# 2010 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 2010 ANNUAL REPORT OF
THE BOARDS OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE AND
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE
TRUST FUNDS**

## LETTER OF TRANSMITTAL

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BOARDS OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE AND
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS,
Washington, D.C., August 5, 2010

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 2010 Annual Report of the Boards of Trustees of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund, the 45th 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/
Donald M. Berwick, M.D., *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. Currently, these positions are vacant and the President's nominees await Senate confirmation hearings. 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 2010 report is the 45th to be submitted.

The release of this report has been delayed from its normal schedule to allow incorporation of the effects of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010. This legislation, referred to collectively as the "Affordable Care Act" or ACA, contains roughly 165 provisions

[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.

affecting the Medicare program by reducing costs, increasing revenues, improving certain benefits, combating fraud and abuse, and initiating a major program of research and development for alternative provider payment mechanisms, health care delivery systems, and other changes intended to improve the quality of health care and/or reduce its costs to Medicare. The key changes introduced by the Affordable Care Act are summarized in Appendix A.

The Affordable Care Act improves the financial outlook for Medicare substantially. However, the effects of some of the new law's provisions on Medicare are not known at this time, with the result that the projections are much more uncertain than normal, especially in the longer-range future. For example, the ACA initiative for aggressive research and development has the potential to reduce Medicare costs in the future; however, as specific reforms have not yet been designed, tested, or evaluated, their ability to reduce costs cannot be estimated at this time, and thus no specific savings have been reflected in this report for the initiative.

Another important example involves lower payment rate updates to most categories of Medicare providers in 2011 and later. These updates will be adjusted downward by the increase in productivity experienced in the economy overall. Since the provision of health services tends to be labor-intensive and is often customized to match individuals' specific needs, most categories of health providers have not been able to improve their productivity to the same extent as the economy at large. Over time, the productivity adjustments mean that the prices paid for health services by Medicare will grow about 1.1 percent per year more slowly than the increase in prices that providers must pay to purchase the goods and services they use to provide health care services. Unless providers could reduce their cost per service correspondingly, through productivity improvements or other steps, they would eventually become unwilling or unable to treat Medicare beneficiaries.

It is possible that providers can improve their productivity, reduce wasteful expenditures, and take other steps to keep their cost growth within the bounds imposed by the Medicare price limitations. Similarly, the implementation of payment and delivery system reforms, facilitated by the ACA research and development program, could help constrain cost growth to a level consistent with the lower Medicare payments. These outcomes are far from certain, however. Many experts doubt the feasibility of such sustained improvements and anticipate that over time the Medicare price constraints would become unworkable and that Congress would likely override them,

much as they have done to prevent the reductions in physician payment rates otherwise required by the sustainable growth rate formula in current law.

The annual report to Congress on the financial status of Medicare must be based on current law. In this report, the productivity adjustments are assumed to occur in all future years, as required by the Affordable Care Act. In addition, reductions in Medicare payment rates for physician services, totaling 30 percent over the next 3 years, are assumed to be implemented as required under current law, despite the virtual certainty that Congress will continue to override these latter reductions.

In view of the factors described above, it is important to note that the actual future costs for Medicare are likely to exceed those shown by the current-law projections in this report. We recommend that the projections be interpreted as an illustration of the very favorable financial outcomes that would be experienced if the productivity adjustments can be sustained in the long range—and we caution readers to recognize the great uncertainty associated with achieving this outcome. Where possible, we illustrate the potential understatement of Medicare costs and projection results by reference to an alternative projection that assumes—for purposes of illustration only—that the physician fee reductions are overridden and that the productivity adjustments are gradually phased out over the 15 years starting in 2020.[2]

The differences between the current-law projections and the illustrative alternative are substantial, although both represent a sizable improvement in the financial outlook for Medicare compared to the law in effect prior to the Affordable Care Act. This difference in outlook serves as a compelling reminder of the importance of developing and implementing further means of reducing health care cost growth in the coming years. The ACA provides the opportunity to help meet the challenge of slowing health care cost growth and to do so without the need for further legislation. The projections in this report provide an unequivocal incentive to pursue this effort vigorously.

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[2]At the request of the Trustees, the Office of the Actuary at CMS has prepared an illustrative set of Medicare trust fund projections under this theoretical alternative to current law. These projections are available at http://www.cms.gov/ActuarialStudies/Downloads/2010TRAlternativeScenario.pdf. No endorsement of the illustrative alternative to current law by the Trustees, CMS, or the Office of the Actuary should be inferred.

*Overview*

Because our knowledge of the potential long-range effects of the productivity adjustments to Medicare payment updates is so limited, the Board of Trustees is convening an independent panel of expert actuaries and economists to consider these issues and to help develop growth rate assumptions for future annual reports.

# II. OVERVIEW

## *A. HIGHLIGHTS*

The major findings of this report under the intermediate set of assumptions are summarized below. Each of these findings is described in more detail in the "Overview" and "Actuarial Analysis" sections.

### In 2009

In 2009, 46.3 million people were covered by Medicare: 38.7 million aged 65 and older, and 7.6 million disabled. About 24 percent of beneficiaries have chosen to enroll in Part C private health plans that contract with Medicare to provide Part A and Part B health services. Total benefits paid in 2009 were $502 billion. Income was $508 billion, expenditures were $509 billion, and assets held in special issue U.S. Treasury securities were $381 billion.

### Short-Range Results

The financial status of the HI trust fund is substantially improved by the lower expenditures and additional tax revenues instituted by the Affordable Care Act. These changes are estimated to postpone the exhaustion of HI trust fund assets from 2017 under the prior law to 2029 under current law and to 2028 under the alternative scenario. Despite this significant improvement, however, the fund is still not adequately financed over the next 10 years. HI expenditures have exceeded income annually since 2008 and are projected to continue doing so under current law through 2013. Beginning in 2014, trust fund surpluses are estimated to occur throughout the short-range projection period and for several years thereafter. The shortfalls projected for the next 4 years can be met by redeeming trust fund assets, which at the beginning of 2010 were $304 billion, but the asset balance would fall below the Trustees' recommended minimum level starting in 2012 under the intermediate assumptions. The HI trust fund has not met the Trustees' formal test of short-range financial adequacy since 2003.

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. In particular, without legislation, Part B premiums payable in 2011 and 2012 by new enrollees, high-income enrollees, and State Medicaid programs (on behalf of low-income enrollees) will probably have to be raised significantly above normal requirements to offset the loss of revenues caused by the hold-harmless provision, raising serious equity issues.

Part B costs have been increasing rapidly, having averaged 8.3 percent annual growth over the last 5 years, and are likely to continue doing so. Under current law, an average annual growth rate of 4.8 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 23 percent for December of 2010. If Congress continues to override these reductions, as they have for 2003 through November of 2010, the Part B growth rate would instead average roughly 8 percent. For Part D, the average annual increase in expenditures is estimated to be 9.4 percent through 2019. The U.S. economy is projected to grow at an average annual rate of 5.1 percent during this period, significantly more slowly than Part D and the probable growth rate for Part B.

The difference between Medicare's total outlays and its "dedicated financing sources" is estimated to reach 45 percent of outlays in fiscal year 2010, the first year of the projection. This threshold is reached much earlier than projected in previous reports primarily due to lower HI payroll taxes in 2010. 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 fifth 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. The law directs the President to 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

For the 75-year projection period, the HI actuarial deficit has decreased from 3.88 percent of taxable payroll, as shown in last year's report, to 0.66 percent of taxable payroll, principally because the far-reaching effects of the Affordable Care Act reduce the actuarial deficit by 3.16 percent. However, this substantial improvement depends partly on the long-range feasibility of downward adjustments to

increases in payment rates for all categories of HI providers in all future years. In the context of today's health care system, these reductions would probably not be viable indefinitely into the future and would likely result in HI payment rates that would eventually become inadequate to compensate providers for their costs of treating beneficiaries, with adverse implications for beneficiary access to care. Under the illustrative alternative scenario, which assumes that the lower price updates are gradually phased out over 15 years starting in 2020, then about 60 percent of the full ACA savings would still be realized, and the HI actuarial deficit would be 1.91 percent of taxable payroll. The difference between the current-law and illustrative alternative HI projections underscores the importance of finding innovative new methods of delivering and paying for health care that improve quality of outcomes and achieve better cost efficiency. The Affordable Care Act institutes a major new program of research and development, which could lead to such results. Until specific methods have been designed, tested, and implemented, however, it is likely that the current-law projections for the HI trust fund (and SMI Part B as well) substantially understate the future cost of the program.

Part B outlays were 1.5 percent of GDP in 2009 and are projected to grow to about 2.5 percent by 2084. These cost projections are understated as a result of the substantial reductions in physician payments that would be required under current law and are further understated if the reductions in future price updates for most other Part B providers are not feasible. Actual future Part B costs will depend on the steps Congress might take to address these situations but under the illustrative alternative projections, Part B costs would be 5.2 percent of GDP in 2084, and would exceed the current-law projections by 22 percent in 2019, by 40 percent for 2030, and by 112 percent in 2084.

Part D outlays are estimated to increase from 0.4 percent of GDP in 2009 to about 1.8 percent by 2084. These outlay projections are slightly lower than those shown in last year's report principally because of lower-than-expected spending in 2008 and 2009 as well as a reduction in the projected growth in prescription drug spending in the U.S. for the next 10 years. The lower Part D expenditures due to these factors are mostly offset by the cost of filling in the coverage gap (or "donut hole"), as provided for by the Affordable Care Act.

**Conclusion**

The financial outlook for the Medicare program is substantially improved as a result of the far-reaching changes in the Patient

Protection and Affordable Care Act. In the long range, however, much of this improvement depends on the feasibility of the ACA's downward adjustments to future increases in Medicare prices for most categories of health care providers. The development and implementation of new models for delivering and paying for health care have the potential to reduce cost growth rates to the level established by the statutory price updates, but specific outcomes cannot be assessed at this time.

Total Medicare expenditures were $509 billion in 2009 and are projected under current law to increase in future years at a somewhat faster pace than either workers' earnings or the economy overall. As a percentage of GDP, expenditures are estimated to increase from 3.5 percent in 2009 to 6.4 percent by 2084 (based on our intermediate set of assumptions). If Congress continues to override the statutory decreases in physician fees, and if the reduced price increases for other health services under Medicare become unworkable and do not take effect in the long range, then Medicare spending would instead represent roughly 11.0 percent of GDP in 2084. (This compares to 11.4 percent as shown in last year's report under the prior law.) Growth of this magnitude, if realized, would substantially increase the strain on the nation's workers, the economy, Medicare beneficiaries, and the Federal Budget.

HI tax income and other dedicated revenues are expected to fall short of HI expenditures in most future years. The magnitude of the shortfalls is reduced substantially by various Affordable Care Act provisions, with the result that trust fund assets can be redeemed at a slower rate, postponing the depletion of the fund by about 12 years compared to prior law. Although much improved, the HI trust fund still does not meet the short-range test of financial adequacy. In the long range, projected HI expenditures and scheduled tax income are much closer to balancing because of the new legislation, if the slower price updates can be continued indefinitely. If not, and prices are increased, then HI income and expenditures will remain substantially out of balance. Under either scenario, the trust fund does not meet the test of long-range close actuarial balance.

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 faster than the economy to match expected expenditure growth under current law. Absent legislation, it will probably be necessary to significantly raise Part B premiums for

a subset of beneficiaries in 2011 and 2012 to ensure adequate program financing.

The Affordable Care Act has introduced important changes to the Medicare program that are designed to reduce costs, increase revenues, expand the scope of benefits, and encourage the development of new systems of health care delivery that will improve health outcomes and cost efficiency. The financial projections in this report indicate a need for additional steps to address Medicare's remaining financial challenges. Consideration of further reforms should occur in the near future. The sooner 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 both the exhaustion of the HI trust fund and the anticipated excess growth in HI, SMI Part B, and SMI Part D expenditures.

## *B. MEDICARE DATA FOR CALENDAR YEAR 2009*

HI and SMI have separate trust funds, sources of revenue, and categories of expenditures. Table II.B1 presents Medicare data for calendar year 2009, 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 benefit outlays.

**Table II.B1.—Medicare Data for Calendar Year 2009**

| | | SMI | | |
|---|---|---|---|---|
| | HI or Part A | Part B | Part D | Total |
| Assets at end of 2008 (billions) | $321.3 | $59.4 | $0.9 | $381.6 |
| Total income | $225.4 | $221.9 | $60.9 | $508.2 |
| Payroll taxes | 190.9 | — | — | 190.9 |
| Interest | 15.3 | 3.0 | 0.0 | 18.3 |
| Taxation of benefits | 12.4 | — | — | 12.4 |
| Premiums | 2.9 | 56.0 | 6.3 | 65.2 |
| General revenue | 1.9 | 162.8 | 47.1 | 211.7 |
| Transfers from States | — | — | 7.6 | 7.6 |
| Other | 2.1 | 0.1 | — | 2.2 |
| Total expenditures | $242.5 | $205.7 | $60.8 | $509.0 |
| Benefits | 239.3 | 202.6 | 60.5 | 502.3 |
| Hospital | 133.9 | 30.5 | — | 164.4 |
| Skilled nursing facility | 26.3 | — | — | 26.3 |
| Home health care | 7.3 | 11.4 | — | 18.6 |
| Physician fee schedule services | — | 62.5 | — | 62.5 |
| Private health plans (Part C) | 59.4 | 53.4 | — | 112.7 |
| Prescription drugs | — | — | 60.5 | 60.5 |
| Other | 12.5 | 44.9 | — | 57.4 |
| Administrative expenses | $3.2 | $3.1 | $0.3 | $6.7 |
| Net change in assets | −$17.1 | $16.2 | $0.1 | −$0.7 |
| Assets at end of 2009 | $304.2 | $75.5 | $1.1 | $380.8 |
| Enrollment (millions) | | | | |
| Aged | 38.3 | 36.0 | n/a | 38.7 |
| Disabled | 7.6 | 6.8 | n/a | 7.6 |
| Total | 46.0 | 42.8 | 33.4 | 46.3 |
| Average benefit per enrollee | $5,205 | $4,728 | $1,810 | $11,743 |

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. Starting in 2013, high-income workers will pay an additional 0.9 percent tax on their earnings above an unindexed threshold ($200,000 for single taxpayers and $250,000 for married couples). Other HI revenue sources include a portion of the Federal income taxes that people pay on their Social Security benefits, as well as 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 and currently cover 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*

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. Future HI trust fund income will depend on the size and characteristics of the covered work force and the level of workers' earnings, and future SMI trust fund income will depend on projected program costs. 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 economic and demographic 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 "ultimate" values for the remainder of the 75-year projection period. Other assumptions are specific to Medicare.

The economic assumptions reflect the current economic recession, which has had a significant impact on GDP growth, wage increases, and inflation levels. Real economic growth resumed in the third quarter of 2009, but the unemployment rate has remained relatively high to date. In last year's report, the economy was projected to return to full-employment levels in 2015. The assumptions for this year's report reflect the higher unemployment and lower wages that actually occurred in 2009, and the projected recovery to a stable full-employment path is now completed in 2017. The deeper and longer-lasting trough in economic activity results in lower employment and taxable earnings over the short-range period. Offsetting this effect, compared to last year's report, the growth in inflation and average hourly earnings are lower during the first 10 years of the projection period, resulting in slower growth for Medicare payment rates relative to taxable payroll. 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 | 4.0 | 3.6 | 4.4 |
| Private non-farm business multifactor productivity | 1.1 | 1.3 | 0.9 |
| Consumer Price Index (CPI) | 2.8 | 1.8 | 3.8 |
| Real-wage differential (percent) | 1.2 | 1.8 | 0.6 |
| 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 2034 to 2084 | 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] | | | |
| HI (Part A) | 4.0[2] | [3] | [3] |
| SMI Part B | 4.0[2] | [3] | [3] |
| SMI Part D | 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 1.4 percent, 1.4 percent, and 2.5 percent for Parts A, B, and D, respectively.
[2]Cost growth assumptions in the last 50 years of the projection vary year by year and follow a smooth downward path. See text for the basis of these assumptions.
[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.[3] 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.

Four years ago the Board of Trustees adopted a slight refinement of the long-range growth assumption that provided 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 assumptions were based on a simplified economic model and were determined in a way such that the 75-year actuarial balance for the HI trust fund was 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 was appropriate.

This same approach is used to establish "baseline" long-range growth rate assumptions for the 2010 Medicare Trustees Report, prior to the incorporation of the provisions of the Affordable Care Act. Under the economic model, in 2034 the pre-ACA growth rate for all Medicare services is assumed to be about 1.3 percentage points above the rate of GDP growth for that year (before demographic impacts). This differential gradually declines to about 0.8 percentage point in 2054 and to 0.3 percentage point in 2084.[4] Compared to a constant "GDP plus 1 percent" assumption, the pre-ACA baseline growth assumption is initially higher but subsequently lower. Beyond 75 years, the assumed baseline growth rate is GDP plus zero percent.

As noted in the introduction to this report, the Affordable Care Act permanently modifies the annual increases in Medicare payment rates for most categories of health service providers. Such payment updates for 2011 and later will be reduced by the 10-year moving average increase in private, non-farm business multifactor

[3]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.

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

productivity.[5] All HI (Part A) providers are affected by this adjustment, and the long-range cost growth rate for HI under current law is set equal to the baseline assumptions established prior to enactment of the ACA, as described above, minus the increase in economy-wide multifactor productivity. On average, the resulting long-range growth assumption for HI is the increase in per capita GDP plus 1 percent, minus the productivity factor (1.1 percent), or 4.0 percent per year under the intermediate assumptions.

For SMI Part B, certain provider categories—for example, outpatient hospitals, ambulatory surgical centers, diagnostic laboratories, and most other non-physician services—are affected by the productivity adjustment. These services have the same assumed long-range growth rate as the HI services. Average physician expenditures per beneficiary are increased at approximately the rate of per capita GDP growth, as required (on average) by the sustainable growth rate formula in current law. All other outlays, which constitute about 16.8 percent of total Part B expenditures in 2019, have an assumed average growth rate of per capita GDP plus 1 percent. The weighted average growth rate for Part B is 4.1 percent per year. The productivity adjustments do not affect Part D, and therefore the growth assumption continues to be based on GDP plus 1 percent, or 5.1 percent on average in the long range.

The ultimate long-range growth rate assumptions for the HI and SMI Part B projections under an illustrative alternative to current law are based on the GDP + 1 percent assumption without modification.

The long-range implications of the productivity adjustments are very uncertain but could have serious consequences for the Medicare program. The basis for the Medicare cost growth rate assumptions, described above, has been chosen primarily to incorporate the ACA provisions in a simple, straightforward manner in part due to consideration of this uncertainty and in part due to the difficulty of modeling such consequences. The potential effects of sustained slower payment increases on provider participation; beneficiary access to care; utilization, intensity, and quality of services; and other factors are purposely not considered at this time. Similarly, the possible changes in payment mechanisms, delivery systems, and other aspects of health care that could arise in response to the payment limitations and the ACA-directed research activities are not modeled. The Board of Trustees is convening an independent panel of expert actuaries and

[5]"Multifactor productivity" is a measure of real output per combined unit of labor and capital, reflecting the contributions of all factors of production.

economists to consider these issues and to help develop optimal growth rate assumptions for future annual reports. In addition, consistent with the recommendations of the 2000 and 2004 Technical Panels, further research is being conducted on long-range health cost growth trends generally.

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 all provisions of the Affordable Care Act (as well as other applicable statutory provisions). For each of Parts A, B, and D, the assumed growth rates for years 11 through 25 of the projection period are set by interpolating between the rate at the end of the short-range projection period (2019) and the rate at the start of the long-range period described above (2034).

For the HI 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 current-law intermediate assumptions. Under low-cost assumptions, the increase during the same period is assumed to be 2 percentage points less than under current-law intermediate assumptions. The 2-percentage-point differentials are assumed to decline gradually until 2059, when the same rate of increase in HI costs (relative to taxable payroll) is assumed for all three sets of assumptions. The low-cost and high-cost projections shown in this report provide an indication of how the costs of Medicare could vary in the future under current law as a result of different economic and demographic trends. (In contrast, the illustrative alternative projection described earlier shows costs under an alternative to current law, based on the intermediate economic and demographic assumptions.)

Due to the automatic financing provisions for Parts B and D, the SMI trust fund is expected to be adequately financed in all future years, 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 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 economic and demographic 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 these factors over past decades. 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. As a result of (i) the very improbable reductions in physician payments required under the current-law SGR formula, and (ii) the strong possibility that the productivity adjustments lead to payment rates for other health care providers that are inadequate in the long range, actual future Medicare expenditures are likely to exceed the intermediate projections shown in this report, possibly by quite large amounts. This potential understatement is illustrated throughout the report by reference to key results under the "illustrative alternative" projection.

## *D. FINANCIAL OUTLOOK FOR THE MEDICARE PROGRAM*

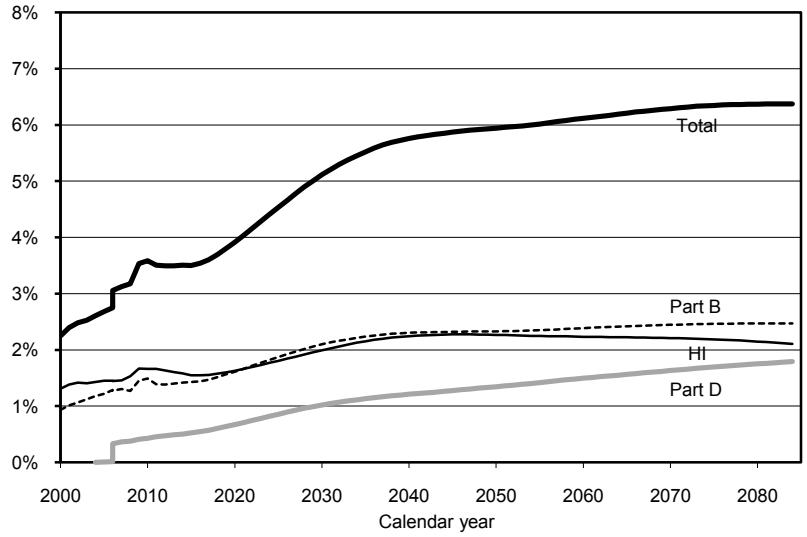
This report evaluates the financial status of the HI and SMI trust funds. For HI, the Trustees apply formal tests of financial status for both the short range and the long range; for SMI, the Trustees assess the ability of the trust fund to meet incurred costs over the period for which financing has 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. Accordingly, 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 3.5 percent of GDP in 2009. Under current law, costs would increase to about 5.5 percent of GDP by 2035 under the intermediate assumptions and to 6.4 percent of GDP by the end of the 75-year period. However, it is important to note that Medicare expenditures are understated because of unrealistic substantial reductions in physician payments scheduled under current law and may be further understated (and to a greater degree) if the statutory reductions in payment updates to other categories of providers cannot be implemented. The Introduction to this report describes this concern in greater detail. If the physician payment reductions are overridden and the other update constraints are phased out, then Medicare expenditures would reach an estimated 11.0 percent of GDP in 2084.

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



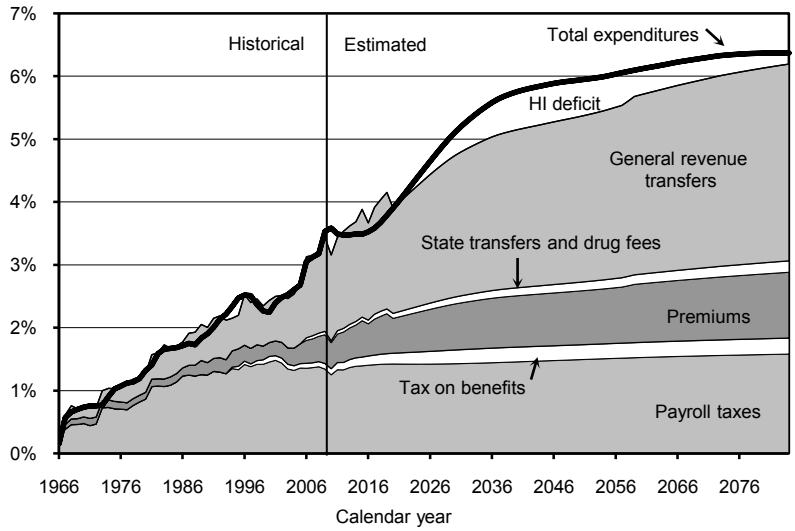

The Medicare projections reflect (i) continuing growth in the volume and intensity of services provided per beneficiary throughout the projection period; (ii) the impact of a large increase in beneficiaries starting in the near future as the 1946-1965 baby boom generation reaches age 65 and becomes eligible to receive benefits (thereby increasing the growth in the number of beneficiaries from 2 percent per year currently to about 3 percent); and (iii) other key demographic trends, including future birth rates at roughly the same level as during the last 2 decades and continuing improvements in life expectancy. The projections also reflect the far-reaching changes enacted as part of the Affordable Care Act and the other three new laws affecting Medicare that were enacted since the 2009 annual report was issued (as summarized in appendix A).

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. The share of Medicare beneficiaries in such plans has risen rapidly in recent years, reaching 24.0 percent in 2009 from 12.8 percent in 2004. 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 prior to the Affordable Care Act, private plans were generally paid a higher average amount, and the additional payments were used to reduce enrollee cost-sharing requirements, provide extra benefits, and/or reduce Part B and Part D premiums. These benefit

enhancements were valuable to enrollees but also resulted in higher Medicare costs overall and higher premiums for all Part B beneficiaries, not just those who were enrolled in MA plans. Under the ACA, payments to plans will be based on "benchmarks" in a range of 95 to 115 percent of fee-for-service Medicare costs, with bonus amounts payable for plans meeting high quality-of-care standards. (Prior to the ACA, the benchmark range was generally 100 to 140 percent of fee-for-service costs.) As these changes phase in during 2012-2017, the overall participation rate for private health plans is expected to decline from 24 percent in 2009 to about 13 percent in 2019.

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, new fees under the ACA on manufacturers and importers of brand-name prescription drugs (allocated to Part B), and HI and SMI statutory general revenues—are compared to total Medicare expenditures. For 2010, total Medicare expenditures are expected to exceed revenue by a significant margin due to a decrease in HI payroll tax income resulting from the current depressed levels of economic activity and from downward adjustments to payroll tax amounts received in earlier years. From 2011 through 2019, non-interest revenues exceed overall expenditures somewhat, but after that period expenditures are projected to exceed aggregate non-interest revenues as a result of the projected 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 for most of 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. Under the Affordable Care Act, high-income workers will pay an additional 0.9 percent of earnings to the HI trust fund.[6] After this provision takes effect in 2013, payroll taxes are projected to grow slightly faster than GDP.[7] 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.

[6]The ACA also specifies that individuals with incomes greater than $200,000 per year and couples above $250,000 will pay an additional "Medicare contribution" of 3.8 percent on some or all of their non-work income (such as investment earnings). However, the revenues from this tax are not allocated to the Medicare trust funds.

[7]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, taxable 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 (since fringe benefits are not subject to this tax). Over time, however, a growing proportion of workers will exceed the fixed earnings thresholds specified in the ACA ($200,000 and $250,000) and will become subject to the additional 0.9-percent HI payroll tax. The net effect of these factors is an increasing trend in payroll taxes as a percentage of GDP.

*Overview*

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. Accordingly, as the HI sources of revenue become inadequate to cover HI costs, SMI revenues are projected to represent a growing share of total Medicare revenues. In 2009, as HI payroll tax receipts declined due to the recession and general revenue transfers increased by 15 percent ($27 billion) from their 2008 value, the latter income source became the largest single source of income to the Medicare program as a whole for the first time. General revenues are expected to continue growing as a share of total Medicare financing under current law—and to 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. SMI premiums will also increase in 2011 and later as a result of an ACA provision that increases Part D premiums for high-income enrollees and other provisions that freeze the income thresholds for Part B and Part D income-related premiums in 2011-2019.

The interrelationship between the Medicare program and the Federal Budget is an important topic—one that will become increasingly critical over time as the general revenue requirements for SMI continue to grow. While transfers from the general fund 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 3.1 percent in 2084 under current law (but would increase to 5.2 percent under the illustrative alternative to current law). Moreover, in the absence of corrective legislation, from now through 2014 and then again after 2019 the difference between HI dedicated revenues and expenditures would be met until 2029 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 2029, these transactions would require general fund transfers equal to 0.3 percent of GDP. (After asset depletion in 2029, 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 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.[8] 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 through 2009 reports. If such determinations are present in two consecutive Trustees Reports, then a "Medicare funding warning" is triggered. This warning was first triggered as a result of the projections in the 2007 report. In this year's report, the difference is projected to exceed 45 percent in fiscal year 2010—the first year of the projection period and the fifth consecutive time that the threshold has been exceeded within the first 7 years of the projection. (The 45-percent ratio is reached much earlier in the projection period in this year's report due to lower projected payroll tax income for 2010 than had been expected in prior reports. Due to the changes made by the ACA, the ratio would decline below 45 percent for 2012 through 2021 under the intermediate assumptions.) Consequently, 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.

[8]The dedicated financing sources are HI payroll taxes, the HI share of income taxes on Social Security benefits, Part B receipts from the new fees on manufacturers and importers of brand-name prescription drugs, Part D State transfers, and beneficiary premiums. These sources are the first five layers depicted in figure II.D2.

## *E. FINANCIAL STATUS OF THE HI TRUST FUND*

### 1. 10-Year Actuarial Estimates (2010-2019)

In 2010, due to the economic recession, HI expenditures are expected to grow faster than income. Beginning in 2011, income will grow faster than expenditures due to the provisions of the Affordable Care Act and the assumed economic recovery. This continues until 2018 when expenditures are once again projected to grow faster than income. Over the next 10 years, HI expenditure growth is estimated to average 4.6 percent per year, while HI income growth is estimated to average 5.8 percent per year. In 2010, total income to the HI trust fund is estimated to fall short of expenditures by more than $30 billion, primarily due to depressed levels of economic activity and an expected $8 billion downward adjustment to 2010 income that corrects for excess payroll tax revenue credited to the trust fund. Trust fund deficits are projected to continue for the next 4 years in the absence of further corrective legislation, although at substantially reduced levels compared to the deficits projected prior to the ACA. Beginning in 2014, trust fund surpluses are estimated for the rest of the short-range projection period and several years after that. Redemption of trust fund assets will still be needed to pay expenditures in full and on time for the next several years, but the effects of the ACA decrease the trust fund deficits sufficiently (and eventually lead to surpluses) to postpone the exhaustion of the trust fund by about 12 years from 2017 as shown in last year's report to 2029.

Table II.E1 presents the projected operations of the HI trust fund under the intermediate assumptions for the next decade. At the beginning of 2010, 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 roughly 1 year from now. This outlook indicates the need for additional legislative action to achieve full financial balance for the HI trust fund through 2019.

**Table II.E1.—Estimated Operations of the HI Trust Fund under Intermediate Assumptions, Calendar Years 2009-2019**

[Dollar amounts in billions]

| Calendar year | Total income[1] | Total expenditures | Change in fund | Fund at year end | Ratio of assets to expenditures[2] |
|---|---|---|---|---|---|
| 2009[3] | 225.4 | 242.5 | -17.1 | 304.2 | 132 |
| 2010 | 217.6 | 249.3 | -31.7 | 272.5 | 122 |
| 2011 | 241.5 | 259.3 | -17.8 | 254.7 | 105 |
| 2012 | 254.4 | 271.2 | -16.8 | 237.9 | 94 |
| 2013 | 277.0 | 282.5 | -5.5 | 232.4 | 84 |
| 2014 | 297.2 | 296.0 | 1.2 | 233.6 | 79 |
| 2015 | 315.9 | 305.0 | 10.8 | 244.4 | 77 |
| 2016 | 336.6 | 321.2 | 15.4 | 259.8 | 76 |
| 2017 | 357.2 | 338.2 | 19.0 | 278.8 | 77 |
| 2018 | 377.9 | 357.9 | 20.0 | 298.8 | 78 |
| 2019 | 397.9 | 379.7 | 18.2 | 317.0 | 79 |

[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 2009 represent actual experience.

