual category of service. Moreover, starting with the 25th year of the projection, all Medicare expenditures are assumed to increase at a common rate (before demographic impacts), in recognition of the uncertainty described above and the small likelihood that one category of expense could continue to grow indefinitely at significantly faster rates of growth than those for other services.

Based on a recommendation by the 2000 Medicare Technical Review Panel, the increase in average expenditures per beneficiary for the 25th through 75th years of the projection was assumed in the 2001 through 2005 Trustees Reports to equal the growth in per capita GDP plus 1 percentage point, prior to demographic effects. For the infinite-horizon projections, the Trustees have assumed the same growth rate as per capita GDP for the 76th and later years (again, prior to demographic impacts).

Beginning with the 2006 report, the Board of Trustees adopted a refinement of these long-range growth assumptions. The refinement provides a smoother and more realistic transition from current Medicare cost growth rates, which have been significantly above the level of GDP growth, to the ultimate assumed level of GDP plus zero percent for the indefinite future. The year-by-year growth patterns are based on a stylized economic model that makes assumptions about (i) continuing improvements in medical technology, (ii) the extent to which new medical technology either increases health care costs or reduces them, and (iii) society's relative preference for improved health versus consumption of other goods and services. The

model is based on a computable general equilibrium (CGE) methodology and uses a single agent to represent demand for medical care at the national level. The model does not directly project Medicare spending. Consistent with past Trustees Report assumptions, however, the new projection assumes that overall health care spending per capita and Medicare spending per beneficiary grow at the same rate after the 25th year of the projection.

Due to data limitations, this economic model cannot be used to independently project long-range health cost growth rates. It is a refinement to the existing growth assumptions rather than a replacement, and accordingly the intermediate growth assumption generated by the economic model is determined in such a way that the average rate of cost growth in the long range is consistent with the prior "GDP plus 1 percent" assumption. Specifically, the model parameters are selected (i) to reproduce the actual 1977 and the projected 2018 levels of total U.S. health expenditures as a share of GDP, (ii) to be within the reasonable range of existing research studies on income and price elasticities, and (iii) to result in the same 75-year HI actuarial balance as calculated under the "GDP plus 1 percent" assumption.[64]

With this latter constraint, the assumed per beneficiary growth rate from the economic model for all Medicare services in 2033 is about 1.4 percentage points above the level of GDP growth for that year. This differential gradually declines to about 0.8 percent in 2053 and to less than 0.2 percent in 2083. Compared to the assumptions used prior to the 2006 report, the new growth assumption is initially higher but subsequently lower than the constant "GDP plus 1 percent" assumption. For the infinite horizon, the assumed growth rate of GDP plus zero percent is essentially unchanged. Following prior practice, in between the 10th and 25th years of the projection the growth rates for Parts A, B, and D are assumed to grade smoothly from their level in the 10th year to the long-range growth rates from the economic model.

The new cost growth assumptions thus follow a smoother path over the next 75 years than did the prior assumptions. Under the new assumptions, projected HI and SMI costs are initially somewhat higher than they would have been with the prior assumption, but

[64]Additional information on the development of the long-range health cost growth assumptions is available in a memorandum by the CMS Office of the Actuary, at http://www.cms.hhs.gov/ReportsTrustFunds/downloads/projectionmethodology.pdf.

later in the projection period they are lower. For example, the HI cost in 2033 is estimated to be 6.52 percent of taxable payroll. If the "GDP plus 1 percent" assumption had been used, the corresponding estimate would be 6.34 percent. In 2083, however, the new cost rate of 12.07 percent is significantly lower than the 13.66-percent rate under the prior assumption. As noted, the 75-year actuarial balance is the same under either set of assumptions. Similar patterns of difference result for the SMI Part B and Part D projections.

The theory behind this model is that, should innovations in medical technology continue to increase rapidly in the future, and to add substantially to costs as they have in the past, then eventually society would be unwilling and unable to devote a steadily increasing share of its income to obtaining better health. Such unwillingness could be expressed in a number of ways consistent with current law, such as private and public health plans' refusal to adopt expensive new technologies that offer only marginal health improvement over existing techniques, or the inability on the part of individuals to afford health insurance premiums or cost-sharing payments.

The economic model implicitly reflects such constraints in a general way but does not attempt to explicitly model the actual mechanisms by which cost growth would be slowed. Because the model is tied through the actuarial balance calculation to the underlying "GDP plus 1 percent" assumption for the first 75 years, it effectively assumes a similar degree of cost constraint as implicitly assumed under the prior assumption.[65]

As recommended by both the 2000 and 2004 Medicare Technical Review Panels, the Trustees and their staffs are continuing to pursue research into these issues, with the goal of developing an economic model that will directly estimate long-range health cost growth rates. The economic model used for this report offers a useful, although limited, step in this direction.

[65]The detailed rationale for the "GDP plus 1 percent" assumption is described in the report of the 2000 Medicare Technical Review Panel, available at http://www.cms.hhs.gov/ReportsTrustFunds/downloads/TechnicalPanelReport2000.pdf. Further discussion of this assumption is included in the 2004 Medicare Technical Review Panel's report, at http://aspe.hhs.gov/health/medpanel/.

V. APPENDICES

A. MEDICARE AMENDMENTS SINCE THE 2008 REPORT

Since the 2008 annual report was transmitted to Congress on March 25, 2008, four laws have been enacted that have a significant effect on the Medicare trust funds.

The Supplemental Appropriations Act of 2008 (Public Law 110-252, enacted on June 30, 2008) included one provision that affected the HI and SMI programs. It provided for the establishment of a Medicare Improvement Fund that would be available to the Secretary of Health and Human Services to make improvements to the original fee-for-service program under Parts A and B. The initial funding of $2.22 billion will be provided by the HI trust fund and the Part B account within the SMI trust fund and will be made available for FY 2014. (As noted below, this provision was subsequently modified three times.)

The Medicare Improvements for Patients and Providers Act (MIPPA) of 2008 (Public Law 110–275, enacted on July 15, 2008) included a number of provisions affecting the HI and SMI programs. The more important provisions, from an actuarial standpoint, are described in the following paragraphs. Certain provisions with a relatively minor financial impact on the HI and SMI programs, but which are important from a policy perspective, are described as well.

MIPPA Provisions Affecting HI Only

- Effective for cost-reporting periods beginning on January 1, 2009, payments to sole-community hospitals are rebased.

- Certain hospital wage index reclassifications are extended for 1 year.

MIPPA Provisions Affecting Part B of SMI Only

- For July through December of 2008, the physician fee schedule conversion factor was increased by 0.5 percent over the 2007 conversion factor, rather than decreased by 10.1 percent, as would otherwise have occurred. Similarly, for January through December of 2009, the physician fee schedule conversion factor is increased by 1.1 percent over the 2008 conversion factor, rather than decreasing by 15.4 percent over the 2008 conversion factor, as would otherwise have occurred.

- For January through December of 2010, the physician fee schedule conversion factor will be computed as if the conversion factor for the prior 18 months had not been changed by the Medicare Improvements to Patients and Providers Act.

- The Physician Quality Reporting Initiative is extended through December 31, 2010. Physicians and other professionals who successfully report data on applicable quality measures will be eligible for lump sum bonus incentive payments, which will be 2.0 percent of allowed charges for covered services billed by the physician during the reporting period.

- The Physician Assistance and Quality Initiative (PAQI) Fund, which was established by the Tax Relief and Health Care Act, enhanced by the Transitional Medical Assistance, Abstinence Education, and Qualifying Individual Programs Extension Act, and modified by the Medicare, Medicaid, and SCHIP Extension Act, is further modified. The amount that was to be available in 2013 is now eliminated.

- A bonus and penalty incentive payment program to encourage the use of electronic prescribing by physicians was created.

- The floor of 1.0 for the geographic practice cost index that is applied to the work component of the physician fee schedule payment amount is further extended to services furnished from Jul 1, 2008 through December 31, 2009. The physician fee schedule payment amount was originally established by the Medicare Modernization Act (MMA) and was extended by the Tax Relief and Health Care Act and the Medicare, Medicaid, and SCHIP Extension Act.

- Direct payments for the technical component for certain pathology services, as provided for by the MMA and extended by the Tax Relief and Health Care Act and the Medicare, Medicaid, and SCHIP Extension Act, are extended through December 31, 2009.

- Exceptions to the financial limits on therapy services, as established by the Deficit Reduction Act and extended by the Tax Relief and Health Care Act and the Medicare, Medicaid, and SCHIP Extension Act, are further extended until December 31, 2009.

- The implementation of the competitive acquisition program for durable medical equipment services is delayed for 18 months until January 1, 2010. The impact of this delay was made budget neutral by reducing payments for all services subject to competitive acquisition in 2008 by 9.5 percent beginning on January 1, 2009. This payment reduction will be taken into account when calculating payments for subsequent years.

- A 0.5-percent payment reduction is required for laboratory services in each year from 2009 through 2013.

- The higher copayment rate for outpatient psychiatric services is being phased down to the standard Part B coinsurance rate over a 5-year period beginning in 2010.

- Various changes are made to the renal dialysis program, including a 1.0-percent payment update for 2009 and 2010 and the implementation of a bundled payment system beginning in 2011.

- For the period from July 1, 2008 through December 31, 2009, payments for rural ground ambulance services are increased by 3 percent and non-rural ground ambulance services are increased by 2 percent. These increases will not be taken into account in calculating payments for subsequent years.

- The Secretary of Health and Human Services has the authority to expand Medicare Part B coverage to additional preventive services, through the process of making national coverage determinations. These benefits must be recommended by the United States Preventive Services Task Force, and must be reasonable and necessary for the prevention or early detection of an illness or disability, as well as appropriate for individuals entitled to benefits under Part A or enrolled in Part B.

- The Qualifying Individual program is extended through December 31, 2009. This program is part of Medicaid and pays the Medicare Part B premium on behalf of certain beneficiaries with relatively low income and assets.

MIPPA Provisions Affecting HI and Part B of SMI

- Beginning in 2010, payments for indirect medical education (IME) will be phased out of the Medicare Advantage (MA) payment ratebook. The annual reduction in IME will be limited to 0.60 percent of the per-capita fee-for-service cost in each county.

- Certain MA Private Fee-for-Service plans will be required to establish contractual provider networks beginning in 2011. This requirement applies to all group plans and to non-group plans operating in counties with at least two network-based competitors.

- The initial balance of the regional PPO stabilization fund is reduced from $1.79 billion to $1.00 (one dollar), and the availability of this account is moved from 2013 to 2014.

- The funding for the Medicare Improvement Fund was increased by $19.9 billion, and these amounts were to be made available in FY 2014 through 2017.

MIPPA Provisions Affecting Part D of SMI Only

- The late enrollment penalty is eliminated for beneficiaries eligible for the low-income subsidy.

- Full low-income subsidy asset tests are applied for the Medicare Savings Program.

- Certain income and resources are excluded in the determination of low-income subsidy eligibility.

- Low-income subsidy enrollment assistance is provided.

- Prompt payment of Part D claims by plans is required.

- Part D coverage of benzodiazepines is now required.

- Formulary requirements are changed for certain categories and classes of drugs.

The QI Program Supplemental Funding Act of 2008 (Public Law 110-379, enacted on October 8, 2008) included one provision that affected the HI and SMI programs. It increased the initial funding of the Medicare Improvement Fund from $2.22 billion to $2.29 billion. (The funding increase under MIPPA continues to apply.)

The American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111-5, enacted on February 17, 2009) included a number of provisions affecting the HI and SMI programs. The more important provisions, from an actuarial standpoint, are described in the following paragraphs. Certain provisions with a relatively minor

financial impact on the HI and SMI programs, but which are important from a policy perspective, are described as well.

ARRA Provisions Affecting HI Only

- Implementation of a hospice wage index budget neutrality factor is delayed by 1 year until fiscal year 2010.

- Eliminating payments for indirect medical education in the capital prospective payment system is delayed by 1 year until fiscal year 2010.

- Hospitals will receive bonus payments or pay penalties based on whether or not they are considered meaningful users of health information technology. Beginning in fiscal year 2011, a hospital will be eligible to receive bonus payments in the amount of $2 million plus $200 per discharge for the 1,150th through the 23,000th discharge. This bonus payment would be multiplied by the Medicare share of bed days for the hospital and would also be multiplied by a transition factor that would phase out the bonus payment after 5 years. No bonus payments are allowed to start after 2015. Penalties would become effective in fiscal year 2015 and would amount to having the hospital's update factor reduced by three-quarters of the market basket price index for each year that the hospital did not qualify as a meaningful user. The reduction in the update is phased in over 3 years. These amounts of bonus payments and penalties would not be included in the calculation of MA payment rates. Somewhat different provisions apply for critical access hospitals and hospitals used mainly by MA plans.

ARRA Provisions Affecting Part B of SMI Only

- The Qualifying Individual program is extended through December 31, 2010. This program is part of Medicaid and pays the Medicare Part B premium on behalf of certain beneficiaries with relatively low income and assets.

- Physicians will receive bonus payments or pay penalties based on whether or not they are considered meaningful users of health information technology. Beginning in 2012 and continuing until 2016, a physician will be eligible to receive Medicare bonus payments of up to $18,000 in a year. The amounts to be received will be phased out over time but can be received for up to 5 years. Additional amounts can be received if the physician is located in a

health professional shortage area. No bonus payments are allowed after 2016. Penalties would become effective in 2015. Physicians would have Medicare payments reduced by 1 percent in 2015, 2 percent in 2016, and 3 percent in 2017 and any year after that in which they did not qualify as a meaningful user. These amounts of bonus payments and penalties would not be included in the calculation of MA payment rates or the determination of the Part B financing, but would be offset each year through a special general revenue transfer between the general fund of the Treasury and the Part B account. A physician could qualify to receive health information technology bonus payments from either Medicare or Medicaid but not both.

ARRA Provisions Affecting HI and Part B of SMI

- The total funding for the Medicare Improvement Fund is changed to $22.29 billion (a further increase of $70 million) and will be completely available in fiscal year 2014. The amount of money saved due to the health information technology penalties would also be added to this fund and made available 1 year after being saved, beginning in 2020.

B. AVERAGE MEDICARE EXPENDITURES PER BENEFICIARY

Table V.B1 shows historical average per beneficiary expenditures for HI and SMI, as well as projected costs for calendar years 2009 through 2018 under the intermediate assumptions.

For both HI and SMI Part B, costs increased very rapidly in the early years when Medicare was still a new program and as a result of the rapid inflation of the 1970s and early 1980s. In addition, the cost-based reimbursement mechanisms in place provided relatively little incentive for efficiency in the provision of health care. Growth in average HI expenditures moderated dramatically following the introduction of the inpatient hospital prospective payment system in fiscal year 1984, but accelerated again in the late 1980s and early 1990s due to rapid growth in skilled nursing and home health expenditures. During this same period, SMI Part B average costs generally continued to increase at relatively fast rates but slowed somewhat in the early 1990s with the implementation of physician fee reform legislation.

Expenditure growth moderated again during the late 1990s due to the effects of further legislation, including the Balanced Budget Act of 1997 (BBA), and efforts to control fraud and abuse. In addition, historically low levels of general and medical inflation helped reduce Medicare payment updates. HI per beneficiary costs actually decreased in 1998, 1999, and 2000, in part because of such BBA mandates as a reduction in payment updates to providers and a shift in home health benefits from HI to SMI Part B, and because of a decline in utilization of services. Growth rates returned to more normal levels during 2001-2008, with two exceptions noted below.

Table V.B1.—HI and SMI Average per Beneficiary Costs

Calendar year	Average per beneficiary costs				Average percent change[1]			
		SMI				SMI		
	HI	Part B	Part D	Total	HI	Part B	Part D	Total
Historical data:								
1970	$255	$101	—	$356	13.4%	14.8%	—	13.8%
1975	462	180	—	642	12.6	12.2	—	12.5
1980	895	390	—	1,285	14.1	16.7	—	14.9
1985	1,554	768	—	2,322	11.7	14.5	—	12.6
1990	1,963	1,304	—	3,267	4.8	11.2	—	7.1
1995	3,130	1,823	—	4,953	9.8	6.9	—	8.7
2000	3,272	2,381	—	5,653	0.9	5.5	—	2.7
2001	3,559	2,646	—	6,205	8.8	11.1	—	9.8
2002	3,743	2,922	—	6,664	5.2	10.4	—	7.4
2003	3,733	3,209	—	6,942	−0.2	9.8	—	4.2
2004	4,039	3,450	—	7,489	8.2	7.5	—	7.9
2005	4,262	3,754	—	8,016	5.5	8.8	—	7.0
2006	4,387	4,111	$1,543	10,041	2.9	9.5	—	25.3
2007	4,555	4,297	1,562	10,414	3.8	4.5	1.2%	3.7
2008	5,179	4,322	1,517	11,018	13.7	0.6	−2.9	5.8
Intermediate estimates:								
2009	5,319	4,686	1,885	11,890	2.7	8.4	24.3	7.9
2010	5,374	4,569	1,915	11,859	1.0	−2.5	1.6	−0.3
2011	5,577	4,622	2,031	12,230	3.8	1.1	6.0	3.1
2012	5,823	4,849	2,139	12,811	4.4	4.9	5.3	4.8
2013	6,111	5,053	2,254	13,418	4.9	4.2	5.4	4.7
2014	6,483	5,362	2,396	14,240	6.1	6.1	6.3	6.1
2015	6,493	5,375	2,573	14,441	0.2	0.2	7.4	1.4
2016	6,734	5,716	2,736	15,186	3.7	6.3	6.3	5.2
2017	7,003	6,087	2,953	16,042	4.0	6.5	7.9	5.6
2018	7,301	6,502	3,177	16,981	4.3	6.8	7.6	5.9

[1]Percent changes for 1970 represent the average annual increases from 1967 (the first full year of trust fund operations) through 1970. Similarly, percent changes shown for 1975, 1980, 1985, 1990, 1995, and 2000 represent the average annual increase over the 5-year period ending in the indicated year.

On average, annual increases in per beneficiary costs have been greater for SMI Part B than for HI during the previous 3 decades—by approximately 1.0 percent, 4.7 percent, and 1.0 percent per year in the 1970s, 1980s, and 1990s, respectively. This trend continued through 2003, partly because of the shift of certain home health services from HI to SMI Part B, which was completed in 2003. For 2005 through 2007, the SMI Part B increases were again higher than the HI increase, in part as a result of unusually rapid increases in the volume and intensity of physician services, but also due to an accounting error that occurred in these years, which resulted in certain Part A benefits being misallocated to Part B. The HI increase was higher than the SMI Part B increase in 2008 (and lower in 2009) due to the correction of the accounting error. Beginning in 2010 and continuing for a few years, the HI increase is higher than the SMI Part B increase due to substantial reductions in payment rates for physicians and frozen payment rates for certain other Part B services, as required under current law.

For the period 2010-2015, the projected SMI Part B increases are substantially understated as a result of the current-law physician

updates. Under the sustainable growth rate system (SGR), the physician payment update is projected to be −21.5 percent in 2010 and about −5.5 percent for 2011-2014. Legislation to prevent or ameliorate such an outcome is highly likely. Note that the rapid growth rates in the 1970s and 1980s are not expected to recur for either HI or SMI Part B, due to more moderate inflation rates and the conversion of Medicare's remaining cost-based reimbursement mechanisms to prospective payment systems as part of the Balanced Budget Act of 1997, and because of the physician updates under the SGR.

Although SMI Part D coverage began in 2004, the most significant prescription drug provisions did not start until 2006. Accordingly, for purposes of this discussion, only the per beneficiary expenditures for 2006 and later will be included. The initial open enrollment period for Part D ran through May 15, 2006. Beneficiaries who enrolled at the beginning of the year tended to have higher costs than those who enrolled toward the end of the open enrollment period. As a result, the average per beneficiary costs in 2006 were relatively high. In addition, actual spending in 2006 was ultimately far less than the prospective amounts that were paid to the Part D plans based on their bids—a discrepancy that resulted in significant reconciliation payments from the plans to the Part D program. These reconciliation amounts reduced the total payments to the plans in 2007 and 2008. As table V.B1 indicates, these factors caused the per beneficiary costs to increase slightly from 2006 to 2007 and then to decline slightly in 2008. The usually large increase in Part D costs per enrollee estimated for 2009 reflects the large reconciliation payments from plans to Part D that reduced 2008 net costs below normal levels ($4.4 billion). Other factors include a significant increase in plan bids for 2009, based on their experience in 2007-2008, and anticipated large reconciliation payments from Part D to the plans in 2009 for 2008 ($4.3 billion).

The comparison of average annual increases is distorted by increases for Part D mentioned above and SGR penalties and bonuses for Part B. If 2009 and 2010 are excluded, the average annual increases in Part D per beneficiary costs are expected to be between 2 to 3 percent greater than for HI or SMI Part B for the period 2011-2018. With the inclusion of the Part D costs in the total, overall Medicare per beneficiary cost growth is expected to be roughly 0.6 percent higher over the 2009-2018 period than it otherwise would be.

C. MEDICARE COST SHARING AND PREMIUM AMOUNTS

HI beneficiaries who use covered services may be subject to deductible and coinsurance requirements. A beneficiary is responsible for an inpatient hospital deductible amount, which is deducted from the amount payable by the HI trust fund to the hospital, for inpatient hospital services furnished in a spell of illness. When a beneficiary receives such services for more than 60 days during a spell of illness, he or she is responsible for a coinsurance amount equal to one-fourth of the inpatient hospital deductible for each of days 61-90 in the hospital. After 90 days in a spell of illness, each individual has 60 lifetime reserve days of coverage, for which the coinsurance amount is equal to one-half of the inpatient hospital deductible. A beneficiary is responsible for a coinsurance amount equal to one-eighth of the inpatient hospital deductible for each of days 21-100 of skilled nursing facility services furnished during a spell of illness. No cost sharing is required for home health or hospice services.

Most persons aged 65 and older and many disabled individuals under age 65 are insured for HI benefits without payment of any premium. The Social Security Act provides that certain aged and disabled persons who are not insured may voluntarily enroll, subject to the payment of a monthly premium. In addition, since 1994, voluntary enrollees may qualify for a reduced premium if they have at least 30 quarters of covered employment.

Table V.C1 shows the historical levels of the HI deductible, coinsurance amounts, and premiums, as well as projected values for future years based on the intermediate set of assumptions used in estimating the operations of the trust funds. Certain anomalies in these values resulted from specific trust fund features in particular years (for example, the effect of the Medicare Catastrophic Coverage Act of 1988 on 1989 values). The values listed in the table for future years are estimates, and the actual amounts are likely to be somewhat different as experience emerges.

Table V.C1.—HI Cost-Sharing and Premium Amounts

Year	Inpatient hospital deductible[1]	Inpatient daily coinsurance[1]		SNF daily coinsurance[1]	Monthly premium	
		Days 61-90	Lifetime reserve days		Standard[2]	Reduced[1]
Historical data:						
1967	$40	$10	—	$5.00	—	—
1968	40	10	$20	5.00	—	—
1969	44	11	22	5.50	—	—
1970	52	13	26	6.50	—	—
1971	60	15	30	7.50	—	—
1972	68	17	34	8.50	—	—
1973	72	18	36	9.00	$33	—
1974	84	21	42	10.50	36	—
1975	92	23	46	11.50	40	—
1976	104	26	52	13.00	45	—
1977	124	31	62	15.50	54	—
1978	144	36	72	18.00	63	—
1979	160	40	80	20.00	69	—
1980	180	45	90	22.50	78	—
1981	204	51	102	25.50	89	—
1982	260	65	130	32.50	113	—
1983	304	76	152	38.00	113	—
1984	356	89	178	44.50	155	—
1985	400	100	200	50.00	174	—
1986	492	123	246	61.50	214	—
1987	520	130	260	65.00	226	—
1988	540	135	270	67.50	234	—
1989[3]	560	—	—	25.50	156	—
1990	592	148	296	74.00	175	—
1991	628	157	314	78.50	177	—
1992	652	163	326	81.50	192	—
1993	676	169	338	84.50	221	—
1994	696	174	348	87.00	245	$184
1995	716	179	358	89.50	261	183
1996	736	184	368	92.00	289	188
1997	760	190	380	95.00	311	187
1998	764	191	382	95.50	309	170
1999	768	192	384	96.00	309	170
2000	776	194	388	97.00	301	166
2001	792	198	396	99.00	300	165
2002	812	203	406	101.50	319	175
2003	840	210	420	105.00	316	174
2004	876	219	438	109.50	343	189
2005	912	228	456	114.00	375	206
2006	952	238	476	119.00	393	216
2007	992	248	496	124.00	410	226
2008	1,024	256	512	128.00	423	233
2009	1,068	267	534	133.50	443	244
Intermediate estimates:						
2010	1,112	278	556	139.00	458	252
2011	1,160	290	580	145.00	473	260
2012	1,212	303	606	151.50	493	271
2013	1,268	317	634	158.50	513	282
2014	1,328	332	664	166.00	536	295
2015	1,388	347	694	173.50	551	303
2016	1,452	363	726	181.50	573	315
2017	1,516	379	758	189.50	596	328
2018	1,584	396	792	198.00	622	342

[1]Amounts shown are effective for calendar years.

[2]Amounts shown for 1967-1982 are for the 12-month periods ending June 30; amounts shown for 1983 are for the period July 1, 1982 through December 31, 1983; amounts shown for 1984 and later are for calendar years.

[3]Anomalies in the 1989 values are due to the Medicare Catastrophic Coverage Act of 1988. Most of the provisions of the Act were repealed the following year.