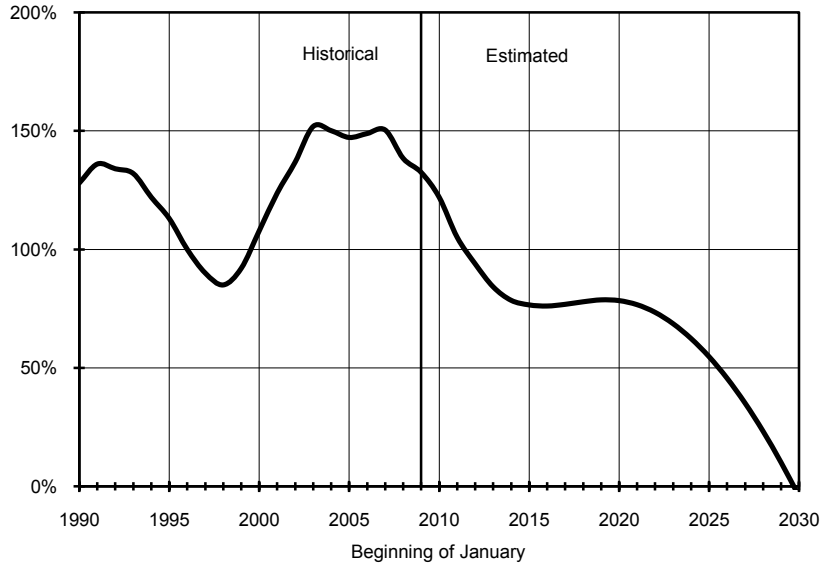
Note: Totals do not necessarily equal the sums of rounded components.

The short-range financial outlook for the HI trust fund is substantially more favorable than projected in last year's annual report, primarily as a result of the Affordable Care Act. Total HI savings from lower benefit payments and increased revenues are estimated to total more than $400 billion in 2010-2019, with most of the savings attributable to (i) the productivity adjustments to provider payment updates (which affect all HI providers, amounting to $162 billion); (ii) the reduced payments to Medicare Advantage plans ($86 billion); and (iii) the increased HI payroll taxes on high-income workers ($63 billion).[9] The result is a much slower depletion of trust fund assets than estimated under the prior law, as well as increased interest earnings. This leads to trust fund surpluses for several years of the short-range projection period. The cumulative effect of these factors is a substantially higher level of projected HI assets relative to annual expenditures.

Even with the changes in the Affordable Care Act, under the intermediate assumptions the assets of the HI trust fund would continue decreasing as a percentage of annual expenditures from the beginning of 2010 until 2015. At that point, the ratio would remain about level through 2020 but would start decreasing again thereafter becoming exhausted in 2029, as illustrated in figure II.E1. This date of exhaustion is 12 years later than estimated in the 2009 annual report due to the effects of the ACA savings provisions and minor updates to the economic assumptions.

[9]For additional information on provider payment updates, see section IV.A1.

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




There is substantial uncertainty in the various projection factors for HI trust fund expenditures and revenues. Accordingly, the date of HI trust fund exhaustion could differ substantially in either direction from the 2029 intermediate estimate. Under the low-cost assumptions, trust fund assets would start to increase in 2012 and continue to increase throughout the projection period if the provisions of current law were to continue unchanged. Under the high-cost assumptions, however, asset depletion would occur in 2017.

## 2. 75-Year Actuarial Estimates (2010-2084)

It is important to note that the improved outlook for the HI trust fund depends in part on the feasibility of the productivity adjustments to payment updates for hospitals, skilled nursing facilities, home health agencies, and hospice care organizations. There is a significant likelihood that these providers would not be able to reduce their cost growth rates sufficiently during this period to match the slower increases in Medicare payments per service, in which case they would eventually become unable to continue providing health care services to Medicare beneficiaries. If such a situation occurred, and Congress overrode the productivity adjustments, then actual costs would be higher and the HI trust fund would be depleted somewhat sooner (in 2028, based on the illustrative alternative projection). In any case, 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.

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 HI 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."

The standard HI payroll tax rates are not scheduled to change in the future under current law and will remain constant at 2.90 percent. As noted, high-income workers will pay an additional 0.9 percent of their earnings above $200,000 (for single workers) or $250,000 (for married couples filing joint income tax returns) in 2013 and later. Because these income thresholds are not indexed, over time an increasing proportion of workers will become subject to the additional HI tax rate. Thus, HI payroll tax revenues will increase steadily as a percentage of taxable payroll. Income from taxation of Social Security benefits will also increase as a greater proportion of Social Security beneficiaries become subject to such taxation over time, since the income thresholds determining taxable benefits are not indexed for price inflation.

The cost rate will significantly escalate in the immediate future (as a result of the decline in taxable payroll brought about by the economic recession) and again 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). The effect of these factors will be somewhat offset under current law by the accumulating effect of the productivity adjustments to provider price updates, which will reduce annual HI cost growth by an estimated 1.1 percent per year. After 25, 50, and 75 years, for example, the prices paid to HI providers under current law would be 24 percent, 42 percent, and 56 percent lower than under the prior law. As noted, there is a substantial likelihood

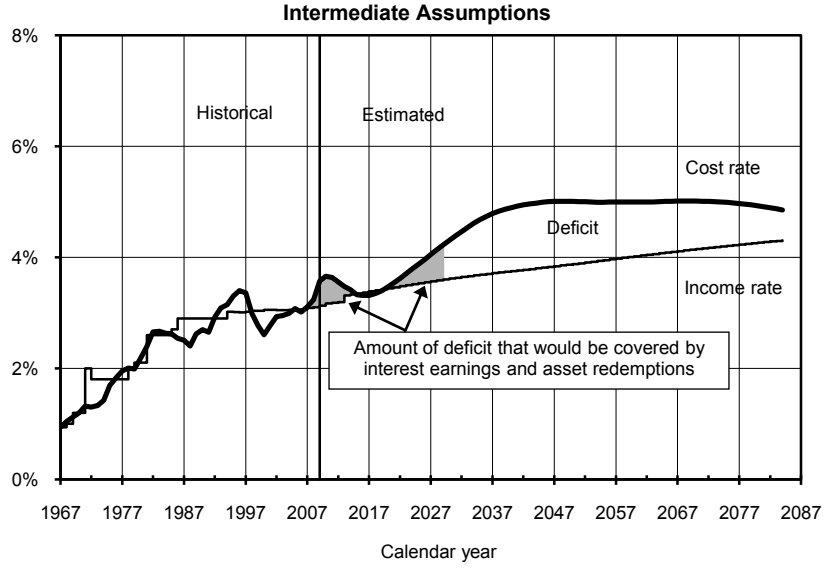
that these lower price levels, absent major changes in health care delivery systems, would become inadequate to ensure beneficiary access to care.

Figure II.E2 compares projected income and cost rates under the intermediate assumptions. As indicated, HI expenditures are projected to continue to exceed tax income—but by a decreasing margin—for the next several years. Thereafter, a surplus is projected for a few years before deficits return in 2020 and later. For the last 40 years of the projection period, the projected deficit decreases from its highest level in 2045 as the price update reductions continue to compound. For example, taxes would cover 85 percent of estimated expenditures in 2029 and 77 percent in 2050. By the end of the 75-year period, HI taxes would cover 89 percent of estimated expenditures. Under the illustrative alternative projection, the HI deficit at the end of the 75-year period would be roughly 4.84 percent of taxable payroll—still a significant improvement relative to the estimate in last year's report under prior law of 8.55 percent, but much more adverse than the current-law estimate of 0.55 percent.

The shaded area in figure II.E2 represents the excess of expenditures over tax income that could be met by interest earnings and the redemption of trust fund assets under current law. 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 for most years until 2029, at which time the fund is projected to be exhausted. For a few years, asset redemptions would not be needed but interest earnings would, and there are 4 years (2016-2019) that are estimated to require neither of these sources.

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 20 years before the projected exhaustion date. By 2028, without legislation to address the HI deficits, an estimated 13 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.E2 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 0.66 percent of taxable payroll is projected for the 75-year period under current law, representing the difference between the summarized income rate of 3.83 percent and the corresponding cost rate of 4.49 percent. Based on this measure, the HI trust fund fails the Trustees' test for long-range financial balance, as it has for many years. (If the productivity adjustments were gradually phased out after the first 10 years, the long-range HI deficit would be 1.91 percent of payroll.)

The long-range financial imbalance could be addressed in several different ways. In theory, the standard 2.90-percent payroll tax could be immediately increased by the amount of the actuarial deficit to 3.56 percent, or expenditures could be reduced by a corresponding amount. Note, however, that these changes would require an immediate 23-percent increase in the tax rate or an immediate 15-percent reduction in expenditures.[10] More realistically, the tax

[10]Under either of these two scenarios, tax income would initially be substantially greater than expenditures, and trust fund assets would accumulate rapidly. Subsequently, however, tax income would be inadequate, and assets would be drawn down to cover the difference. The corresponding immediate changes in the standard tax rate or expenditure levels are 66 percent and 33 percent, respectively, under the illustrative alternative projections.

and/or benefit changes could be made gradually, rather than immediately, but would ultimately have to reach much higher levels to eliminate the deficit throughout the mid-range period. In view of the significant likelihood that actual costs will be higher than projected under current law in the long range, there is a continuing need to develop alternative payment mechanisms, delivery system changes, and other reforms that would help reduce cost growth in a sustainable manner.

## *F. FINANCIAL STATUS OF THE SMI TRUST FUND*

SMI differs fundamentally from HI in regard to the nature of its financing and the method by which its 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. Accordingly, 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 from these programs 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 (2010-2019)

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 2009 through 2019. For Part B, expenditures grew at an average annual rate of 8.3 percent over the past 5 years, exceeding GDP growth by 4.2 percentage points annually, on average. Part B cost increases are estimated to average about 5.3 percent for the 5-year period 2010 to 2014, about the same as the GDP growth rate. 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 percent through 2014.

Part B income growth is based on expenditure growth projected 1 year in advance and therefore is normally quite close to expenditure growth. Assets have been somewhat above the customary range since the end of 2007 and, under current law, are projected to remain above

this level at the end of 2010.[11] Assets would be lower than projected in 2010 in the very likely event that legislation is enacted to retroactively override a 23-percent reduction in physician fees that is scheduled for December 1, 2010. After 2010, 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 were required in 2010, and are expected to be required for several more years, to prevent asset depletion under a 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.[12] As a result, physician payments per service are projected to decline 23.0 percent on December 1, 2010, 6.5 percent in January 2011, and 2.9 percent in 2012.

It is very likely that Congress will legislatively override the significant reductions in physician payments per service that are scheduled. Scheduled negative physician fee updates in 2003 through November 2010 have already been overridden by legislation, and the negative physician fee update scheduled for December 2010 is 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, total SMI, and total Medicare estimates shown for 2010 and thereafter are likely to be significantly understated and should be interpreted cautiously. The Part B

[11]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.

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

projections, in particular, may be understated by roughly 20 percent in 2019, based on the illustrative alternative projection.

**Table II.F1.—Estimated Operations of the SMI Trust Fund under Intermediate Assumptions, Calendar Years 2009-2019**

[Dollar amounts in billions]

| Calendar year | Total income[1] | Total expenditures | Change in fund | Fund at year end |
|---|---|---|---|---|
| Part B account: | | | | |
| 2009[2] | $221.9[3] | $205.7 | $16.2 | $75.5 |
| 2010 | 203.7[3] | 220.1 | −16.4 | 59.1 |
| 2011 | 235.0 | 215.3 | 19.7 | 78.9 |
| 2012 | 264.2 | 225.9 | 38.4 | 117.2 |
| 2013 | 287.5 | 242.1 | 45.4 | 162.7 |
| 2014 | 312.2 | 259.8 | 52.4 | 215.1 |
| 2015 | 363.8[3] | 275.8 | 88.0 | 303.1 |
| 2016 | 333.4[3] | 293.2 | 40.2 | 343.3 |
| 2017 | 395.4 | 314.0 | 81.3 | 424.7 |
| 2018 | 435.7 | 338.0 | 97.7 | 522.3 |
| 2019 | 477.0 | 365.0 | 112.0 | 634.4 |
| Part D account: | | | | |
| 2009[2] | 60.9[3] | 60.8 | 0.1 | 1.1 |
| 2010 | 61.4[3] | 62.0 | −0.6 | 0.5 |
| 2011 | 71.5 | 71.2 | 0.3 | 0.7 |
| 2012 | 78.5 | 78.4 | 0.0 | 0.8 |
| 2013 | 85.6 | 85.6 | 0.0 | 0.8 |
| 2014 | 93.0 | 93.0 | 0.0 | 0.9 |
| 2015 | 102.5[3] | 102.5 | 0.0 | 0.9 |
| 2016 | 112.6[3] | 112.5 | 0.1 | 1.0 |
| 2017 | 123.5 | 123.4 | 0.1 | 1.1 |
| 2018 | 135.9 | 135.8 | 0.1 | 1.2 |
| 2019 | 150.0 | 149.9 | 0.1 | 1.3 |
| Total SMI: | | | | |
| 2009[2] | 282.8[3] | 266.5 | 16.3 | 76.6 |
| 2010 | 265.2[3] | 282.1 | −17.0 | 59.6 |
| 2011 | 306.5 | 286.5 | 20.0 | 79.6 |
| 2012 | 342.7 | 304.3 | 38.4 | 118.0 |
| 2013 | 373.1 | 327.6 | 45.5 | 163.5 |
| 2014 | 405.3 | 352.8 | 52.5 | 216.0 |
| 2015 | 466.3[3] | 378.3 | 88.1 | 304.1 |
| 2016 | 446.0[3] | 405.7 | 40.3 | 344.3 |
| 2017 | 518.9 | 437.4 | 81.4 | 425.7 |
| 2018 | 571.6 | 473.9 | 97.8 | 523.5 |
| 2019 | 627.0 | 514.9 | 112.1 | 635.6 |

[1]Includes interest income.
[2]Figures for 2009 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 actually occurred on December 31, 2009. Consequently, the Part B and Part D premiums withheld from the checks and the associated Part B general revenue contributions were added to the respective Part B or Part D account 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.

Prior to 2016, the projected Part B expenditures shown in table II.F1 are somewhat higher than the corresponding amounts in last year's Trustees Report. As described in more detail in the Actuarial Analysis section, physician expenditures are higher as a result of a decision to exclude physician-administered drugs from the mechanism for setting payment rates. In the short range, this factor outweighs the net Part B savings under the Affordable Care Act

(principally from provisions to reduce Medicare Advantage payments and reduce payment updates for most fee-for-service providers by economy-wide productivity gains). Projected Part B income and assets are also higher than shown in the prior annual report as a result of the higher expenditure level and the need to maintain a larger-than-normal contingency reserve (in view of the high probability of legislation that would increase Part B costs).

Although financial balance for the Part B account can be maintained through annual premium adjustments, unusual steps were necessary in 2010 to achieve this result and will likely also be required for the next few years. Specifically, about three-quarters of enrollees were not subject to the Part B premium increase for 2010, and many are expected to not be subject to the full premium increases for the next several years under a "hold-harmless" provision of current law. Without action to respond to this situation, similar to the action taken for 2010 (as described below), 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. There was no increase in Social Security benefits for December 2009 as a result of significant decreases in the CPI during the last 5 months of 2008. Thus, the Part B premium increase for 2010 would have been significantly greater than the cost-of-living adjustment for all beneficiaries if not for the hold-harmless provision, which provided that beneficiaries affected by this provision did not have to pay the higher premium level.[13]

Depending on future increases in the CPI, zero cost-of-living adjustments for Social Security benefits could also occur for December 2010 and possibly for December 2011 as well. Under the Trustees' economic assumptions, the December benefit increases are projected to be 0 percent and 1.2 percent for 2010 and 2011, respectively.

[13]New enrollees during the year, enrollees with high incomes who are subject to the income-related premium adjustment, and Part B enrollees who are not Social Security enrollees 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.

To prevent asset exhaustion and maintain an adequate contingency reserve for the Part B trust fund account under these circumstances, premiums were raised substantially more than normal in 2010, and they would need to be maintained at substantially more than normal levels for several more years. 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. For 2010, the Part B premium is $110.50. Under the intermediate economic assumptions, monthly premiums of $120.10 and $113.80 are estimated for 2011 and 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. [14]

The Medicare prescription drug benefit began full operation in 2006. Income and expenditures for the Part D account are projected to grow at an average annual rate of 9.4 percent for the 10-year period 2010 to 2019, 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 2009 report. The difference is primarily attributable to lower-than-expected spending in 2008 and 2009 as well as a reduction in the projected growth in prescription drug spending in the U.S. for the next 10 years. The reduced estimates are due to a higher market penetration of generic drugs and a decline in the number of new drug products that are expected to reach the market during this period. This impact is partially offset by higher costs from the gradual elimination of the Part D coverage gap (or "donut hole") under the Affordable Care Act.

[14]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, this approach raises serious equity concerns. Other approaches might be preferable but would require legislation. In 2009, legislation to freeze the 2010 Part B premium at its 2009 level for all beneficiaries, and to make up the income shortfall through general revenues, was passed by the House but was not voted on in the Senate.

*Overview*

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 2010 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 2010.

The amount of the contingency reserve needed in Part B is normally much smaller (both in absolute dollars and as a fraction of annual costs) than in HI or OASDI. This effect tends to occur 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.

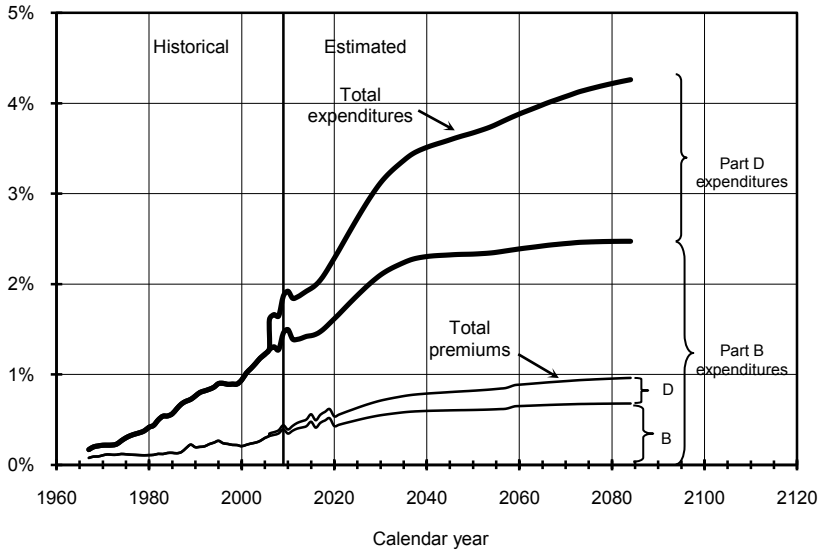
## 2. 75-Year Actuarial Estimates (2010-2084)

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. Future Part B costs would also be higher if the reductions in provider payment updates based on economy-wide productivity gains cannot be continued indefinitely and are overridden by Congress. Based on the illustrative alternative projection, Part B costs would be about 35 percent higher by 2030 and 110 percent higher by the end of the long-range

projection period if (i) physician payment rates were updated using the Medicare Economic Index, rather than through the sustainable growth rate (SGR) process; and (ii) the productivity adjustments were gradually phased out starting in 2020. Given the near certainty of continuing Congressional action to prevent decreases in physician fees, and the likelihood that the productivity adjustments for other Part B providers will eventually lead to inadequate payment rates and need to be modified, 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 prescription drug coverage. Under the current-law assumptions, SMI expenditures would grow to almost 3.5 percent of GDP within 25 years and to more than 4 percent by the end of the projection period. (Total SMI expenditures in 2084 would be almost 7 percent of GDP under the illustrative alternative projection.)

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




The projected SMI cost under current law would place gradually 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 about 4.3 percent per year on average, an increase that reflects the significant reductions in Part B physician payments and slower Part B provider payment updates 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 3.9 percent).[15] 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 5.3 percent annually under current law, somewhat in excess of the projected 4.7-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.

If Medicare payment rates to Part B providers are increased more in line with their input price increases, then the burden on beneficiaries (through SMI premiums and cost sharing) and on society at large (through support of SMI general revenue financing) would increase much more substantially over time.

[15]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*

The financial projections shown for the Medicare program in this report represent a substantial, but very uncertain, improvement over those in recent years as a result of the far-reaching provisions of the Patient Protection and Affordable Care Act (as amended by the Health Care and Education Reconciliation Act of 2010). Compared to the projections in last year's annual report, projected Medicare costs as a percentage of GDP are 12 percent lower in 2019, 20 percent lower in 2030, and 43 percent lower in 2080. The legislation postpones the estimated date of exhaustion for the HI trust fund from 2017 in last year's report to 2029. At 0.66 percent of taxable payroll, the long-range actuarial deficit for HI is only one-sixth of its prior level. Projected long-range expenditures for SMI Part B are also substantially lower than before, while Part D expenditures are slightly lower.

It is important to note, however, that the substantially improved results for HI and SMI Part B depend in part on the long-range feasibility of lower increases in Medicare payment rates to most categories of health care providers, as mandated by the Affordable Care Act. Moreover, in the context of today's health care system, these adjustments would probably not be viable indefinitely into the future. Under current law, the annual increase in Medicare prices for most health services will be reduced by about 1.1 percentage points (the estimated growth in economy-wide multifactor productivity) below the increase in prices that providers must pay to purchase the goods and services they need to provide health care services. Over time, unless providers could alter their use of goods and services so as to reduce their cost per service correspondingly, the prices paid by Medicare for health services would fall further and further below such costs and providers would eventually become unwilling or unable to treat Medicare beneficiaries. Congress would likely override the payment update reductions, much as they have had to prevent the reductions in physician payment rates otherwise required by the sustainable growth rate formula in current law.

For these reasons, it is important to note that the actual future costs for Medicare are likely to exceed those shown by the current-law projections in this report. The potential magnitude of the understatement can be illustrated by use of an alternative projection. Specifically, if Medicare payments to physicians were updated by the Medicare Economic Index, rather than decreasing by 30 percent over the next three years as required under current law, and if the productivity adjustments to price updates for other Medicare services

were gradually phased out starting in 2020, then the projected total cost of Medicare in 2080 would be 10.75 percent of GDP (versus 6.38 percent under current law), HI trust fund exhaustion would occur in 2028 (compared to 2029), and the HI actuarial deficit would be 1.91 percent of taxable payroll (versus 0.66 percent). These levels still represent a very significant improvement compared to the estimates prior to the Affordable Care Act, but they clearly illustrate that the relatively favorable projection results shown under current law rely partially on the scheduled reductions in physician payments and heavily on the permanent annual reductions in Medicare price updates for most non-physician services.

The immediate physician fee reductions are clearly unworkable and are almost certain to be overridden by Congress. The productivity adjustments will affect other Medicare price levels much more gradually, but there is a strong likelihood that without very substantial and transformational changes in health care practices, payment rates would become inadequate in the long range. As a result, the projections shown in this report for current law should not be interpreted as our best expectation of actual Medicare financial operations in the future but rather as illustrations of the very favorable impact of permanently slower growth in health care costs, if such slower growth can be achieved. The illustrative alternative projection underscores this uncertainty.

It is possible that healthcare providers could improve their productivity, reduce wasteful expenditures, and take other steps to keep their cost growth within the bounds imposed by the Medicare price limitations. For such efforts to be successful in the long range, however, providers would have to generate and sustain unprecedented levels of productivity gains—a very challenging and uncertain prospect.

The possibility also exists that health care in the U.S. can be transformed, in both the way that it is delivered and the manner in which it is financed. The Affordable Care Act takes important steps in this direction by initiating programs of research into innovative payment and service delivery models, such as accountable care organizations, patient-centered "medical homes," improvement in care coordination for individuals with multiple chronic health conditions, improvement in coordination of post-acute care, payment bundling, "pay for performance," and assistance for individuals in making informed health choices. If the new approaches developed through these research initiatives can be demonstrated to improve the quality of health care and/or reduce costs, then they can be adopted for

Medicare without further legislation.[16] Such changes have the potential to reduce health care costs and cost growth rates and could, as a result, help lower Medicare cost growth rates to levels compatible with the lower price updates payable under current law.

The ability of new delivery and payment methods to significantly lower cost growth rates is very uncertain at this time, since specific changes have not yet been designed, tested, or evaluated. Hopes for success are high, but it would be imprudent to assume that improvements in efficiency can be made of the magnitude needed to align with the statutory Medicare price updates, until such enhancements are proven.

For these reasons, while the substantial improvements in Medicare's financial outlook under the Affordable Care Act are welcome and encouraging, expectations must be tempered by awareness of the difficult challenges that lie ahead in improving the quality of care and making health care far more cost efficient. The sizable differences in projected Medicare cost levels between current law and the illustrative alternative scenario highlight the critical importance of the research agenda that is getting under way. Every effort must be made not only to bring Medicare costs—and health care costs in the U.S. generally—more in line with society's ability to afford them but also to improve the quality of health care outcomes.

Given the uncertain ability of delivery and payment reforms to reduce costs, it will also be important to monitor the adequacy of Medicare payment rates over time to ensure beneficiary access to high-quality care.

The time gained by postponing the depletion of the HI trust fund should be used to determine effective solutions to the remaining long-range HI financial imbalance. Even assuming that the current-law payment rates will be adequate, the HI program does not meet either our short-range test of financial adequacy or our long-range test of close actuarial balance. Under current law, scheduled HI tax income would cover only 85 percent of estimated expenditures in 2029 and 77 percent in 2050. By the end of the 75-year projection period, 89 percent of HI costs could be paid from HI revenues. Planning

[16]Under the Affordable Care Act, tested changes can be adopted nationally without further legislation if (i) the Secretary of Health and Human Services determines that the expansion is expected to improve quality of care without increasing spending or to reduce spending without reducing the quality of care and (ii) the Chief Actuary of the Centers for Medicare & Medicaid Services certifies that expansion would reduce (or would not result in any increase in) net program expenditures.

efforts should also consider the strong likelihood that the price adjustments in current law will not be permanently viable and should develop alternative means to achieve financial balance.

Although the Part B and Part D accounts of the SMI trust fund are both adequately financed under current law, important issues remain to be addressed. In particular, maintaining this status for Part B over the next few years will be challenging as a result of reductions in premiums and general revenues under the "hold harmless" provision of current law. The immediate problem can be prevented under current law only through large increases in the premiums paid by new Part B enrollees, by high-income enrollees, and by the State Medicaid programs on behalf of low-income enrollees. Absent new legislation to address inadequate Part B revenues through some other means, large premium increases for this subset of beneficiaries are likely to be necessary for 2011.

While the projections in this year's report show a substantial improvement over last year's, they continue to demonstrate the need for timely and effective action to address Medicare's remaining financial challenges—including the projected exhaustion of the HI trust fund, this fund's long-range financial imbalance, and the issue of rapid growth in Medicare expenditures. Furthermore, if the lower prices payable for health services under Medicare are overridden, the financial challenges in the long range would be much more severe. 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 through viable means, building on the strong measures enacted as part of the Affordable Care Act. Consideration of such further reforms should occur in the 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 (HI) and Supplementary Medical Insurance (SMI)—are very different from each other in many key respects, it is important to consider the overall cost of Medicare and its financing. By reviewing Medicare's total expenditures, the financial obligation created by the program can be assessed. Similarly, the sources and relative magnitudes of HI and SMI revenues are an important policy matter.

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.

As noted in the preceding Introduction and Conclusion sections, the actual future costs for Medicare are likely to exceed those shown by the current-law projections in this report. Congress is almost certain to prevent reductions in Medicare payment rates to physicians that would total about 30 percent over the next three years. These reductions are required by the sustainable growth rate system in current law, but smaller reductions have been overridden every year since 2003. Under the Patient Protection and Affordable Care Act, as amended, increases in the prices paid by Medicare for almost all other (non-physician) categories of health services will be reduced by the growth in economy-wide productivity (about 1.1 percent per year). As described previously, the long-term feasibility of the slower price increases is very uncertain, and a strong possibility exists that Congress would eventually moderate or eliminate these adjustments.

For these reasons, the estimates shown under current law should be used cautiously in evaluating the overall financial obligation created by Medicare and in assessing the financial status of the individual trust fund accounts. To help illustrate the degree to which the

current-law projections potentially understate actual future costs, key results are also provided based on an alternative to current law.[17]

### 1. 10-year Actuarial Estimates (2010-2019)

Table III.A1 shows past and projected Medicare income, expenditures, and trust fund assets in dollar amounts for calendar years.[18] Projections are shown under the intermediate set of assumptions for the short-range projection period 2010 through 2019 based on current law. A more detailed breakdown of expenditures and income for HI and SMI is provided in tables III.B4 and III.C1, respectively.

[17]The illustrative alternative projections are available at http://www.cms.gov/ActuarialStudies/Downloads/2010TRAlternativeScenario.pdf . No endorsement of the theoretical alternative to current law by the Trustees, CMS, or the Office of the Actuary should be inferred.

[18]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.

**Table III.A1.—Total Medicare Income, Expenditures, and Trust Fund Assets during Calendar Years 1970-2019**

[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 |
| 2009 | 508.2[1] | 509.0 | −0.7 | 380.8 |
| Intermediate estimates: | | | | |
| 2010 | 482.8[1] | 531.5 | −48.7 | 332.1 |
| 2011 | 547.9 | 545.8 | 2.2 | 334.3 |
| 2012 | 597.1 | 575.5 | 21.6 | 355.9 |
| 2013 | 650.1 | 610.2 | 40.0 | 395.9 |
| 2014 | 702.5 | 648.8 | 53.7 | 449.6 |
| 2015 | 782.2[1] | 683.3 | 98.9 | 548.5 |
| 2016 | 782.5[1] | 726.9 | 55.7 | 604.1 |
| 2017 | 876.1 | 775.7 | 100.4 | 704.5 |
| 2018 | 949.6 | 831.8 | 117.8 | 822.3 |
| 2019 | 1,024.9 | 894.6 | 130.4 | 952.6 |

[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 actually occurred on December 31, 2009. Consequently, the Part B and Part D premiums withheld from the checks and the associated Part B general revenue contributions were added to the respective Part B or Part D account 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. From 1985 to 2009, expenditures grew at an average annual rate of 8.5 percent. 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 5.8 percent during 2010-2019. The average growth rate reflects the continuing impact of each of the factors listed above, together with the effects of the scheduled (but unrealistic) physician payment reductions, the changes in the Affordable Care Act that affect the level of Medicare costs (such as the phased-in reduction in Medicare Advantage payment benchmarks), and other ACA changes that affect cost growth rates (such as the productivity adjustments to annual payment updates for most providers).

Through most of Medicare's history, trust fund income has kept pace with increases in expenditures.[19] Under current law, total Medicare income is estimated to increase at a significantly faster rate (7.3 percent annually) than expenditures during 2010-2019. This difference arises in part because of the lower expenditures under the Affordable Care Act and the physician payment reductions. It is also attributable to faster growth in HI payroll tax revenues as an increasing proportion of workers becomes subject to the additional 0.9-percent tax rate over time.

Past excesses of income over expenditures have been invested in U.S. Treasury securities, with total trust fund assets accumulating to $381 billion at the end of calendar year 2009. Combined assets are projected to decline significantly in 2010 due to the current recession and the timing of premium receipts. The change in assets fluctuates slightly, although remaining positive, over the remainder of the short-range projection period due to the timing of premium collections as described in the footnote to table III.A1.[20]

### 2. 75-year Actuarial Estimates (2010-2084)

Table III.A2 shows past and projected Medicare expenditures expressed as a percentage of GDP.[21] This percentage provides a relative measure of the size of the Medicare program compared to the

[19]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.

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

[21]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.

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 in 2010 and later 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 about 6 to 9 percent in the short range, depending on the specific changes enacted. If, in addition, the productivity adjustments to other Medicare price increases are phased out after 2019, then total Medicare costs in 2030 could be roughly 18 percent greater than shown in table III.A2, 38 percent greater in 2050, and 69 percent greater in 2080.

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 Medicare expenditures to 3.1 percent of GDP in the first year. Moderate continuing growth is projected in the long range under current law, as a result of the lower price updates under the ACA, with total Medicare expenditures projected to reach about 6.4 percent of GDP by 2080. For comparison, over the last 50 years total Federal personal and corporate income tax receipts have averaged 11 percent of GDP. Projected Medicare costs would slightly exceed those for Social Security in 2049 and later under current law.

Part of the projected increase is attributable to the prescription drug benefit in Medicare. In its first (partial) year of operation, this benefit increased aggregate Medicare costs by about one-eighth.[22] With continuing faster growth in drug costs, relative to the traditional HI and SMI Part B expenditures, the prescription drug benefit is projected to increase Medicare costs by roughly 20 percent beginning in 2020 and about 40 percent at the end of the projection period.[23] Under the Affordable Care Act provisions, growth rates for HI and SMI Part B are reduced by the productivity adjustments to price updates; these adjustments do not apply to Part D, since payments to drug plans are established through a bidding process.

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

[23]Costs beyond the first 25 years for HI, SMI Part B, and SMI Part D are described in section IV.D of this report.

The cost projections shown in table III.A2 for total Medicare, as well as for Parts A and B, are substantially different than those in the 2009 annual report. The Part D projections also differ, although by much lower relative amounts than for Parts A and B. These differences arise for a number of reasons, which are described in sections III.B and III.C, with the Affordable Care Act having the greatest impact.