The *Federal Register* notice announcing the HI deductible and coinsurance amounts for 2009 included an estimate of the aggregate cost to HI beneficiaries for the changes in the deductible and coinsurance amounts from 2008 to 2009. At the time the notice was published, it was estimated that in 2009 there would be 8.53 million inpatient deductibles paid at $1,068 each, 2.22 million inpatient days subject to coinsurance at $267 per day (for hospital days 61 through 90), 1.06 million lifetime reserve days subject to coinsurance at $534 per day, and 40.05 million extended care days subject to coinsurance at $133.50 per day. Similarly, it was estimated that in 2008 there would be 8.54 million deductibles paid at $1,024 each, 2.22 million days subject to coinsurance at $256 per day (for hospital days 61 through 90), 1.06 million lifetime reserve days subject to coinsurance at $512 per day, and 39.66 million extended care days subject to coinsurance at $128 per day. Therefore, the total increase in cost to beneficiaries was estimated to be $680 million due to (i) the increase in the inpatient deductible and coinsurance amounts, and (ii) the change in the number of deductibles and daily coinsurance amounts paid.

Table V.C2 displays the SMI cost-sharing and premium amounts for Parts B and D. The projected values for future years are based on the intermediate set of assumptions used in estimating the operations of the Part B and Part D accounts. As a result, these values are estimates, and the actual amounts are likely to be somewhat different as experience emerges. In particular, the Part B premiums partially reflect the substantial—and improbable—reductions in physician payment rates for 2010 through 2015 under the sustainable growth rate system. If these unrealistic physician payment updates are overridden by new legislation—as has happened for each of the past 7 years—then future Part B premiums and Part B deductibles will reflect the impact of any legislative changes.[66]

The premiums shown in table V.C2 include an above-average contingency margin in recognition of the strong likelihood of legislation that would increase Part B costs after financing for a year had been established. The premiums for 2010 and 2011 also reflect additional increases designed to offset the loss of revenues attributable to the "hold harmless" provision, as described in section III.C.

[66]Projected Part B premiums and deductibles under two illustrative alternatives to current law are shown on the CMS website at http://www.cms.hhs.gov/ReportsTrustFunds/05_alternativePartB.asp. No endorsement of these alternatives by the Board of Trustees, CMS, or the CMS Office of the Actuary should be inferred.

Table V.C2.—SMI Cost-Sharing and Premium Amounts

	Part B		Part D			
Calendar year	Standard monthly premium[1]	Annual deductible[2]	Base beneficiary premium	Deductible	Initial benefit limit	Catastrophic threshold
Historical data:						
1967	$3.00	$50	—	—	—	—
1968	4.00	50	—	—	—	—
1969	4.00	50	—	—	—	—
1970	4.00	50	—	—	—	—
1971	5.30	50	—	—	—	—
1972	5.60	50	—	—	—	—
1973	5.80	60	—	—	—	—
1974	6.30[3]	60	—	—	—	—
1975	6.70	60	—	—	—	—
1976	6.70	60	—	—	—	—
1977	7.20	60	—	—	—	—
1978	7.70	60	—	—	—	—
1979	8.20	60	—	—	—	—
1980	8.70	60	—	—	—	—
1981	9.60	60	—	—	—	—
1982	11.00	75	—	—	—	—
1983	12.20	75	—	—	—	—
1984	14.60	75	—	—	—	—
1985	15.50	75	—	—	—	—
1986	15.50	75	—	—	—	—
1987	17.90	75	—	—	—	—
1988	24.80	75	—	—	—	—
1989[4]	31.90	75	—	—	—	—
1990	28.60	75	—	—	—	—
1991	29.90	100	—	—	—	—
1992	31.80	100	—	—	—	—
1993	36.60	100	—	—	—	—
1994	41.10	100	—	—	—	—
1995	46.10	100	—	—	—	—
1996	42.50	100	—	—	—	—
1997	43.80	100	—	—	—	—
1998	43.80	100	—	—	—	—
1999	45.50	100	—	—	—	—
2000	45.50	100	—	—	—	—
2001	50.00	100	—	—	—	—
2002	54.00	100	—	—	—	—
2003	58.70	100	—	—	—	—
2004	66.60	100	—	—	—	—
2005	78.20	110	—	—	—	—
2006	88.50	124	$32.20	$250	$2,250	$3,600
2007	93.50	131	27.35	265	2,400	3,850
2008	96.40	135	27.93	275	2,510	4,050
2009	96.40	135	30.36	295	2,700	4,350
Intermediate estimates:						
2010	104.20	146	32.83	305	2,780	4,500
2011	120.20	168	34.99	320	2,930	4,750
2012	111.50	156	37.26	335	3,090	5,000
2013	111.50	156	39.50	355	3,260	5,250
2014	111.50	156	41.97	375	3,450	5,550
2015	111.50	156	44.88	400	3,660	5,900
2016	114.20	160	48.10	425	3,910	6,300
2017	122.50	172	51.68	455	4,190	6,750
2018	131.40	184	55.60	490	4,510	7,250

[1]Amounts shown for 1967-1982 are for the 12-month periods ending June 30; amounts shown for 1983 are for the period July 1, 1982 through December 31, 1983; amounts shown for 1984 and later are for calendar years.

[2]Prior to the Medicare Modernization Act (MMA), the Part B deductible was fixed by statute and had only occasionally been adjusted. The MMA raised the deductible to $110 in 2005 and specified that it be indexed by average per beneficiary Part B expenditures thereafter.

[3]In accordance with limitations on the costs of health care imposed under Phase III of the Economic Stabilization program, the standard premium rates for July and August 1973 were set at $5.80 and $6.10, respectively. Effective September 1973, the rate increased to $6.30.
[4]Anomalies in the 1989 values are due to the Medicare Catastrophic Coverage Act of 1988. Most of the provisions of the Act were repealed the following year.

The Part B monthly premiums displayed in table V.C2 are the standard premium rates paid by most Part B enrollees. However, there are three provisions that alter the premium rate for certain Part B enrollees. First, there is a premium surcharge for those beneficiaries who enroll after their initial enrollment period. Second, beginning in 2007, there is a higher "income-related" premium for those individuals whose modified adjusted gross income exceeds a specified threshold. Individuals exceeding the threshold will pay premiums covering 35, 50, 65, or 80 percent of the average program cost for aged beneficiaries, depending on their income level, compared to the standard premium covering 25 percent. Table V.C3 displays these Part B income-related premium amounts for 2007-2018, based on the intermediate set of assumptions.

Table V.C3.—Part B Income-Related Premium Amounts[1]

	Ultimate percentage of program costs represented by premium			
Calendar year	35%	50%	65%	80%
Historical data:				
2007	$105.80	$124.40	$142.90	$161.40
2008	122.20	160.90	199.70	238.40
2009	134.90	192.70	250.50	308.30
Intermediate estimates:				
2010	145.80	208.30	270.80	333.30
2011	168.30	240.40	312.50	384.60
2012	156.10	223.00	289.90	356.80
2013	156.10	223.00	289.90	356.80
2014	156.10	223.00	289.90	356.80
2015	156.10	223.00	289.90	356.80
2016	159.90	228.40	296.90	365.40
2017	171.50	245.00	318.50	392.00
2018	184.00	262.80	341.60	420.50

[1]Includes the impact of the 3-year transition in 2007 and 2008.

In 2009 the initial threshold was $85,000 for an individual tax return and $170,000 for a joint return. The thresholds are indexed to inflation in subsequent years. These higher income-related premiums are being phased in over the 3-year period 2007-2009.

Part B premiums may also vary from the standard rate because a "hold-harmless" provision lowers the premium rate for certain individuals who have their premiums deducted from their Social Security checks. On an individual basis, this provision limits the dollar increase in the Part B premium to the dollar increase in the individual's Social Security check. As a result, the person affected pays a lower Part B premium, and the net amount of the individual's

Social Security check does not decrease despite the greater increase in the premium.

Most services under Part B are subject to an annual deductible and coinsurance. The annual deductible has been set in statute through 2005. Thereafter, it increases with the increase in the Part B aged actuarial rate to approximate the growth in per capita Part B expenditures. After meeting the deductible, the beneficiary pays an amount equal to the product of the coinsurance percentage and the remaining allowed charges. The coinsurance percentage is 20 percent except for most services currently reimbursed under the outpatient hospital prospective payment system (OPPS). Under the OPPS, the coinsurance percentage varies by service but currently falls in the range of 20-50 percent. The OPPS coinsurance percentages will gradually decrease over time until they reach 20 percent for each OPPS service. For those services not subject to either the deductible or coinsurance (clinical lab tests, home health agency services, and some preventive care services), the beneficiary pays nothing.

The Part D average premiums displayed in table V.C2 are the estimated base beneficiary premiums. For 2006, the base beneficiary premium was calculated based on a national average plan bid that gave each bid an equal weight. The actual premium that a beneficiary pays varies according to the plan in which the beneficiary is enrolled. Some pay lower premiums than those displayed in table V.C2, and others pay more. The average premium rate that beneficiaries paid in 2006 was roughly $23. In 2007 and 2008, the national average was calculated under a transitional demonstration program using 80 percent and then 40 percent of the equally weighted bids and 20 percent and then 60 percent of the enrollment-weighted average bid. As a result of this calculation, the average premium rate paid by beneficiaries fell to about $22 in 2007 and increased to $24 in 2008. Starting in 2009, the national average plan bid is based on the enrollment-weighted average. The average premium paid in 2009 is expected to be around $28. Since beneficiaries may switch plans each year once the premium rates are known, it is assumed that the estimated average premium rate paid by beneficiaries will be slightly less than the base beneficiary premium in future years.

As with Part B, there is a Part D late enrollment penalty for those beneficiaries enrolling after their initial enrollment period. Furthermore, there are premium and cost-sharing subsidies for those beneficiaries with incomes less than 150 percent of the Federal poverty level and with assets in 2009 less than $12,510 for an

individual and $25,010 for a couple. The asset figures are indexed in subsequent years by the CPI.

Under standard Part D coverage, there is an initial deductible. After meeting the deductible, the beneficiary pays 25 percent of the remaining costs up to the initial benefit limit. Beyond this limit, the beneficiary pays all the drug costs until his or her total out-of-pocket expenditures reach the catastrophic threshold. (Included in this total are the deductible and coinsurance payments for expenses up to the initial benefit limit.) Thereafter, the beneficiary pays the greater of (i) 5 percent of the drug cost, or (ii) $2.40 for generic or preferred multiple-source drugs or $6.00 for preferred single-source drugs. The latter copayment amounts from 2009 are indexed annually by per enrollee Part D average costs. Beneficiaries qualifying for the Part D low-income subsidy pay substantially reduced premium and cost-sharing amounts. Many Part D plans offer alternative coverage that differs from the standard coverage described above. The majority of beneficiaries have not enrolled in the standard benefit design, but rather in plans with low or no deductibles, flat payments for covered drugs, and, in some cases, partial coverage in the coverage gap.

D. MEDICARE AND SOCIAL SECURITY TRUST FUNDS AND THE FEDERAL BUDGET

The financial operations of Medicare and Social Security can be viewed in the context of the programs' trust funds or in the context of the overall Federal Budget. The financial status of the trust funds differs fundamentally from the impact of these programs on the budget, and the relationship between these two perspectives is often misunderstood. Each perspective is appropriate and important for its intended purpose; this appendix attempts to clarify their roles and relationship.

By law, the annual reports of the Medicare and Social Security Boards of Trustees to Congress focus on the financial status of the programs' trust funds—that is, whether these funds have sufficient revenues and assets to enable the payment of benefits and administrative expenses. This "trust fund perspective" is important, because the existence of trust fund assets provides the statutory authority to make such payments without the need for an appropriation from Congress. Medicare and Social Security benefits can be paid only if the relevant trust fund has sufficient income or assets.

The trust fund perspective does not encompass the interrelationship between the Medicare and Social Security trust funds and the overall Federal Budget. The budget is a comprehensive display of all Federal activities, whether financed through trust funds or from the general fund of the Treasury. This broader focus may appropriately be termed the "budget perspective" or "government-wide perspective" and is officially presented in the *Budget of the United States Government* and in the *Financial Report of the United States Government*.

The majority of Medicare and Social Security costs are financed through payroll taxes, income taxes on Social Security benefits, Medicare premiums, and special State payments to Medicare. In addition to these "earmarked" receipts from workers, employers, beneficiaries, and States, Medicare and Social Security rely on Federal general fund revenues for some of their financing (principally for the SMI trust fund), and the trust funds are credited with interest payments on their accumulated assets as well. The financial status of a trust fund appropriately considers all sources of financing provided under current law for that fund, including the availability of trust fund assets that can be used to meet program expenditures. From the budget perspective, however, general fund transfers, interest payments to the trust funds, and asset redemptions represent a draw

on other Federal resources for which there is no earmarked source of revenue from the public.