**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 | — | 2.47 |
| 2000 | 1.31 | 0.94 | — | 2.25 |
| 2001 | 1.38 | 1.01 | — | 2.40 |
| 2002 | 1.42 | 1.06 | — | 2.48 |
| 2003 | 1.41 | 1.12 | — | 2.53 |
| 2004 | 1.43 | 1.18 | 0.00% | 2.61 |
| 2005 | 1.45 | 1.22 | 0.01 | 2.68 |
| 2006 | 1.45 | 1.27 | 0.33 | 3.06 |
| 2007 | 1.46 | 1.30 | 0.36 | 3.12 |
| 2008 | 1.53 | 1.27 | 0.38 | 3.18 |
| 2009 | 1.67 | 1.45 | 0.41 | 3.53 |
| Intermediate estimates: | | | | |
| 2010 | 1.66 | 1.49 | 0.43 | 3.59 |
| 2011 | 1.66 | 1.39 | 0.45 | 3.51 |
| 2012 | 1.63 | 1.39 | 0.47 | 3.49 |
| 2013 | 1.61 | 1.40 | 0.49 | 3.49 |
| 2014 | 1.59 | 1.42 | 0.50 | 3.51 |
| 2015 | 1.55 | 1.43 | 0.52 | 3.50 |
| 2016 | 1.55 | 1.44 | 0.55 | 3.54 |
| 2017 | 1.56 | 1.47 | 0.57 | 3.60 |
| 2018 | 1.58 | 1.51 | 0.60 | 3.69 |
| 2019 | 1.60 | 1.56 | 0.64 | 3.80 |
| 2020 | 1.63 | 1.61 | 0.67 | 3.91 |
| 2025 | 1.80 | 1.87 | 0.86 | 4.53 |
| 2030 | 1.99 | 2.10 | 1.02 | 5.11 |
| 2035 | 2.15 | 2.24 | 1.13 | 5.52 |
| 2040 | 2.24 | 2.30 | 1.21 | 5.76 |
| 2045 | 2.27 | 2.32 | 1.28 | 5.87 |
| 2050 | 2.27 | 2.33 | 1.35 | 5.94 |
| 2055 | 2.25 | 2.35 | 1.42 | 6.02 |
| 2060 | 2.23 | 2.39 | 1.50 | 6.12 |
| 2065 | 2.22 | 2.42 | 1.57 | 6.21 |
| 2070 | 2.21 | 2.45 | 1.63 | 6.29 |
| 2075 | 2.19 | 2.46 | 1.70 | 6.35 |
| 2080 | 2.15 | 2.47 | 1.75 | 6.37 |

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 during 2010-2030. 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 same historical period, the number of covered workers also increased rapidly (by about 55 percent), but is projected to increase much more slowly (about 28 percent) over the next 35 years. This relative demographic shift and its implications 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 specified by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 and the additional benefit coverage that such plans could offer as a result. In 2009, enrollment in private health plans represented 24 percent of total Medicare beneficiaries, with nearly all such enrollees participating in Medicare Advantage health insurance plans. Enrollment in MA plans is expected to decline in the future, both in number and as a percent of total beneficiaries. As noted, the Affordable Care Act reduces Medicare payments to private plans, which will result in less-generous plan benefit packages and/or higher premiums. By 2017 when these changes are fully phased in, an estimated 15 percent of Medicare beneficiaries would remain in private Part C health plans, with the balance reverting back to traditional "fee-for-service" Medicare. Ultimately, the proportion of beneficiaries in such plans is estimated to stabilize at just under 13 percent.

**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 | 43,065 | 40,361 | 30,536 | 7,292 | 43,436 |
| 2007 | 44,010 | 41,093 | 31,217 | 8,666 | 44,368 |
| 2008 | 45,098 | 41,958 | 32,413 | 10,008 | 45,453 |
| 2009 | 45,970 | 42,846 | 33,401 | 11,098 | 46,318 |
| Intermediate estimates: | | | | | |
| 2010 | 47,014 | 43,932 | 34,372 | 11,683 | 47,351 |
| 2011 | 48,308 | 45,010 | 35,219 | 11,998 | 48,634 |
| 2012 | 49,975 | 46,404 | 37,095 | 12,106 | 50,293 |
| 2013 | 51,678 | 47,897 | 38,211 | 11,832 | 51,987 |
| 2014 | 53,235 | 49,250 | 39,221 | 11,136 | 53,536 |
| 2015 | 54,771 | 50,579 | 40,257 | 10,205 | 55,063 |
| 2016 | 56,343 | 51,939 | 41,337 | 9,289 | 56,629 |
| 2017 | 57,986 | 53,362 | 42,512 | 8,603 | 58,264 |
| 2018 | 59,685 | 54,843 | 43,690 | 8,223 | 59,957 |
| 2019 | 61,442 | 56,382 | 44,897 | 8,161 | 61,708 |
| 2020 | 63,248 | 57,967 | 46,207 | 8,253 | 63,508 |
| 2025 | 72,361 | 66,041 | 52,824 | 9,323 | 72,603 |
| 2030 | 80,194 | 73,068 | 58,515 | 10,329 | 80,424 |
| 2035 | 85,144 | 77,488 | 62,112 | [2] | 85,367 |
| 2040 | 88,049 | 80,208 | 64,224 | [2] | 88,271 |
| 2045 | 90,020 | 81,981 | 65,659 | [2] | 90,243 |
| 2050 | 92,445 | 84,182 | 67,425 | [2] | 92,670 |
| 2055 | 95,637 | 87,055 | 69,748 | [2] | 95,863 |
| 2060 | 99,598 | 90,684 | 72,631 | [2] | 99,825 |
| 2065 | 103,448 | 94,184 | 75,428 | [2] | 103,670 |
| 2070 | 107,546 | 97,916 | 78,404 | [2] | 107,761 |
| 2075 | 111,945 | 101,930 | 81,596 | [2] | 112,147 |
| 2080 | 116,182 | 105,794 | 84,666 | [2] | 116,366 |

[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] | Brand-name drug fees | 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 |
| 2009 | 39.1 | 2.5 | 13.4 | — | 1.5% | 43.5 |
| Intermediate estimates: | | | | | | |
| 2010 | 39.7 | 3.0 | 13.1 | — | 0.9 | 43.3 |
| 2020 | 36.5 | 4.4 | 14.2 | 0.3% | 1.7 | 42.9 |
| 2030 | 30.1 | 4.6 | 15.5 | 0.2 | 2.2 | 47.5 |
| 2040 | 28.3 | 4.5 | 15.9 | 0.1 | 2.4 | 48.8 |
| 2050 | 27.9 | 4.4 | 16.0 | 0.1 | 2.5 | 49.2 |
| 2060 | 26.8 | 4.2 | 16.4 | 0.0 | 2.6 | 50.0 |
| 2070 | 26.1 | 4.1 | 16.6 | 0.0 | 2.8 | 50.4 |
| 2080 | 25.7 | 4.1 | 16.8 | 0.0 | 2.9 | 50.5 |

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

Note: Row sums may not exactly equal 100 percent due to rounding.

In 2009, general revenues (primarily those for SMI) represented 44 percent of total non-interest income to the Medicare program—becoming, for the first time, the largest share of Medicare financing. HI payroll taxes were the next largest source of overall financing, at 39 percent. Beneficiary premiums (again, primarily for SMI) were third, at 13 percent. Under current law, HI tax revenues are projected to fall increasingly short of HI expenditures after 2021 until 2045. Thereafter, HI tax revenues are still projected to fall short of HI expenditures but by a decreasing margin. (Such revenues were also less than expenditures from 2007 to the present, but, beginning in 2011, provisions of the ACA are estimated to improve and, for a short time, eliminate the HI trust fund deficit.) In contrast, SMI premium and general revenues will keep pace with SMI expenditure growth, and, once fully phased down,[24] State payments (on behalf of Medicare beneficiaries who also qualify for full Medicaid benefits) will grow with Part D expenditures. A new source of Part B financing, from fees on manufacturers and importers of brand-name prescription drugs, will increase from $2.2 billion in 2011 to $4.0 billion in 2018 but then decrease to $2.7 billion for 2019 and later. In the absence of legislation, HI tax income would represent a declining portion of total Medicare revenues. In 2029, for example, just prior to the projected exhaustion of the HI trust fund, currently scheduled HI payroll taxes would represent about 30 percent of total non-interest Medicare

[24]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.

income. General revenues and beneficiary premiums would equal about 47 and 15 percent, respectively.[25]

The Medicare Modernization Act requires an expanded analysis of the combined expenditures and dedicated revenues of the HI and SMI trust funds. In particular, the Act requires a determination as to whether projected annual "general revenue funding" exceeds 45 percent of total Medicare outlays within the next 7 fiscal years (2010-2016). For this purpose, general revenue funding is defined in 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, 2008, and 2009. Two consecutive such determinations trigger a "Medicare funding warning," which indicates 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 the 2007, 2008, and 2009 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.[26]

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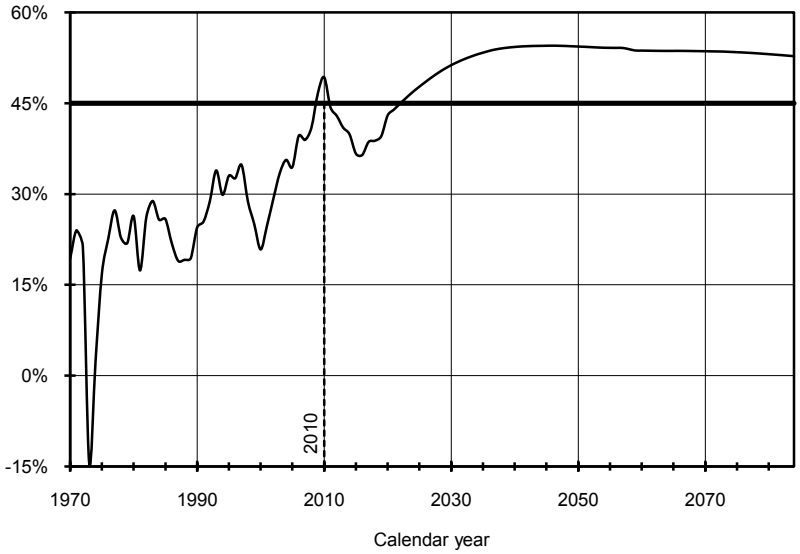
[25]The general revenue share of total Medicare *revenues* cannot be directly compared to the difference between outlays and dedicated revenues as a share of outlays (described previously). Although currently somewhat similar in magnitude, the former measure does not reflect the HI deficit, whereas the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

[26]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 that section 803 of the Medicare Modernization Act, governing the action required by the House in response to a funding warning, will not apply to the 111th Congress.

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 exceeded 45 percent at the end of calendar year 2009 and is expected to do so in 2010 (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. In this year's report, the difference is projected to exceed 45 percent in fiscal year 2010—the first year of the projection period and the fifth consecutive time that the threshold has been exceeded within the first 7 years of the projection. (The 45-percent ratio is reached much earlier in the projection period in this year's report due to lower projected payroll tax income for 2010 than had been expected in prior reports. The ratio would decline below 45 percent for 2012 through the remainder of the 7 year period under the intermediate assumptions.) Accordingly, a determination of "excess general revenue Medicare funding" is made again this year. With this fifth consecutive finding, another "Medicare funding warning" is triggered.[27] Revenue increases of at least $22 billion or benefit reductions of at least $40 billion, or some combination of revenue increases and benefit reductions, would be required to reduce the ratio below 45 percent through 2016.

[27]The Medicare Modernization Act directs the President to submit a legislative proposal responding to the funding warning within 15 days of the President's Fiscal Year 2012 Budget, which will be released in early February 2011.

**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 reach 53 percent of outlays by 2035 and to remain at about that level throughout the remainder of the 75-year period. 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;
- 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 2029. 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 the purpose of avoiding asset exhaustion without new legislation.

The Medicare Modernization Act 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] |
| 2004 | 16.8% | 9.9% | 6.5% | 6.9% | 6.9% |
| 2005 | 6.8 | 9.4 | 6.5 | 6.9 | 6.9 |
| 2006 | 38.0 | 20.9 | 6.0 | 6.6 | 5.3 |
| 2007 | 8.2 | 7.4 | 5.1 | 6.0 | 4.4 |
| 2008 | 3.6 | 4.4 | 2.6 | 4.4 | 3.1 |
| 2009 | 24.4 | 9.8 | −1.3 | 5.7 | 3.3 |
| 2010 | 16.8 | 5.1 | 3.7 | 3.9 | 2.5 |
| 2011 | −10.1 | 2.3 | 4.7 | 5.2 | 4.0 |
| 2012 | 2.2 | 5.5 | 5.9 | 5.5 | 3.7 |
| 2013 | 1.9 | 6.3 | 6.3 | 6.1 | 5.4 |
| 2014 | 3.6 | 6.4 | 5.9 | 6.6 | 6.7 |
| 2015 | −0.1 | 5.4 | 5.6 | 6.7 | 7.1 |
| 2016 | 12.2 | 6.4 | 5.2 | 7.0 | 6.8 |
| 2017 | 3.5 | 6.8 | 5.0 | 6.8 | 6.2 |
| 2018 | 8.0 | 7.3 | 4.7 | 6.8 | 5.8 |
| 2019 | 9.6 | 7.5 | 4.5 | 6.6 | 5.4 |
| 2020-2034 | 9.3 | 7.2 | 4.6 | — | — |
| 2035-2059 | 5.1 | 5.1 | 4.6 | — | — |
| 2060-2084 | 4.7 | 4.7 | 4.6 | — | — |

[1]Source: National health expenditure (NHE) projections article published on February 4, 2010. This article, along with the paper outlining the methodology, is available at http://www.cms.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, this gap will increase faster than outlays in most years through 2034 since the dedicated sources of income to the HI trust fund will generally cover a decreasing percentage of HI outlays.

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 continue the longstanding trend of increasing more rapidly than GDP in most years. 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 2 percent per year, and this growth rate will increase to approximately 3 percent 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 and reflect 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 2009

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 2009, 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 $321.3 billion on January 1, 2009. During calendar year 2009, total revenue amounted to $225.4 billion, and total expenditures were $242.5 billion. Total assets thus decreased by $17.1 billion during the year, to $304.2 billion on December 31, 2009.

**Table III.B1.—Statement of Operations of the HI Trust Fund during Calendar Year 2009**

[In thousands]

| | |
|---|---|
| Total assets of the trust fund, beginning of period | $321,270,415 |
| Revenue: | |
| Payroll taxes | $190,889,744 |
| Income from taxation of OASDI benefits | 12,376,000 |
| Interest on investments | 15,323,052 |
| Premiums collected from voluntary participants | 2,907,735 |
| Premiums collected from Medicare Advantage participants | 135,310 |
| Transfer from Railroad Retirement account | 496,000 |
| Reimbursement, transitional uninsured coverage | 614,000 |
| Reimbursement, program management general fund | 281,000 |
| SSA interfund interest payments to SSA trust funds[1] | −1,009 |
| Military service wage credit, general fund | 968,000 |
| Interest on reimbursements, Railroad Retirement | 28,272 |
| Other | 2,212 |
| Reimbursement, Union activity | 918 |
| Fraud and abuse control receipts: | |
| Criminal fines | 620,965 |
| Civil monetary penalties | 10,915 |
| Civil penalties and damages, CMS | 5,569 |
| Civil penalties and damages, Department of Justice | 620,920 |
| 3% administrative expense reimbursement, Department of Justice | 19,244 |
| 3% administrative expense reimbursement, CMS | 2,969 |
| Fraud and abuse appropriation for FBI | 126,258 |
| Total revenue | $225,428,075 |
| Expenditures: | |
| Net benefit payments | $239,260,430 |
| Administrative expenses: | |
| Treasury administrative expenses | 181,060 |
| Salaries and expenses, SSA[2] | 859,935 |
| Salaries and expenses, CMS[3] | 1,107,986 |
| Salaries and expenses, Office of the Secretary, HHS | 38,542 |
| Medicare Payment Advisory Commission | 6,842 |
| Fraud and abuse control expenses: | |
| HHS Medicare integrity program | 331,277 |
| HHS Office of Inspector General[4] | −42,563 |
| Department of Justice | 474,548 |
| FBI | 252,516 |
| HCFAC Discretionary, CMS | 7,542 |
| Total administrative expenses | 3,217,685 |
| Total expenditures | $242,478,115 |
| Net addition to the trust fund | −17,050,040 |
| Total assets of the trust fund, end of period | $304,220,376 |

[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]For facilities, goods, and services provided by SSA.
[3]Includes administrative expenses of the intermediaries.
[4]A positive figure represents a transfer from the HI trust fund. A negative figure represents a transfer to the HI trust fund.

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 without limit on a covered individual's total wages and self-employment income. 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 2011 and thereafter, the tax rates shown are the rates scheduled in current law. As indicated in the footnote to the table, in 2013 and later employees and self-employed individuals with earnings above certain thresholds will pay an additional HI tax of 0.9 percent on their earnings above the thresholds.

**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 |
| 1994-2010 | no limit | 1.45 | 2.90 |
| Scheduled in current law: | | | |
| 2011 & later | no limit | 1.45[1] | 2.90[1] |

[1]Beginning in 2013, workers will pay an additional 0.9 percent of their earnings above $200,000 (for those who file an individual tax return) or $250,000 (for those who file a joint income tax return).

*Actuarial Analysis*

Total HI payroll tax income in calendar year 2009 amounted to $190.9 billion—a decrease of 3.9 percent over the amount of $198.7 billion for the preceding 12-month period. This decrease in tax income resulted primarily from a decrease in the number of workers due to the economic recession.

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 $12.4 billion in calendar year 2009.

Another substantial source of trust fund income is interest credited from investments in government securities held by the fund. In calendar year 2009, $15.3 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 2009 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 $496 million in principal and about $13 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, 2008. This amount, together with interest to the date of transfer totaling about $15 million, was transferred to the trust fund in June 2009.

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 2009, such reimbursement amounted to $614 million (all for estimated benefit payments). The $614 million for benefit payments consisted of $251 million for non-Federal uninsured and $263 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 2009, the trust fund was credited with about $1,407 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 $242.5 billion in total HI expenditures, $239.3 billion represented net benefits paid from the trust fund for health

services.[28] Net benefit payments increased 6.9 percent in calendar year 2009 over the corresponding amount of $223.8 billion paid during the preceding calendar year. This increase was larger than usual due to 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.

The remaining $3.2 billion in 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 $1.0 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 2009 with the estimates presented in the 2008 and 2009 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 2009 was slightly lower than estimated in the 2009 report and substantially lower than estimated in the 2008 report 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 2009 were slightly lower than the amounts projected in the 2008 and 2009 reports largely as a result of lower payment updates due to the economic recession.

**Table III.B3.—Comparison of Actual and Estimated Operations of the HI Trust Fund, Calendar Year 2009**

[Dollar amounts in millions]

| | | Comparison of actual experience with estimates for calendar year 2009 published in— | | | |
|---|---|---|---|---|---|
| | | 2009 report | | 2008 report | |
| Item | Actual amount | Estimated amount[1] | Actual as percentage of estimate | Estimated amount[1] | Actual as percentage of estimate |
| Payroll taxes | $190,890 | $192,707 | 99% | $210,574 | 91% |
| Benefit payments | 239,260 | 242,304 | 99 | 241,458 | 99 |

[1] Under the intermediate assumptions.

[28] 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.

***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.[29] Table V.E9, presented in appendix E, shows the assets of the HI trust fund at the end of fiscal years 2008 and 2009.

**2. 10-Year Actuarial Estimates (2010-2019)**

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, the projections shown under current law assume that no changes 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 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 for current law 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

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

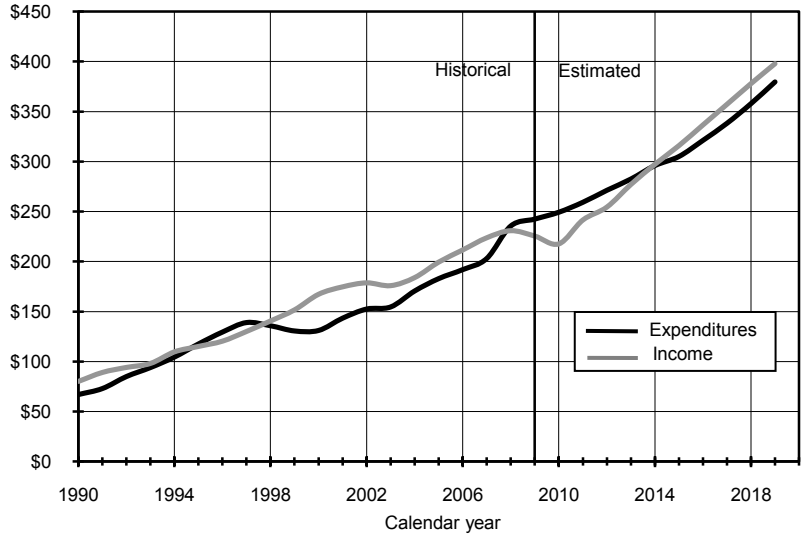
trust fund in the future could differ significantly from these estimates.

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 as a result of a misallocation of certain hospice benefit costs to the Part B trust fund account. This accounting error was corrected in 2008. Beginning in 2008, expenditures exceeded income, and this situation is expected to continue for the next 4 years. Beginning in 2014, trust fund surpluses are estimated to occur for the rest of the short-range projection period and several years after that.

The impact of the current serious economic recession on HI payroll tax income is apparent in figure III.B1. In 2009, payroll taxes decreased as a result of higher unemployment and slow growth in wages along with collection lags. A further reduction in such revenues is expected for 2010, in part as a result of downward adjustments to collections in prior years. In addition, an increase in expenditures is expected due to increased utilization of services and the regular updating of the payment rates. Together these factors result in an estimated trust fund deficit of $31.7 billion in 2010.

For the next several years, HI trust fund income is estimated to continue to fall short of expenditures, although the magnitude of these deficits will be sharply reduced by the provisions of the Patient Protection and Affordable Care Act, as amended. Beginning in 2014, small surpluses occur for the remainder of the short-range projection period. Price updates for all HI providers will be adjusted downward by the growth in economy-wide productivity, which will slow expenditure growth rates by about 1.1 percentage points per year. The level of expenditures will also be reduced significantly by the 2011 freeze and subsequent reductions in Medicare Advantage payment benchmarks under the ACA, and HI payroll tax revenues will be increased by the additional 0.9-percent tax rate for high-income workers in 2013 and later. Collectively, these and the other provisions in the ACA result in an estimated HI surplus of $15-$20 billion per year during 2015-2019, compared to an average annual deficit of more than $80 billion for this period as estimated prior to the legislation.

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




As figure III.B1 illustrates, HI income growth is estimated to be significantly greater during 2011-2017 than expenditure growth, in contrast to the opposite situation that tends to prevail. Income growth is aided during this period by the recovery from the economic recession (assumed to begin later in 2010) and by the fixed earnings thresholds for application of the additional 0.9-percent HI payroll tax rate (which will result in an increasing proportion of workers paying this tax over time). At the same time, expenditure growth is slowed significantly by the other ACA provisions mentioned previously.

The expected operations of the HI trust fund during calendar years 2010 to 2019, 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 1970-2019**

[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 |
| 2009 | 190.9 | 12.4 | 0.5 | 0.6 | 2.9 | 1.0 | 17.1 | 225.4 | 239.3 | 3.2 | 242.5 | −17.1 | 304.2 |
| Intermediate estimates: | | | | | | | | | | | | | |
| 2010 | 184.5 | 14.1 | 0.5 | -0.1 | 3.3 | 0.0 | 15.3 | 217.6 | 245.9 | 3.4 | 249.3 | −31.7 | 272.5 |
| 2011 | 205.5 | 17.5 | 0.5 | 0.3 | 3.3 | 0.0 | 14.3 | 241.5 | 255.6 | 3.7 | 259.3 | −17.8 | 254.7 |
| 2012 | 217.4 | 19.2 | 0.5 | 0.3 | 3.4 | 0.0 | 13.6 | 254.4 | 267.3 | 4.0 | 271.2 | −16.8 | 237.9 |
| 2013 | 237.7 | 21.8 | 0.5 | 0.3 | 3.5 | 0.0 | 13.3 | 277.0 | 278.1 | 4.4 | 282.5 | −5.5 | 232.4 |
| 2014 | 255.5 | 24.5 | 0.6 | 0.2 | 3.6 | 0.0 | 12.8 | 297.2 | 291.1 | 4.9 | 296.0 | 1.2 | 233.6 |
| 2015 | 270.9 | 27.1 | 0.6 | 0.2 | 3.7 | 0.0 | 13.4 | 315.9 | 299.7 | 5.4 | 305.0 | 10.8 | 244.4 |
| 2016 | 287.2 | 29.8 | 0.6 | 0.2 | 3.9 | 0.0 | 14.9 | 336.6 | 315.3 | 5.9 | 321.2 | 15.4 | 259.8 |
| 2017 | 303.0 | 32.8 | 0.6 | 0.2 | 4.0 | 0.0 | 16.5 | 357.2 | 331.8 | 6.5 | 338.2 | 19.0 | 278.8 |
| 2018 | 318.8 | 35.8 | 0.6 | 0.2 | 4.2 | 0.0 | 18.3 | 377.9 | 350.9 | 7.0 | 357.9 | 20.0 | 298.8 |
| 2019 | 333.9 | 38.7 | 0.6 | 0.2 | 4.4 | 0.0 | 20.0 | 397.9 | 372.1 | 7.6 | 379.7 | 18.2 | 317.0 |

[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 receipts amount to $0.6-$1.0 billion each year for the 10-year projection period. In 2008, other income 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.

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 since such taxes are the main source of HI financing. As noted, payroll tax revenues increase in 2013 and later as a result of the additional 0.9-percent tax rate on earnings for high-income workers. For all other workers, while the payroll tax rate is scheduled to remain constant, covered earnings are assumed to increase every year after 2010 under the intermediate assumptions 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.

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 "low-cost" and "high-cost" assumptions. 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 fall within the range, other outcomes are possible, particularly in light of the wide variations in experience that have occurred in the past and the likelihood of further legislation affecting HI. 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 2009 to 2019, 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 132 percent for 2009. Under the intermediate assumptions, the trust fund ratio is projected to decline gradually to a level of 77 percent at the beginning of 2015 under current law. The ratio would remain

approximately level through the remainder of the short-range projection period and several years after that. Without legislation to correct the financial imbalance, the fund would start decreasing again and use up all its remaining assets in 2029 and would thus become exhausted under the intermediate assumptions. If the reductions in Medicare price updates under the Affordable Care Act cannot be maintained throughout this period, then asset depletion would occur in 2028, based on the illustrative alternative projection.

Under the low-cost alternative, the trust fund would continue to grow indefinitely after the first few years, while under the high-cost alternative, exhaustion would occur in 2017. Without corrective legislation, therefore, the assets of the HI trust fund would be exhausted within the next 7 to 19 years under the high-cost and intermediate assumptions. While the projected date of exhaustion has been postponed significantly by the provisions of the Affordable Care Act, the fact that exhaustion would still occur under a fairly broad range of future economic conditions indicates the importance of promptly addressing the HI trust fund's remaining 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 assets would also have to be restored to an appropriate level for future contingencies.

**Table III.B5.—Estimated Operations of the HI Trust Fund during Calendar Years 2009-2019, 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: | | | | | |
| 2009[2] | $225.4 | $242.5 | −$17.1 | $304.2 | 132% |
| 2010 | 217.6 | 249.3 | −31.7 | 272.5 | 122 |
| 2011 | 241.5 | 259.3 | −17.8 | 254.7 | 105 |
| 2012 | 254.4 | 271.2 | −16.8 | 237.9 | 94 |
| 2013 | 277.0 | 282.5 | −5.5 | 232.4 | 84 |
| 2014 | 297.2 | 296.0 | 1.2 | 233.6 | 79 |
| 2015 | 315.9 | 305.0 | 10.8 | 244.4 | 77 |
| 2016 | 336.6 | 321.2 | 15.4 | 259.8 | 76 |
| 2017 | 357.2 | 338.2 | 19.0 | 278.8 | 77 |
| 2018 | 377.9 | 357.9 | 20.0 | 298.8 | 78 |
| 2019 | 397.9 | 379.7 | 18.2 | 317.0 | 79 |
| Low−cost: | | | | | |
| 2009[2] | 225.4 | 242.5 | −17.1 | 304.2 | 132 |
| 2010 | 218.8 | 243.1 | −24.3 | 279.9 | 125 |
| 2011 | 245.1 | 249.8 | −4.7 | 275.1 | 112 |
| 2012 | 258.4 | 253.5 | 4.9 | 280.1 | 109 |
| 2013 | 281.9 | 258.3 | 23.7 | 303.7 | 108 |
| 2014 | 303.8 | 264.7 | 39.1 | 342.8 | 115 |
| 2015 | 323.8 | 266.5 | 57.4 | 400.2 | 129 |
| 2016 | 345.2 | 273.8 | 71.3 | 471.5 | 146 |
| 2017 | 366.3 | 281.4 | 85.0 | 556.5 | 168 |
| 2018 | 388.0 | 290.7 | 97.3 | 653.8 | 191 |
| 2019 | 409.2 | 301.3 | 108.0 | 761.7 | 217 |
| High−cost: | | | | | |
| 2009[2] | 225.4 | 242.5 | −17.1 | 304.2 | 132 |
| 2010 | 216.6 | 255.6 | −39.0 | 265.2 | 119 |
| 2011 | 238.8 | 269.6 | −30.9 | 234.4 | 98 |
| 2012 | 252.9 | 293.0 | −40.1 | 194.2 | 80 |
| 2013 | 276.1 | 313.6 | −37.5 | 156.7 | 62 |
| 2014 | 297.6 | 337.3 | −39.8 | 117.0 | 46 |
| 2015 | 316.7 | 357.1 | −40.4 | 76.6 | 33 |
| 2016 | 336.8 | 385.8 | −49.0 | 27.6 | 20 |
| 2017[3] | 356.7 | 416.3 | −59.6 | −32.0 | 7 |
| 2018[3] | 376.9 | 452.0 | −75.0 | −107.0 | −7 |
| 2019[3] | 395.3 | 492.1 | −96.8 | −203.8 | −22 |

[1]Ratio of assets in the fund at the beginning of the year to expenditures during the year.
[2]Figures for 2009 represent actual experience.
[3]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 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 2010, is projected to decrease through 2015, becoming less than 100 percent by the beginning of 2012. Accordingly, the financing for HI is not considered adequate in the short-range projection period (2010-2019).

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.

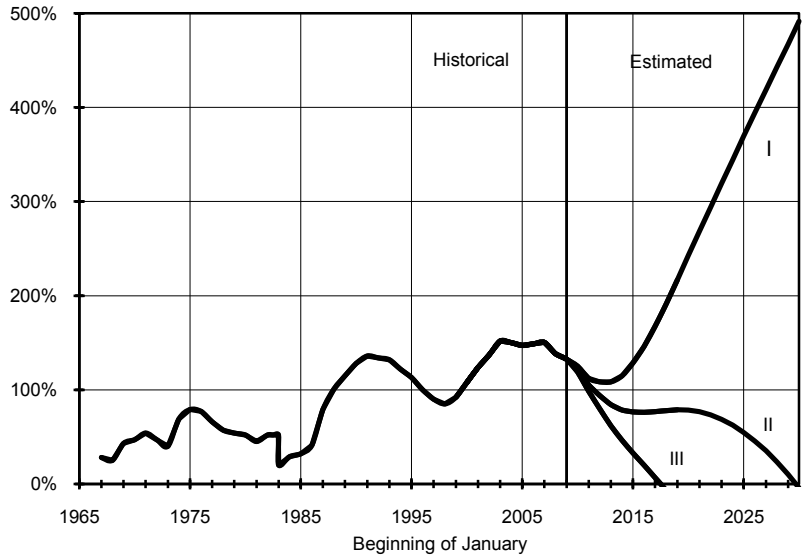
**Table III.B6.—Ratio of Assets at the Beginning of the Year to Expenditures during the Year for the HI Trust Fund**

| 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 |
| 2009 | 132 |

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 under the intermediate alternative for a few more years before leveling off. Under the high-cost alternative, the fund ratio is projected to continue declining until the fund is exhausted in 2017. Only under conditions of robust economic growth and extremely low health care cost increases (2.2 percent per year), as assumed in the

low-cost alternative, would HI assets grow significantly relative to expenditures, absent legislative changes.

**Figure III.B2.—HI Trust Fund Balance at the Beginning of the 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. 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.[30] 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 percent in 2001, 2.93 percent in 2002, and 2.97 percent 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 3.02 percent and 3.11 percent, respectively, in part as a result of the Medicare Modernization Act of 2003. In 2006 and 2007, the cost rate decreased very slightly to 3.10 percent and 3.09 percent due to slower inpatient hospital growth. In 2008 and 2009, reflecting the impact of the recession, it increased to 3.27 percent and 3.69 percent due to the lower amount of taxable payroll, which was not offset by lower spending. The resulting deficit in 2009 as a percentage of taxable payroll was the largest since the program began.

[30]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 | 3.02 | 3.08 | +0.06 |
| 2005 | 3.11 | 3.07 | −0.04 |
| 2006 | 3.10 | 3.07 | −0.03 |
| 2007 | 3.09 | 3.09 | 0.00 |
| 2008 | 3.27 | 3.08 | −0.19 |
| 2009 | 3.69 | 3.13 | −0.56 |
| Intermediate estimates: | | | |
| 2010 | 3.66 | 3.17 | −0.49 |
| 2011 | 3.63 | 3.18 | −0.46 |
| 2012 | 3.55 | 3.19 | −0.36 |
| 2013 | 3.47 | 3.31 | −0.16 |
| 2014 | 3.41 | 3.33 | −0.09 |
| 2015 | 3.33 | 3.35 | +0.02 |
| 2016 | 3.31 | 3.37 | +0.06 |
| 2017 | 3.31 | 3.39 | +0.07 |
| 2018 | 3.35 | 3.40 | +0.06 |
| 2019 | 3.39 | 3.42 | +0.03 |
| 2020 | 3.46 | 3.44 | −0.02 |
| 2025 | 3.87 | 3.53 | −0.34 |
| 2030 | 4.31 | 3.62 | −0.69 |
| 2035 | 4.68 | 3.69 | −0.99 |
| 2040 | 4.89 | 3.75 | −1.14 |
| 2045 | 4.99 | 3.81 | −1.18 |
| 2050 | 5.00 | 3.88 | −1.13 |
| 2055 | 4.99 | 3.95 | −1.04 |
| 2060 | 4.99 | 4.02 | −0.98 |
| 2065 | 5.00 | 4.08 | −0.92 |
| 2070 | 5.01 | 4.15 | −0.86 |
| 2075 | 4.99 | 4.21 | −0.78 |
| 2080 | 4.92 | 4.26 | −0.66 |

[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.

Another large HI deficit is estimated for 2010 as a result of the recession's impact on payroll tax revenues. After 2010, however, the recovery from the recession and the provisions of the Affordable Care Act are expected to reduce the deficit substantially for a number of years. Beginning in 2015 the income rates under current law are projected to be less than the cost rates through 2019. At that point, the impact of demographic shifts causes the annual deficits to recur and to increase through about 2045. After 2045, the income rates are still insufficient but at decreasing rates over time. HI expenditures

are projected to be 5.00 and 4.92 percent of taxable payroll in 2050 and 2080, respectively—far lower than prior to the Affordable Care Act. As noted previously, however, the improvement is directly dependent on the long-run feasibility of the reductions in HI price updates. If health care productivity, delivery systems, and payment methods cannot be improved sufficiently to match the mandated price update reductions (1.1 percent per year), then the corresponding HI cost rates would be roughly 6.49 and 8.88 percent, respectively. Until such further reforms can be designed, tested, proven effective, and implemented nationally, the higher costs under the illustrative alternative projection must be considered the more likely outcome.

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 2084, the annual income rates under the low-cost and high-cost alternatives differ by less than 0.6 percent of taxable payroll).

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

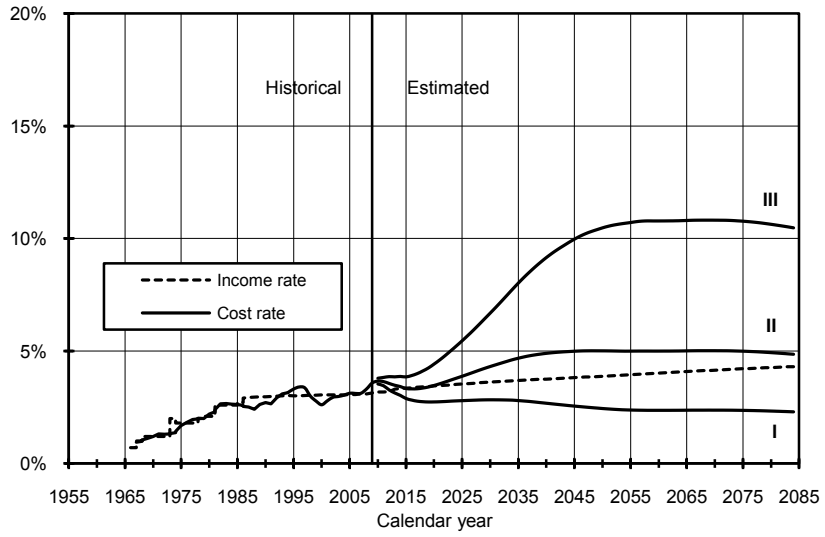



Figure III.B3 indicates the remaining financial imbalance projected under current law, based on the intermediate assumptions. Cost rates

are projected to continue to exceed income rates by a decreasing margin through 2014. For a few years after 2014 income exceeds expenditures, but this situation quickly reverses and cost rates once again exceed income rates for the remainder of the projection period. This deficit reaches a peak of about 1.2 percent of taxable payroll in 2045 and then starts to decrease for the rest of the projection period as the productivity reductions to HI price updates continue to compound. By the end of the 75-year period, this differential would be only about 0.5 percent of taxable payroll and would continue to decline thereafter under current law.

Under the more favorable economic and demographic conditions assumed in the low-cost assumptions, HI costs would continue to exceed scheduled income through 2012. After that, steadily growing surpluses are projected for the remainder of the projection period. This very favorable result is due in large part to HI expenditure growth rates that would average only about 4 percent per year, reflecting the combined effects of slower growth in utilization and intensity of services, the price reductions from the Affordable Care Act, and slower improvement in beneficiary life expectancies.

The high-cost projections illustrate the large financial imbalance that could occur, even under the Affordable Care Act, 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.[31]

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, less the price update adjustments based on economy-wide multifactor productivity gains. This net rate is about 0.3 percent faster than the increase in Gross Domestic Product (GDP) per capita in 2034 and declines to about 0.8 percent *slower* than GDP by 2084. Accordingly, 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 initially increase somewhat more rapidly than average wages but more slowly after about 2052. As noted previously, there is a very significant likelihood that the HI prices payable to providers under current law will become inadequate to ensure beneficiary

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

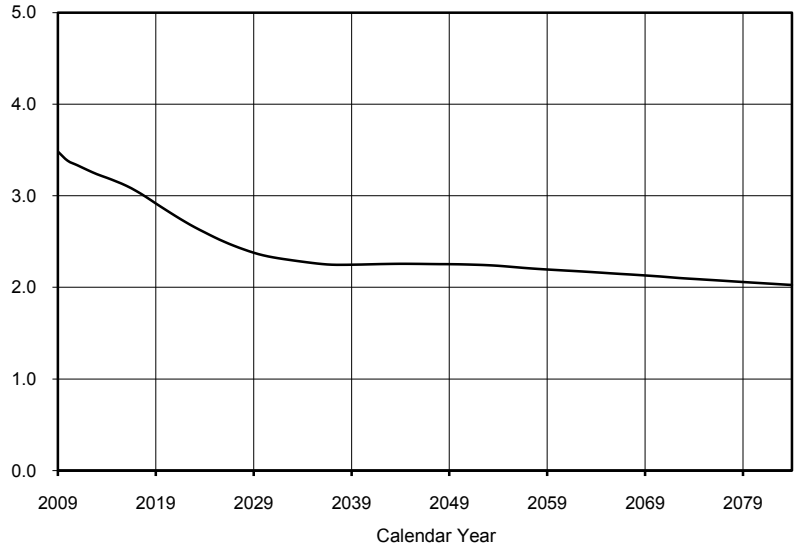
access to care. As a result, the long-range HI projections under current law should be interpreted cautiously. Beyond the initial 25-year projection period, the low-cost and high-cost alternatives assume that HI cost increases, relative to taxable payroll increases, are initially 2 percentage points 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 decrease gradually until the year 2059, 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 present fully 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 begin to take place next year. As figure III.B3 indicates, HI expenditures, expressed as percentages of taxable payroll, are projected to increase after 2017 under current law and based on the intermediate assumptions until about 2050. 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 constitute the labor force. During the last 25 years of the projection period, the demographic impacts moderate somewhat.[32] HI expenditures, expressed as percentages of taxable payroll, are projected to remain about level from 2050 through 2075 under current law and to decrease gradually at the end of the projection period.

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 2009 to 2084.

[32]HI costs 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 3 decades.

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




As figure III.B4 indicates, while every beneficiary in 2009 had about 3.5 workers to pay for his or her HI benefit, in 2030 there would be only about 2.3 workers. This ratio would then continue to decline until there are only 2.1 workers per beneficiary in 2080. This reduction implies an increase in the HI cost rate of about 70 percent in 2084, relative to its current level, solely due to demographic factors.

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 while a zero or positive actuarial balance implies that the end-of-period trust fund balance is at least as large as the target trust fund balance, it has no such implication for the trust fund balance at other times during the projection period.

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 3.83 percent of taxable payroll. The summarized HI cost rate under the intermediate assumptions, for the entire 75-year period, is 4.49 percent. As a result, the actuarial balance is −0.66 percent, and the HI trust fund fails to meet the Trustees' long-range test of close actuarial balance. (Section V.F contains the definition of this test.) If the productivity adjustments to HI provider price updates cannot be continued in the long run, then the actuarial balance would be much lower, for example −1.91 percent under the illustrative alternative projection.

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 0.66 percent of taxable payroll. However, if no such changes were made until 2029, when the trust fund would be exhausted under current law, then the required increase would be 0.96 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, the changes would be minor over the next 10 years and then would grow rapidly to over 1 percent of taxable payroll in 25 years but eventually decrease about 35 years from now, reaching just over 0.5 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, 2010-2034: | | | |
| Summarized income rate | 3.64% | 3.60% | 3.69% |
| Summarized cost rate | 3.94 | 2.99 | 5.39 |
| Actuarial balance | −0.30 | 0.61 | −1.70 |
| 50 years, 2010-2059: | | | |
| Summarized income rate | 3.72 | 3.64 | 3.83 |
| Summarized cost rate | 4.35 | 2.78 | 7.32 |
| Actuarial balance | −0.63 | 0.86 | −3.49 |
| 75 years, 2010-2084: | | | |
| Summarized income rate | 3.83 | 3.72 | 3.97 |
| Summarized cost rate | 4.49 | 2.67 | 8.08 |
| Actuarial balance | −0.66 | 1.05 | −4.11 |

[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. Under the low-cost alternative, the summarized cost rate for the 75-year valuation period is 2.67 percent of taxable payroll, and the summarized income rate is 3.72 percent of taxable payroll, meaning that HI income rates provided in current law would be adequate under the highly favorable conditions assumed in the low-cost alternative. Under the high-cost alternative, the summarized cost rate for the 75-year projection period is 8.08 percent of taxable payroll, which is about two times the summarized income rate of 3.97 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 economic and demographic sets of assumptions 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. Moreover, in view of the significant likelihood that the reductions in Medicare provider payment updates will not be feasible indefinitely, it will be important to monitor the adequacy of such payments over time.

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.

**Table III.B9.—Components of 75-Year HI Actuarial Balance under Intermediate Assumptions (2010-2084)**

| | |
|---|---|
| **Present value as of January 1, 2010 (in billions):** | |
| a. Payroll tax income | $12,416 |
| b. Taxation of benefits income | 1,841 |
| c. Fraud and abuse control receipts | 152 |
| d. Total income (a + b + c) | 14,408 |
| e. Expenditures | 17,090 |
| f. Expenditures minus income (e − d) | 2,683 |
| g. Trust fund assets at start of period | 304 |
| h. Open-group unfunded obligation (f − g) | 2,378 |
| i. Ending target trust fund[1] | 154 |
| j. Present value of actuarial balance (d − e + g − i) | −2,533 |
| k. Taxable payroll | 384,271 |
| **Percent of taxable payroll:** | |
| Actuarial balance (j ÷ k) | −0.66% |

[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 $2.4 trillion. This value is referred to as the 75-year "unfunded obligation" for the HI trust fund and is substantially lower than last year's value of $13.4 trillion. Normally, this measure increases significantly from one report to the next, reflecting (i) the later valuation date, and (ii) the addition of a large deficit year to the calculation. The large reduction shown in this year's report is primarily attributable to the provisions of the Patient Protection and Affordable Care Act. In particular, the long-range effect of the productivity adjustments to payment rate updates is very pronounced, compounding to a reduction of about 36 percent in HI provider prices in 2050, compared to prior-law levels, and 54 percent in 2080. Slightly lower projected utilization of HI services and slightly more favorable economic assumptions (after 2016) also contribute to the improvement. The reasons for the change are discussed in more detail later in this section.

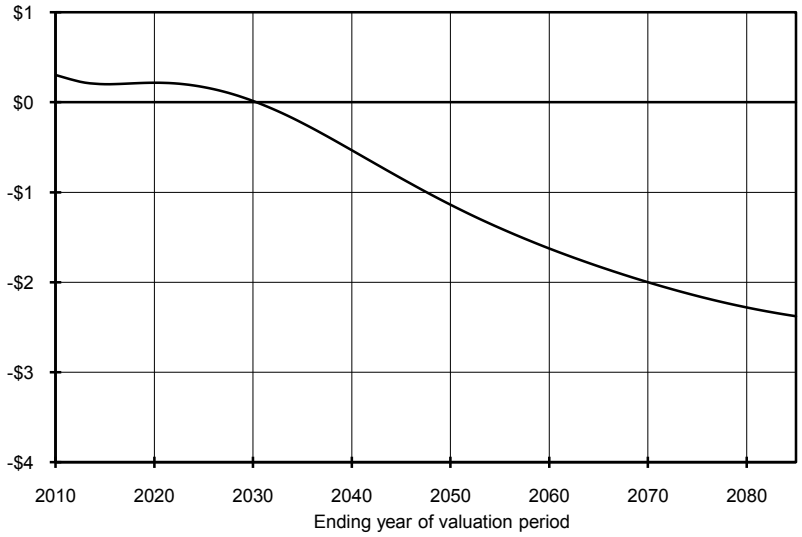
The unfunded obligation (adjusted for the ending target trust fund) can be expressed as a percentage of the present value of future taxable payroll to calculate the traditional actuarial balance of the HI program. Under the intermediate assumptions, the present value of the actuarial deficit is $2.5 trillion. Dividing by the present value of future taxable payroll (estimated to be $384 trillion) results in the actuarial balance of −0.66 percent shown in table III.B9. Based on the

illustrative alternative projections, the HI unfunded obligation is $7.0 trillion, and, as noted previously, the actuarial balance is −1.91 percent of taxable payroll.

Figure III.B5 shows the present values, as of January 1, 2010, of cumulative HI taxes less expenditures (plus the 2010 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, 2010; in trillions]




The cumulative annual balance of the trust fund is highest at the beginning of 2010 with beginning trust fund assets of about $0.3 trillion. The cumulative present value trends steadily downward over the projection period (except for 2016-2020 when the impact of the ACA is most noticeable) due to the anticipated shortfall of tax revenues, relative to expenditures, in most years from 2010 and later. The trust fund is projected to become exhausted in 2029, 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 $2.4 trillion. This unfunded obligation indicates that if $2.4 trillion were added to the trust fund at the beginning of 2010, 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 $2.4 trillion, would be required to reach financial balance.

The estimated unfunded obligation of $2.4 trillion and the closely associated present value of the actuarial deficit ($2.5 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 about $2.5 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 2010 to 2084 for the evaluation of the long-run financial status of the HI program. 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. Table III.B10 shows that the present value of open-group unfunded obligations for the program over that period is $2.4 trillion, which is equivalent to 0.6 percent of taxable payroll or 0.3 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 about 89 percent of projected expenditures at the end of the 75-year projection period, and the projected financial imbalance improves at the end of 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.[33] 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. If the slower HI price updates under the ACA can be continued indefinitely—an unlikely possibility, as noted—then the HI financial imbalance would actually improve beyond the 75-year period. 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 less the productivity adjustments beginning in 2085. Extending the calculations beyond 2084 *subtracts* $2.9 trillion in unfunded obligations from the amount estimated through 2084. Over the infinite horizon, the HI program is thus projected to have a surplus of $0.6 trillion. This amount represents 0.1 percent of the present value of future HI taxable payroll over the infinite horizon, or less than 0.05 percent of GDP. (The corresponding values based on the illustrative alternative projection are an unfunded obligation of $22.5 trillion, or 3.7 percent of taxable payroll and 1.6 percent of GDP.)

[33]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.

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

[Present values as of January 1, 2010; dollar amounts in trillions]

| | Present value | As a percentage of: HI taxable payroll | GDP |
|---|---|---|---|
| Unfunded obligations through the infinite horizon[1] | −$0.6 | −0.1% | −0.0% |
| Unfunded obligations from program inception through 2084[1] | 2.4 | 0.6 | 0.3 |

[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 2010-2084 and for 2010 through the infinite horizon are $384.3 trillion and $609.8 trillion, respectively.
2. The present values of GDP for 2010-2084 and for 2010 through the infinite horizon are $843.3 trillion and $1,404.4 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 $6.9 trillion. The projected difference between taxes and expenditures for future participants is a surplus of $7.5 trillion.

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).[34] The unfunded obligations shown in table III.B11 for current participants further indicate that their HI taxes are not adequate to cover their own future costs when they become eligible for HI benefits—and that this situation has also occurred for workers in the past. For future workers under current law, however, the compounding effects of the lower HI price updates would, if they can continue to be applied indefinitely, lower costs to the point that scheduled HI taxes would be more than sufficient. In practice, the projected aggregate 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.

[34]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.

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

[Present values as of January 1, 2010; dollar amounts in trillions]

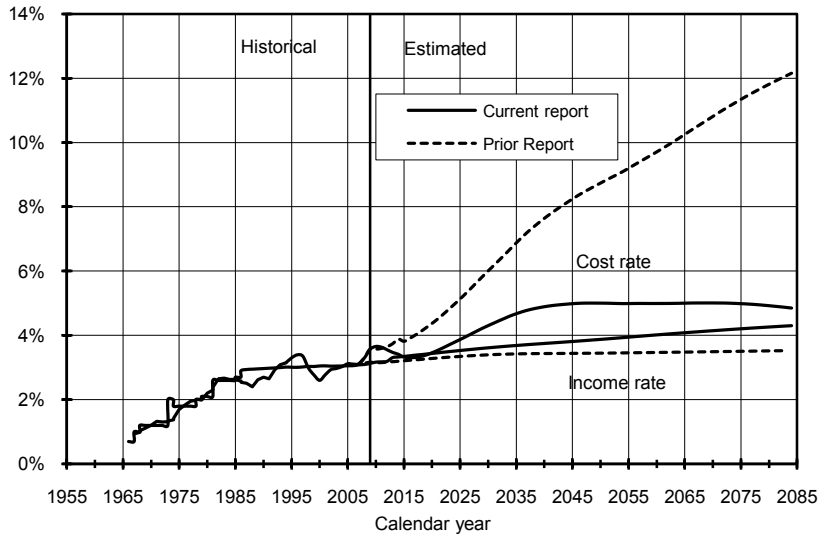
| | Present value | As a percentage of: HI taxable payroll | GDP |
|---|---|---|---|
| Future expenditures less income for current participants | $7.2 | 1.2% | 0.5% |
| Less current trust fund (income minus expenditures to date for past and current participants) | 0.3 | 0.0 | 0.0 |
| Equals unfunded obligations for past and current participants[1] | 6.9 | 1.1 | 0.5 |
| Plus expenditures less income for future participants for the infinite horizon | −7.5 | −1.2 | −0.5 |
| Equals unfunded obligations for all participants for the infinite future | −0.6 | −0.1 | −0.0 |

[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 2010 through the infinite horizon is $609.8 trillion.
2. The estimated present value of GDP for 2010 through the infinite horizon is $1,404.4 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 2009 report.

**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 far lower than those in the 2009 report for most of the projection period. In addition, the projected income rates are significantly higher.

The cost differentials described above reflect projected long-range rates of increase in HI costs that are lower than those from last year's report due to the impact of the ACA. 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. However, in this year's report the growth assumptions also reflect the reductions from the productivity adjustments, which lower the HI provider price updates by about 1.1 percent per year. Other ACA changes also reduce the level of HI expenditures during 2011-2019, and this difference carries through to the rest of the projection period.

In addition, the income rates include the impact of the higher tax rate required of high-income workers by the ACA, together with the growing proportion of workers who will be required to pay the higher tax over time, since the income thresholds are not indexed. In 2013, for example, about 3 percent of all workers are estimated to be affected by the higher tax rate; by 2080, this percentage increases to an estimated 79 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 −0.66 percent of taxable payroll. The actuarial balance under the intermediate assumptions as shown in the 2009 annual report was −3.88 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 2009-2083 to 2010-2084 adds a large deficit year to the calculation of the actuarial balance. (This step is performed before consideration of the ACA impacts.) The effect on the actuarial balance is −0.11 percent of taxable payroll.
(2) Updating the projection base: The actual cost as a percentage of payroll for 2009 was higher than estimated in last year's report. This change was caused by costs being slightly less than previously estimated and taxable payroll being lower to a greater degree than previously estimated. The total impact of the actual base-year data is a change of −0.14 percent of taxable payroll in the actuarial balance.
(3) Private health plan assumptions: Projected HI expenditures for private health plans are lower in the 2010

report than in last year's report for three primary reasons (again, prior to consideration of the ACA reductions in Medicare Advantage payment "benchmarks"). First, the projected capitation "benchmarks" used to establish payments to plans are somewhat lower, reflecting slightly slower growth rates in HI costs per beneficiary overall during 2009-2012. Second, in setting risk factors for plan bids for 2010, an adjustment was made to offset past increases in average plan risk scores in excess of those for the fee-for-service beneficiary population. This adjustment, which had not been assumed in preparing the 2009 Trustees Report projections, has been incorporated into the new projections for this report and results in lower rebate payments to plans. Further, such adjustments are now assumed to occur from time to time in the future. Finally, the Part A portion of actual plan bids for 2010 increased by only 0.06 percent compared to the average level for 2009, which was significantly lower than assumed in the 2009 report. The overall effect of these changes is a +0.14-percent change in the actuarial balance.

(4) Hospital assumptions: Changes in the hospital assumptions are described in section IV.A. Lower levels of spending for the new prospective payment hospital categories in recent years has caused both a lower base and lower trend factors for those types of hospitals. Offsetting this factor, a change was made to use average hourly compensation instead of average hourly earnings in the calculation of the projected hospital market basket, which resulted in slightly higher projected market baskets. These factors, along with other minor changes, result in a +0.02-percent change in the actuarial balance.

(5) Other provider assumptions: Skilled nursing facility payment rates were lowered by about 3.3 percent in 2010 to better reflect budget neutrality compared to the old payment system. In addition, home health agency outlier payments in 2010 were capped at 10 percent of total payments for each agency. The effect of these changes, along with other minor factors, is a +0.04-percent difference in the actuarial balance.

(6) Legislative changes: Changes made to Medicare Part A payments by the Affordable Care Act caused substantially lower projected payments to be made to fee-for-service providers and significantly lower payments to be made to private health plans. In addition, high-income workers are

required to pay additional HI payroll taxes beginning in 2013. An excise tax on employer provided health plans is assumed to cause an increase in the portion of compensation that will be subject to the HI payroll tax. All of these changes are described in more detail in section V.A of this report. The effect of these changes is a +3.16-percent difference in the actuarial balance.

(7) Economic and demographic assumptions: Adjustments to the economic and demographic assumptions result in a net change of +0.11 percent in the actuarial balance. Several factors contribute to this change. The lower wage and price increases caused by the current economic recession contribute to lower HI costs in the next few years from what was projected last year. After that, costs increase at about the same rate as last year's projections, but the level is lower. The impact of the recession results in lower HI payroll taxes than what was projected for the next several years. Subsequently, however, the pre-ACA projections include slightly higher tax income for most of the projection period.

**Table III.B12.—Change in the 75-Year Actuarial Balance since the 2009 Report**

| | |
|---|---|
| 1. Actuarial balance, intermediate assumptions, 2009 report | −3.88% |
| 2. Changes: | |
| a. Valuation period | −0.11 |
| b. Base estimate | −0.14 |
| c. Private health plan assumptions | 0.14 |
| d. Hospital assumptions | 0.02 |
| e. Other provider assumptions | 0.04 |
| f. Legislation | 3.16 |
| g. Economic and demographic assumptions | 0.11 |
| Net effect, above changes | 3.22 |
| 3. Actuarial balance, intermediate assumptions, 2010 report | −0.66 |

## 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. In each case, the provisions of current law are assumed to remain unchanged throughout the 75-year projection period.

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. Since 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 0.6 percentage point (as assumed for the high-cost alternative), 1.2 percentage points (as assumed for the intermediate assumptions), and 1.8 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 3.4, 4.0, and 4.6 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.[35] 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 assumed growth rates in real wages. For the 75-year period 2010-2084, the summarized cost rate decreases from 4.73 percent (for a real-wage differential of 0.6 percentage point) to 4.15 percent (for a differential of 1.8 percentage points). The HI actuarial balance over this period shows a corresponding improvement for faster rates of growth in real wages.

[35]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.

**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 | 3.4-2.8 | 4.0-2.8 | 4.6-2.8 |
| Summarized income rate: | | | |
| 25-year: 2010-2034 | 3.65% | 3.64% | 3.63% |
| 50-year: 2010-2059 | 3.71 | 3.72 | 3.73 |
| 75-year: 2010-2084 | 3.79 | 3.83 | 3.85 |
| Summarized cost rate: | | | |
| 25-year: 2010-2034 | 4.03 | 3.94 | 3.85 |
| 50-year: 2010-2059 | 4.52 | 4.35 | 4.14 |
| 75-year: 2010-2084 | 4.73 | 4.49 | 4.15 |
| Actuarial balance: | | | |
| 25-year: 2010-2034 | −0.38 | −0.30 | −0.22 |
| 50-year: 2010-2059 | −0.81 | −0.63 | −0.41 |
| 75-year: 2010-2084 | −0.94 | −0.66 | −0.30 |

[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. 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 1.2 percent (as assumed for the intermediate assumptions), yielding ultimate percentage increases in average annual wages in covered employment of 3.0, 4.0, and 5.0 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 | 3.0-1.8 | 4.0-2.8 | 5.0-3.8 |
| Summarized income rate: | | | |
| 25-year: 2010-2034 | 3.63% | 3.64% | 3.65% |
| 50-year: 2010-2059 | 3.68 | 3.72 | 3.76 |
| 75-year: 2010-2084 | 3.77 | 3.83 | 3.88 |
| Summarized cost rate: | | | |
| 25-year: 2010-2034 | 3.95 | 3.94 | 3.94 |
| 50-year: 2010-2059 | 4.36 | 4.35 | 4.34 |
| 75-year: 2010-2084 | 4.49 | 4.49 | 4.48 |
| Actuarial balance: | | | |
| 25-year: 2010-2034 | −0.32 | −0.30 | −0.28 |
| 50-year: 2010-2059 | −0.68 | −0.63 | −0.58 |
| 75-year: 2010-2084 | −0.72 | −0.66 | −0.60 |

[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 4.49 percent (for CPI increases of 1.8 percent) to 4.48 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.[36] 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.

[36]The slight sensitivity shown in the table results primarily from the fact that the fiscal year 2010 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: 2010-2034 | 3.63% | 3.64% | 3.65% |
| 50-year: 2010-2059 | 3.73 | 3.72 | 3.72 |
| 75-year: 2010-2085 | 3.86 | 3.83 | 3.80 |
| Summarized cost rate: | | | |
| 25-year: 2010-2034 | 3.98 | 3.94 | 3.91 |
| 50-year: 2010-2059 | 4.43 | 4.35 | 4.29 |
| 75-year: 2010-2084 | 4.59 | 4.49 | 4.40 |
| Actuarial balance: | | | |
| 25-year: 2010-2034 | −0.35 | −0.30 | −0.27 |
| 50-year: 2010-2059 | −0.70 | −0.63 | −0.57 |
| 75-year: 2010-2084 | −0.73 | −0.66 | −0.60 |

For all periods, the cost rate decreases slightly with increasing real-interest rates. Over 2010-2084, for example, the summarized HI cost rate would decline from 4.59 percent (for an ultimate real-interest rate of 2.1 percent) to 4.40 percent (for an ultimate real-interest rate of 3.6 percent). Accordingly, each 1.0-percentage-point increase in the assumed real-interest rate increases the long-range actuarial balance, on average, by about 0.09 percent of taxable payroll. Compared to past annual reports, the current sensitivity of the HI cost rate and actuarial balance to different real-interest rate assumptions is substantially reduced. Under the Affordable Care Act, future cost rates would be fairly level after 2045, and the annual deficits would decrease, due to the compounding effects of the slower price updates for HI providers. Discounting a relatively level series by high or low interest factors has much less effect than when the series is increasing rapidly, as with the pre-ACA projections.

### *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 growth rate in such costs (relative to the growth in taxable payroll) will be 1 percentage point slower than the intermediate assumption in 2010 and each later year, 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: 2010-2034 | 3.64% | 3.64% | 3.64% |
| 50-year: 2010-2059 | 3.72 | 3.72 | 3.72 |
| 75-year: 2010-2084 | 3.83 | 3.83 | 3.83 |
| Summarized cost rate: | | | |
| 25-year: 2010-2034 | 3.44 | 3.94 | 4.54 |
| 50-year: 2010-2059 | 3.40 | 4.35 | 5.68 |
| 75-year: 2010-2084 | 3.21 | 4.49 | 6.53 |
| Actuarial balance: | | | |
| 25-year: 2010-2034 | 0.20 | −0.30 | −0.90 |
| 50-year: 2010-2059 | 0.33 | −0.63 | −1.95 |
| 75-year: 2010-2084 | 0.62 | −0.66 | −2.70 |

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 3.21 percent (for an annual cost/payroll

growth rate of 1 percentage point less than the intermediate assumptions) to 6.53 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 1.66 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, combining both Part B and Part D, and to discuss the implications of continuing SMI cost growth.

It is important to note that projected SMI expenditures are understated because future reductions in physician payment rates, required under current law, are unrealistic and virtually certain to be overridden by Congress.[37] Also, as noted in the Introduction to this report, the long-range viability of the slower increases in prices paid by Medicare for most other forms of health services is questionable. If Congress overrides these update adjustments to ensure access to care

[37]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 and the minimal likelihood that the physician payment reductions will occur in practice.

for beneficiaries, then actual future Part B costs would be substantially higher than shown by the current-law projections in this report. The annual report to Congress on the financial status of Medicare is necessarily based on current law, including the substantial reduction in physician payments that would be required and the permanently slower price updates for most other health services, absent any legislative change. These limitations should be considered in assessing the projected cost for the SMI trust fund and the Part B account in particular. Part B projections under an illustrative alternative to the current-law "sustainable growth rate" payment mechanism and price update adjustments are shown in a supplemental memorandum, prepared by the Office of the Actuary, CMS, at the Board of Trustees' request.[38]

The projected financial status for the Part B account reflects a very unusual situation. Specifically, about three-quarters of enrollees are not subject to Part B premium increases in 2010, and many will not be subject to full premium increases for the next several 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.[39]

There was no increase in Social Security benefits 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 is greater than the cost-of-living adjustment for all beneficiaries, and beneficiaries affected by the hold-harmless provision do 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 additional years. Under the Trustees' economic assumptions, the December benefit increases are projected to be 0 percent and 1.2 percent for 2010 and 2011, respectively. Without action to respond to this situation, the loss of premium revenues, and the

[38]This memorandum is available on the CMS website at http://www.cms.gov/ActuarialStudies/Downloads/2010TRAlternativeScenario.pdf. No endorsement of these alternative payment mechanisms by the Board of Trustees, CMS, or the CMS Office of the Actuary should be inferred.

[39]New enrollees during the year, enrollees who do not receive a Social Security benefit check, 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.

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 under current law. The increases would be paid only by higher-income Part B enrollees, new Part B enrollees, Part B enrollees who are not Social Security enrollees, and the State Medicaid programs (on behalf of Part B enrollees who are also Medicaid enrollees). The monthly premium for 2010 is $110.50 and was set at a significantly higher level than would have been required normally as a result of this financing problem. Under the intermediate economic assumptions, monthly premiums of $120.10 and $113.80 are estimated for 2011 and 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.

The variation in premium amounts for different categories of Part B enrollees would be particularly large in 2011 if another zero COLA occurs for December 2010 (as is currently expected). About 75 percent of enrollees would continue to pay $96.40 per month, as they have since 2009. Newly eligible enrollees with incomes between roughly $15,000 and $85,000 per year would pay a monthly premium of $120.10 under the intermediate assumptions, or 25 percent more than otherwise-similar individuals who became eligible in 2009 or earlier.[40] State Medicaid programs would also pay $120.10 on behalf of low-income enrollees who qualify for Medicaid assistance. Finally, single enrollees with incomes above $85,000 (or married enrollees filing jointly with incomes above $170,000) would pay premiums ranging from $168.10 to $384.20 per month.