In the past, general fund and interest payments for Medicare and Social Security were relatively small. These amounts have increased substantially over the last 2 decades, however, and the expected rapid future growth of Medicare and Social Security will make their interaction with the Federal Budget increasingly important. As the difference between earmarked and total trust fund revenues grows, the financial operations of Social Security and Medicare can appear markedly different depending on which of the two perspectives is used.[67]

Illustration with Actual Data for 2008

The trust fund and budget perspectives can be illustrated with actual data on Federal financial operations for fiscal year 2008, as shown in table V.D1. The first three columns show revenues and expenditures for HI, SMI, and OASDI, respectively, and the fourth column is the sum of these three columns. The fifth column shows total revenues and expenditures for all other government programs (including the general fund account of the Treasury), and the final column is the sum of the "Combined" and "Other Government" columns. Earmarked revenues from the public are shown separately from revenues from other government accounts (general revenue transfers and interest credits). Note that the transfers and interest credits received by the trust funds appear in total as negative entries under the "Other Government" column and are thus offsetting when summed for the total budget in the final column. These two intragovernmental transactions are key to the differences between the two perspectives.

[67]A more complete treatment of this topic can be found in the *2008 Financial Report of the United States Government* at www.fms.treas.gov/fr/ and in a Treasury report entitled "Social Security and Medicare Trust Funds and the Federal Budget: An Expanded Exposition," available at www.treas.gov/offices/economic-policy/social_security.html. Additional information is available in a *Health Care Financing Review* article entitled "Medicare Financial Status, Budget Impact, and Sustainability: Which Concept Is Which?", available at www.cms.hhs.gov/HealthCareFinancingReview/downloads/05-06Winpg127.pdf.

Table V.D1.—Annual Revenues and Expenditures for Medicare and Social Security Trust Funds and the Total Federal Budget, Fiscal Year 2008

(In billions)

Revenue and expenditures categories	Trust funds				Other government	Total[1]
	HI	SMI	OASDI	Combined		
Revenues from public:						
Payroll and benefit taxes	$208.9	—	$689.0	$897.9	—	$897.9
Premiums[2]	4.2	$54.2	—	58.4	—	58.4
Other taxes, fees, and payments[3]	—	7.0	—	7.0	$1,560.5	1,567.5
Total	213.2	61.3	689.0	963.4	1,560.5	2,523.9
Total expenditures to public[4]	230.2	224.8	617.0	1,072.1	1,906.6	2,978.7
Net Results for Budget Perspective	**−17.1**	**−163.6**	**71.9**	**−108.7**	**−346.1**	**−454.8**
Revenues from other government accounts:						
Transfers	0.7	180.4	—	181.1	-181.1	0.0
Interest credits	15.9	3.2	113.7	132.8	-132.8	0.0
Total	16.6	183.6	113.7	313.9	-313.9	0.0
Net Results for Trust Fund Perspective	**−0.5**	**20.0**	**185.7**	**205.2**	**n/a**	**n/a**

[1]This column is the sum of the preceding two columns and shows data for the total Federal Budget. The figure $454.8 billion was the total Federal Budget deficit for fiscal year 2008.
[2]Includes Part D premiums paid directly to plans, which are not displayed on Treasury statements and are estimated.
[3]Includes Part D State transfers.
[4]The OASDI figure includes $4.0 billion transferred to the Railroad Retirement Board.

Notes: 1. For comparison, HI taxable payroll, OASDI taxable payroll, and GDP were $6,795 billion, $5,493 billion, and $14,260 billion, respectively, in 2008.
2. Totals do not necessarily equal the sums of rounded components.
3. "n/a" indicates not applicable.

The trust fund perspective reflects both categories of revenues for each trust fund. For HI, revenues from the public plus transfers/credits from other government accounts were $0.5 billion less than total expenditures in 2008, as shown at the bottom of the first column.[68] For the SMI trust fund, the statutory revenues from beneficiary premiums, State transfers, general revenue transfers, and interest earnings collectively exceeded expenditures by $20.0 billion in 2008. Note that the general revenue transfers from other government accounts are appropriately viewed as financial resources from the trust fund perspective since they are available under current law to help meet trust fund outlays. For OASDI, total trust fund revenues from all sources (including $113.7 billion in interest payments) exceeded total expenditures by $185.7 billion.

[68]Surpluses of revenues from the public over expenditures to the public are invested in special Treasury securities and thereby represent a loan from the trust funds to the general fund of the Federal government. These loans reduce the amount that the general fund has to borrow from the public to finance a deficit (or likewise increase the amount of debt paid off if there is a surplus). Interest is credited to the trust funds while the securities are being held. Trust fund securities can be redeemed at any time if needed to help meet program expenditures. Thus, the accumulation of fund assets creates budget commitments for future years when interest earnings and asset redemptions are used to meet expenditures.

From the government-wide or budget perspective, only earmarked revenues received from the public—taxes on payroll and benefits, plus premiums—and expenditures made to the public are important for the final balance.[69] For HI, the difference between such revenues ($213.2 billion) and total expenditures made to the public ($230.2 billion) was $17.1 billion in 2008, indicating that HI had a negative effect on the overall budget in 2008. For SMI, beneficiary premiums and State payments to Part D of Medicare are the only source of revenues from the public and represent only about 25 percent of total expenditures. The remaining $163.6 billion in 2008 outlays represented a substantial net draw on the Federal Budget in that year.[70] For OASDI, the difference between revenues from the public ($689.0 billion) and total expenditures ($617.0 billion) was $71.9 billion, indicating that OASDI had a large, positive effect on the overall budget last year.

Thus, from the trust fund perspective, SMI and OASDI had significant annual surpluses in 2008 and HI had a small deficit. From the budget perspective, OASDI made a positive contribution to the Federal Budget, though by an amount smaller than the respective trust fund surpluses, and HI and SMI had a net draw on the budget. HI, SMI, and OASDI collectively had a large trust fund surplus of $205.2 billion in fiscal year 2008, but a significant net draw of $108.7 billion on the budget.

It is important to recognize that each viewpoint is appropriate for its intended purpose but that one perspective cannot be used to answer questions related to the other. In the case of SMI, under current-law financing the trust fund will always be in balance and there will always be a net draw on the Federal Budget. In the case of HI, trust fund surpluses in a given year may occur with either a positive or negative direct impact on the budget for that year. Conversely, a positive or negative budget impact from HI offers minimal insight into whether its trust fund has sufficient total revenues and assets to permit payment of benefits.

The next section illustrates the magnitude of the long-range difference between projected expenditures and revenues for Medicare

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[69]For this purpose, "the public" includes State governments since they are outside of the Federal government.

[70]Three types of trust fund transactions comprised this net budget obligation: $180.4 billion was drawn in the form of general revenue transfers, and another $3.2 billion in interest payments, and $20.0 billion was transferred from the trust fund to the general fund through the purchase of special-issue Treasury securities in an amount equal to the trust fund surplus for the year.

and Social Security, under both the trust fund and budget perspectives.

Future Obligations of the Trust Funds and the Budget

Table V.D2 collects from the Medicare and OASDI Trustees Reports the present values of projected future revenues and expenditures over the next 75 years under current law. For HI and OASDI, tax revenues from the public are projected to fall short of statutory expenditures by $13.8 trillion and $7.7 trillion, respectively, in present value terms.[71]

Table V.D2.—Present Values of Projected Revenue and Cost Components of 75-Year Open-Group Obligations for HI, SMI, and OASDI
(In trillions, as of January 1, 2009)

Revenue and expenditure categories	HI	SMI	OASDI	Combined
Revenues from public:				
Payroll and benefit taxes	$12.0	—	$37.2	$49.2
Premiums	0.0	$7.2	—	7.2
Other taxes and fees[1]	—	1.0	—	1.0
Total	12.0	8.2	37.2	57.4
Total expenditures to public	25.8	32.5	44.9	103.2
Net Results for Budget Perspective	**−13.8**	**−24.3**	**−7.7**	**−45.8**
Revenues from other government accounts:				
Transfers	0.0	24.2	0.0	24.2
Interest credits	n/a	n/a	n/a	n/a
Total	0.0	24.2	0.0	24.2
Trust fund assets on January 1, 2009	0.3	0.0	2.4	2.7
Net Results for Trust Fund Perspective	**−13.4**	**−0.1**	**−5.3**	**−18.8**

[1]Includes Part D State transfers.

Notes: 1. For comparison, the present values of HI taxable payroll, OASDI taxable payroll, and GDP are $355.9 trillion, $282.8 trillion, and $790.9 trillion, respectively, over the next 75 years. This present value of GDP is calculated using HI-specific interest discount factors and differs slightly from the corresponding amount shown in the OASDI Trustees Report.
2. Medicare present values are calculated using HI-specific discount factors, while OASDI amounts use OASDI-specific discount factors.
3. Totals do not necessarily equal the sums of rounded components.
4. "n/a" indicates not applicable.
5. "0.0" indicates an amount of less than $50 billion.

From the budget perspective, these are the additional amounts that would be needed in order to pay HI and OASDI benefits and other costs at the level scheduled under current law over the next 75 years. From the trust fund perspective, the amounts needed are smaller by the value of the accumulated assets in the respective trust funds—$0.3 trillion for HI and $2.4 trillion for OASDI—that could be drawn down to cover a part of the projected shortfall in tax revenues. Two points about this comparison are important to note:

[71]Interest income is not a factor in this table, as dollar amounts are in present value terms.

- Other than asset redemptions and interest payments, no provision exists under current law to address the projected HI and OASDI financial imbalances. Once assets are exhausted, expenditures cannot be made except to the extent covered by ongoing tax receipts. In this extreme—and politically unlikely—situation, further transfers from the general fund would require new legislation.

- From a trust fund perspective, the long-range HI and OASDI deficits reflect the net imbalance after trust fund assets have been redeemed. From a government-wide perspective, the deficits represent the cost of redeeming those assets plus the additional legislative authorization that would be required to fully satisfy future scheduled benefit payments.[72]

The situation for SMI is somewhat different. SMI expenditures for Part B and Part D are projected to exceed premium revenues by $24.3 trillion. General fund transfers of this amount will be needed to keep the SMI trust fund solvent for the next 75 years, and these transfers represent a formal budget requirement under current law. From the trust fund perspective, the present value of projected total premiums and general revenues is about equal to the present value of future expenditures.

From the 75-year budget perspective, the present value of the additional resources that would be needed to meet projected expenditures, at current-law levels for the three programs combined, is $45.8 trillion.[73] To put this very large figure in perspective, it would represent 5.8 percent of the present value of projected GDP over the same period ($791 trillion). The components of the $45.8-trillion total are as follows:

[72]In practice, the long-range HI and OASDI deficits could be addressed by reducing expenditures, increasing payroll or other earmarked tax revenues, implementing a general revenue subsidy, or some combination of such measures. For Medicare, in particular, legislation has frequently been enacted to slow the growth of expenditures.

[73]As noted previously, the long-range HI and OASDI financial imbalances could instead be partially addressed by expenditure reductions, thereby reducing the need for additional revenues. Similarly, SMI expenditure reductions would reduce the need for general fund transfers.

Unfunded HI and OASDI obligations (trust fund perspective)[74]	$18.8 trillion	(2.4% of GDP)
HI and OASDI asset redemptions	$2.7 trillion	(0.3% of GDP)
SMI Parts B and D general revenue financing	$24.2 trillion	(3.1% of GDP)

These resource needs would be in addition to the payroll taxes, benefit taxes, and premium payments scheduled under current law. As noted, the asset redemptions and SMI general revenue transfers represent formal budget commitments under current law, but no provision exists for covering the HI and OASDI trust fund deficits once assets are exhausted.

[74]Additional revenues and/or expenditure reductions totaling $18.8 trillion, together with $2.7 trillion in asset redemptions, would cover the projected financial imbalance but would leave the HI and OASDI trust funds exhausted at the end of the 75-year period. The long-range actuarial deficit for HI and OASDI includes a cost factor to allow for a normal level of fund assets. See section III.B3 in this report, and section IV.B4 in the OASDI Trustees Report, for the numerical relationship between the actuarial deficit and the "unfunded obligations" of each program.

E. FISCAL YEAR HISTORICAL DATA AND PROJECTIONS THROUGH 2018

Tables V.E1, V.E2, and V.E3 present detailed operations of the HI trust fund, along with Part B and Part D of the SMI trust fund, for fiscal year 2008. These tables are similar to the calendar-year operation tables displayed in sections III.B and III.C.

Table V.E1.—Statement of Operations of the HI Trust Fund during Fiscal Year 2008
[In thousands]

Total assets of the trust fund, beginning of period	$319,510,477
Revenue:	
Payroll taxes	$197,195,373
Income from taxation of OASDI benefits	11,733,000
Interest on investments	16,732,466
Premiums collected from voluntary participants	2,912,670
Premiums collected from Medicare Advantage participants	87,343
Transfer from Railroad Retirement account	493,600
Reimbursement, transitional uninsured coverage	506,000
Reimbursement, program management general fund	192,000
CMS interfund interest payments[1]	-1,340
SSA interfund interest payments to SSA trust funds[1]	-1,344
Interest adjustment, hospice payment error correction[2]	-853,199
Interest on reimbursements, Railroad Retirement	32,092
Other	1,865
Reimbursement, Union activity	1,206
Fraud and abuse control receipts:	
Criminal fines	5,340
Civil monetary penalties	11,410
Civil penalties and damages, CMS	11,932
Civil penalties and damages, Department of Justice	531,204
3% administrative expense reimbursement, Department of Justice	16,431
Fraud and abuse appropriation for FBI	120,937
Total revenue	$229,728,985
Expenditures:	
Net benefit payments	$218,524,793
Principal adjustment, hospice payment error correction[2]	8,483,566
Administrative expenses:	
Treasury administrative expenses	166,033
Salaries and expenses, SSA[3]	814,419
Salaries and expenses, CMS[4]	1,068,811
Salaries and expenses, Office of the Secretary, HHS	37,432
Payment Assessment Commission, HHS	6,336
Fraud and abuse control expenses:	
HHS Medicare integrity program	694,328
HHS Office of Inspector General	265,276
Department of Justice	57,783
FBI	120,937
Total administrative expenses	3,231,357
Total expenditures	$230,239,716
Net addition to the trust fund	-510,731
Total assets of the trust fund, end of period	$318,999,746

[1]A positive figure represents a transfer to the HI trust fund from the other trust funds. A negative figure represents a transfer from the HI trust fund to the other funds.
[2]Amounts transferred to the general fund of the Treasury for Part A hospice costs that were misallocated to the Part B trust fund account.
[3]For facilities, goods, and services provided by SSA.
[4]Includes administrative expenses of the intermediaries.