This approach to preventing exhaustion of the Part B trust fund account is the only one available under current law. Given the implications of this approach, however, and the serious equity issues

[40]Beneficiaries who became eligible in 2010 would continue to pay the full 2010 premium of $110.50.

it raises, Congress may consider other means of ensuring an adequate revenue supply for financing Part B.[41]

### *a. 10-Year Actuarial Estimates (2010-2019)*

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, 2010, 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 impacts of 0-percent cost-of-living adjustments for Social Security benefits, for December 2009 and projected for December 2010, affect financing starting in 2010 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 2019. The estimates are based on current law, including a physician payment update of −23.0 percent for December 2010, an estimated update of −6.5 percent in January 2011, and an estimated update of −2.9 percent in 2012. This table combines the operations of the Part B and Part D accounts to present the expected operations of the trust fund in total.

[41]On September 24, 2009, the House of Representatives passed the Medicare Premium Fairness Act (H.R. 3631), which would have frozen the monthly Medicare Part B premium for all beneficiaries in 2010 at the 2009 premium. This bill was not voted on in the Senate and thus did not become law.

**Table III.C1.—Operations of the SMI Trust Fund (Cash Basis) during Calendar Years 1970-2019**

[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 |
| 2009 | 62.3[9] | 209.8[9] | 7.6 | 3.1 | 282.8 | 263.0 | 3.5 | 266.5 | 16.3 | 76.6 |
| Intermediate estimates: | | | | | | | | | | |
| 2010 | 57.6[9] | 200.5[9] | 4.2 | 2.8 | 265.2 | 279.0 | 3.1 | 282.1 | −17.0 | 59.6 |
| 2011 | 66.4 | 227.7 | 8.0 | 4.4 | 306.5 | 283.2 | 3.3 | 286.5 | 20.0 | 79.6 |
| 2012 | 75.8 | 251.1 | 9.2 | 6.5 | 342.7 | 300.7 | 3.6 | 304.3 | 38.4 | 118.0 |
| 2013 | 83.8 | 270.5 | 9.8 | 9.0 | 373.1 | 323.7 | 3.9 | 327.6 | 45.5 | 163.5 |
| 2014 | 92.4 | 290.3 | 10.3 | 12.2 | 405.3 | 348.5 | 4.3 | 352.8 | 52.5 | 216.0 |
| 2015 | 108.8[9] | 331.2[9] | 10.9 | 15.5 | 466.3 | 373.5 | 4.7 | 378.3 | 88.1 | 304.1 |
| 2016 | 100.9[9] | 314.2[9] | 11.7 | 19.2 | 446.0 | 400.5 | 5.2 | 405.7 | 40.3 | 344.3 |
| 2017 | 119.0 | 362.7 | 12.7 | 24.5 | 518.9 | 431.8 | 5.7 | 437.4 | 81.4 | 425.7 |
| 2018 | 131.6 | 396.5 | 13.8 | 29.7 | 571.6 | 467.7 | 6.2 | 473.9 | 97.8 | 523.5 |
| 2019 | 145.0 | 432.7 | 15.0 | 34.4 | 627.0 | 508.3 | 6.6 | 514.9 | 112.1 | 635.6 |

[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 ($8.5 billion) transferred 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 occurred on December 31, 2009, and delivery of benefit checks normally due on January 3, 2016 is expected to occur on December 31, 2015.

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

### *b. 75-Year Actuarial Estimates (2010-2084)*

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 2009-2080. As noted, these current-law costs are understated as a result of the substantial physician payment reductions required under current law and are further understated if the productivity adjustments to other Medicare price updates under the Affordable Care Act cannot be continued in the long range.

The 75-year projection period fully allows for the analysis of impacts caused by future trends that may reasonably be expected to occur, such as the large increase in enrollees after 2010 when the baby boom generation will reach eligibility age and begin to receive benefits. Such long-range projections are necessarily highly uncertain, however, in view of economic and health-cost trends that are generally much more variable than demographic trends, together with the high probability of further legislative changes affecting SMI expenditures.

**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 |
|---|---|
| 2009 | 1.87% |
| 2010 | 1.92 |
| 2011 | 1.84 |
| 2012 | 1.86 |
| 2013 | 1.89 |
| 2014 | 1.92 |
| 2015 | 1.95 |
| 2016 | 1.99 |
| 2017 | 2.04 |
| 2018 | 2.12 |
| 2019 | 2.20 |
| 2020 | 2.29 |
| 2025 | 2.73 |
| 2030 | 3.12 |
| 2035 | 3.37 |
| 2040 | 3.51 |
| 2045 | 3.60 |
| 2050 | 3.67 |
| 2055 | 3.77 |
| 2060 | 3.88 |
| 2065 | 3.99 |
| 2070 | 4.08 |
| 2075 | 4.16 |
| 2080 | 4.22 |

[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.

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 and because of the significant probability that the productivity adjustments to other Medicare price updates will not be feasible in the long term.

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 future is generally estimated to be significantly smaller because of the impact of the Affordable Care Act. The growth differential reflects the net effects of (i) the savings from the ACA (the productivity adjustments to price updates and reduced Medicare Advantage payment "benchmarks," in particular); (ii) the increase in the SMI population as the baby boom generation turns age 65, enrolls, and is eligible to receive benefits; (iii) the faster growth trend associated with the Part D prescription drug benefit; and (iv) the negative physician payment updates that would occur under current law during 2010-2012.[42]

[42]The introduction of the full drug benefit in 2006 caused a very large one-time increase in the growth rate.

**Table III.C3.—Average Annual Rates of Growth in SMI and the Economy**

[In percent]

| Calendar years | SMI | | | U.S. Economy | | | Growth differential[1] |
|---|---|---|---|---|---|---|---|
| | Beneficiary population | Per capita expenditures | Total expenditures | Total population | Per capita GDP | Total GDP | |
| Historical data: | | | | | | | |
| 1968-1989 | 2.7% | 13.4% | 16.4% | 1.0% | 7.9% | 8.9% | 6.9% |
| 1990-1999 | 1.5 | 6.2 | 7.7 | 1.0 | 4.4 | 5.5 | 2.1 |
| 2000-2009 | 1.5 | 10.7[2] | 12.3[2] | 0.9 | 3.3 | 4.3 | 7.7[2] |
| Intermediate estimates: | | | | | | | |
| 2010-2019 | 2.8 | 4.0 | 6.9 | 0.9 | 4.2 | 5.1 | 1.7 |
| 2020-2034 | 2.1 | 5.3 | 7.5 | 0.7 | 3.9 | 4.6 | 2.8 |
| 2035-2059 | 0.6 | 4.6 | 5.3 | 0.5 | 4.1 | 4.6 | 0.6 |
| 2060-2084 | 0.8 | 4.2 | 5.0 | 0.5 | 4.1 | 4.6 | 0.4 |

[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 generally expected to continue to grow faster than average income or per capita GDP, the premiums and coinsurance amounts paid by beneficiaries would 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 2009 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, growth in the utilization and intensity of services, and other medical cost inflation. 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 represent over four-fifths of the average Social Security retired-worker benefit in 2084 under current law.

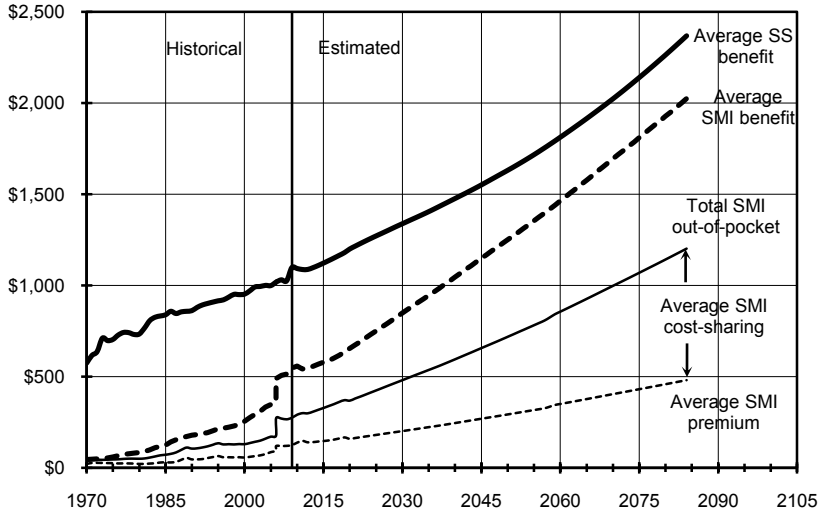
Average beneficiary premiums and cost-sharing payments for SMI will increase at about the same rate as average SMI benefits.[43] Thus, a growing proportion of beneficiaries' Social Security and other income would generally be required over time to pay total out-of-pocket costs for SMI, including both premiums and cost-sharing

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

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 13 percent of the average Social Security benefit but would increase to an estimated 20 percent in 2080. Similarly, an average cost-sharing amount in 2010 would be equivalent to about 14 percent of the Social Security benefit, which would increase to about 30 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.

**Figure III.C1.—Comparison of Average Monthly SMI Benefits, Premiums, and Cost Sharing to the Average Monthly Social Security Benefit**
[Amounts in constant 2009 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, varies 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 high incomes pay a higher income-related premium beginning in 2007, and, similarly, Part D enrollees will pay an income-related premium beginning in 2011. 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.gov/ReportsTrustFunds/04_Beneficiaryoop.asp.

Another way to evaluate the implications of rapid SMI growth is to compare 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 12.0 percent of total Federal income taxes collected in that year. For 2009 and 2010, the percentage increased to 17.7 and 18.6 percent, respectively, primarily as a result of lower income tax revenues caused by the recession and legislative changes designed to stimulate the economy. Should such taxes in the future maintain their historical average level of the last 50 years relative to the national economy, then, based on the intermediate projections, SMI general revenue financing in 2080 would represent over 26 percent of total income taxes under current law and substantially more than that if Congress modifies the physician payment system and the productivity adjustments to non-physician price updates.

**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 | 12.0 |
| 2009 | 17.7 |
| Intermediate estimates: | |
| 2010 | 18.6 |
| 2020 | 15.0 |
| 2030 | 19.5 |
| 2040 | 21.8 |
| 2050 | 22.7 |
| 2060 | 24.6 |
| 2070 | 25.7 |
| 2080 | 26.6 |

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

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

## 2. Part B Account

### *a. Financial Operations in Calendar Year 2009*

A statement of the revenue and expenditures of the Part B account of the SMI trust fund in calendar year 2009, 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 2009**

[In thousands]

| | | |
|---|---|---|
| Total assets of the Part B account in the trust fund, beginning of period | | $59,381,831 |
| Revenue: | | |
| Premiums from enrollees: | | |
| Enrollees aged 65 and over | $47,433,140 | |
| Disabled enrollees under age 65 | 8,606,433 | |
| Total premiums | | 56,039,573 |
| Premiums collected from Medicare Advantage participants | | 119,992 |
| Government contributions: | | |
| Enrollees aged 65 and over | 131,514,241 | |
| Disabled enrollees under age 65 | 31,246,082 | |
| Total government contributions | | 162,760,323 |
| Other | | 13,172 |
| Interest on investments | | 2,949,470 |
| SSA interfund interest receipts[1] | | 993 |
| Total revenue | | $221,883,522 |
| Expenditures: | | |
| Net Part B benefit payments | | $202,585,344 |
| Administrative expenses: | | |
| Transfer to Medicaid[2] | 449,420 | |
| Treasury administrative expenses | 357 | |
| Salaries and expenses, CMS[3] | 1,751,366 | |
| Salaries and expenses, Office of the Secretary, HHS | 35,228 | |
| Salaries and expenses, SSA | 884,323 | |
| Medicare Payment Advisory Commission | 4,561 | |
| Railroad Retirement administrative expenses | 9,264 | |
| Transitional assistance administrative expenses | 446 | |
| Prescription drug administrative expenses | 150 | |
| Total administrative expenses | | 3,135,115 |
| Total expenditures | | $205,720,460 |
| Net addition to the trust fund | | 16,163,063 |
| Total assets of the Part B account in the trust fund, end of period | | $75,544,893 |

[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]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.

[3]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 $59.4 billion on December 31, 2008. During calendar year 2009, total revenue amounted to $221.9 billion and total expenditures were $205.7 billion. Total assets thus increased $16.2 billion during the year, to $75.5 billion as of December 31, 2009. The large increase in assets occurred primarily because the January 2010 premium and associated general revenue income were paid into the Part B account on December 31, 2009.

(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. A new source of revenues, specified by the Affordable Care Act and starting in 2011, will be the annual fees assessed on manufacturers and importers of brand-name prescription drugs. The ACA directs that these fees be allocated to the Part B trust fund account, where they will serve to slightly reduce the need for premium revenues and Federal general revenues.[44] 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, $56.0 billion represented premium payments by (or on behalf of) aged and disabled enrollees—an increase of 11.6 percent over the amount of $50.2 billion for the preceding year. This increase resulted from the growth in the number of persons enrolled in Part B and the receipt of the January 2010 premium income during calendar year 2009. In addition, enrollees with high incomes were required to pay a larger share of average Part B per capita costs in 2009 compared to 2008. (In the absence of the additional month of receipts, total premium revenues would have increased by about 2.1 percent. This increase is significantly lower than normal, primarily because the Part B standard premium did not increase from 2008 to 2009.)

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. This 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

[44]Although section 1402 of the Affordable Care Act introduces a 3.8-percent "unearned income Medicare contribution" on non-work income for high-income individuals and couples, the receipts from this provision are not allocated to the Medicare trust funds.

amounts under the intermediate set of assumptions appear in section V.C.

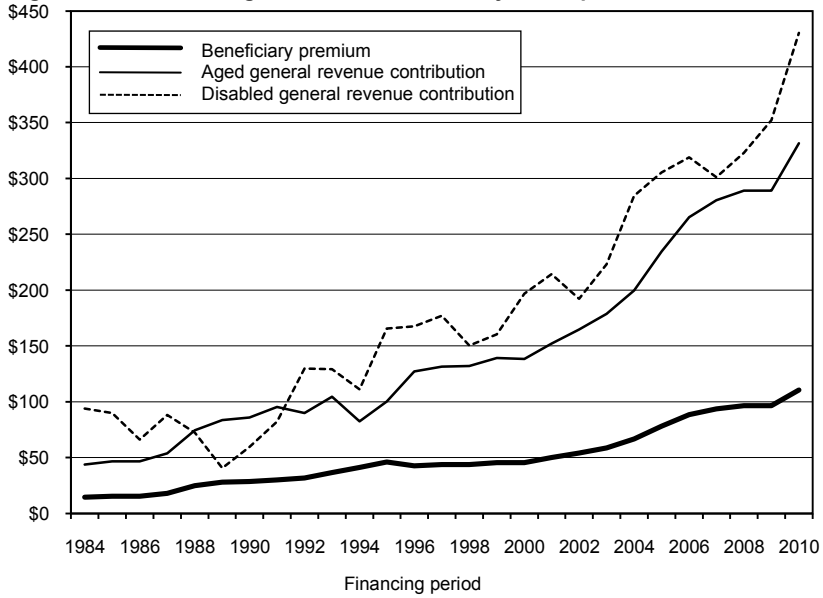
**Table III.C6.—Standard Part B Monthly Premium Rates, Actuarial Rates, and Premium Rates as a Percentage of Part B Cost**

| | | 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 |
| 2010 | 110.50 | 221.00 | 270.40 | 25.0 | 20.4 |

[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 graph of the monthly per capita financing rates in all 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 2009, contributions received from the general fund of the Treasury amounted to $162.8 billion, which accounted for 73.4 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 2009,

$3.0 billion of revenue was from interest on the investments of the account.

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 $13 million were made in calendar year 2009.

(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, $202.6 billion represented net benefits paid from the account for health services.[45] Net benefits increased 7.3 percent over the corresponding amount of $188.8 billion paid during the preceding calendar year. This spending growth reflects increases both in the number of beneficiaries and in the price, volume, and intensity of services. Additional information on Part B benefits by type of service is available in section IV.B1.

The remaining $3.1 billion of expenditures was for administrative expenses and represented 1.5 percent of total Part B expenditures in

[45]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.

2009.[46] 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 Medicare Modernization Act.

(3) Actual experience versus prior estimates

Table III.C7 compares the actual experience in calendar year 2009 with the estimates presented in the 2008 and 2009 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 2009 report and somewhat higher than estimated in the 2008 report, because legislation increased physician payments in 2009 after that year's report was issued. Actual premiums and actual government contributions were very close 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 2009**

[Dollar amounts in millions]

| | | Comparison of actual experience with estimates for calendar year 2009 published in: | | | |
|---|---|---|---|---|---|
| | | 2009 report | | 2008 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 | $56,040 | $56,677 | 99% | $56,027 | 100% |
| Government contributions | 162,760 | 163,787 | 99 | 160,236 | 102 |
| Benefit payments | 202,585 | 199,607 | 101 | 190,872 | 106 |

[1]Under the intermediate assumptions.

(4) Assets

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

[46]In 2009, the Part B salaries and expenses for the Centers for Medicare & Medicaid Services, including the administrative expenses of the carriers and intermediaries, amounted to $1.8 billion or 0.9 percent of total Part B expenditures.

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.[47] Table V.E10, presented in appendix E, shows the assets of the Part B account at the end of fiscal years 2008 and 2009.

### *b. 10-Year Actuarial Estimates (2010-2019)*

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, 2010. However, unusual steps were necessary in 2010 and 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. There was no increase in Social Security benefits for December 2009 as a result of significant decreases in the CPI during the last 5 months of 2008. The Part B premium increase for 2010 would have been significantly greater than the zero-percent cost-of-living adjustment for all beneficiaries if not for the hold-harmless provision, but beneficiaries affected by this provision did not have to pay the higher premium level. Only about one-fourth of Part B enrollees are paying the increase in the Part B premium in 2010 (or having it paid for them by Medicaid).

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

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 and 1.2 percent for 2010 and 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 continue to be raised substantially more than normal under current law, as they were for 2010. The increases would be paid only by those Part B enrollees who are not subject to the hold-harmless provision (primarily new enrollees during the year and high-income enrollees) and by the State Medicaid programs (on behalf of Part B enrollees who are also Medicaid enrollees). Following this practice, the 2010 Part B premium was set to be $110.50. In view of the equity concerns mentioned previously, the increase was intentionally set at a somewhat lower level than otherwise required, with asset redemptions making up the difference. In this way, the premium increase was ameliorated somewhat for 2010.

Under the intermediate economic assumptions, monthly premiums of $120.10 and $113.80 are estimated for 2011 and 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.[48] The unusually large premiums estimated for 2011 and 2012 are due to the effect of the hold-harmless provision of current law that limits premium increases for about three-quarters of Part B enrollees to increases in Social Security benefits. As indicated, a second zero COLA for Social Security would require payment of much larger-than-normal premiums by (or on behalf of) the one-fourth of beneficiaries not affected by the provision, absent legislation to address the situation.

[48]In the highly unlikely event that the current-law negative physician payment updates are allowed to occur without legislative intervention, no increase in Part B financing would be needed for 2011 above the 2010 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 November 2010, Congress has avoided negative updates.

*Actuarial Analysis*

As noted, the Part B expenditures are substantially understated in both the short range and long range because current-law physician payment rates are unrealistically reduced for 2010 and later under the sustainable growth rate system—by 23.0 percent in December 2010, by 6.5 percent in January 2011, and by 2.9 percent in 2012. In practice, Congress is nearly certain to prevent some or all of these scheduled reductions through new legislation, as it has for 2003 through November 2010. Depending on the specific legislated changes, Part B costs could be about 21 percent higher in 2019 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 2019. As mentioned previously, the estimates for 2010 and later should be interpreted cautiously, given the near certainty of further legislation addressing physician payments. Also, 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.

**Table III.C8.—Operations of the Part B Account in the SMI Trust Fund (Cash Basis) during Calendar Years 1970-2019**

[In billions]

| | Income | | | | Expenditures | | | Account | |
|---|---|---|---|---|---|---|---|---|---|
| Calendar year | Premium income | General revenue[8] | 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 |
| 2009 | 56.0[8] | 162.8[8] | 3.1 | 221.9 | 202.6 | 3.1 | 205.7 | 16.2 | 75.5 |
| Intermediate estimates: | | | | | | | | | |
| 2010 | 51.2[8] | 149.7[8] | 2.8 | 203.7 | 217.3 | 2.9 | 220.1 | −16.4 | 59.1 |
| 2011 | 58.4 | 172.2 | 4.4 | 235.0 | 212.2 | 3.0 | 215.3 | 19.7 | 78.9 |
| 2012 | 65.7 | 192.0 | 6.5 | 264.2 | 222.6 | 3.3 | 225.9 | 38.4 | 117.2 |
| 2013 | 71.9 | 206.6 | 9.0 | 287.5 | 238.4 | 3.6 | 242.1 | 45.4 | 162.7 |
| 2014 | 79.0 | 221.1 | 12.2 | 312.2 | 255.8 | 4.0 | 259.8 | 52.4 | 215.1 |
| 2015 | 92.9[8] | 255.4[8] | 15.4 | 363.8 | 271.3 | 4.4 | 275.8 | 88.0 | 303.1 |
| 2016 | 84.4[8] | 229.8[8] | 19.2 | 333.4 | 288.3 | 4.9 | 293.2 | 40.2 | 343.3 |
| 2017 | 100.1 | 270.8 | 24.5 | 395.4 | 308.7 | 5.4 | 314.0 | 81.3 | 424.7 |
| 2018 | 110.6 | 295.4 | 29.7 | 435.7 | 332.2 | 5.8 | 338.0 | 97.7 | 522.3 |
| 2019 | 121.6 | 321.1 | 34.4 | 477.0 | 358.8 | 6.3 | 365.0 | 112.0 | 634.4 |

[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 ($8.5 billion) transferred 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 actually occurred on December 31, 2009. Consequently, the Part B premiums withheld from the checks and the associated general revenue contributions were 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.

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

As shown in table III.C8, the Part B account is estimated to decrease during 2010 to an estimated $59.1 billion by the end of the year. Since the Part B monthly premium and associated general revenue income for January 2010 were received by Part B in December 2009,

the Part B asset level is higher than normal at the end of 2009, and only 11 months of income will be received by Part B during 2010. The expected asset reduction in 2010 is due principally to this temporary shift in the timing of receipts.

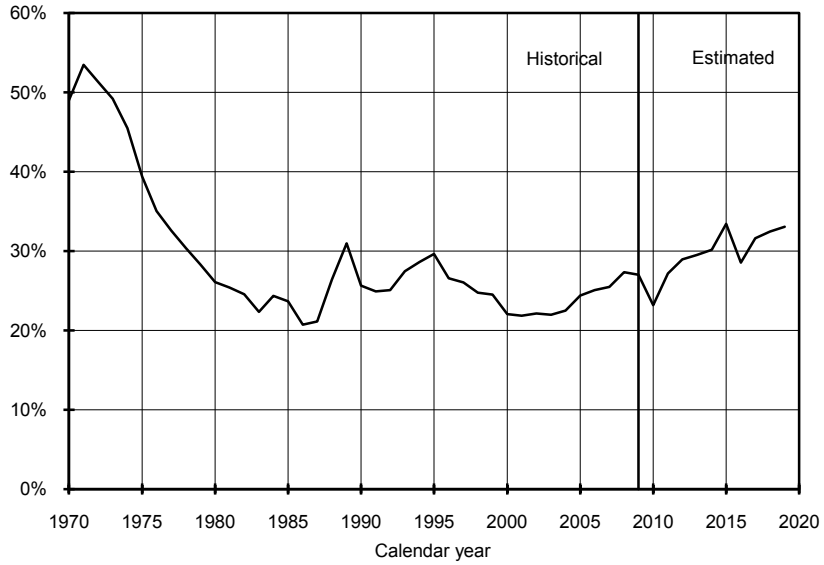
Starting in 2010 the Part B projections are heavily influenced by the physician payment reductions in December 2010, January 2011, and 2012, as estimated under current law. Part B financing margins were set in 2010, and are projected to be set for 2011 and thereafter, so that account assets would be adequate to cover a much higher level of benefits in the likely event that Congress will continue to prevent reductions in Part B physician payment rates. Accordingly, table III.C8 shows rapidly increasing Part B asset levels because expenditures reflect the current-law physician reductions but income reflects current-law expenditures plus a large margin based on the reasonable expectation that the current-law reductions will not occur.[49]

The Part B expenditure estimates shown in this report for 2010-2019 are higher in most years than those in last year's report. The reasons for the change are described in the subsequent section on long-range projections.

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.

[49]This rise in assets is unlikely to occur. Each year as the current-law physician payment reductions 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**




Beneficiary premiums are also affected by a new provision under the Affordable Care Act that imposes fees on the manufacturers and importers of brand-name prescription drugs and allocates the fees to the Part B account of the SMI trust fund. The new legislation does not modify the determination of the Part B actuarial rates, premiums, or general revenue matching contributions; the normal financing, plus the new fees, would result in an excessive level of program financing without other action. Accordingly, the premium margin for maintaining an appropriate level of trust fund assets will be reduced such that total revenues from premiums, matching general revenues, and the ear-marked fees relating to brand-name prescription drugs will equal the appropriate level needed for program financing.

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 8.5 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 2009, Part B benefits grew 12.4 percent on an aggregate basis (7.3 percent, excluding the one-time effect of the hospice payment correction in 2008) and increased to 1.42 percent of GDP.

**Table III.C9.—Growth in Part B Benefits (Cash Basis) through December 31, 2019**

| 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 | 4,293 | 4.4 | 1.27 |
| 2008 | 180.3[2] | 2.2 | 4,297 | 0.1 | 1.25 |
| 2009 | 202.6 | 12.4 | 4,728 | 10.0 | 1.42 |
| Intermediate estimates: | | | | | |
| 2010 | 217.3 | 7.3 | 4,946 | 4.6 | 1.47 |
| 2011 | 212.2 | −2.3 | 4,716 | −4.7 | 1.37 |
| 2012 | 222.6 | 4.9 | 4,796 | 1.7 | 1.36 |
| 2013 | 238.4 | 7.1 | 4,978 | 3.8 | 1.37 |
| 2014 | 255.8 | 7.3 | 5,193 | 4.3 | 1.39 |
| 2015 | 271.3 | 6.1 | 5,365 | 3.3 | 1.39 |
| 2016 | 288.3 | 6.3 | 5,551 | 3.5 | 1.41 |
| 2017 | 308.7 | 7.1 | 5,784 | 4.2 | 1.44 |
| 2018 | 332.2 | 7.6 | 6,058 | 4.7 | 1.48 |
| 2019 | 358.8 | 8.0 | 6,363 | 5.0 | 1.53 |

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

The estimated reduction in Part B benefits in 2011 reflects the physician payment updates of −23.0 percent in December 2010 and another −6.5 percent in January 2011 under current law. A further change of −2.9 percent is also estimated for January 2012. Physician 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.[50] 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.

[50]Additional information about the SGR system and the physician spending targets, including the original target levels, is available at http://www.cms.gov/SustainableGRatesConFact/Downloads/sgr2011p.pdf.

In addition, amendments enacted in 2003 through May 2010 to override scheduled reductions in physician payment rates all raised actual payment levels, but not all raised the target spending levels. As noted, to address the accumulated difference between actual and allowed spending levels, the current SGR mechanism will require fee schedule reductions in December 2010 through 2012 totaling 30 percent.

Part B expenditure growth rates in 2011-2019 are also affected by the net impact of the Affordable Care Act. Substantial savings are generated during this period by the slower Medicare price updates for most non-physician services and the reduced payment "benchmarks" for private Medicare Advantage health plans.

Despite the unrealistic statutory reductions to physician payments, Part B costs in the 2010 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 2009-2019, 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: | | | | | |
| 2009[2] | $56.0[3] | $165.8[3] | $221.9 | $205.7 | $75.5 |
| 2010 | 51.2[3] | 152.5[3] | 203.7 | 220.1 | 59.1 |
| 2011 | 58.4 | 176.6 | 235.0 | 215.3 | 78.9 |
| 2012 | 65.7 | 198.5 | 264.2 | 225.9 | 117.2 |
| 2013 | 71.9 | 215.6 | 287.5 | 242.1 | 162.7 |
| 2014 | 79.0 | 233.2 | 312.2 | 259.8 | 215.1 |
| 2015 | 92.9[3] | 270.9[3] | 363.8 | 275.8 | 303.1 |
| 2016 | 84.4[3] | 249.0[3] | 333.4 | 293.2 | 343.3 |
| 2017 | 100.1 | 295.3 | 395.4 | 314.0 | 424.7 |
| 2018 | 110.6 | 325.1 | 435.7 | 338.0 | 522.3 |
| 2019 | 121.6 | 355.5 | 477.0 | 365.0 | 634.4 |
| Low-cost: | | | | | |
| 2009[2] | $56.0[3] | $165.8[3] | $221.9 | $205.7 | $75.5 |
| 2010 | 51.2[3] | 152.6[3] | 203.8 | 217.5 | 61.9 |
| 2011 | 55.1 | 168.4 | 223.5 | 209.3 | 76.0 |
| 2012 | 62.3 | 188.3 | 250.6 | 215.3 | 111.3 |
| 2013 | 66.5 | 199.6 | 266.1 | 225.6 | 151.7 |
| 2014 | 71.2 | 211.1 | 282.4 | 236.6 | 197.5 |
| 2015 | 81.8[3] | 239.2[3] | 321.0 | 245.3 | 273.2 |
| 2016 | 73.0[3] | 216.0[3] | 289.0 | 254.6 | 307.6 |
| 2017 | 84.4 | 249.6 | 333.9 | 265.6 | 375.9 |
| 2018 | 90.3 | 267.2 | 357.5 | 278.7 | 454.7 |
| 2019 | 97.2 | 285.8 | 383.0 | 293.5 | 544.1 |
| High-cost: | | | | | |
| 2009[2] | $56.0[3] | $165.8[3] | $221.9 | $205.7 | $75.5 |
| 2010 | 51.2[3] | 152.5[3] | 203.7 | 222.9 | 56.4 |
| 2011 | 62.1 | 185.9 | 248.0 | 222.2 | 82.2 |
| 2012 | 70.5 | 211.5 | 281.9 | 239.5 | 124.6 |
| 2013 | 78.7 | 235.0 | 313.7 | 263.3 | 175.1 |
| 2014 | 88.7 | 261.1 | 349.9 | 289.4 | 235.6 |
| 2015 | 107.0[3] | 311.3[3] | 418.4 | 315.1 | 338.8 |
| 2016 | 99.6[3] | 292.7[3] | 392.3 | 343.7 | 387.4 |
| 2017 | 120.8 | 354.5 | 475.3 | 376.7 | 486.0 |
| 2018 | 136.4 | 398.4 | 534.8 | 416.1 | 604.7 |
| 2019 | 154.9 | 449.2 | 604.1 | 461.8 | 747.0 |

[1]Other income contains government contributions, fees on manufacturers and importers of brand-name prescription drugs, and interest.
[2]Figures for 2009 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 under current law. 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 in light of 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 current-law costs as high or low as the current-law alternative projections. In practice, actual costs will likely be affected 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.[51]

Part B expenditures are estimated to grow 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 2019.

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 2019 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 27 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, and then are increased by 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.

[51]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. Due to 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 2010*

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 private "yearly renewable term" insurance, with financing established each year based on estimated costs for the year. For Part B, financing is provided from premium income paid by the enrollees and from income contributed from general revenue by the Federal Government. As with private plans, 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 assets in the account at any time should not be 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.[52]

[52]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, 2010**

[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 | 136,993 | 2,893 | 139,886 | −6,539 |
| 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[2] | 2,238 | 197,728 | 177,515 | 2,492 | 180,007 | 17,721 |
| 2008 | 50,232 | 137,731[2] | 3,591 | 191,554 | 180,417 | 2,990 | 183,407 | 8,147 |
| 2009 | 51,385 | 149,149 | 3,084 | 203,618 | 204,242 | 3,135 | 207,377 | −3,759 |
| Intermediate estimates: | | | | | | | | |
| 2010 | 55,855 | 163,337 | 2,812 | 222,003 | 217,906 | 2,861 | 220,767 | 1,236 |

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

[2]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 corrective 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 all 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, 2010**

[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 | 9,337 | — | 9,337 | 10,093 | 0.07 |
| 2005 | 24,008 | — | 24,008 | 9,624 | — | 9,624 | 14,384 | 0.08 |
| 2006 | 32,325 | — | 32,325 | 10,929 | — | 10,929 | 21,396 | 0.12 |
| 2007 | 42,062 | 9,296[3] | 51,358 | 12,015 | — | 12,015 | 39,343 | 0.21 |
| 2008 | 59,382 | — | 59,382 | 12,119 | — | 12,119 | 47,263 | 0.23 |
| 2009 | 75,545 | — | 75,545 | 13,775 | — | 13,775 | 61,770 | 0.28 |
| Intermediate estimates: | | | | | | | | |
| 2010 | 59,148 | — | 59,148 | 14,409 | — | 14,409 | 44,740 | 0.21 |

[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 2010. 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 2009, the Part B reserve ratio was 28 percent, which is above normal requirements. This favorable result for the financial status of the Part B account is due primarily to the receipt of 13 months of income during calendar year 2009.

Part B financing has been established through December 31, 2010 and was designed with specific margins to maintain a contingency reserve slightly above the range of 15-20 percent. Incurred income is estimated to exceed incurred expenditures in 2010, as shown in

table III.C11. The excess of assets over liabilities is expected to decrease by $17.0 billion by the end of December 2010, as indicated in table III.C12. This decrease comes from two primary factors. First, in order to ameliorate the effects of the hold-harmless provision on the 2010 premium increase, the 2010 financing was set at a slightly lower level than would otherwise be required, with asset redemptions making up the difference. Second, the assets are somewhat overstated at the end of 2009 due to the January 2010 premium and general revenue income being received in December 2009. Assets at the end of 2010 will reflect only 11 months of premium and general revenue income during 2010. The reserve ratio is expected to decrease from 28 percent as of December 31, 2009 to 22 percent at the end of 2010 under current law. A legislative override of the 23.0-percent physician payment reduction scheduled for December 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 2009 and 2010. 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 (2010 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 2010 by a margin equivalent to 27.7 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 14.7 percent of incurred expenditures in 2010. Under either scenario, assets would be sufficient to cover outstanding liabilities. However, if

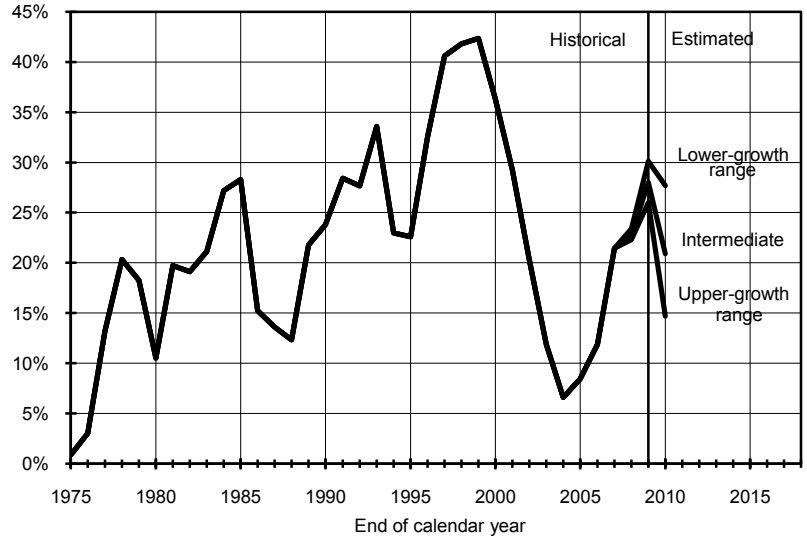
the higher growth range scenario were actually to materialize, then subsequent financing rates would have to be adjusted to maintain an appropriate contingency level in the account. A combination of the conditions assumed in the higher growth range scenario and a legislative override of the scheduled physician payment reduction would necessitate a sharper increase in premium and general revenue financing. Figure III.C4 shows the reserve ratio for historical years and for 2010 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, 2010**

| As of December 31, | 2008 | 2009 | 2010 |
|---|---|---|---|
| Intermediate scenario: | | | |
| Actuarial status (in millions) | | | |
| Assets | $59,382 | $75,545 | $59,148 |
| Liabilities | 12,119 | 13,775 | 14,409 |
| Assets less liabilities | 47,263 | 61,770 | 44,740 |
| Ratio[1] | 22.8% | 28.0% | 20.9% |
| Low-range scenario: | | | |
| Actuarial status (in millions) | | | |
| Assets | $59,382 | $75,545 | $67,139 |
| Liabilities | 12,119 | 13,273 | 13,543 |
| Assets less liabilities | 47,263 | 62,272 | 53,596 |
| Ratio[1] | 23.4% | 30.1% | 27.7% |
| Upper-range scenario: | | | |
| Actuarial status (in millions) | | | |
| Assets | $59,382 | $75,545 | $50,222 |
| Liabilities | 12,119 | 14,257 | 15,379 |
| Assets less liabilities | 47,263 | 61,288 | 34,842 |
| Ratio[1] | 22.3% | 26.0% | 14.7% |

[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 2009**




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 2010 is adequate to cover 2010 expected expenditures and to maintain the financial status of the Part B account in 2010 at a satisfactory level. The 2010 reserve ratio is subject to a greater than usual degree of uncertainty as a result of likely legislation to override the negative physician payment scheduled for December 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, and of limited usefulness, due to the large current-law physician payment reductions for December 2010 through 2012. This problem is compounded by the significant likelihood that productivity adjustments to other Medicare price updates for 2011 and thereafter will not be feasible in the long term. The projections in this report do not include any potential secondary impacts resulting from these two types of large current-law payment reductions. Due to 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. However, the potential understatement of projected future Part B costs is illustrated by reference to an illustrative alternative to current law that assumes that physician payment rates are updated by the Medicare Economic Index and that the productivity adjustments to other payment updates are gradually phased out after 2019. No endorsement of the theoretical changes by the Trustees, CMS, or the Office of the Actuary should be inferred.

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 2009-2080.[53] 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 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 |
|---|---|
| 2009 | 1.45% |
| 2010 | 1.49 |
| 2011 | 1.39 |
| 2012 | 1.39 |
| 2013 | 1.40 |
| 2014 | 1.42 |
| 2015 | 1.43 |
| 2016 | 1.44 |
| 2017 | 1.47 |
| 2018 | 1.51 |
| 2019 | 1.56 |
| 2020 | 1.61 |
| 2025 | 1.87 |
| 2030 | 2.10 |
| 2035 | 2.24 |
| 2040 | 2.30 |
| 2045 | 2.32 |
| 2050 | 2.33 |
| 2055 | 2.35 |
| 2060 | 2.39 |
| 2065 | 2.42 |
| 2070 | 2.45 |
| 2075 | 2.46 |
| 2080 | 2.47 |

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

Part B costs per enrollee after the initial 10-year period are assumed to increase at rates consistent with the current-law SGR payment system for physicians, the slower price updates under the ACA for

[53]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.

most other categories of Part B providers, and the full price updates for services not affected by the update adjustments (for example, payments for physician-administered prescription drugs). The basis for these assumptions is described in sections II.C and IV.D. Based on these assumptions and the projected demographic changes, incurred Part B expenditures as a percentage of GDP would increase from 1.45 percent in 2009 to 2.47 percent in 2080. Under the illustrative alternative analysis, Part B expenditures would instead increase to 5.12 percent in 2080.

This report focuses on the 75-year period from 2010 to 2084 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.

In section III.B of this report, a projection of HI revenues and expenditures is presented that extends beyond the normal 75-year projection period, to illustrate costs and revenues 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, minus the 1.1-percent productivity adjustments assumed under current law for affected provider payment updates, beginning in about 2085.

Table III.C15 shows an estimated present value of Part B expenditures through the infinite horizon of $29.1 trillion, of which $17.7 trillion would occur during the first 75 years. Because such amounts, calculated over extremely long horizons, can be difficult to interpret, they are also shown as percentages of the present value of future GDP. Both figures are 2.1 percent of GDP. The table also indicates that approximately 27 percent of expenditures for each time period would be financed through beneficiary premiums and less than 0.3 percent financed through fees collected related to brand-name prescription drugs. The remaining 73 percent is 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, 2010; dollar amounts in trillions]

| | Present value | As a percentage of GDP |
|---|---|---|
| Unfunded obligations through the infinite horizon[1] | $0.0 | 0.0% |
| Expenditures | 29.1 | 2.1 |
| Income | 29.1 | 2.1 |
| Beneficiary premiums | 7.9 | 0.6 |
| General revenue contributions | 21.1 | 1.5 |
| Fees related to brand-name prescription drugs | 0.1 | 0.0 |
| Unfunded obligations from program inception through 2084[1] | 0.0 | 0.0 |
| Expenditures | 17.7 | 2.1 |
| Income | 17.7 | 2.1 |
| Beneficiary premiums | 4.8 | 0.6 |
| General revenue contributions | 12.9 | 1.5 |
| Fees related to brand-name prescription drugs | 0.1 | 0.0 |

[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 2010-2084 and for 2010 through the infinite horizon are $843.3 trillion and $1,404.4 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 present values separately for current versus future beneficiaries. As indicated, about 51 percent of the total, infinite-horizon cost is associated with current beneficiaries, with the remaining 49 percent attributable to beneficiaries becoming eligible for Part B benefits after January 1, 2010.

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

[Present values as of January 1, 2010; dollar amounts in trillions]

| | Present value | As a percentage of GDP |
|---|---|---|
| Future expenditures less income for current participants | $0.1 | 0.0% |
| Expenditures | 14.8 | 1.1 |
| Income | 14.7 | 1.0 |
| Beneficiary premiums | 4.0 | 0.3 |
| General revenue contributions | 10.6 | 0.8 |
| Fees related to brand-name prescription drugs | 0.0 | 0.0 |
| Less current trust fund (Income minus expenditures to date for past and current participants) | 0.1 | 0.0 |
| Equals unfunded obligations for past and current participants[1] | 0.0 | 0.0 |
| Expenditures | 14.7 | 1.0 |
| Income | 14.6 | 1.0 |
| Beneficiary premiums | 3.9 | 0.3 |
| General revenue contributions | 10.6 | 0.8 |
| Fees related to brand-name prescription drugs | 0.0 | 0.0 |
| Plus expenditures less income for future participants for the infinite horizon | −0.1 | −0.0 |
| Expenditures | 14.3 | 1.0 |
| Income | 14.4 | 1.0 |
| Beneficiary premiums | 3.9 | 0.3 |
| General revenue contributions | 10.5 | 0.7 |
| Fees related to brand-name prescription drugs | 0.0 | 0.0 |
| Equals unfunded obligations for all participants for the infinite future | −0.1 | −0.0 |
| Expenditures | 29.0 | 2.1 |
| Income | 29.0 | 2.1 |
| Beneficiary premiums | 7.8 | 0.6 |
| General revenue contributions | 21.0 | 1.5 |
| Fees related to brand-name prescription drugs | 0.0 | 0.0 |

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

Notes: 1. The estimated present value of GDP for 2010 through the infinite horizon is $1,404.4 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 expenditures as a percentage of GDP for the current annual report with the corresponding projections from the 2009 report. As indicated, current-law costs are now estimated to be far lower in most years than those in the 2009 annual report. By the end of the 75-year period, costs as a percentage of GDP would be only a little over one-half of their projected level in last year's report.

Several factors affect the new projections of Part B expenditures as a share of GDP compared to last year. First and most importantly, the Affordable Care Act has several provisions that strongly affect Part B spending. Under the ACA, the payment updates for most non-physician Part B types of service will be reduced in every future year by economy-wide productivity growth.[54] As noted previously, these permanent payment reductions are probably not feasible in the long

[54]These productivity adjustments are applied to 53 percent of projected Part B fee-for-service benefits in 2019.

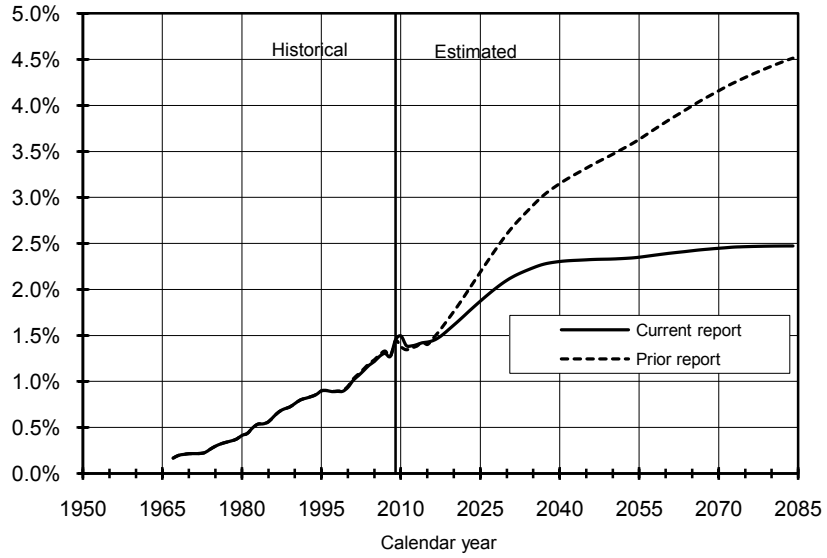
range without major changes in healthcare delivery systems, but they are included in the current-law estimates and result in a substantial reduction in the current-law Part B spending projections. The compounding effect of a 1.1-percent lower price update over succeeding decades is the primary factor contributing to the very large reduction in projected Part B costs. Under the illustrative alternative scenario, with more plausible physician and non-physician payment updates, Part B costs in 2080 are projected to be 5.12 percent of GDP—higher than shown in last year's projection, and much higher than the current-law projection.

Second, the ACA also reduces the growth in Part B payments to Medicare Advantage managed care plans in 2011 through 2017, which reduces the level of Part B spending estimates for all future years. Collectively, the other ACA provisions also result in a further small net reduction in Part B expenditures.

Third, under a new regulation, physician-administered drugs will no longer be included in the definition of physician services under the sustainable growth rate (SGR) payment system. Expenditures for such drugs have been removed from the actual past spending tabulations and from the allowed spending in the base year. The effect of this change was to substantially reduce the cumulative excess of actual spending over allowed spending. As a result, fewer annual reductions in physician payment rates would be required under current law to establish balance between actual and target physician expenditures. Specifically, total reductions of approximately 30 percent in December 2010 through 2012 would be required, compared to a total of 38 percent during 2010 through 2015 as estimated last year, prior to the change in regulation.

As shown in figure III.C5, the combined effect of the above factors is a current-law projection of a similar level of Part B expenditures as a percent of GDP through 2016, but a far lower level under current law thereafter. As noted previously, however, the current-law physician payment reductions are very unlikely to occur in practice, and, in the context of today's health care system, the slower price updates for most non-physician services would probably not be viable indefinitely into the future.

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




### 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 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 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 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 2009, around 37 percent of the non-low-income enrollees in Part D drug plans exercised this option.

### *a. Financial Operations in Calendar Year 2009*

The total assets of the account amounted to $0.9 billion on December 31, 2008. During calendar year 2009, total Part D expenditures were approximately $60.8 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 $60.9 billion. As a result, total assets in the Part D account increased to $1.1 billion as of December 31, 2009.

A statement of the revenue and expenditures of the Part D account of the SMI trust fund in calendar year 2009, 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 2009**

[In thousands]

| | | |
|---|---|---|
| Total assets of the Part D account in the trust fund, beginning of period | | $911,374 |
| Revenue: | | |
| Premiums from enrollees: | | |
| Premiums deducted from Social Security benefit checks | $2,478,857 | |
| Premiums paid directly to plans[1] | 3,805,105 | |
| Total premiums | | 6,283,961 |
| Government contributions: | | |
| Prescription drug benefits | 46,732,377 | |
| Prescription drug administrative expenses | 324,866 | |
| Total government contributions | | 47,057,243 |
| Payments from States | | 7,571,857 |
| Interest on investments | | 11,896 |
| Total revenue | | $60,924,958 |
| Expenditures: | | |
| Part D benefit payments[1] | | $60,453,149 |
| Part D administrative expenses | | 324,866 |
| Total expenditures | | $60,778,015 |
| Net addition to the trust fund | | 146,943 |
| Total assets of the Part D account in the trust fund, end of period | | $1,058,317 |

[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, $2.5 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 $6.3 billion or 10.3 percent of total revenue.

In calendar year 2009, contributions received from the general fund of the Treasury amounted to $47.1 billion, which accounted for 77.2 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; this percentage phases down over a 10-year period to 75 percent in 2015. For calendar year 2009, these State payments amounted to $7.6 billion.

Another source of Part D revenue is interest received on investments held by the Part D account. Since 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 2009 was virtually negligible ($12 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 improve the quality, efficiency, and economy of health care 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, because 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 $60.8 billion in total Part D expenditures, $60.5 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 2009 with the estimates presented in the 2008 and 2009 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. Actual Part D benefit costs in calendar year 2009 were a little lower than projected last year and nearly identical to the projection from the 2008 report. Premium revenues represented a slightly greater share of total projected costs than previously estimated in 2008.

**Table III.C18.—Comparison of Actual and Estimated Operations of the Part D Account in the SMI Trust Fund, Calendar Year 2009**

[Dollar amounts in millions]

| | | Comparison of actual experience with estimates for calendar year 2009 published in: | | | |
|---|---|---|---|---|---|
| | | 2009 report | | 2008 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 | $6,284 | $6,323 | 99% | $5,956 | 106% |
| State transfers | 7,572 | 7,856 | 96 | 7,425 | 102 |
| Government contributions | 47,057 | 48,538 | 97 | 48,195 | 98 |
| Benefit payments | 60,453 | 62,571 | 97 | 60,718 | 100 |

[1]Under the intermediate assumptions.

(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.[55] 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 2008 and 2009.

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 (2010-2019)*

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. Beginning in 2011, beneficiaries with modified adjusted gross incomes exceeding a specified threshold will have to pay "income-related" premiums in addition to the premiums charged by the plans in which the individuals enrolled in. The extra premiums will be collected by Medicare and will reduce the Treasury transfers amounts. The appropriation language provides resources for benefit payments under the Part D drug benefit program, without further

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

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 benefit payments and 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 slightly lower than those in the 2009 report. The difference is attributable in part to the actual experience in 2008 and 2009. In estimating drug spending for 2008, it was assumed that the lag time from the date in which a claim was incurred to when the data were received, and thus as the incurred but not reported drug spending, would be similar to the 2007 experience. In practice, however, the lag time was much shorter than expected, causing incurred but not reported drug spending—and, in turn, total drug spending for 2008—to be lower than estimated last year. Part D spending for 2009 was also lower than anticipated. In addition, there was a reduction in the projected growth in prescription drug spending in the U.S. for the next 10 years. The slower growth estimates are due to a higher market penetration of lower-cost generic drugs and a decline in the number of new drug products that are expected to reach the market. The reduction in projected Part D costs, described above, is partially offset by the cost of gradually phasing out the benefit formula coverage gap (or "donut hole") during 2011-2020, as provided for by the Affordable Care Act.

Table III.C19 shows the estimated operations of the Part D account under the intermediate assumptions on a calendar-year basis through 2019.

**Table III.C19.—Operations of the Part D Account in the SMI Trust Fund (Cash Basis) during Calendar Years 2004-2019**

[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 |
| 2009 | 6.3[6] | 47.1 | 7.6 | 0.0 | 60.9 | 60.5 | 0.3 | 60.8 | 0.1 | 1.1 |
| Intermediate estimates: | | | | | | | | | | |
| 2010 | 6.4[6] | 50.8 | 4.2 | 0.0 | 61.4 | 61.8 | 0.2 | 62.0 | −0.6 | 0.5 |
| 2011 | 8.0 | 55.4 | 8.0 | 0.0 | 71.5 | 71.0 | 0.3 | 71.2 | 0.3 | 0.7 |
| 2012 | 10.1 | 59.2 | 9.2 | 0.0 | 78.5 | 78.2 | 0.3 | 78.4 | 0.0 | 0.8 |
| 2013 | 11.9 | 63.9 | 9.8 | 0.0 | 85.6 | 85.3 | 0.3 | 85.6 | 0.0 | 0.8 |
| 2014 | 13.4 | 69.3 | 10.3 | 0.0 | 93.0 | 92.7 | 0.3 | 93.0 | 0.0 | 0.9 |
| 2015 | 15.9[6] | 75.8 | 10.9 | 0.0 | 102.5 | 102.2 | 0.3 | 102.5 | 0.0 | 0.9 |
| 2016 | 16.5[6] | 84.3 | 11.7 | 0.0 | 112.6 | 112.2 | 0.3 | 112.5 | 0.1 | 1.0 |
| 2017 | 18.9 | 91.9 | 12.7 | 0.0 | 123.5 | 123.1 | 0.3 | 123.4 | 0.1 | 1.1 |
| 2018 | 21.0 | 101.1 | 13.8 | 0.0 | 135.9 | 135.5 | 0.3 | 135.8 | 0.1 | 1.2 |
| 2019 | 23.4 | 111.5 | 15.0 | 0.0 | 150.0 | 149.5 | 0.4 | 149.9 | 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 actually occurred on December 31, 2009. Consequently the Part D premiums withheld from the checks were added to the Part D account, on December 31, 2009. This amount is excluded from the premium 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, 2019**

| 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% | 1,563 | −8.6% | 0.4 |
| 2008 | 49.0 | 0.4 | 1,511 | −3.3 | 0.3 |
| 2009[1] | 60.5 | 23.4 | 1,810 | 19.8 | 0.4 |
| Intermediate estimates: | | | | | |
| 2010[1] | 61.8 | 2.2 | 1,797 | −0.7 | 0.4 |
| 2011 | 71.0 | 14.9 | 2,015 | 12.1 | 0.5 |
| 2012 | 78.2 | 10.1 | 2,107 | 4.6 | 0.5 |
| 2013 | 85.3 | 9.1 | 2,233 | 6.0 | 0.5 |
| 2014 | 92.7 | 8.7 | 2,364 | 5.9 | 0.5 |
| 2015[1] | 102.2 | 10.2 | 2,538 | 7.4 | 0.5 |
| 2016[1] | 112.2 | 9.8 | 2,713 | 6.9 | 0.5 |
| 2017 | 123.1 | 9.7 | 2,895 | 6.7 | 0.6 |
| 2018 | 135.5 | 10.1 | 3,101 | 7.1 | 0.6 |
| 2019 | 149.5 | 10.4 | 3,330 | 7.4 | 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. The somewhat volatile pattern of annual growth rates is caused by the payment structure of the Part D program; that is, prospective payments to the plans are made based on the plan bids and then are reconciled to actual prescription drug expenditures after the end of the year. For example, 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. In contrast, actual drug spending exceeded the plan bids in 2008, resulting in more than $2 billion in additional Part D outlays 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 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-cost, and high-cost assumptions.

**Table III.C21.—Estimated Operations of the Part D Account in the SMI Trust Fund during Calendar Years 2009-2019, 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: | | | | | |
| 2009 | $6.3[2] | $54.6 | $60.9 | $60.8 | $1.1 |
| 2010 | 6.4[2] | 55.0 | 61.4 | 62.0 | 0.5 |
| 2011 | 8.0 | 63.4 | 71.5 | 71.2 | 0.7 |
| 2012 | 10.1 | 68.4 | 78.5 | 78.4 | 0.8 |
| 2013 | 11.9 | 73.7 | 85.6 | 85.6 | 0.8 |
| 2014 | 13.4 | 79.6 | 93.0 | 93.0 | 0.9 |
| 2015 | 15.9[2] | 86.7 | 102.5 | 102.5 | 0.9 |
| 2016 | 16.5[2] | 96.1 | 112.6 | 112.5 | 1.0 |
| 2017 | 18.9 | 104.6 | 123.5 | 123.4 | 1.1 |
| 2018 | 21.0 | 114.9 | 135.9 | 135.8 | 1.2 |
| 2019 | 23.4 | 126.6 | 150.0 | 149.9 | 1.3 |
| Low-cost: | | | | | |
| 2009 | 6.3[2] | 54.6 | 60.9 | 60.8 | 1.1 |
| 2010 | 6.4[2] | 53.8 | 60.3 | 60.8 | 0.5 |
| 2011 | 7.5 | 58.2 | 65.7 | 65.5 | 0.7 |
| 2012 | 8.3 | 59.2 | 67.5 | 67.5 | 0.7 |
| 2013 | 9.4 | 62.4 | 71.8 | 71.8 | 0.7 |
| 2014 | 10.4 | 65.5 | 75.8 | 75.8 | 0.7 |
| 2015 | 12.0[2] | 69.2 | 81.1 | 81.1 | 0.7 |
| 2016 | 12.2[2] | 74.3 | 86.5 | 86.4 | 0.8 |
| 2017 | 13.8 | 78.7 | 92.5 | 92.4 | 0.8 |
| 2018 | 15.1 | 84.1 | 99.2 | 99.2 | 0.8 |
| 2019 | 16.6 | 90.2 | 106.7 | 106.7 | 0.9 |
| High-cost: | | | | | |
| 2009 | 6.3[2] | 54.6 | 60.9 | 60.8 | 1.1 |
| 2010 | 6.4[2] | 56.2 | 62.6 | 63.2 | 0.5 |
| 2011 | 8.6 | 68.9 | 77.5 | 77.2 | 0.8 |
| 2012 | 11.6 | 78.1 | 89.7 | 89.6 | 0.8 |
| 2013 | 14.0 | 85.7 | 99.7 | 99.6 | 0.9 |
| 2014 | 16.1 | 95.3 | 111.4 | 111.3 | 1.0 |
| 2015 | 19.3[2] | 106.8 | 126.1 | 126.0 | 1.1 |
| 2016 | 20.4[2] | 121.9 | 142.2 | 142.1 | 1.3 |
| 2017 | 23.7 | 136.5 | 160.2 | 160.0 | 1.4 |
| 2018 | 26.7 | 154.3 | 181.0 | 180.8 | 1.6 |
| 2019 | 30.1 | 174.8 | 204.9 | 204.7 | 1.8 |

[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 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 2019 both income and expenditures would be around 29 percent lower than projected under the intermediate assumptions. The corresponding amounts under the high-cost assumptions would be around 37 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 2010*

As noted previously, the Part D account in the SMI trust fund will be in financial balance indefinitely as a result of its 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.[56] 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 2006-2009 Part D payment transactions. It has also been used for many years in setting appropriations for Federal matching funds for the Medicaid program.

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.[57]

Another potential Part D liability exists to the extent that Part D reinsurance payments and employer subsidy payments are based on plan estimates.[58] 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.

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

[57]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 that are incurred but unreported 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.

[58]These estimates are subject to actuarial review by the Office of the Actuary at CMS.

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.

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

### *c. Long-Range Estimates*

In section III.C3b, the expected operations of the Part D account over the next 10 years were presented. In this section, the long-range expenditures of the account are examined under the intermediate assumptions. Due to its automatic financing provisions, the Part D 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.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 2009-2080.[59] The 75-year projection period fully allows for the presentation of likely future trends, such as the large increase in enrollees after 2010 when the baby boom generation will begin to receive benefits.

[59]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 |
|---|---|
| 2009 | 0.41% |
| 2010 | 0.43 |
| 2011 | 0.45 |
| 2012 | 0.47 |
| 2013 | 0.49 |
| 2014 | 0.50 |
| 2015 | 0.52 |
| 2016 | 0.55 |
| 2017 | 0.57 |
| 2018 | 0.60 |
| 2019 | 0.64 |
| 2020 | 0.67 |
| 2025 | 0.86 |
| 2030 | 1.02 |
| 2035 | 1.13 |
| 2040 | 1.21 |
| 2045 | 1.28 |
| 2050 | 1.35 |
| 2055 | 1.42 |
| 2060 | 1.50 |
| 2065 | 1.57 |
| 2070 | 1.63 |
| 2075 | 1.70 |
| 2080 | 1.75 |

[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 "baseline" growth rates determined by the economic model described in sections II.C and IV.D. Based on these assumptions and projected demographic changes, incurred Part D expenditures as a percentage of GDP would increase rapidly from 0.41 percent in 2009 to 1.75 percent in 2080.

This report focuses on the 75-year period from 2010 to 2084 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 2085.

Table III.C23 shows an estimated present value of Part D expenditures through the infinite horizon of $21.2 trillion, of which $9.7 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 16 percent of expenditures would be financed through beneficiary premiums and 10 percent through State transfers, with the remaining 74 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, 2010; dollar amounts in trillions]

| | Present value | As a percentage of GDP |
|---|---|---|
| Unfunded obligations through the infinite horizon[1] | $0.0 | 0.0% |
| Expenditures | 21.2 | 1.5 |
| Income | 21.2 | 1.5 |
| Beneficiary premiums | 3.3 | 0.2 |
| State transfers | 2.1 | 0.2 |
| General revenue contributions | 15.8 | 1.1 |
| Unfunded obligations from program inception through 2084[1] | 0.0 | 0.0 |
| Expenditures | 9.7 | 1.2 |
| Income | 9.7 | 1.2 |
| Beneficiary premiums | 1.5 | 0.2 |
| 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 2010-2084 and for 2010 through the infinite horizon are $843.3 trillion and $1,404.4 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, 2010.

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

[Present values as of January 1, 2010; dollar amounts in trillions]

| | Present value | As a percentage of GDP |
|---|---|---|
| Future expenditures less income for current participants | $0.0 | 0.0% |
| Expenditures | 7.0 | 0.5 |
| Income | 7.0 | 0.5 |
| Beneficiary premiums | 1.1 | 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 | 7.0 | 0.5 |
| Income | 7.0 | 0.5 |
| Beneficiary premiums | 1.1 | 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 | 14.2 | 1.0 |
| Income | 14.2 | 1.0 |
| Beneficiary premiums | 2.2 | 0.2 |
| State transfers | 1.4 | 0.1 |
| General revenue contributions | 10.6 | 0.8 |
| Equals unfunded obligations for all participants for the infinite future | 0.0 | 0.0 |
| Expenditures | 21.2 | 1.5 |
| Income | 21.2 | 1.5 |
| Beneficiary premiums | 3.3 | 0.2 |
| State transfers | 2.1 | 0.2 |
| General revenue contributions | 15.8 | 1.1 |

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

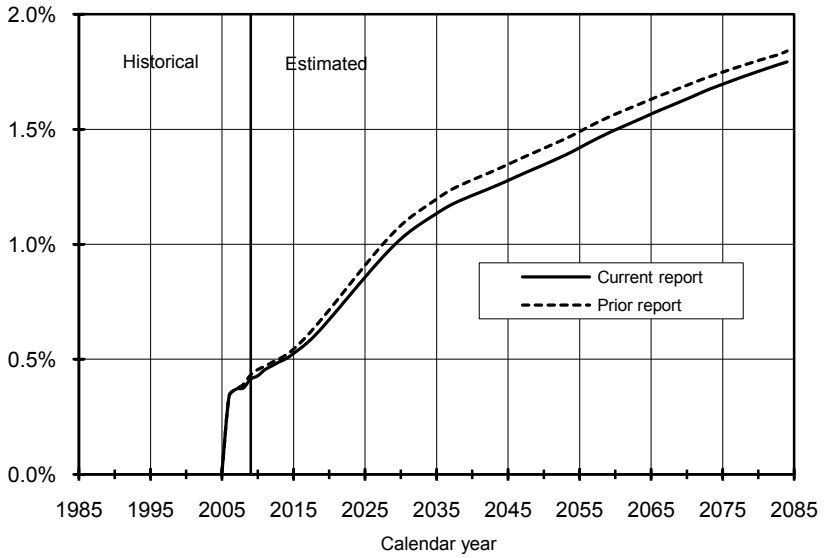
Notes: 1. The estimated present value of GDP for 2010 through the infinite horizon is $1,404.4 trillion. See note 2 of table III.B10.
2 Totals do not necessarily equal the sums of rounded components.

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, as well as 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 2009 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. The percentage differential is −0.02 percent of GDP in 2009 and grows to −0.05 percent of GDP in 2084, primarily due to the lower assumed growth rates for prescription drug expenditures in the U.S. overall. Partially offsetting the lower costs due to this assumption change is the projected cost of phasing out the Part D coverage gap, as specified by the Affordable Care Act.