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

Table V.E2.—Statement of Operations of the Part B Account in the SMI Trust Fund during Fiscal Year 2008

[In thousands]

Total assets of the Part B account in the trust fund, beginning of period		$38,554,223
Revenue:		
Premiums from enrollees:		
Enrollees aged 65 and over	$42,495,550	
Disabled enrollees under age 65	6,870,681	
Total premiums		49,366,232
Premiums collected from Medicare Advantage participants		77,455
Government contributions:		
Enrollees aged 65 and over	122,185,199	
Disabled enrollees under age 65	22,702,662	
Total Government contributions		144,887,861
Other		9,999
Interest on investments		2,324,517
SSA interfund interest payments to SSA trust funds[1]		-1,208
CMS interfund interest receipts[1]		1,340
Interest adjustment, hospice payment error correction[2]		812,234
Total revenue		$197,478,429
Expenditures:		
Net Part B benefit payments		$183,161,691
Principal adjustment, hospice payment error correction[2]		-8,483,566
Administrative expenses:		
Transfer to Medicaid[3]	396,612	
Treasury administrative expenses	242	
Salaries and expenses, CMS[4]	1,717,030	
Salaries and expenses, Office of the Secretary, HHS	35,347	
Salaries and expenses, SSA	865,837	
Medicare Payment Advisory Commission	4,224	
Railroad Retirement administrative expenses	7,517	
Transitional assistance administrative expenses	803	
Prescription drug administrative expenses	3,754	
Total administrative expenses		3,031,367
Total expenditures		$177,709,492
Net addition to the trust fund		19,768,937
Total assets of the Part B account in the trust fund, end of period		$58,323,159

[1]A positive figure represents a transfer to the Part B account in the SMI trust fund from the other trust funds. A negative figure represents a transfer from the Part B account in the SMI trust fund to the other funds.

[2]Amounts transferred from the general fund of the Treasury for Part A hospice costs that were misallocated to the Part B trust fund account.

[3]Represents amount transferred from the Part B account in the SMI trust fund to Medicaid to pay the Part B premium for certain qualified individuals, as legislated by the Balanced Budget Act of 1997.

[4]Includes administrative expenses of the carriers and intermediaries.

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

Table V.E3—Statement of Operations of the Part D Account in the SMI Trust Fund during Fiscal Year 2008
[In thousands]

Total assets of the Part D account in the trust fund, beginning of period		$592,053
Revenue:		
Premiums from enrollees		
Premiums deducted from Social Security benefit checks	$1,821,768	
Premiums paid directly to plans[1]	2,937,782	
Total premiums		4,759,551
Government contributions:		
Prescription drug benefits	35,157,328	
Prescription drug administrative expenses	389,028	
Total government contributions		35,546,356
Payments from States		7,042,304
Interest on investments		13,243
Total revenue		$47,361,454
Expenditures:		
Part D benefit payments[1]		$46,735,572
Part D administrative expenses		392,000
Total expenditures		$47,127,572
Net addition to the trust fund		233,882
Total assets of the Part D account in the trust fund, end of period		$825,935

[1]Premiums paid directly to plans are not displayed on Treasury statements and are estimated. These premiums have been added to the benefit payments reported on the Treasury statement to obtain an estimate of total Part D benefits. Direct data on such benefit amounts are not yet available.

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

Tables V.E4, V.E5, V.E6, V.E7, and V.E8 present estimates of the fiscal year operations of total Medicare, the HI trust fund, the SMI trust fund, the Part B account in the SMI trust fund, and the Part D account in the SMI trust fund, respectively. These tables correspond to the calendar-year trust fund operation tables shown in section III.

Table V.E4.—Total Medicare Income, Expenditures, and Trust Fund Assets during Fiscal Years 1970-2018

[In billions]

Fiscal year	Total income	Total expenditures	Net change in assets	Assets at end of year
Historical data:				
1970	$7.5	$7.1	$0.3	$2.7
1975	16.9	14.8	2.1	11.3
1980	35.7	35.0	0.7	19.0
1985	75.5	71.4	4.1	31.9
1990	125.7	109.7	16.0	110.2
1995	173.0	180.1	−7.1	143.4
2000	248.9	219.3	29.6	214.0
2001	266.3	241.2	25.2	239.2
2002	285.5	256.9	28.6	267.8
2003	286.0	277.8	8.2	275.9
2004	307.6	301.5	6.1	282.1
2005	349.4	336.9	12.5	294.6
2006	422.3	380.5	41.8	336.4
2007	457.1	434.8	22.2	358.7
2008	474.6	455.1	19.5	378.1
Intermediate estimates:				
2009	489.6	499.8	−10.3	367.9
2010	512.9	521.3	−8.4	359.4
2011	547.8	555.7	−7.9	351.5
2012	585.3	567.6	17.7	369.2
2013	623.7	622.8	0.9	370.1
2014	652.1	691.0	−38.9	331.2
2015	680.3	713.9	−33.6	297.5
2016	724.8	791.4	−66.5	231.0
2017	766.3	836.0	−69.7	161.3
2018	814.7	882.9	−68.2	93.1

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

Table V.E5.—Operations of the HI Trust Fund during Fiscal Years 1970-2018

[In billions]

	Income								Expenditures			Trust fund	
Fiscal year[1]	Payroll taxes	Income from taxation of benefits	Railroad Retirement account transfers	Reimburse-ment for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest and other[2,3]	Total	Benefit payments[3,4]	Adminis-trative expenses[5]	Total	Net change	Balance at end of year
Historical data:													
1970	$4.8	—	$0.1	$0.6	—	$0.0	$0.1	$5.6	$4.8	$0.1	$5.0	$0.7	$2.7
1975	11.3	—	0.1	0.5	$0.0	0.0	0.6	12.6	10.4	0.3	10.6	2.0	9.9
1980	23.2	—	0.2	0.7	0.0	0.1	1.1	25.4	23.8	0.5	24.3	1.1	14.5
1985	46.5	—	0.4	0.8	0.0	0.1	3.2	50.9	47.8	0.8	48.7	4.1[6]	21.3
1990	70.7	—	0.4	0.4	0.1	0.1	7.9	79.6	65.9	0.8	66.7	12.9	95.6
1995	98.1	$3.9	0.4	0.5	1.0	0.1	11.0	114.8	113.6	1.3	114.9	−0.0	129.5
2000	137.7	8.8	0.5	0.5	1.4	0.0	10.8	159.7	127.9[7]	2.4	130.3	29.4	168.1
2001	151.9	4.9	0.5	0.5	1.4	−1.2[8]	13.0	171.0	139.4[7]	2.4	141.7	29.3	197.4
2002	151.6	10.9	0.4	0.4	1.5	0.0	14.9	179.8	145.6[7]	2.5	148.0	31.7	229.1
2003	149.8	8.3	0.4	0.4	1.6	0.0	15.2	175.8	151.3[7]	2.5	153.8	22.0	251.1
2004	153.4	8.6	0.4	0.4	1.8	0.2	16.0	180.8	164.1	2.9	167.0	13.8	264.9
2005	169.0	8.8	0.4	0.3	2.3	0.0	16.2	196.9	181.3	2.9	184.1	12.8	277.7
2006	180.4	10.3	0.5	0.4	2.6	0.0	16.1	210.3	181.8	3.1	184.9	25.4	303.1
2007	188.0	10.6	0.5	0.5	2.8	0.0	16.9	219.2	200.2	2.6	202.8	16.4	319.5
2008	197.2	11.7	0.5	0.5	2.9	0.0	16.9	229.7	227.0[9]	3.2	230.2	−0.5	319.0
Intermediate estimates:													
2009	195.0	12.2	0.5	0.6	3.1	0.0	16.2	227.6	238.4	3.3	241.6	−14.0	305.0
2010	197.3	16.4	0.5	−0.1	3.2	1.0[10]	15.5	233.8	246.8	3.4	251.3[11]	−17.5	287.6
2011	211.0	17.7	0.5	0.3	3.4	0.0	14.5	247.5	266.3	3.6	269.9	−22.4	265.1
2012	223.0	18.3	0.5	0.3	3.6	0.0	13.4	259.2	275.2	3.8	279.0	−19.9	245.3
2013	235.7	20.1	0.6	0.3	3.9	0.0	12.1	272.5	300.7	4.1	304.8	−32.3	213.0
2014	247.8	22.4	0.6	0.3	4.1	0.0	10.1	285.3	334.6	4.4	339.1	−53.8	159.2
2015	260.0	24.6	0.6	0.3	4.3	0.0	7.4	297.2	343.1	4.7	347.9	−50.7	108.5
2016	274.0	27.0	0.6	0.3	4.6	0.0	5.2	311.6	372.7	5.1	377.8	−66.1	42.4
2017[12]	284.7	29.7	0.7	0.2	4.8	0.0	2.4	322.6	391.4	5.4	396.8	−74.2	−31.8
2018[12]	297.4	32.4	0.7	0.2	5.2	0.0	−0.9	334.9	411.7	5.8	417.5	−82.6	−114.4

[1]Fiscal years 1970 and 1975 consist of the 12 months ending on June 30 of each year; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.
[2]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund, receipts from the fraud and abuse control program, and a small amount of miscellaneous income. In 2008, includes an adjustment of −$0.9 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.
[3]See footnote 2 of table III.B4.
[4]Includes costs of Peer Review Organizations from 1983 through 2001 (beginning with the implementation of the prospective payment system on October 1, 1983) and costs of Quality Improvement Organizations beginning in 2002.
[5]Includes costs of experiments and demonstration projects. Beginning in 1997, includes fraud and abuse control expenses, as provided for by Public Law 104-191.
[6]Includes repayment of loan principal, from the OASI trust fund, of $1.8 billion.
[7]For 1998 to 2003, includes monies transferred to the SMI trust fund for home health agency costs, as provided for by Public Law 105-33.
[8]Includes the lump-sum general revenue adjustment of −$1.2 billion, as provided for by section 151 of Public Law 98-21.
[9]Includes monies ($8.5 billion) transferred to the general fund of the Treasury for Part A hospice costs that were previously misallocated to the Part B trust fund account.
[10]Includes the lump-sum general revenue adjustment of $1.0 billion, as provided for by section 151 of Public Law 98-21.
[11]Includes payment of estimated contingent liability payable to States (to reimburse them for payments they have made on behalf of beneficiaries) for probable unasserted claims that resulted from processing errors in which incorrect Medicare eligibility determinations were made ($1.2 billion).
[12]Estimates for 2017 and later are hypothetical, since the HI trust fund would be exhausted in those years.

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

Table V.E6.—Operations of the SMI Trust Fund (Cash Basis) during Fiscal Years 1970-2018

[In billions]

	Income					Expenditures			Trust fund	
Fiscal Year[1]	Premium income	General revenue[2]	Transfers from States	Interest and other[3,4]	Total	Benefit payments[4,5]	Adminis-trative expense	Total	Net change	Balance at end of year[6]
Historical data:										
1970	$0.9	$0.9	—	$0.0	$1.9	$2.0	$0.2	$2.2	−$0.3	$0.1
1975	1.9	2.3	—	0.1	4.3	3.8	0.4	4.2	0.2	1.4
1980	2.9	6.9	—	0.4	10.3	10.1	0.6	10.7	−0.5	4.5
1985	5.5	17.9	—	1.2	24.6	21.8	0.9	22.7	1.8	10.6
1990	11.5[7]	33.2	—	1.4[7]	46.1[7]	41.5	1.5[7]	43.0[7]	3.1[7]	14.5[7]
1995	19.2	37.0	—	1.9	58.2	63.5	1.7	65.2	−7.0	13.9
2000	20.5	65.6	—	3.2	89.2	87.2[8]	1.8	89.0	0.2	45.9
2001	22.3	69.8	—	3.2	95.3	97.5[8]	2.0	99.5	−4.1	41.8
2002	24.4	78.3	—	3.0	105.7	107.0[8]	1.8	108.8	−3.1	38.7
2003	26.8	80.9	—	2.5	110.2	121.7[8]	2.4	124.1	−13.9	24.8
2004	30.3	94.5	—	1.7	126.6	131.5	2.8	134.3	−7.7	17.1
2005	35.9	115.2	—	1.4	152.5	149.8	2.9	152.7	−0.2	16.9
2006	44.2	162.6	$3.6	1.5	212.0	192.1	3.5	195.6	16.4	33.3
2007	49.6	179.2	7.0	2.1	237.9	228.6	3.4	232.0	5.9	39.1
2008	54.1	180.4	7.0	3.2	244.8	221.4[9]	3.4	224.8	20.0	59.1
Intermediate estimates:										
2009	57.5	193.5	7.7	3.2	261.9	254.8	3.4	258.2	3.7	62.8
2010	60.9	206.5	8.2	3.4	279.0	265.7	3.5	270.0[10]	9.0	71.9
2011	65.4	222.1	8.7	4.1	300.3	282.1	3.7	285.7	14.6	86.4
2012	72.0	239.3	9.3	5.5	326.1	284.7	3.9	288.6	37.5	123.9
2013	76.0	257.9	9.9	7.4	351.2	313.8	4.2	318.0	33.2	157.1
2014	78.9	268.3	10.6	9.0	366.8	347.5	4.5	352.0	14.9	172.0
2015	82.0	279.7	11.3	10.1	383.1	361.3	4.8	366.1	17.0	189.0
2016	86.6	303.5	12.3	10.8	413.2	408.5	5.1	413.6	−0.4	188.6
2017	94.7	324.1	13.6	11.3	443.7	433.8	5.4	439.2	4.5	193.1
2018	104.7	348.4	15.0	11.7	479.8	459.7	5.7	465.4	14.4	207.4

[1]Fiscal years 1970 and 1975 consist of the 12 months ending on June 30 of each year; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.

[2]Includes Part B general fund matching payments, Part D subsidy costs, and certain interest-adjustment items.

[3]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income. In 2008, includes an adjustment of $0.8 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.

[4]See footnote 2 of table III.B4.

[5]See footnote 5 of table III.C1.

[6]The financial status of SMI depends on both the assets and the liabilities of the trust fund (see table III.C12).

[7]Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

[8]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.

[9]Benefits shown for 2008 are reduced by monies transferred ($8.5 billion) from the general fund of the Treasury to reimburse Part B for Part A hospice costs that were previously misallocated to the Part B trust fund account.

[10]Includes payment of estimated contingent liability payable to States (to reimburse them for payments they have made on behalf of beneficiaries) for probable unasserted claims that resulted from processing errors in which incorrect Medicare eligibility determinations were made ($0.8 billion).

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

Table V.E7.—Operations of the Part B Account in the SMI Trust Fund (Cash Basis) during Fiscal Years 1970-2018

[In billions]

	Income				Expenditures			Account	
Fiscal year[1]	Premium income	General revenue[2]	Interest and other[3,4]	Total	Benefit payments[4,5]	Administrative expense	Total	Net change	Balance at end of year[6]
Historical data:									
1970	$0.9	$0.9	$0.0	$1.9	$2.0	$0.2	$2.2	−$0.3	$0.1
1975	1.9	2.3	0.1	4.3	3.8	0.4	4.2	0.2	1.4
1980	2.9	6.9	0.4	10.3	10.1	0.6	10.7	−0.5	4.5
1985	5.5	17.9	1.2	24.6	21.8	0.9	22.7	1.8	10.6
1990	11.5[7]	33.2	1.4[7]	46.1[7]	41.5	1.5[7]	43.0[7]	3.1[7]	14.5[7]
1995	19.2	37.0	1.9	58.2	63.5	1.7	65.2	−7.0	13.9
2000	20.5	65.6	3.2	89.2	87.2[8]	1.8	89.0	0.2	45.9
2001	22.3	69.8	3.2	95.3	97.5[8]	2.0	99.5	−4.1	41.8
2002	24.4	78.3	3.0	105.7	107.0[8]	1.8	108.8	−3.1	38.7
2003	26.8	80.9	2.5	110.2	121.7[8]	2.4	124.1	−13.9	24.8
2004	30.3	94.5	1.7	126.6	131.5	2.8	134.3	−7.7	17.1
2005	35.9	114.0	1.4	151.3	148.6	2.9	151.5	−0.2	16.9
2006	41.6	134.3	1.5	177.4	158.3	3.3	161.6	15.7	32.6
2007	45.7	137.8	2.0	185.6	177.2	2.4	179.7	6.0	38.6
2008	49.4	144.9	3.2	197.5	174.7[9]	3.0	177.7	19.8	58.3
Intermediate estimates:									
2009	51.7	149.8	3.2	204.8	197.9	3.0	200.9	3.9	62.2
2010	53.8	154.4	3.4	211.5	198.6	3.1	202.5[10]	9.0	71.2
2011	57.2	163.6	4.1	224.8	206.3	3.3	209.6	15.3	86.4
2012	62.7	183.5	5.5	251.7	211.5	3.5	215.0	36.7	123.1
2013	65.7	192.8	7.3	265.8	229.0	3.7	232.7	33.1	156.3
2014	67.5	197.5	9.0	274.0	255.3	4.0	259.2	14.8	171.1
2015	69.4	201.6	10.1	281.2	259.9	4.3	264.2	17.0	188.0
2016	72.6	210.6	10.8	294.1	289.0	4.5	293.5	0.6	188.6
2017	79.2	228.4	11.2	318.8	309.5	4.8	314.3	4.5	193.1
2018	87.4	250.8	11.7	349.8	331.6	5.2	336.8	13.1	206.1

[1]Fiscal years 1970 and 1975 consist of the 12 months ending on June 30 of each year; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.

[2]General fund matching payments, plus certain interest-adjustment items.

[3]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income. In 2008, includes an adjustment of $0.8 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.

[4]See footnote 2 of table III.B4.

[5]See footnote 5 of table III.C1.

[6]The financial status of Part B depends on both the assets and the liabilities of the trust fund (see table III.C12).

[7]Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

[8]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.

[9]Benefits shown for 2008 are reduced by monies transferred ($8.5 billion) from the general fund of the Treasury to reimburse Part B for Part A hospice costs that were previously misallocated to the Part B trust fund account.

[10]Includes payment of estimated contingent liability payable to States (to reimburse them for payments they have made on behalf of beneficiaries) for probable unasserted claims that resulted from processing errors in which incorrect Medicare eligibility determinations were made ($0.8 billion).

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

Table V.E8.—Operations of the Part D Account in the SMI Trust Fund (Cash Basis) during Fiscal Years 2004-2018

[In billions]

	Income					Expenditures			Account	
Fiscal year	Premium income	General revenue[1]	Transfers from States[2]	Interest and other	Total	Benefit payments[3]	Adminis-trative expense	Total	Net change	Balance at end of year
Historical data:										
2004	—	$0.2	—	—	$0.2	$0.2	—	$0.2	—	—
2005	—	1.2	—	—	1.2	1.2	—	1.2	—	—
2006	$2.6	28.3	$3.6	$0.0	34.6	33.7	$0.2	33.9	$0.7	$0.7
2007	3.9	41.4	7.0	0.0	52.3	51.3	1.0	52.4	−0.1	0.6
2008	4.8	35.5	7.0	0.0	47.4	46.7	0.4	47.1	0.2	0.8
Intermediate estimates:										
2009	5.8	43.6	7.7	0.0	57.1	56.9	0.4	57.3	−0.2	0.7
2010	7.1	52.2	8.2	0.0	67.5	67.1	0.4	67.5	0.0	0.7
2011	8.2	58.5	8.7	0.0	75.5	75.7	0.4	76.2	−0.7	0.0
2012	9.3	55.8	9.3	0.0	74.4	73.1	0.4	73.6	0.8	0.8
2013	10.3	65.1	9.9	0.0	85.4	84.8	0.5	85.3	0.1	0.9
2014	11.4	70.8	10.6	0.0	92.8	92.3	0.5	92.8	0.1	0.9
2015	12.6	78.0	11.3	0.0	102.0	101.4	0.5	101.9	0.1	1.0
2016	13.9	92.8	12.3	0.0	119.1	119.6	0.5	120.1	−1.0	0.0
2017	15.5	95.8	13.6	0.0	124.9	124.3	0.5	124.9	—	0.0
2018	17.3	97.6	15.0	0.0	130.0	128.1	0.6	128.7	1.3	1.3

[1]Includes all government transfers including amounts for the general subsidy, reinsurance, employer drug subsidy, low-income subsidy, administrative expenses, risk sharing, and State expenses for making low-income eligibility determinations. Includes amounts for the Transitional Assistance program of $0.2, $1.1, and $0.2 billion in 2004-2006, respectively.

[2]See footnote 3 of table III.C19.

[3]Includes payments to plans, subsidies to employer retiree prescription drug plans, payments to States for making low-income eligibility determinations, and Part D drug premiums collected from beneficiaries and transferred to Medicare Advantage plans and private drug plans. Includes amounts for the Transitional Assistance program of $0.2, $1.1, and $0.2 billion in 2004-2006, respectively.

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

Table V.E9 shows the total assets of the HI trust fund and their distribution at the end of fiscal years 2007 and 2008. The assets at the end of fiscal year 2008 totaled $319.0 billion: $318.7 billion in the form of U.S. Government obligations and an undisbursed balance of $0.3 billion.

Table V.E9.—Assets of the HI Trust Fund, by Type, at the End of Fiscal Years 2007 and 2008[1]

	September 30, 2007	September 30, 2008
Investments in public-debt obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
3.750-percent, 2009	——	$4,611,407,000.00
4.500-percent, 2008	$7,111,331,000.00	——
Bonds:		
3.500-percent, 2009	1,491,940,000.00	——
3.500-percent, 2010-2018	28,953,328,000.00	28,953,328,000.00
4.000-percent, 2010-2023	——	37,504,774,000.00
4.125-percent, 2009	987,939,000.00	——
4.125-percent, 2010-2020	28,685,324,000.00	28,666,470,000.00
4.625-percent, 2009	977,468,000.00	——
4.625-percent, 2010-2019	26,615,179,000.00	26,615,179,000.00
5.000-percent, 2009	1,268,944,000.00	——
5.000-percent, 2010-2022	36,460,961,000.00	32,444,161,000.00
5.125-percent, 2009	1,158,786,000.00	——
5.125-percent, 2010-2021	32,711,296,000.00	29,647,026,000.00
5.250-percent, 2008-2009	3,703,479,000.00	——
5.250-percent, 2010-2017	29,370,250,000.00	29,370,250,000.00
5.625-percent, 2008-2009	5,075,450,000.00	——
5.625-percent, 2010-2016	28,546,479,000.00	28,546,479,000.00
5.875-percent, 2011-2012	8,754,457,000.00	8,754,457,000.00
6.000-percent, 2012-2014	20,598,023,000.00	20,598,023,000.00
6.250-percent, 2008	8,548,126,000.00	——
6.500-percent, 2008-2009	4,018,292,000.00	——
6.500-percent, 2010-2015	29,807,294,000.00	29,807,294,000.00
6.875-percent, 2011	2,166,172,000.00	2,166,172,000.00
7.000-percent, 2011	3,368,466,000.00	3,368,466,000.00
7.250-percent, 2008	225,130,000.00	——
7.250-percent, 2009	8,773,256,000.00	7,687,497,000.00
Total investments	$319,377,370,000.00	$318,740,983,000.00
Undisbursed balance	133,106,791.65	258,763,157.22
Total assets	$319,510,476,791.65	$318,999,746,157.22

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

The effective annual rate of interest earned by the assets of the HI trust fund during the 12 months ending on December 31, 2008 was 5.2 percent. 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 2008 was 4.0 percent, payable semiannually.

Table V.E10 shows a comparison of the total assets of the SMI trust fund, Parts B and D combined, and their distribution at the end of fiscal years 2007 and 2008. At the end of 2008, assets totaled $60.3 billion: $59.1 billion in the form of U.S. Government obligations and an undisbursed balance of $1.2 billion.

Table V.E10.—Assets of the SMI Trust Fund, by Type, at the End of Fiscal Years 2007 and 2008[1]

	September 30, 2007	September 30, 2008
Investments in public-debt obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
3.750-percent, 2009	——	$5,451,521,000.00
3.875-percent, 2009	——	621,481,000.00
4.000-percent, 2009	——	12,365,000.00
4.500-percent, 2008	$516,127,000.00	——
4.750-percent, 2008	4,588,551,000.00	
Bonds:		
4.000-percent, 2011-2023	——	17,051,952,000.00
4.125-percent, 2009	2,570,352,000.00	——
5.000-percent, 2011-2016	3,085,299,000.00	——
5.000-percent, 2017-2019	7,495,143,000.00	8,344,382,000.00
5.000-percent, 2020-2022	——	6,551,711,000.00
5.125-percent, 2008-2009	2,845,895,000.00	——
5.125-percent, 2010-2011	4,997,529,000.00	5,134,800,000.00
5.125-percent, 2012-2017	——	2,772,618,000.00
5.250-percent, 2016	297,753,000.00	297,753,000.00
5.625-percent, 2016	1,822,107,000.00	1,822,107,000.00
5.875-percent, 2013	2,526,588,000.00	2,526,588,000.00
6.000-percent, 2013-2014	3,462,146,000.00	3,462,146,000.00
6.500-percent, 2013-2015	3,110,670,000.00	3,110,670,000.00
6.875-percent, 2012	1,929,853,000.00	1,929,853,000.00
Total investments	$39,248,013,000.00	$59,089,947,000.00
Undisbursed balance[2]	−101,737,260.37	1,203,257,239.42
Total assets	$39,146,275,739.63	$60,293,204,239.42

[1]Certificates of indebtedness and bonds are carried at par value, which is the same as book value.
[2]Negative figures represent an extension of credit against securities to be redeemed within the following few days.