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 2010 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal 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. Accordingly, 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 2010, the prospective payment rates have already been determined. For fiscal years 2011 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), minus a specified percentage. 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 compen-sation | Hospital hourly compen-sation differential | Hospital hourly compen-sation | 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: | | | | | | | | | | | | | |
| 2000 | 6.5% | −2.5% | 3.80% | 3.5% | −0.6% | 2.90% | 3.4% | −2.1% | 1.3% | 0.4% | −0.1% | −1.6% | 1.3% |
| 2001 | 4.5 | 0.8 | 5.30 | 2.7 | 0.5 | 3.20 | 4.5 | −1.1 | 1.0 | 2.3 | 1.1 | 1.5 | 9.7 |
| 2002 | 3.4 | 1.6 | 5.10 | 1.4 | 0.5 | 1.90 | 3.8 | −1.3 | 1.0 | 2.1 | −0.1 | 2.5 | 8.2 |
| 2003 | 5.2 | −1.0 | 4.20 | 2.2 | 1.5 | 3.70 | 4.0 | −0.9 | 1.7 | 0.9 | −0.2 | −0.6 | 4.9 |
| 2004 | 3.7 | 0.2 | 3.90 | 2.6 | 1.4 | 4.00 | 3.9 | −0.6 | 1.8 | 0.1 | −0.7 | 1.3 | 5.9 |
| 2005 | 3.8 | 0.1 | 3.90 | 3.5 | 0.7 | 4.20 | 4.0 | −0.6 | 1.8 | −0.9 | 0.4 | 1.4 | 6.3 |
| 2006 | 3.9 | −0.1 | 3.80 | 3.2 | 0.7 | 3.90 | 3.8 | −0.2 | 2.0 | −3.8 | −1.4 | −0.2 | 0.1 |
| 2007 | 4.2 | −0.6 | 3.60 | 2.9 | 0.6 | 3.50 | 3.6 | −0.3 | 2.2 | −3.4 | −1.7 | 0.2 | 0.5 |
| 2008 | 3 0 | 0.3 | 3.30 | 4.1 | 1.0 | 5.10 | 4.0 | −0.2 | 2.5 | −3.1 | −0.7 | 0.5 | 2.9 |
| 2009 | 3.1 | −0.4 | 2.70 | −0.7 | 2.0 | 1.30 | 2.1 | 0.7 | 1.9 | −2.5 | 0.0 | 1.3 | 3.6 |
| Intermediate estimates: | | | | | | | | | | | | | |
| 2010 | 4.7 | −2.3 | 2.30 | 2 0 | 0.3 | 2.30 | 2.3 | −0.3 | 2.3 | −0.9 | −0.1 | 0.6 | 3.9 |
| 2011 | 3.3 | 0.0 | 3.30 | 1.7 | 0.6 | 2.31 | 2.9 | −0.6 | 2.8 | 0.0 | −0.3 | −0.2 | 4.6 |
| 2012 | 3.9 | 0.0 | 3.90 | 2.3 | 0.5 | 2.81 | 3.5 | −1.7 | 3.5 | 0.8 | −0.7 | 0.5 | 6.0 |
| 2013 | 4.3 | 0.0 | 4.30 | 2.7 | 0.4 | 3.11 | 3.8 | −1.6 | 3.4 | 1.8 | −0.6 | −0.5 | 6.4 |
| 2014 | 4.6 | 0.0 | 4.60 | 2.8 | 0.3 | 3.11 | 4.0 | −1.5 | 3.0 | 2.6 | −0.5 | −0.2 | 7.6 |
| 2015 | 4.5 | 0.0 | 4.50 | 2.8 | 0.2 | 3.01 | 3.9 | −1.3 | 2.9 | 2.9 | −0.5 | −2.2 | 5.7 |
| 2016 | 4.4 | 0.0 | 4.40 | 2.8 | 0.1 | 2.90 | 3.8 | −1.4 | 2.9 | 2.6 | −0.4 | 0.4 | 8.1 |
| 2017 | 4.2 | 0.0 | 4.20 | 2.8 | 0.0 | 2.80 | 3.7 | −1.9 | 2.9 | 2.0 | −0.2 | 0.9 | 7.5 |
| 2018 | 4.2 | 0.0 | 4.20 | 2.8 | 0.0 | 2.80 | 3.7 | −1.9 | 2.9 | 1.2 | −0.1 | 1.2 | 7.1 |
| 2019 | 4.2 | 0.0 | 4.20 | 2.8 | 0.0 | 2.80 | 3.7 | −1.7 | 2.9 | 0.6 | −0.1 | 1.1 | 6.6 |
| 2020 | 4.1 | 0.0 | 4.10 | 2.8 | 0.0 | 2.80 | 3.6 | −1.1 | 2.9 | 0.3 | 0.0 | 1.0 | 6.9 |
| 2025 | 4.1 | 0.0 | 4.10 | 2.8 | 0.0 | 2.80 | 3.6 | −1.1 | 2.5 | 0.0 | 0.4 | 1.0 | 6.6 |
| 2030 | 4.1 | 0.0 | 4.10 | 2.8 | 0.0 | 2.80 | 3.6 | −1.1 | 1.7 | 0.0 | 0.9 | 1.0 | 6.3 |

[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. Also reflects the downward adjustments to price updates based on the 10-year moving average of private, non-farm business multifactor productivity growth in 2012 and later, and additional decreases in updates ranging from 0.1 percentage point to 0.75 percentage point from 2010 through 2019, as introduced by the Affordable Care Act.

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 compensation can be analyzed and projected in terms of (i) the assumed increases in hourly compensation in employment in the general economy; and (ii) the difference between increases in hourly compensation in the general economy and the hospital hourly compensation used in the hospital input price index. Since HI began, the differential between hospital workers' hourly compensation and hourly compensation in the general economy has fluctuated widely and averaged about 0.0 percent since 2000. This differential is assumed to remain at zero 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 averaged about 0.8 percent during 2000-2009. Over the short term, the hospital price differential is assumed to decrease gradually from recent levels and then to level off at 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.[60] 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

[60]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. (Accordingly, 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. Beginning in fiscal year 2010, the Affordable Care Act mandates amounts to be subtracted from the input price index, including the increase in economy-wide multifactor productivity in 2012 and later, and amounts ranging from 0.1 percentage point to 0.75 percentage point for 2010 through 2019. As a result of these adjustments, the unit input intensity allowance, as indicated in table IV.A1, is negative throughout the first 25-year projection period.

Increases in payments for inpatient hospital services also reflect growth in the number of inpatient hospital admissions covered under HI. As shown in table IV.A1, increases in admissions are attributable to growth in both HI fee-for-service enrollment and admission incidence (admissions per beneficiary).[61] The historical and projected growth in enrollment reflects 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. Growth in enrollment is 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 reduced the number of beneficiaries with fee-for-service Medicare coverage and thereby reduced 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, enrollment in Medicare Advantage plans accelerated rapidly. The proportion of beneficiaries in private plans is expected to level off quickly and then start to decrease throughout the rest of the short-range projection period due to the impact of the MA payment "benchmark" reductions introduced by the Affordable Care Act.

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

[61]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.

The average complexity of hospital admissions (case mix) is expected to increase by 1.0 percent annually in fiscal years 2010 through 2034 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. A complicating factor is the advent of the new MS-DRG system, which led to significant increases in case mix as a result of claims coding. Much of the MS-DRG impact has been offset through statutory budget neutrality adjustments. Although the size of these adjustments was limited by law in 2008 and 2009, the law allows subsequent 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 (DSH)" payments, and payments to hospitals not included in the prospective payment system. Of particular significance are the forthcoming reductions in DSH payments under the ACA, in recognition of the decrease in the number of uninsured hospital patients that will result from the major coverage expansions in 2014 and later.

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 that time, 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[62] in SNFs are caused principally by rising payroll costs for nurses and other required skilled labor. For 1998 and later, such costs 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 and 2008, which is expected to gradually slow to more historical values over the next few years. In 2010, a reduction of about 3.3 percent was applied to all the rates to better match payments from the old payment system to the new payment system. 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.

[62]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: | | | | | | | | | |
| 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 | 2.2 | 6.7 |
| 2002 | 8.7 | 9.8 | −5.1 | −8.5 | 6.0 | 14.4 | 6.1 | 0.4 | 5.7 |
| 2003 | 5.1 | 2.4 | −12.8 | 0.1 | 4.0 | −0.5 | 4.0 | 2.7 | 1.3 |
| 2004 | 5.8 | 13.6 | 9.5 | 10.5 | 7.7 | 18.3 | 7.9 | 6.1 | 1.7 |
| 2005 | 5.7 | 10.9 | 7.1 | 21.0 | 8.7 | −2.6 | 8.5 | 5.3 | 3.0 |
| 2006 | 0.2 | 7.6 | 2.2 | 28.0 | 5.8 | 0.0 | 5.7 | 6.2 | −0.6 |
| 2007 | 0.4 | 8.3 | 3.9 | 22.6 | 5.8 | −1.0 | 5.7 | 5.8 | −0.1 |
| 2008 | 2.8 | 9.1 | 6.5 | 22.0 | 7.8 | 10.6 | 7.8 | 1.9 | 5.9 |
| 2009 | 3.5 | 5.6 | 9.6 | 19.1 | 7.7 | −2.5 | 7.5 | −4.6 | 12.6 |
| Intermediate estimates: | | | | | | | | | |
| 2010 | 3.8 | 2.3 | 3.1 | 2.5 | 3.4 | 6.4 | 3.4 | 4.3 | −0.8 |
| 2011 | 4.6 | 5.6 | 0.7 | 3.8 | 4.5 | 6.8 | 4.5 | 5.1 | −0.6 |
| 2012 | 6.0 | 5.8 | 6.1 | −1.3 | 4.2 | 9.3 | 4.2 | 6.6 | −2.2 |
| 2013 | 6.4 | 6.9 | 7.8 | −2.8 | 4.3 | 10.3 | 4.4 | 6.8 | −2.3 |
| 2014 | 7.7 | 8.2 | 6.1 | −5.9 | 4.6 | 10.6 | 4.7 | 6.4 | −1.6 |
| 2015 | 5.8 | 8.5 | 5.2 | −9.6 | 3.0 | 10.5 | 3.1 | 5.8 | −2.6 |
| 2016 | 8.2 | 8.3 | 4.3 | −7.6 | 5.2 | 10.3 | 5.3 | 5.8 | −0.5 |
| 2017 | 7.6 | 7.9 | 4.4 | −6.1 | 5.4 | 9.4 | 5.4 | 5.3 | 0.1 |
| 2018 | 7.2 | 7.3 | 7.5 | −2.1 | 5.9 | 8.6 | 5.9 | 4.9 | 1.0 |
| 2019 | 6.6 | 6.7 | 6.9 | 2.2 | 6.1 | 7.8 | 6.1 | 4.6 | 1.4 |
| 2020 | 6.9 | 6.4 | 6.7 | 4.6 | 6.5 | 7.4 | 6.5 | 4.4 | 2.0 |
| 2025 | 6.7 | 7.0 | 6.9 | 6.7 | 6.7 | 6.7 | 6.7 | 4.4 | 2.2 |
| 2030 | 6.3 | 7.2 | 6.8 | 6.5 | 6.5 | 5.9 | 6.5 | 4.5 | 1.9 |

[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).
[7]Includes the declining share of costs drawn from HI for coverage of certain home health services transferred from HI to SMI Part B.

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. 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 that resulted 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 and 2009, based on preliminary data, a very large increase in utilization occurred. Moreover, 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. (In 2010, limits were placed on the proportion of total payments that an agency could receive in the form of outlier payments. Also, prosecution of fraud cases has resulted in the closing of a number of purported home health agencies.) For 2010 and later, these utilization and intensity increases are expected to slow, so more modest increases are assumed for the rest of the projection period due to the growth and aging of the population.

Reimbursement per episode of care[63] 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 increase have been observed, although a substantial increase occurred in 2008. CMS is adjusting HHA payment levels over the next several years to offset gradually the financial effect of the unduly high 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 were originally very small relative to total HI benefit payments, but they have grown rapidly in most years and now substantially exceed the level of HI home health expenditures. This growth rate slowed dramatically in the mid-to-late 1990s but rebounded sharply in 1999 through 2006. In 2007 to 2009, 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 the growth in the number of covered days. Increases in hospice payments are not shown separately in table IV.A2 but are included in the weighted average increase for all HI types of service.

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

### *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 growth 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 CMS. 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 compensation 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 2010 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds (OASDI). 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 most meaningful measure of HI 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 −0.8 percent per year in 2010, and then increasing to a level of about 1.9 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 an initial decrease, followed by 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 3.7 percent less than the rate for taxable payroll by 2010 but then increases, reaching about 0.1 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 decreasing from about 2.1 percent more than taxable payroll in 2010 before increasing to about 4.0 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: | | | | | | | | |
| 2010 | 4.7% | 2.0% | 0.2% | 3.9% | 3.4% | 4.3% | -0.8% | 3.66% |
| 2011 | 3.3 | 1.7 | 1.9 | 4.6 | 4.5 | 5.1 | -0.6 | 3.63 |
| 2012 | 3.9 | 2.3 | 2.6 | 6.0 | 4.2 | 6.6 | -2.2 | 3.55 |
| 2013 | 4.3 | 2.7 | 2.6 | 6.4 | 4.4 | 6.8 | -2.3 | 3.47 |
| 2014 | 4.6 | 2.8 | 3.6 | 7.6 | 4.7 | 6.4 | -1.6 | 3.41 |
| 2015 | 4.5 | 2.8 | 1.8 | 5.7 | 3.1 | 5.8 | -2.6 | 3.33 |
| 2016 | 4.4 | 2.8 | 4.2 | 8.1 | 5.3 | 5.8 | -0.5 | 3.31 |
| 2017 | 4.2 | 2.8 | 3.7 | 7.5 | 5.4 | 5.3 | 0.1 | 3.31 |
| 2018 | 4.2 | 2.8 | 3.3 | 7.1 | 5.9 | 4.9 | 1.0 | 3.35 |
| 2019 | 4.2 | 2.8 | 2.8 | 6.6 | 6.1 | 4.6 | 1.4 | 3.39 |
| 2020 | 4.1 | 2.8 | 3.1 | 6.9 | 6.5 | 4.4 | 2.0 | 3.46 |
| 2025 | 4.1 | 2.8 | 2.9 | 6.6 | 6.7 | 4.4 | 2.2 | 3.87 |
| 2030 | 4.1 | 2.8 | 2.6 | 6.3 | 6.5 | 4.5 | 1.9 | 4.31 |
| Low-cost: | | | | | | | | |
| 2010 | 5.1 | 1.9 | -2.8 | 0.9 | 1.2 | 5.2 | -3.7 | 3.53 |
| 2011 | 3.0 | 1.1 | 0.7 | 3.0 | 3.3 | 5.6 | -2.2 | 3.45 |
| 2012 | 3.2 | 1.6 | 1.4 | 3.9 | 1.0 | 6.7 | -5.3 | 3.27 |
| 2013 | 3.4 | 1.8 | 1.2 | 3.9 | 2.1 | 6.5 | -4.1 | 3.13 |
| 2014 | 3.6 | 1.8 | 2.1 | 5.1 | 2.3 | 6.0 | -3.5 | 3.03 |
| 2015 | 3.4 | 1.8 | 0.2 | 3.0 | 0.7 | 5.5 | -4.5 | 2.89 |
| 2016 | 3.7 | 1.8 | 2.3 | 5.4 | 2.7 | 5.3 | -2.4 | 2.82 |
| 2017 | 3.6 | 1.8 | 1.8 | 4.8 | 2.9 | 4.7 | -1.7 | 2.77 |
| 2018 | 3.6 | 1.8 | 1.5 | 4.5 | 3.5 | 4.4 | -0.9 | 2.75 |
| 2019 | 3.7 | 1.8 | 1.0 | 4.0 | 3.7 | 4.1 | -0.4 | 2.73 |
| 2020 | 3.5 | 1.8 | 1.5 | 4.5 | 4.3 | 4.2 | 0.1 | 2.74 |
| 2025 | 3.5 | 1.8 | 1.3 | 4.3 | 4.4 | 4.1 | 0.4 | 2.79 |
| 2030 | 3.5 | 1.8 | 1.0 | 3.9 | 4.2 | 4.2 | 0.1 | 2.83 |
| High-cost: | | | | | | | | |
| 2010 | 4.4 | 2.2 | 3.2 | 6.8 | 5.7 | 3.6 | 2.1 | 3.78 |
| 2011 | 3.8 | 2.5 | 3.2 | 6.6 | 6.1 | 5.1 | 0.9 | 3.82 |
| 2012 | 5.4 | 4.3 | 3.5 | 8.7 | 8.4 | 7.4 | 0.9 | 3.85 |
| 2013 | 5.9 | 4.4 | 3.7 | 9.2 | 7.2 | 7.5 | -0.2 | 3.85 |
| 2014 | 5.7 | 3.8 | 5.1 | 10.4 | 7.4 | 7.0 | 0.4 | 3.86 |
| 2015 | 5.6 | 3.8 | 3.5 | 8.6 | 6.0 | 6.5 | -0.5 | 3.84 |
| 2016 | 5.3 | 3.8 | 5.9 | 10.9 | 8.0 | 6.4 | 1.6 | 3.90 |
| 2017 | 4.9 | 3.8 | 5.4 | 10.1 | 8.0 | 5.7 | 2.2 | 3.99 |
| 2018 | 4.8 | 3.8 | 5.2 | 9.8 | 8.7 | 5.5 | 3.0 | 4.11 |
| 2019 | 5.0 | 3.8 | 4.6 | 9.3 | 8.9 | 5.4 | 3.3 | 4.24 |
| 2020 | 4.7 | 3.8 | 4.7 | 9.3 | 9.0 | 4.8 | 4.0 | 4.41 |
| 2025 | 4.7 | 3.8 | 4.5 | 9.1 | 9.2 | 4.7 | 4.3 | 5.45 |
| 2030 | 4.7 | 3.8 | 4.1 | 8.7 | 9.0 | 4.8 | 4.0 | 6.68 |

[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 2000 to

2009. As mentioned earlier, HI now makes payments to the great majority of providers on a prospective basis. 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. Legislation has been enacted affecting the inpatient PPS payment levels to hospitals for most of the past 25 years, and the Affordable Care Act mandates reductions of about 1.1 percent per year in the market basket updates for hospitals and most other providers for all years in the future. Although the new law is assumed to apply in all years, there are serious concerns as to whether these future scheduled update reductions are workable in the long range.

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.

Under the intermediate assumptions, 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 the baseline rates determined by the economic model described in sections II.C and IV.D less the economy-wide productivity adjustments. This rate is about 0.2 percent faster than the increase in Gross Domestic Product (GDP) per capita in 2034 but would slow down to about 0.8 percent slower than GDP per capita by 2084. HI expenditures, which were 3.7 percent of taxable payroll in 2009, increase to 4.3 percent by 2030 and to 4.9 percent by 2080 under the intermediate assumptions. Accordingly, if all of the projection assumptions are realized over time, the HI income rates provided in current law (3.83 percent of taxable payroll) would be 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 2059, 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 2.8 percent of taxable payroll in 2030, decreasing to 2.3 percent of taxable payroll by 2080 (only about three-fifths of the current level). Under the high-cost alternative, HI expenditures would increase to 6.7 percent of taxable payroll in 2030, and to 10.6 percent of taxable payroll in 2080.

Projections have also been prepared by the CMS Office of the Actuary for an illustrative alternative to current law to help quantify the potential understatement of HI costs projected for the long range under current law. If the slower price updates are not feasible in the long range and are phased out during 2020-2034, then the HI cost rate would be 4.5 percent in 2030 and 8.9 percent in 2080. These levels are about 5 percent and 80 percent higher, respectively, than the current-law estimates under the intermediate assumptions, illustrating the very strong impact of the market basket reductions scheduled in current law.

## *B. SUPPLEMENTARY MEDICAL INSURANCE*

SMI consists of Part B and, since 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 thus 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.

*Actuarial Methodology*

It is important to note that the current-law Part B projections include very large negative updates to physician payments, and yearly adjustments for economy-wide productivity growth applied to most other Part B types of service. Both of these payment reductions are unlikely to be workable—immediately in the case of the physician payment reductions, and more gradually in the long range for the productivity adjustments—resulting in current-law Part B estimates that are likely understated to a considerable degree.

(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. Accordingly, 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 such services as renal dialysis performed in free-standing dialysis facilities, services in outpatient rehabilitation facilities, and services in rural health clinics.

Separate payment systems exist 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. They send to CMS a record of the allowed payment, the applicable deductible and coinsurance, and the amount reimbursed after reduction for coinsurance and the deductible.

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. Accordingly, 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),[64] 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 2011 through 2019. The physician fee updates and MEI increases shown through 2010 are actual values. For 2010-2012, the physician updates are unrealistically low, due to the requirements of the current-law sustainable growth rate (SGR) system. Congress is virtually certain to override the scheduled negative updates. The modified update shown in column 4 reflects the growth in the MEI, the update adjustment factor, and all legislative impacts, such as the addition of certain preventive services under the Affordable Care Act.

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

**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: | | | | | | | | | | |
| 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 | 5.0 | 7.7 | 5.5 |
| 2007 | 2.1 | −2.1 | 0.0 | −1.4 | 3.5 | 2.1 | 2.9 | 2.9 | 9.8 | 4.7 |
| 2008 | 1.8 | −1.3 | 0.5 | 0.4 | 3.4 | 3.8 | 4.1 | 7.0 | 7.4 | 4.2 |
| 2009 | 1.6 | −0.5 | 1.1 | 1.6 | 3.6 | 5.3 | −0.7 | −8.5 | 10.0 | 5.4 |
| 2010 | 1.2[6] | −1.9[6] | −0.7[6] | 1.2 | 5.1 | 6.3 | 2.0 | 4.4 | 5.8 | 3.6 |
| 2011 | 0.5 | −26.0 | −25.6 | −26.0 | 9.9 | −18.6 | 1.7 | 2.9 | −0.1 | 4.1 |
| 2012 | 1.0 | −3.9 | −2.9 | −5.2 | 2.0 | −3.3 | 2.3 | 4.5 | 4.4 | 3.9 |
| 2013 | 1.3 | −1.2 | 0.1 | 0.0 | 4.4 | 4.4 | 2.7 | −0.2 | 4.4 | 4.3 |
| 2014 | 1.8 | −0.7 | 1.1 | 1.5 | 3.3 | 4.8 | 2.8 | 5.4 | 4.4 | 4.8 |
| 2015 | 2.1 | −1.3 | 0.8 | 0.1 | 2.8 | 3.0 | 2.8 | 5.4 | 3.8 | 1.2 |
| 2016 | 2.4 | −1.9 | 0.5 | 0.0 | 3.4 | 3.4 | 2.8 | −0.1 | 5.7 | 2.1 |
| 2017 | 2.6 | −2.4 | 0.1 | -0.1 | 3.7 | 3.6 | 2.8 | 5.7 | 5.9 | 4.8 |
| 2018 | 2.7 | −2.9 | −0.3 | -0.2 | 4.0 | 3.8 | 2.8 | 5.8 | 5.9 | 5.1 |
| 2019 | 2.7 | −3.1 | −0.5 | −0.3 | 4.1 | 3.7 | 2.8 | 5.7 | 5.9 | 5.0 |
| Disabled (excluding ESRD): | | | | | | | | | | |
| 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 | −1.7 | 0.4 | 3.5 | −0.8 | −2.8 | 1.1 |
| 2006 | 2.8 | −2.6 | 0.2 | 0.2 | 3.5 | 3.7 | 3.2 | 7.2 | 9.9 | −3.4 |
| 2007 | 2.1 | −2.1 | 0.0 | −1.4 | 4.1 | 2.6 | 2.9 | 2.6 | 15.8 | 7.7 |
| 2008 | 1.8 | −1.3 | 0.5 | 0.4 | 3.3 | 3.7 | 4.1 | 7.2 | 11.9 | 8.7 |
| 2009 | 1.6 | −0.5 | 1.1 | 1.6 | 8.6 | 10.3 | −0.7 | −0.2 | 22.7 | 10.9 |
| 2010 | 1.2[6] | −1.9[6] | −0.7[6] | 1.2 | 5.0 | 6.3 | 2.0 | 4.7 | 5.7 | 3.2 |
| 2011 | 0.5 | −26.0 | −25.6 | −26.0 | 9.9 | −18.7 | 1.7 | 3.2 | −0.2 | 3.9 |
| 2012 | 1.0 | −3.9 | −2.9 | −5.2 | 2.0 | −3.3 | 2.3 | 4.9 | 4.4 | 3.8 |
| 2013 | 1.3 | −1.2 | 0.1 | 0.0 | 4.4 | 4.4 | 2.7 | 0.1 | 4.4 | 4.4 |
| 2014 | 1.8 | −0.7 | 1.1 | 1.5 | 3.3 | 4.8 | 2.8 | 5.7 | 4.4 | 5.0 |
| 2015 | 2.1 | −1.3 | 0.8 | 0.1 | 2.9 | 3.0 | 2.8 | 5.7 | 3.9 | 2.5 |
| 2016 | 2.4 | −1.9 | 0.5 | 0.0 | 3.4 | 3.4 | 2.8 | 0.1 | 5.7 | 3.2 |
| 2017 | 2.6 | −2.4 | 0.1 | -0.1 | 3.7 | 3.6 | 2.8 | 5.7 | 5.9 | 5.2 |
| 2018 | 2.7 | −2.9 | −0.3 | -0.2 | 4.0 | 3.8 | 2.8 | 5.7 | 5.9 | 5.4 |
| 2019 | 2.7 | −3.1 | −0.5 | −0.3 | 4.1 | 3.7 | 2.8 | 5.7 | 5.9 | 5.3 |

[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 of 2003 established a minimum update of 1.5 percent. For 2006, the Deficit Reduction Act of 2005 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 of 2007, together with the Medicare Improvements for Patients and Providers Act (MIPPA) of 2008, specified an update of 0.5 percent for 2008. MIPPA also specified an update of 1.1 percent for 2009. The Department of Defense Appropriations Act of 2009, the Temporary Extension Act of 2010, and the Continuing Extension Act of 2010 established a 0.0-percent update for January to May 2010.

[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, 2000, and 2010. 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.
[6]The physician payment price changes for 2010 occurred on June 1, 2010 and December 1, 2010.

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. For 2003 through May 2010, the system would have led to significant reductions in physician fee schedule rates in each year. 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.[65] However, the target spending level was not adjusted for the amendments that avoided the reductions in 2004, 2005, and 2006, and thus 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. The Department of Defense Appropriations Act (DODDA), the Temporary Extension Act (TEA), and the Continuing Extension Act (CEA) established a 0.0-percent update for January through May 2010 and specified that the conversion factor for June 1, 2010 be determined as if the scheduled updates for January through May 2010 had not been changed by the DODAA, the TEA, and the CEA. The Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 established

[65]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.

a 2.2-percent update for June through November 2010 and specified that the conversion factor for December 1, 2010 be determined as if the scheduled updates for January through November 2010 had not been changed by the DODAA, the TEA, the CEA, and the PACMBPRA.

In addition, the November 2009 Physician Fee Schedule final regulation announced a change to the definition of physician services under the SGR system. Under the new rule, physician-administered drugs are no longer included in the definition of physician services under the SGR system and have been removed from the actual past spending tabulations and from the allowed spending base year. The effect of this administrative change was to reduce substantially the cumulative excess of actual spending over allowed spending. As a result, fewer annual reductions in physician payment rates would be required under current law to establish balance between actual and target physician expenditures.

Under current law, these recent amendments and regulatory changes would cause the physician update to be −23.0 percent in December 2010, would cause the projected January 2011 physician update to the December 2010 physician payment rates to be an estimated −6.5 percent, and would cause the projected physician update to be −2.9 percent in 2012. The cumulative reduction in the payment rates for physician services would be approximately 30 percent from December 2010 through 2012.[66] In contrast, the MEI is expected to increase by about 3 percent over the same time frame. Such substantial reductions in physician payments per service are nearly certain to be legislatively avoided. (As noted, Congress has overridden the scheduled negative update for each of the past 8 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.[67]

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[66]The corresponding total reduction prior to the change in the regulations defining physicians services was estimated to be 38 percent. Additional information about the SGR system and the physician spending targets, including the original target levels, is available at http://www.cms.gov/SustainableGRatesConFact/Downloads/sgr2011p.pdf.

[67]Part B projections under an illustrative alternative to the current-law estimates are shown on the CMS website at http://www.cms.gov/ActuarialStudies/Downloads/2010TRAlternativeScenario.pdf. No endorsement of this alternative by the Board of Trustees, CMS, or the Office of the Actuary should be inferred.

*Actuarial Methodology*

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.[68] The secondary impacts have been excluded because of the minimal likelihood that the physician payment reductions will occur in practice 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.

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.

[68]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.

**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: | | | | | |
| 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 | 1,724.29 | 215.43 | 103.01 | 440.39 |
| 2006 | 27.612 | 1,801.22 | 225.21 | 110.95 | 464.54 |
| 2007 | 26.937 | 1,836.72 | 231.43 | 121.84 | 486.40 |
| 2008 | 26.455 | 1,907.59 | 247.64 | 130.84 | 506.61 |
| 2009 | 26.231 | 2,011.53 | 226.34 | 144.14 | 532.35 |
| 2010 | 26.480 | 2,149.41 | 236.83 | 152.81 | 544.99 |
| 2011 | 26.912 | 1,724.80 | 243.47 | 152.66 | 566.84 |
| 2012 | 27.967 | 1,663.57 | 255.09 | 159.39 | 589.68 |
| 2013 | 29.512 | 1,740.74 | 254.33 | 166.38 | 615.40 |
| 2014 | 31.356 | 1,822.59 | 268.06 | 173.66 | 644.89 |
| 2015 | 33.418 | 1,871.68 | 282.72 | 180.29 | 652.46 |
| 2016 | 35.511 | 1,932.48 | 282.10 | 190.49 | 665.68 |
| 2017 | 37.467 | 1,998.02 | 298.31 | 201.64 | 697.80 |
| 2018 | 39.220 | 2,070.11 | 315.49 | 213.59 | 733.03 |
| 2019 | 40.759 | 2,157.93 | 333.51 | 226.13 | 769.83 |
| Disabled (excluding ESRD): | | | | | |
| 2000 | 4.137 | 1,055.93 | 204.67 | 67.83 | 216.55 |
| 2001 | 4.355 | 1,159.98 | 234.67 | 71.98 | 251.95 |
| 2002 | 4.563 | 1,195.43 | 281.70 | 79.86 | 303.44 |
| 2003 | 4.847 | 1,274.29 | 323.72 | 85.31 | 374.44 |
| 2004 | 5.100 | 1,403.26 | 322.26 | 92.61 | 422.60 |
| 2005 | 5.309 | 1,403.80 | 319.37 | 90.01 | 428.82 |
| 2006 | 5.236 | 1,453.19 | 341.59 | 99.01 | 413.72 |
| 2007 | 5.265 | 1,495.43 | 350.20 | 114.62 | 445.59 |
| 2008 | 5.266 | 1,555.57 | 375.46 | 128.29 | 483.94 |
| 2009 | 5.284 | 1,722.28 | 376.30 | 157.87 | 539.63 |
| 2010 | 5.526 | 1,851.20 | 398.27 | 167.71 | 561.21 |
| 2011 | 5.849 | 1,474.32 | 410.46 | 167.35 | 582.82 |
| 2012 | 6.073 | 1,419.53 | 431.15 | 174.64 | 605.54 |
| 2013 | 6.290 | 1,485.64 | 431.49 | 182.29 | 632.51 |
| 2014 | 6.490 | 1,555.23 | 455.99 | 190.33 | 663.99 |
| 2015 | 6.682 | 1,596.58 | 482.22 | 197.69 | 680.75 |
| 2016 | 6.863 | 1,648.33 | 482.27 | 208.98 | 702.46 |
| 2017 | 7.012 | 1,704.05 | 509.89 | 221.29 | 738.83 |
| 2018 | 7.117 | 1,765.39 | 538.86 | 234.44 | 778.33 |
| 2019 | 7.178 | 1,858.41 | 569.47 | 248.22 | 819.56 |

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

As with physician services, 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 particular, under the Affordable Care Act, these fees will be updated in 2011 and later by the increase in the CPI minus the increase in the 10-year moving average of private, non-farm business multifactor productivity. Per capita charges for these expenditure categories have also 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 (BBA) of 1997 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.[69]

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

[69]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 was paid from 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: | | | | |
| 2000 | −0.8% | 14.5[2] | 5.3% | 21.8% |
| 2001 | 12.5 | −51.0[2] | 0.7 | 14.7 |
| 2002 | −1.4 | 3.1[2] | 13.5 | 20.7 |
| 2003 | 5.4 | 4.5[2] | 7.8 | 3.9 |
| 2004 | 10.0 | 14.6 | 8.3 | 15.1 |
| 2005 | 10.6 | 15.9 | 4.4 | 13.3 |
| 2006 | 5.0 | 17.6 | 4.4 | 6.9 |
| 2007 | 7.1 | 18.7 | 2.2 | 7.0 |
| 2008 | 6.3 | 12.3 | 4.4 | 6.4 |
| 2009 | 9.8 | 10.4 | 10.0 | 11.0 |
| 2010 | 5.8 | 1.6 | 1.6 | 8.4 |
| 2011 | 6.3 | −1.3 | −2.4 | −3.1 |
| 2012 | 5.7 | 2.0 | 0.4 | 6.3 |
| 2013 | 6.3 | 2.2 | 3.6 | 5.3 |
| 2014 | 6.7 | −0.0 | 4.4 | 5.0 |
| 2015 | 6.8 | −1.1 | 4.6 | 4.4 |
| 2016 | 6.8 | −1.7 | 6.0 | 4.5 |
| 2017 | 6.3 | −0.8 | 6.2 | 4.4 |
| 2018 | 6.3 | 3.0 | 6.2 | 5.0 |
| 2019 | 6.3 | 3.1 | 6.1 | 4.7 |
| Disabled (excluding ESRD): | | | | |
| 2000 | 2.0 | 14.0[2] | 7.4 | −16.0 |
| 2001 | 13.4 | −44.2[2] | 7.3 | 1.4 |
| 2002 | 3.9 | 4.7[2] | 13.9 | 21.9 |
| 2003 | 5.1 | 5.0[2] | 6.4 | −2.7 |
| 2004 | 12.7 | 14.2 | 10.0 | 14.9 |
| 2005 | 9.6 | 16.8 | 5.5 | 12.1 |
| 2006 | 5.4 | 20.3 | 6.1 | 11.5 |
| 2007 | 7.0 | 19.9 | 4.5 | 12.5 |
| 2008 | 7.8 | 14.3 | 6.0 | 7.6 |
| 2009 | 12.9 | 10.5 | 13.1 | 19.2 |
| 2010 | 5.8 | 3.2 | 1.6 | 10.1 |
| 2011 | 6.2 | −1.3 | −2.4 | −0.2 |
| 2012 | 5.7 | 3.1 | 0.4 | 8.1 |
| 2013 | 6.3 | 3.5 | 3.6 | 7.0 |
| 2014 | 6.7 | 1.0 | 4.4 | 6.5 |
| 2015 | 6.8 | −0.2 | 4.6 | 5.7 |
| 2016 | 6.8 | −0.9 | 6.0 | 5.8 |
| 2017 | 6.3 | −0.3 | 6.2 | 5.7 |
| 2018 | 6.4 | 3.4 | 6.2 | 6.1 |
| 2019 | 6.3 | 3.5 | 6.2 | 5.8 |

[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]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: | | | | | |
| 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 | 504.95 | 187.68 | 76.76 | 241.73 |
| 2005 | 28.433 | 579.54 | 217.43 | 80.14 | 269.84 |
| 2006 | 27.612 | 629.53 | 255.75 | 83.63 | 285.55 |
| 2007 | 26.937 | 684.35 | 303.59 | 85.47 | 303.90 |
| 2008 | 26.455 | 744.61 | 340.90 | 89.20 | 323.99 |
| 2009 | 26.231 | 833.09 | 376.45 | 98.12 | 360.07 |
| 2010 | 26.480 | 888.06 | 382.50 | 99.73 | 390.59 |
| 2011 | 26.912 | 951.25 | 377.38 | 97.38 | 379.37 |
| 2012 | 27.967 | 1,014.29 | 384.93 | 97.75 | 403.40 |
| 2013 | 29.512 | 1,085.97 | 393.34 | 101.31 | 424.54 |
| 2014 | 31.356 | 1,165.62 | 393.21 | 105.74 | 445.63 |
| 2015 | 33.418 | 1,247.53 | 388.92 | 110.58 | 464.93 |
| 2016 | 35.511 | 1,332.25 | 382.48 | 117.24 | 485.53 |
| 2017 | 37.467 | 1,416.24 | 379.30 | 124.46 | 506.52 |
| 2018 | 39.220 | 1,505.98 | 390.62 | 132.18 | 531.36 |
| 2019 | 40.759 | 1,600.90 | 402.66 | 140.31 | 555.94 |
| Disabled (excluding ESRD): | | | | | |
| 2000 | 4.137 | 322.53 | 204.34[1] | 65.80 | 119.97 |
| 2001 | 4.355 | 436.16 | 114.01[1] | 70.61 | 124.93 |
| 2002 | 4.563 | 456.20 | 119.34[1] | 80.46 | 155.01 |
| 2003 | 4.847 | 503.62 | 125.31[1] | 85.61 | 147.56 |
| 2004 | 5.100 | 582.73 | 143.06 | 94.15 | 167.19 |
| 2005 | 5.309 | 658.49 | 167.10 | 99.30 | 183.31 |
| 2006 | 5.236 | 715.34 | 200.97 | 105.39 | 200.79 |
| 2007 | 5.265 | 773.96 | 240.94 | 110.18 | 225.09 |
| 2008 | 5.266 | 850.29 | 275.35 | 116.83 | 241.58 |
| 2009 | 5.284 | 977.45 | 304.19 | 132.19 | 290.06 |
| 2010 | 5.526 | 1,042.26 | 313.94 | 134.30 | 320.86 |
| 2011 | 5.849 | 1,115.07 | 309.95 | 131.06 | 319.78 |
| 2012 | 6.073 | 1,189.24 | 319.45 | 131.54 | 346.19 |
| 2013 | 6.290 | 1,273.45 | 330.55 | 136.34 | 370.72 |
| 2014 | 6.490 | 1,368.03 | 333.78 | 142.31 | 394.99 |
| 2015 | 6.682 | 1,468.26 | 333.24 | 148.86 | 417.65 |
| 2016 | 6.863 | 1,569.24 | 330.26 | 157.85 | 441.97 |
| 2017 | 7.012 | 1,668.49 | 329.21 | 167.60 | 467.27 |
| 2018 | 7.117 | 1,774.32 | 340.26 | 178.01 | 495.58 |
| 2019 | 7.178 | 1,886.14 | 352.00 | 188.97 | 524.09 |

[1]See footnote 2 of table IV.B3.