The effective annual rate of interest earned by the assets of the SMI trust fund for the 12 months ending on December 31, 2008 was 4.8 percent. Interest on special issues is paid semiannually on June 30 and December 31. The interest rate on special issues purchased by the account in June 2008 was 4.0 percent, payable semiannually.

F. GLOSSARY

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

Actuarial deficit. A negative actuarial balance.

Actuarial rates. One-half of the Part B expected monthly benefit and administrative costs for each aged enrollee adjusted for interest earned on the Part B account assets attributable to aged enrollees and a contingency margin (for the aged actuarial rate), and one-half of the expected monthly benefit and administrative costs for each disabled enrollee adjusted for interest earned on the Part B account assets attributable to disabled enrollees and a contingency margin (for the disabled actuarial rate), for the duration the rate is in effect.

Actuarial status. A measure of the adequacy of the financing as determined by the difference between assets and liabilities at the end of the periods for which financing was established.

Administrative expenses. Expenses incurred by the Department of Health and Human Services and the Department of the Treasury in administering HI and SMI and the provisions of the Internal Revenue Code relating to the collection of contributions. Such administrative expenses, which are paid from the HI and SMI trust funds, include expenditures for contractors to determine costs of, and make payments to, providers, as well as salaries and expenses of the Centers for Medicare & Medicaid Services.

Aged enrollee. An individual, aged 65 or over, who is enrolled in HI or SMI.

Allowed charge. Individual charge determined by a carrier for a covered Part B medical service or supply.

Annual out-of-pocket threshold. The amount of out-of-pocket expenses that must be paid for prescription drugs before significantly reduced Part D beneficiary cost sharing is effective. Amounts paid by a third-party insurer are not included in testing this threshold, but amounts paid by State or Federal assistance programs are included.

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 key factors that affect the balance in 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) The low-cost alternative, with relatively rapid economic growth, low inflation, and favorable (from the standpoint of program financing) demographic conditions;
(2) The intermediate assumptions, which represent the Trustees' best estimates of likely future economic and demographic conditions; and
(3) The high-cost alternative, with slow economic growth, more rapid inflation, and financially disadvantageous demographic conditions.

See also "Hospital assumptions."

Average market yield. A computation that 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 immediately 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 HI or SMI. See also "Aged enrollee" and "Disabled enrollee."

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

Benefit period. An alternate name for "spell of illness."

Board of Trustees. A Board established by the Social Security Act to oversee the financial operations of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund. The Board is composed of six members, four of whom serve automatically by virtue of their positions in the Federal government: the Secretary of the Treasury, who is the Managing Trustee; the

Secretary of Labor; the Secretary of Health and Human Services; and the Commissioner of Social Security. Two other members are public representatives who are appointed by the President and confirmed by the Senate. These positions are currently vacant. The Administrator of the Centers for Medicare & Medicaid Services (CMS) serves as Secretary of the Board of Trustees.

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

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

Carrier. A private or public organization under contract to CMS to administer the Part B benefits under Medicare. Also referred to as "contractors," these organizations determine coverage and benefit amounts payable and make payments to physicians, suppliers, and beneficiaries.

Case mix index. A relative weight that captures the average complexity of certain Medicare services.

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

Certificate of indebtedness. A short-term certificate of ownership (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.

Closed-group population. Includes all persons currently participating in the program as either taxpayers or beneficiaries, or both. See also "Open-group population."

Coinsurance. Portion of the costs for covered services paid by the beneficiary after meeting the annual deductible. See also "Hospital coinsurance" and "SNF coinsurance."

Consumer Price Index (CPI). A measure of the average change in prices over time in a fixed group of goods and services. In this report, all references to the CPI relate to the CPI for Urban Wage Earners and Clerical Workers (CPI-W).

Contingency. Funds included in the SMI Part B trust fund account to serve as a cushion in case actual expenditures are higher than those projected at the time financing was established. Since the financing is set prospectively, actual experience may be different from the estimates used in setting the financing.

Contingency margin. An amount included in the actuarial rates to provide for changes in the contingency level in the SMI Part B trust fund account. Positive margins increase the contingency level, and negative margins decrease it.

Contribution base. See "Maximum tax base."

Contributions. See "Payroll taxes."

Cost rate. The ratio of HI cost (or outgo or expenditures) on an incurred basis during a given year to the taxable payroll for the year. In this context, the outgo is defined to exclude benefit payments and administrative costs for those uninsured persons for whom payments are reimbursed from the general fund of the Treasury, and for voluntary enrollees, who pay a premium to be enrolled.

Covered earnings. Earnings in employment covered by HI.

Covered employment. All employment and self-employment creditable for Social Security purposes. Almost every kind of employment and self-employment is covered under HI. 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 instance, ministers or self-employed members of certain religious groups—workers can opt out of coverage. Covered employment for HI includes all Federal employees (whereas covered employment for OASDI includes some, but not all, Federal employees).

Covered Part D drugs. Prescription drugs covered under the Medicaid program plus insulin-related supplies and smoking cessation agents. Drugs covered in Parts A and B of Medicare will continue to be covered there, rather than in Part D.

Covered services. Services for which HI or SMI pays, as defined and limited by statute. Covered HI services are provided by hospitals (inpatient care), skilled nursing facilities, home health agencies, and hospices. Covered SMI Part B services include most physician services, care in outpatient departments of hospitals, diagnostic tests, durable medical equipment, ambulance services, and other health

services that are not covered by HI. See "Covered Part D drugs" for SMI Part D.

Covered 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. The number of HI covered workers is slightly larger than the number of OASDI covered workers because of different coverage status for Federal employment. See "Covered employment."

Creditable prescription drug coverage. Prescription drug coverage that meets or exceeds the actuarial value of Part D coverage provided through a group health plan or otherwise.

Dedicated financing sources. The sum of HI payroll taxes, HI share of income taxes on Social Security benefits, Part D State transfers, and beneficiary premiums. This amount is used in the test of excess general revenue Medicare funding.

Deductible. The annual amount payable by the beneficiary for covered services before Medicare makes reimbursement. See also "Inpatient hospital deductible."

Deemed wage credit. See "Non-contributory or deemed 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 inpatient hospital 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.

Direct subsidy. The amount paid to the prescription drug plans representing the difference between the plan's risk-adjusted bid and the beneficiary premium for basic coverage.

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 aged 55 or older whose disability is based on blindness. The law generally requires that a person be disabled continuously for 5 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.

Disability Insurance (DI). See "Old-Age, Survivors, and Disability Insurance (OASDI)."

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 2 years and who is enrolled in HI or SMI.

DRG Coding. The DRG categories used by hospitals on discharge billing. See also "Diagnosis-related groups (DRGs)."

Durable medical equipment (DME). Items such as iron lungs, oxygen tents, hospital beds, wheelchairs, and seat lift mechanisms that are used in the patient's home and are either purchased or rented.

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

Economic assumptions. See "Assumptions."

Economic stabilization program. A legislative program during the early 1970s that limited price increases.

Employer subsidy. The amount paid to the sponsors of qualifying employment-based retiree prescription drug plans. This amount subsidizes a portion of actual drug expenditures between specified coverage limits and is determined without regard to actual employer plan payments.

End-stage renal disease (ESRD). Permanent kidney failure.

Extended care services. In the context of this report, an alternate name for "skilled nursing facility services."

Fallback prescription drug plan. Prescription drug coverage provided by plans bearing no risk. One fallback plan will be approved in regions that do not have a choice of at least two at-risk plans.

Federal Insurance Contributions Act (FICA). Provision authorizing taxes on the wages of employed persons to provide for

OASDI and HI. The tax is paid in equal amounts by covered 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 U.S. Government. Since 1976, each fiscal year has begun October 1 of the prior calendar year and ended the following September 30. For example, fiscal year 2009 began October 1, 2008 and will end September 30, 2009.

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

Frequency distribution. An exhaustive list of possible outcomes for a variable, and the associated probability of each outcome. The sum of the probabilities of all possible outcomes from a frequency distribution is 100 percent.

General fund of the Treasury. Funds held by the U.S. Treasury, other than revenue collected for a specific trust fund (such as HI or SMI) and maintained in a separate account for that purpose. The majority of this fund is derived from individual and business income taxes.

General revenue. Income to the HI and SMI trust funds from the general fund of the Treasury. Only a very small percentage of total HI trust fund income each year is attributable to general revenue.

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.

High-cost alternative. See "Assumptions."

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

Hospice. A provider of care for the terminally ill; delivered services generally include home health care, 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 with general economy labor and non-labor indices; rates of admission incidence; the trend toward treating less complicated cases in outpatient settings; and continued improvement in DRG coding.

Hospital coinsurance. For the 61st through 90th day of hospitalization in a benefit period, a daily amount for which the beneficiary is responsible, equal to one-fourth of the inpatient hospital deductible; for lifetime reserve days, a daily amount for which the beneficiary is responsible, equal to one-half of the inpatient hospital deductible (see "Lifetime reserve days").

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

Hospital Insurance (HI). The Medicare trust fund that covers specified inpatient hospital services, posthospital skilled nursing care, home health services, and hospice care for aged and disabled individuals who meet the eligibility requirements. Also known as Medicare Part A.

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.

Income rate. The ratio of income from tax revenues on an incurred basis (payroll tax contributions and income from the taxation of OASDI benefits) to the HI taxable payroll for the year.

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

Independent laboratory. A free-standing clinical laboratory meeting conditions for participation in the Medicare program and billing through a carrier.

Initial coverage limit. The amount up to which the coinsurance applies under the standard prescription drug benefit.

Inpatient hospital deductible. An amount of money that is deducted from the amount payable by Medicare Part A for inpatient hospital services furnished to a beneficiary during a spell of illness.

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. Interfund borrowing was authorized only during 1982-1987.

Intermediary. A private or public organization that is under contract to CMS to determine costs of, and make payments to, providers for HI and certain SMI Part B services.

Intermediate assumptions. See "Assumptions."

Late enrollment penalty. Additional beneficiary premium amounts for those who either do not enroll in Part D at the first opportunity or fail to maintain other creditable coverage for more than 63 days.

Lifetime reserve days. Under HI, each beneficiary has 60 lifetime reserve days that he or she may opt to use when regular inpatient hospital benefits are exhausted. The beneficiary pays one-half of the inpatient hospital deductible for each lifetime reserve day used.

Long range. The next 75 years.

Low-cost alternative. See "Assumptions."

Low-income beneficiaries. Individuals meeting income and assets tests who are eligible for prescription drug coverage subsidies to help finance premiums and out-of-pocket payments.

Managed care. See "Private Health Plans."

Market basket. See "Hospital market basket."

Maximum tax base. Annual dollar amount above which earnings in employment covered under HI are not taxable. Beginning in 1994, the maximum tax base was eliminated under HI.

Maximum taxable amount of annual earnings. See "Maximum tax base."

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 2 years and to people with end-stage renal disease. In 2006, prescription drug coverage was added as well. Medicare consists of two separate but coordinated trust funds: Hospital Insurance (HI, or Part A) and Supplementary Medical Insurance (SMI). The SMI trust fund is composed of three separate accounts: the Part B account, the Part D account, and the Transitional Assistance Account. Almost all persons who are aged 65 and over or disabled and who are entitled to HI are eligible to enroll in Part B and Part D on a voluntary basis by paying monthly premiums. Health insurance protection is available to Medicare beneficiaries without regard to income.

Medicare Advantage (formerly called Medicare+Choice). An expanded set of options, established by the Medicare Modernization Act, for the delivery of health care under Medicare. Most Medicare beneficiaries can choose to receive benefits through the original fee-for-service program or through one of the following Medicare Advantage plans: (i) coordinated care plans (such as Health Maintenance Organizations, Provider Sponsored Organizations, and Preferred Provider Organizations); (ii) Medical Savings Account (MSA)/High Deductible plans; (iii) Private Fee-for-Service plans; or (iv) special needs plans.

Medicare Advantage Prescription Drug Plan (MA-PDP). Prescription drug coverage provided by Medicare Advantage plans.

Medicare Economic Index (MEI). An index often used in the calculation of the increases in the prevailing charge levels that help to determine allowed charges for physician services. In 1992 and later, this index is considered in connection with the update factor for the physician fee schedule.

Medicare Payment Advisory Commission (MedPAC). A commission established by Congress in the Balanced Budget Act of 1997 to replace the Prospective Payment Assessment Commission and the Physician Payment Review Commission. MedPAC is directed to provide the Congress with advice and recommendations on policies affecting the Medicare program.

Medicare Prescription Drug Account. The separate account within the SMI trust fund to manage revenues and expenditures of the Part D drug benefit.

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 were 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. In addition to contributory credits for basic pay, noncontributory wage credits of $300 were granted for each calendar quarter in which a person received pay for military service from January 1957 through December 1977. Deemed wage credits of $100 were granted for each $300 of military wages, up to a maximum of $1,200 per calendar year, from January 1978 through December 2001. See also "Quinquennial military service determinations and adjustments."

National average monthly bid. The weighted average of all Part D drug bids including all of the bids from PDPs and the drug portion of bids from MA-PDPs.

Noncontributory or deemed wage credits. Wages and wages in kind that were not subject to the HI tax but are deemed as having been. Deemed wage credits exist for the purposes of (i) determining HI eligibility for individuals who might not be eligible for HI coverage without payment of a premium were it not for the deemed wage credits; and (ii) calculating reimbursement due the HI trust fund from the general fund of the Treasury. The first purpose applies in the case of providing coverage to persons during the transitional periods when HI began and when it was expanded to cover Federal employees; both purposes apply in the cases of military service wage credits and deemed wage credits granted for the internment of persons of Japanese ancestry during World War II.

Old-Age, Survivors, and Disability Insurance (OASDI). The Social Security programs that pay for (i) monthly cash benefits to retired-worker (old-age) beneficiaries, their spouses and children, and survivors of deceased insured workers (OASI); and (ii) monthly cash benefits to disabled-worker beneficiaries and their spouses and children, and for providing rehabilitation services to the disabled (DI).

Open-group population. Includes all persons who will ever participate in the program as either taxpayers or beneficiaries, or both. See also "Closed-group population."

Outpatient hospital. Part of the hospital providing services covered by SMI Part B, including services in an emergency room or outpatient clinic, ambulatory surgical procedures, medical supplies such as splints, laboratory tests billed by the hospital, etc.

Part A. The Medicare Hospital Insurance trust fund.

Part A premium. A monthly premium paid by or on behalf of individuals who wish for and are entitled to voluntary enrollment in Medicare HI. These individuals are those who are aged 65 and older, are uninsured for social security or railroad retirement, and do not otherwise meet the requirements for entitlement to Part A. Disabled individuals who have exhausted other entitlement are also qualified. These individuals are those not now entitled but who have been entitled under section 226(b) of the Act, who 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).

Part B. The account within the Medicare Supplementary Medical Insurance trust fund that pays for a portion of the costs of physicians' services, outpatient hospital services, and other related medical and health services for voluntarily enrolled aged and disabled individuals.

Part B premium. The monthly amount paid by those individuals who have voluntarily enrolled in Part B. Most enrollees pay the standard premium amount, which currently represents approximately 25 percent of the average program costs for an aged beneficiary. Beneficiaries with high income are also required to pay an income-related monthly adjustment amount starting in 2007, and those who enroll late are required to pay a penalty. In addition, beneficiaries who are affected by the hold-harmless provision pay a lower premium. See section V.C for more details about the Part B premium.

Part C. See "Private Health Plans."

Part D. The account within the Medicare Supplementary Medical Insurance trust fund that pays private plans to provide prescription drug coverage.

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

Pay-as-you-go financing. A financing scheme in which 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 fluctuations.

Payroll taxes. Taxes levied on the gross wages of employees and net earnings of self-employed workers.

PDP regions. Regional areas that are fully serviced by prescription drug plans.

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. Starting in 2002, these organizations are called Quality Improvement Organizations.

Percentile. A number that corresponds to one of the equal divisions of the range of a variable in a given sample and that characterizes a value of the variable as not exceeded by a specified percentage of all the values in the sample. For example, a score higher than 97 percent of those attained is said to be in the 97th percentile.

Prescription Drug Plans (PDPs). Stand-alone prescription drug plans offered to beneficiaries in traditional fee-for-service Medicare and to beneficiaries in Medicare Advantage plans that do not offer a prescription drug benefit.

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 it fell due. At the time of the last payment, the invested fund would be exactly zero.

Private Health Plans. Plans offered by private companies that contract with Medicare to provide coverage for Part A and Part B services. Medicare Advantage plans, cost plans, and Program of All-Inclusive Care for the Elderly (PACE) plans are all private health plans.

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

Prospective payment system (PPS). A method of reimbursement in which Medicare payment is made based on a predetermined, fixed amount. The payment amount for a particular service is derived based on the classification system of that service (for example, DRGs for inpatient hospital services).

Provider. Any organization, institution, or individual who provides health care services to Medicare beneficiaries. Hospitals (inpatient services), skilled nursing facilities, home health agencies, and hospices are the providers of services covered under Medicare Part A. Physicians, ambulatory surgical centers, and outpatient clinics are some of the providers of services covered under Medicare Part B.

Quality Improvement Organization (QIO). See "Peer Review Organization."

Quinquennial military service determination and adjustments. Prior to the Social Security Amendments of 1983, quinquennial determinations (that is, estimates made once every 5 years) were made of the costs arising from the granting of deemed wage credits for military service prior to 1957; annual reimbursements were made from the general fund of the Treasury to the HI trust fund for these costs. The Social Security Amendments of 1983 provided for (i) a lump-sum transfer in 1983 for (a) the costs arising from the pre-1957 wage credits, and (b) amounts equivalent to the HI taxes that would have been paid on the deemed wage credits for military service for 1966 through 1983, inclusive, if such credits had been counted as covered earnings; (ii) quinquennial adjustments to the pre-1957 portion of the 1983 lump-sum transfer; (iii) general fund transfers equivalent to HI taxes on military deemed wage credits for 1984 and later, to be credited to the fund on July 1 of each year; and (iv) adjustments as deemed necessary to any previously transferred amounts representing HI taxes on military deemed wage credits.

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 (i) the average annual wage in covered employment, and (ii) the average annual CPI.

Reasonable-cost basis. The calculation to determine the reasonable cost incurred by 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 that are unnecessary in the efficient delivery of services covered by a health insurance program.

Reinsurance subsidy. Payments to the prescription drug plans in the amount of 80 percent of drug expenses that exceed the annual out-of-pocket threshold.

Residual factors. Factors other than price, including volume of services, intensity of services, and age/sex changes.

Risk corridor. Triggers that are set to protect Part D prescription drug plans from unexpected losses and that allow the government to share in unexpected gains.

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

Self-Employment Contributions Act (SECA). Provision authorizing taxes on the net income of most self-employed persons to provide for OASDI and HI.

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-Rudman-Hollings Act.

Short range. The next 10 years.

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

SNF coinsurance. For the 21st through 100th day of extended care services in a benefit period, a daily amount for which the beneficiary is responsible, equal to one-eighth of the inpatient hospital deductible.

Social Security Act. Public Law 74-271, enacted on August 14, 1935, with subsequent amendments. The Social Security Act consists of 20 titles, four of which have been repealed. The HI and SMI trust funds are authorized by Title XVIII of the Social Security Act.

Special public-debt obligation. Securities of the U.S. Government issued exclusively to the OASI, DI, HI, and SMI trust funds and other Federal trust funds. Sections 1817(c) and 1841(a) of the Social Security Act provide that the public-debt obligations issued for purchase by the HI and SMI trust funds, respectively, 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 every 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.

Spell of illness. A period of consecutive days, beginning with the first day on which a beneficiary is furnished inpatient hospital or extended care services, and ending with the close of the first period of 60 consecutive days thereafter in which the beneficiary is in neither a hospital nor a skilled nursing facility.

Standard prescription drug coverage. Part D prescription drug coverage that includes a deductible, coinsurance up to an initial coverage limit, and protection against high out-of-pocket expenditures by having reduced coinsurance provisions for individuals exceeding the out-of-pocket threshold.

Stochastic model. An analysis involving a random variable. For example, a stochastic model may include a frequency distribution for one assumption. From the frequency distribution, possible outcomes for the assumption are selected randomly for use in an illustration.

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. In this context, the expenditures are on an incurred basis and exclude costs for those uninsured persons for whom payments are reimbursed from the general fund of the Treasury, and for voluntary enrollees, who pay a premium in order to be enrolled. The summarized cost rate includes the cost of reaching and maintaining a "target" trust fund level, known as a contingency fund ratio. Because a trust fund level of about 1 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 (i) 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 (ii) the present value of the taxable payroll during the period.

Summarized income rate. The ratio of (i) the present value of the tax revenues incurred during a given period (from both payroll taxes and taxation of OASDI benefits), to (ii) the present value of the taxable payroll for the years in the period.

Supplemental prescription drug coverage. Coverage in excess of the standard prescription drug coverage.

Supplementary Medical Insurance (SMI). The Medicare trust fund composed of the Part B account, the Part D account, and the Transitional Assistance Account. The Part B account pays for a portion of the costs of physicians' services, outpatient hospital services, and other related medical and health services for voluntarily enrolled aged and disabled individuals. The Part D account pays private plans to provide prescription drug coverage, beginning in 2006. The Transitional Assistance Account paid for transitional assistance under the prescription drug card program in 2004 and 2005.

Sustainable growth rate. A system for establishing goals for the rate of growth in Medicare Part B expenditures for physicians' services.

Tax rate. The percentage of taxable earnings, up to the maximum tax base, that is paid for the HI tax. Currently, the percentages are 1.45 for employees and employers, each. The self-employed pay 2.9 percent.

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

Taxable payroll. A weighted average of taxable wages 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 maximum taxable 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 maximum taxable amount.

Taxation of benefits. Beginning in 1994, up to 85 percent of an individual's or a couple's OASDI benefits is potentially subject to Federal income taxation under certain circumstances. The revenue derived from taxation of benefits in excess of 50 percent, up to 85 percent, is allocated to the HI trust fund.

Taxes. See "Payroll taxes."

Term insurance. A type of insurance that is in force for a specified period of time.

Test of Long-Range Close Actuarial Balance. Summarized income rates and cost rates are calculated for each of 66 valuation periods within the full 75-year long-range projection period under the intermediate assumptions. The first of these periods consists of the next 10 years. Each succeeding period becomes longer by 1 year, culminating with the period consisting of the next 75 years. The long-range test is met if, for each of the 66 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 5 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. This test is applied to HI trust fund projections made under the intermediate assumptions.

Test of Short-Range Financial Adequacy. The conditions required to meet this test are as follows: (i) 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; (ii) 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 5 years (and not be depleted at any time during this period), and then remain at or above 100 percent throughout the rest of the 10-year period. This test is applied to HI trust fund projections made under the intermediate assumptions.

Transitional assistance. An interim benefit for 2004 and 2005 that provided up to $600 per year to assist low-income beneficiaries who had no drug insurance coverage with prescription drug purchases. This benefit also paid the enrollment fee in the Medicare Prescription Drug Discount Card program.

Transitional Assistance Account. The separate account within the SMI trust fund that managed revenues and expenditures for the transitional assistance drug benefit in 2004 and 2005.

Trust fund. Separate accounts in the U. S. Treasury, mandated by Congress, whose assets may be used only for a specified purpose. For the HI and SMI trust funds, monies not withdrawn for current benefit payments 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 HI and SMI trust fund level; defined as 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 prospective payment system update factor.

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

Voluntary enrollees. Certain individuals, aged 65 or older or disabled, who are not otherwise entitled to Medicare and who opt to obtain coverage under Part A by paying a monthly premium.

Year of exhaustion. The first year in which a trust fund is unable to pay benefits when due because the assets of the fund are exhausted.

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STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the techniques and methodology used herein to evaluate the financial status of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund are based upon sound principles of actuarial practice and are generally accepted within the actuarial profession; and (2) the principal assumptions used and the resulting actuarial estimates are, individually and in the aggregate, reasonable for the purpose of evaluating the financial status of the trust funds under current law, taking into consideration the past experience and future expectations for the population, the economy, and the program.

In past reports, and again this year, the Board of Trustees has emphasized the strong likelihood that actual Part B expenditures will exceed the projections under current law due to further legislative action to avoid substantial reductions in the Medicare physician fee schedule. While the Part B projections in this report are reasonable in their portrayal of future costs under current law, they are not reasonable as an indication of actual future costs. Current law would require physician fee reductions totaling an estimated 38 percent over the next 6 years—an implausible result.

The Trustees have also noted the uncertainty associated with the cost of the Medicare prescription drug benefit. The availability of the 2006-2009 bid submissions by the private plans offering this coverage, together with data on actual plan expenditures in 2006-2008, has helped narrow the range of uncertainty. Nonetheless, this range remains substantial, as illustrated by the Part D projections under alternative assumptions. The projection uncertainty should continue to decline over the next few years as additional actual expenditure data under this new program become available.

Finally, the ultimate depth and duration of the serious economic recession that began in December 2007 remain unknown. Due to the sensitivity of HI trust fund operations to wage increases and unemployment, the recession adds a significant element of uncertainty to the trust fund projections.

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