As indicated in table IV.B4, expenditures for outpatient hospital services increased significantly due to provisions in the BBA, the Balanced Budget Refinement Act of 1999, and the Benefits Improvement and Protection Act of 2000 that reduced beneficiaries' coinsurance payments to normal levels but maintained 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. Effective in 2010, outlier payments to agencies are capped as a percentage of total payments. Assumed growth rates for home health expenditures reflect this initiative, along with the ongoing effects of 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 |
| 2000 | 99 | 80 | $1,562 | $1,272 |
| 2001 | 105 | 82 | 1,858 | 1,415 |
| 2002 | 111 | 84 | 2,096 | 1,684 |
| 2003 | 117 | 86 | 2,414 | 1,717 |
| 2004 | 122 | 86 | 2,804 | 1,829 |
| 2005 | 128 | 89 | 3,221 | 2,424 |
| 2006 | 129 | 91 | 3,530 | 2,551 |
| 2007 | 131 | 94 | 3,543 | 2,518 |
| 2008 | 132 | 97 | 3,747 | 2,582 |
| 2009 | 133 | 100 | 3,969 | 2,743 |
| 2010 | 140 | 103 | 4,351 | 2,921 |
| 2011 | 146 | 105 | 4,467 | 2,959 |
| 2012 | 151 | 107 | 4,715 | 3,068 |
| 2013 | 155 | 108 | 5,030 | 3,216 |
| 2014 | 159 | 109 | 5,360 | 3,385 |
| 2015 | 162 | 110 | 5,667 | 3,546 |
| 2016 | 165 | 111 | 5,985 | 3,709 |
| 2017 | 168 | 112 | 6,320 | 3,884 |
| 2018 | 170 | 113 | 6,654 | 4,067 |
| 2019 | 171 | 113 | 6,977 | 4,259 |

(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 growth 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 Part B Reimbursement Amounts on a Cash Basis

[In millions]

| Calendar year | Carrier | | | | | Intermediary | | | | | Total FFS | Private health plans | Total Part B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Physician fee schedule | DME | Lab | Other | Total | Hospital | Lab | Home health agency | Other | Total | | | |
| Historical data: | | | | | | | | | | | | | |
| 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 | 36,865 | 116,179 | 18,672 | 134,851 |
| 2005 | 57,678 | 8,007 | 3,548 | 15,283 | 84,516 | 19,262 | 2,784 | 7,079 | 11,404 | 40,529[2] | 125,045 | 22,012 | 147,057 |
| 2006 | 58,145 | 8,314 | 3,694 | 15,509 | 85,662 | 21,436 | 2,941 | 7,813 | 12,392 | 44,583[2] | 130,245 | 31,460 | 161,704 |
| 2007 | 58,781 | 8,172 | 4,144 | 15,797 | 86,894 | 22,563 | 2,933 | 9,185 | 13,035 | 47,716[2] | 134,610 | 38,858 | 173,468 |
| 2008 | 60,544 | 8,664 | 4,265 | 16,552 | 90,026 | 24,236 | 2,971 | 10,272 | 13,015 | 50,494 | 140,520 | 48,106 | 188,626 |
| 2009 | 62,465 | 8,087 | 4,712 | 17,179 | 92,443 | 27,178 | 3,337 | 11,346 | 14,718 | 56,578 | 149,021 | 53,378 | 202,400 |
| Intermediate estimates: | | | | | | | | | | | | | |
| 2010 | 67,880 | 8,696 | 5,043 | 17,814 | 99,433 | 30,190 | 3,538 | 11,754 | 16,420 | 61,903 | 161,336 | 55,361 | 216,697 |
| 2011 | 56,985 | 9,108 | 5,271 | 19,130 | 90,494 | 32,443 | 3,486 | 11,920 | 16,467 | 64,315 | 154,809 | 57,074 | 211,883 |
| 2012 | 56,137 | 9,898 | 5,685 | 20,651 | 92,370 | 35,912 | 3,614 | 12,572 | 17,779 | 69,877 | 162,247 | 60,037 | 222,284 |
| 2013 | 61,478 | 10,405 | 6,230 | 22,626 | 100,739 | 40,341 | 3,911 | 13,496 | 19,469 | 77,217 | 177,955 | 60,199 | 238,154 |
| 2014 | 67,923 | 11,500 | 6,859 | 25,017 | 111,299 | 45,657 | 4,297 | 14,327 | 21,354 | 85,635 | 196,933 | 58,566 | 255,499 |
| 2015 | 73,957 | 12,809 | 7,534 | 26,941 | 121,241 | 51,698 | 4,746 | 15,072 | 23,374 | 94,891 | 216,132 | 54,944 | 271,076 |
| 2016 | 80,699 | 13,530 | 8,385 | 29,055 | 131,669 | 58,319 | 5,295 | 15,715 | 25,545 | 104,875 | 236,544 | 51,553 | 288,097 |
| 2017 | 87,624 | 14,901 | 9,308 | 31,889 | 143,721 | 65,098 | 5,892 | 16,382 | 27,771 | 115,143 | 258,864 | 49,569 | 308,433 |
| 2018 | 94,645 | 16,373 | 10,264 | 34,900 | 156,181 | 72,096 | 6,511 | 17,509 | 30,110 | 126,227 | 282,408 | 49,580 | 331,988 |
| 2019 | 102,288 | 17,863 | 11,236 | 37,928 | 169,315 | 79,269 | 7,144 | 18,692 | 32,411 | 137,516 | 306,831 | 51,688 | 358,519 |

[1]See footnote 2 of table IV.B3.

[2]Amounts shown exclude payments inadvertently made from the Part B account in 2005-2007 to cover the costs of certain Part A hospice benefits.

### *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 2009, 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 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 2009-2019[1]**

| | | Alternatives | |
|---|---|---|---|
| Calendar year | Intermediate assumptions | Low-cost | High-cost |
| 2009 | 1.44% | 1.44% | 1.44% |
| 2010 | 1.49 | 1.46 | 1.52 |
| 2011 | 1.39 | 1.34 | 1.45 |
| 2012 | 1.38 | 1.30 | 1.46 |
| 2013 | 1.39 | 1.28 | 1.50 |
| 2014 | 1.41 | 1.27 | 1.55 |
| 2015 | 1.41 | 1.26 | 1.59 |
| 2016 | 1.43 | 1.24 | 1.64 |
| 2017 | 1.46 | 1.24 | 1.71 |
| 2018 | 1.50 | 1.25 | 1.79 |
| 2019 | 1.55 | 1.27 | 1.89 |

[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 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, based on the plan's bid relative to the national average bid, the individual plan premiums are

determined dollar-for-dollar above or below the national average premium.

Each drug plan receives 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 the plan's 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 2009 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 retiree health 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 2009. Effective with 2013 under the Affordable Care Act, employers will no longer be able to deduct retiree health plan costs that are reimbursed by the RDS. In addition, retiree drug claims in the coverage gap will not be eligible for the 50-percent brand-name drug discount, and the 28-percent RDS subsidy rate will remain constant even though the coverage gap will be closing over time for other Part D drug plan participants. As a result of these changes, RDS program participation is assumed to decline quickly to about 2 percent in 2016 and beyond. It is expected that the retirees losing drug coverage through qualifying employer plans will participate in other Part D plans.

Other options for an employer-sponsored plan are to enroll in an employer/union-only Part D 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. Among all beneficiaries participating in Part D, 7 percent were covered by these employer-sponsored plans in 2009; this proportion is estimated to increase gradually to about 10 percent in 2019.

(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 were automatically enrolled in plans with premiums below the low-income premium benchmarks within their regions, thereby receiving full subsidization of their Part D premiums.) After several years of 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 stay at around 30 percent of total beneficiaries participating in Part D from 2009 to 2019.

(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. Once enrolled, they will pay for premiums and any applicable deductible, coinsurance, and/or copayment. After accounting for the enrollees discussed above, about 53 percent of the remaining beneficiaries eligible for Part D were enrolled in 2009. This participation rate is projected to grow to 61 percent by 2012. Table IV.B8 provides a summary of the estimated average enrollment in Part D, by category. Including other Part D-eligible beneficiaries who are receiving creditable drug coverage through another source (such as the Federal Employees Health Benefits Program, TRICARE for Life, the Veterans Administration, and the Indian Health Service), the non-low-income, non-employer participation rate is projected to grow from 69 percent in 2009 to about 75 percent in 2012.

**Table IV.B8.—Part D Enrollment**

[In millions]

| Calendar year | Employer subsidy[1] | Low-income subsidy | | | | All others | Total |
|---|---|---|---|---|---|---|---|
| | | Medicaid full dual eligible | Other, with full subsidy | Other, with partial subsidy | 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 | 6.8 | 6.3 | 3.2 | 0.3 | 9.7 | 15.9 | 32.4 |
| 2009 | 6.6 | 6.4 | 3.3 | 0.3 | 10.0 | 16.8 | 33.4 |
| Intermediate estimates: | | | | | | | |
| 2010 | 6.6 | 6.4 | 3.7 | 0.4 | 10.5 | 17.3 | 34.4 |
| 2011 | 6.2 | 6.7 | 3.8 | 0.4 | 10.9 | 18.2 | 35.2 |
| 2012 | 4.5 | 7.0 | 3.9 | 0.4 | 11.2 | 21.4 | 37.1 |
| 2013 | 2.7 | 7.2 | 4.1 | 0.4 | 11.6 | 23.9 | 38.2 |
| 2014 | 2.1 | 7.4 | 4.2 | 0.4 | 12.0 | 25.2 | 39.2 |
| 2015 | 1.5 | 7.6 | 4.3 | 0.4 | 12.3 | 26.5 | 40.3 |
| 2016 | 0.8 | 7.8 | 4.4 | 0.4 | 12.7 | 27.9 | 41.3 |
| 2017 | 0.8 | 8.1 | 4.5 | 0.4 | 13.0 | 28.7 | 42.5 |
| 2018 | 0.8 | 8.3 | 4.7 | 0.4 | 13.4 | 29.5 | 43.7 |
| 2019 | 0.9 | 8.5 | 4.8 | 0.4 | 13.8 | 30.2 | 44.9 |

[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 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 average premium amount per enrollee is estimated based on the base beneficiary premium with an adjustment to reflect enrollees' tendency to select plans with below-average premiums. Beginning in 2011, Part D will collect "income-related" premiums (in addition to the premiums charged by the plans) for individuals whose modified adjusted gross income exceeds a specified threshold. The amount of the "income-related" premium is dependent on the individual's income level, and

the extra premium amount is the difference between 35, 50, 65 or 80 percent and 25.5 percent applied to the National Average Monthly Bid Amount adjusted for reinsurance.

(2) Projection Base

The projections in this year's report are based in part on actual Part D spending data from 2006 to 2009. 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 2009 and then projecting these costs through the estimation period. Since the data for 2009 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. Accordingly, 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.[70] In 2008, Part D spending grew significantly more rapidly than the national prescription drug spending. As a result, growth for Part D was projected to be slightly faster than for NHE for 2009 and 2010 in last year's report. Since actual Part D growth was ultimately slightly slower than NHE growth in 2009, NHE growth rates were used directly in this year's report as the base for the per capita drug expenses increase. Then, the financial effects of the Affordable Care Act on Part D were estimated and translated to an additional growth rate factor. The combined growth rates were used to project the future per capita drug expenses including the impact from the ACA. These adjusted NHE growth rates are shown in table IV.B9.

To determine the estimated benefits for Part D, the total per capita drug costs are adjusted for two key factors. First, Part D benefit costs 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 benefits slowly decrease over time.

[70]Information on the NHE projections is available at http://www.cms.gov/NationalHealthExpendData/03_NationalHealthAccountsProjected.asp.

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 | 7.6% | 8.6% | 12.4% |
| 2007 | 3.5 | 9.6 | 13.5 |
| 2008 | 2.3 | 10.4 | 13.2 |
| Intermediate estimates: | | | |
| 2009 | 4.3[3] | 10.2 | 12.3 |
| 2010 | 4.8[3] | 10.1 | 12.8 |
| 2011 | 4.7[3] | 10.1 | 12.6 |
| 2012 | 3.9 | 9.8 | 12.8 |
| 2013 | 4.5 | 9.9 | 13.0 |
| 2014 | 5.4 | 9.9 | 13.0 |
| 2015 | 5.8 | 9.5 | 12.8 |
| 2016 | 6.2 | 9.5 | 12.7 |
| 2017 | 6.4 | 9.6 | 12.5 |
| 2018 | 6.6 | 9.6 | 12.2 |
| 2019 | 6.8 | 9.6 | 11.9 |

[1]Published February 4, 2010. Values do not reflect ACA add-on.
[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. Actual rebates for 2008 were approximately 10.4 percent of total prescription drug costs, which was somewhat higher than the plans estimated in their 2008 bid submissions. However, some of the drugs with the highest Part D rebate amounts will be losing patent protection in the next several years. As a result, rebates are projected to decrease from 10.2 percent in 2009 to 9.6 percent in 2019, as shown in table IV.B9.[71]

(4) Administrative Expenses

The plans' expected administrative costs and projected profit margins from their bids are used to determine base-year amounts for these factors. Administrative expenses are projected forward with wage increases. 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 2019.

[71]These are average rebate percentages across all prescription drugs. Generic drugs, which represent over 70 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 | $297 | 8.3 | $1,818 | 7.2 | $529 |
| 2007 | 24.2 | 747 | 333 | 9.2 | 1,821 | 7.0 | 552 |
| 2008 | 25.6 | 690 | 369 | 9.7 | 1,857 | 6.8 | 562 |
| 2009 | 26.8 | 700 | 386 | 10.0 | 1,960 | 6.6 | 581 |
| Intermediate estimates: | | | | | | | |
| 2010 | 27.8 | 688 | 407 | 10.5 | 2,048 | 6.6 | 613 |
| 2011 | 29.0 | 720 | 436 | 10.9 | 2,159 | 6.2 | 646 |
| 2012 | 32.6 | 766 | 429 | 11.2 | 2,241 | 4.5 | 673 |
| 2013 | 35.5 | 816 | 430 | 11.6 | 2,341 | 2.7 | 703 |
| 2014 | 37.1 | 864 | 451 | 12.0 | 2,462 | 2.1 | 737 |
| 2015 | 38.8 | 931 | 476 | 12.3 | 2,602 | 1.5 | 775 |
| 2016 | 40.5 | 991 | 502 | 12.7 | 2,755 | 0.8 | 817 |
| 2017 | 41.7 | 1,065 | 535 | 13.0 | 2,927 | 0.8 | 865 |
| 2018 | 42.9 | 1,148 | 571 | 13.4 | 3,116 | 0.8 | 919 |
| 2019 | 44.0 | 1,240 | 610 | 13.8 | 3,322 | 0.9 | 979 |

### *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 prescription drug spending was somewhat higher than the average plan bid. In 2009, bids increased by more than the expected trend, significantly reducing this differential. For 2010 and beyond, the bids are projected to ultimately converge to about 1 percent lower than actual spending due to aggressive plan bidding.

A new prospective payment will begin in 2011 under the ACA brand-drug discount program that requires drug manufacturers to provide 50 percent brand-name drug discounts for spending in the coverage gap. CMS will determine the annual expected discount amounts for each plan based on their bids. Medicare will initially pay the prospective amounts to the plans on a monthly basis, and the plans will use these amounts to pay half of the costs for brand-name drugs purchased by beneficiaries in the coverage gap. The Part D drug plans will pay back the prospective payments once they receive the discount amounts from the drug manufacturers.

(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 the risk that these costs will differ from the plan's expectation.

For 2008, the total prospective reinsurance payments were significantly below the actual reinsurance costs. As a result, Medicare paid $1.2 billion in reconciliation payments to the Part D plans. Since the average monthly reinsurance amount from the bids increased significantly from roughly $29 in 2008 to more than $34 in 2009, the prospective payments are expected to be very close to the actual reinsurance costs for 2009, and the 2009 reinsurance reconciliation payments are expected to be small. For future years, it is anticipated that the Part D plans' estimates of reinsurance payments will match closely with actual costs.

The prospective low-income cost-sharing payments in 2008 were significantly lower than the actual low-income cost-sharing amounts. As a result, there were reconciliation payments totaling $1.2 billion from Medicare to the Part D plans. For 2009 and beyond, it is expected that the actual low-income cost-sharing subsidies will continue to exceed the bid expectations, but to a lesser extent, 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 less than $0.1 billion were made by the drug plans to Medicare in 2009 because the 2008 bids were slightly higher than the actual experience. For 2009, plan bids are again expected to be close to the actual costs. As a result, only $0.2 billion of payments by Part D plans are expected. For 2010 and beyond, actual costs are estimated to be slightly higher than the plan bids. Therefore, small net risk corridor payments to plans are estimated for each year after 2009.

As mentioned in the previous section, there will be brand-name drug discount prospective payments starting in 2011. Since Medicare Part D doesn't bear the cost of the discount, the prospective payments and plans' repayments will be reconciled after the year end. However, the reconciliation amounts are expected to be minimal.

Reconciliation payments for a particular year have typically been made in the latter part of the following year. Future reconciliation payments are also assumed to be made in the same time frame.

(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 expected to be generally about the same after 2010.

**Table IV.B11.—Aggregate Part D 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 |
| 2009 | 6.1 | 18.8 | 11.4 | 20.3 | 4.0 | -0.1 | 60.5 |
| Intermediate estimates: | | | | | | | |
| 2010 | 6.6 | 19.1 | 10.7 | 20.9 | 4.0 | 0.5 | 61.8 |
| 2011 | 7.7 | 21.0 | 12.8 | 23.7 | 4.0 | 1.7 | 71.0 |
| 2012 | 9.5 | 25.1 | 14.2 | 25.5 | 3.4 | 0.5 | 78.2 |
| 2013 | 11.1 | 29.0 | 15.2 | 27.2 | 2.4 | 0.4 | 85.3 |
| 2014 | 12.3 | 32.1 | 16.7 | 29.4 | 1.8 | 0.4 | 92.7 |
| 2015 | 13.9 | 36.1 | 18.4 | 32.0 | 1.3 | 0.4 | 102.2 |
| 2016 | 15.5 | 40.2 | 20.3 | 34.8 | 0.9 | 0.5 | 112.2 |
| 2017 | 17.1 | 44.4 | 22.3 | 38.1 | 0.7 | 0.5 | 123.1 |
| 2018 | 18.9 | 49.2 | 24.4 | 41.7 | 0.7 | 0.6 | 135.5 |
| 2019 | 20.9 | 54.6 | 26.8 | 45.8 | 0.8 | 0.6 | 149.5 |

[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. Also includes outlays resulting from the $250 payment to all beneficiaries who reach the coverage gap in 2010.

### *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 2009 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 2009 base modifications include the following:

- ±2 percent to account for the uncertainty of the completeness of the actual spending in 2009. 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 2009, 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 2009-2019**

| | | Alternatives | |
|---|---|---|---|
| Calendar year | Intermediate assumptions | Low-cost | High-cost |
| Percentage of beneficiaries enrolled in subsidized employer-sponsored plans | | | |
| 2009 | 14.2% | 14.2% | 14.2% |
| 2010 | 13.9 | 13.9 | 13.9 |
| 2011 | 12.7 | 13.2 | 12.5 |
| 2012 | 8.9 | 11.2 | 8.4 |
| 2013 | 5.2 | 9.1 | 4.2 |
| 2014 | 3.9 | 8.4 | 2.8 |
| 2015 | 2.6 | 7.7 | 1.4 |
| 2016 | 1.4 | 7.0 | — |
| 2017 | 1.4 | 7.0 | — |
| 2018 | 1.4 | 7.0 | — |
| 2019 | 1.4 | 7.0 | — |
| Low-income participation as a percentage of Part D enrollees | | | |
| 2009 | 30.0 | 30.0 | 30.0 |
| 2010 | 30.4 | 30.4 | 30.4 |
| 2011 | 30.9 | 30.4 | 31.2 |
| 2012 | 30.3 | 29.9 | 30.7 |
| 2013 | 30.4 | 29.4 | 31.5 |
| 2014 | 30.5 | 28.8 | 32.3 |
| 2015 | 30.6 | 28.2 | 33.1 |
| 2016 | 30.6 | 27.6 | 33.9 |
| 2017 | 30.6 | 27.0 | 34.7 |
| 2018 | 30.7 | 26.4 | 35.6 |
| 2019 | 30.7 | 25.9 | 36.5 |
| Percentage of non-employer, non-low-income beneficiaries enrolled | | | |
| 2009 | 53.1 | 53.1 | 53.1 |
| 2010 | 53.7 | 53.7 | 53.7 |
| 2011 | 54.0 | 52.8 | 55.3 |
| 2012 | 58.3 | 53.2 | 62.5 |
| 2013 | 59.8 | 54.0 | 64.2 |
| 2014 | 60.1 | 54.1 | 64.4 |
| 2015 | 60.4 | 54.3 | 64.8 |
| 2016 | 60.8 | 54.5 | 65.3 |
| 2017 | 60.8 | 54.5 | 65.2 |
| 2018 | 60.7 | 54.4 | 65.1 |
| 2019 | 60.5 | 54.2 | 64.9 |

Table IV.B13 compares Part D expenditures as a percentage of the Gross Domestic Product under the intermediate, low-cost, and high-cost alternatives.

**Table IV.B13.—Part D Cash Expenditures as a Percentage of the Gross Domestic Product for Calendar Years 2009-2019[1]**

| Calendar year | Intermediate assumptions | Alternatives | |
|---|---|---|---|
| | | Low-cost | High-cost |
| 2009 | 0.43% | 0.43% | 0.43% |
| 2010 | 0.42 | 0.41 | 0.43 |
| 2011 | 0.46 | 0.42 | 0.50 |
| 2012 | 0.48 | 0.41 | 0.55 |
| 2013 | 0.49 | 0.41 | 0.57 |
| 2014 | 0.50 | 0.41 | 0.60 |
| 2015 | 0.53 | 0.42 | 0.64 |
| 2016 | 0.55 | 0.42 | 0.68 |
| 2017 | 0.57 | 0.43 | 0.73 |
| 2018 | 0.60 | 0.45 | 0.78 |
| 2019 | 0.64 | 0.46 | 0.84 |

[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.[72] 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

[72]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.

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 formally designated all private health insurance coverage options available through Medicare as "Part C."[73]

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. These increases carried forward to 2006 and beyond since the benchmark rates were based on the prior year's rate increased with growth in per capita spending for Medicare Parts A and B. 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 cost—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.

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. Also, rebates were introduced and are used to to provide additional benefits not covered under Medicare, reduce cost sharing, and/or reduce Part B or Part D premiums. Prior to the passage of the Affordable Care Act, rebates were calculated as 75 percent of the difference, if any, between the benchmark and the bid.

[73]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.

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.

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, 2014.

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 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.

The Affordable Care Act made fundamental changes to MA funding by linking the benchmark rates to Medicare fee-for-service costs and by requiring the use of quality measures to determine eligibility for bonuses and the share of bid savings versus benchmarks to be provided as a rebate.

For 2011, MA benchmarks will be held at the 2010 levels. Beginning in 2012, the ACA requires the MA county-level benchmarks to be based on a multiple of estimated fee-for-service costs in the county. The multiple applied for a given county is based on the ranking of its fee-for-service cost relative to that for other counties, and the multiplier factors are phased in. The 25 percent, or quartile, of counties with the highest fee-for-service costs will have a multiple of 95 percent of county fee-for-service costs; the second quartile, 100 percent; the third quartile, 107.5 percent; and the lowest quartile, 115 percent. (Prior to the ACA, most county benchmarks were in the range of 100-140 percent of local fee-for-service costs.)

Starting in 2012, plans with at least a 4-star rating on a 5-star quality scale will receive an increase in their benchmark. Qualifying plans will receive a bonus of 1.5 percent of the local fee-for-service costs in 2012, 3.0 percent in 2013, and 5.0 percent in 2014 and subsequent years. The bonuses are doubled for health plans in a "qualifying county," defined as a county in which (i) per capita spending in original Medicare is lower than average; (ii) 25 percent or more of eligible beneficiaries were enrolled in Medicare Advantage as of December 2009; and (iii) the benchmark rate in 2004 was based on the minimum amount applicable to an urban area. There are special bonus provisions for newly established and low-enrollment plans.

The ACA benchmarks will be phased in over 2, 4, or 6 years depending upon the size of the benchmark reduction, with a longer phase-in schedule for areas in which the benchmark decreases by larger amounts. Also, the phased-in benchmarks, including bonuses, are capped at the pre-ACA level.

The ACA also makes changes regarding the share of the excess of benchmarks over bids to be paid to the plan sponsors as rebates. Prior to the ACA, the rebate share was 75 percent. The ACA varies plan rebates based on quality. The highest quality plans (4.5 stars or higher) will receive a 70-percent rebate, plans with a quality rating of at least 3.5 stars and less than 4.5 stars will receive a 65-percent rebate, and plans with a rating of less than 3.5 stars will receive a 50-percent rebate. The change in rebate from the fixed 75-percent level to the variable ACA percentages will be phased in over 3 years beginning in 2012.

Additional ACA changes that affect these projections include the following:

- Codification of CMS' authority to adjust MA risk scores to account for differences in diagnosis coding practice patterns between Medicare fee-for-service providers and MA providers.

- Extension of the SNP authority to January 1, 2014 from January 1, 2011.

- Elimination of the RPPO stabilization fund, which was to be available beginning in 2014.

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 product level:

- Local coordinated care plans (LCCPs), which include HMOs, HMOs with a point-of-service option, local PPOs, PSOs, and Medical Savings Accounts.
- Private Fee-for-Service (PFFS) plans.
- Regional PPO (RPPO) plans.
- Special needs plans (SNPs).
- 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 and reached 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.[74] As a direct consequence of the plan terminations, the percentage of Medicare beneficiaries who 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 in private health plan enrollment was in PFFS plans, which represented 42 percent of the increase from 2004 to 2009. In contrast, RPPOs represented only 7 percent of the increase in this time period.

The 2009 enrollment includes almost 1.9 million beneficiaries with coverage through employer-only or union-only plans—1.1 million of whom are in LCCPs, 0.7 million in PFFS plans, and the balance in RPPO plans.

***c. Projected***

Private Medicare health plan membership is projected to continue to grow through 2012, with diminishing growth rates. Annual decreases in enrollment are projected to begin in 2013 and continue through 2019 as a result of the benchmark and rebate provisions of the ACA. Beginning in 2021, the private plan enrollment growth rate is expected to match that of the MA eligible population—those with coverage for Medicare Part A and Part B.

The share of Medicare enrollees in private health plans is projected to decrease from the 2010 level of 24.7 percent to 13.0 percent in 2020. The share will decrease further to 12.8 percent by 2024 and will remain at that level through 2030. Overall, total health plan membership is expected to increase by 27 percent between 2019 and 2030 due to the large expected increase in total Medicare beneficiaries during those years. (The total Medicare population is expected to increase by 30 percent between 2019 and 2030.)

The previously rapid growth in PFFS plans flattened abruptly in 2009 due to product maturity, changes in CMS' policies on plan marketing and sales, and plan reaction to new statutory provider network requirements. PFFS enrollment is projected to decrease in 2010 (by 30 percent) and 2011 (by 86 percent) because most of the current enrollment is in counties in which sponsors must establish

[74]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.

PFFS networks in 2011. Most of the terminating enrollees are expected to migrate to a LCCP or RPPO plan.

SNP enrollment is expected to remain relatively stable through 2013. The statutory authority for SNPs will expire as of January 1, 2014. Beginning in 2014, it is expected that the majority of existing SNP enrollees will join local coordinated care plans and that the remaining enrollees will transfer to the Medicare fee-for-service program.

The growth in LCCPs is expected to accelerate to 14 percent in 2010 due to the influx of enrollment from PFFS plans that are terminating or reducing their service area. For 2011, it is projected that local CCPs will experience a further increase in enrollment of 16 percent as additional beneficiaries transfer from PFFS plans. A further spike in enrollment of 7 percent is expected in 2014 due to the influx of enrollees from terminating SNPs.

RPPO enrollment is projected to grow by over 200 percent between 2009 and 2011, primarily as a result of the migration of enrollees from PFFS 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 | 418 | 7,292 | 43,436 | 16.8 |
| 2007 | 5,528 | 1,623 | 183 | 930 | 403 | 8,666 | 44,368 | 19.5 |
| 2008 | 5,965 | 2,243 | 290 | 1,148 | 362 | 10,008 | 45,453 | 22.0 |
| 2009 | 6,602 | 2,431 | 422 | 1,270 | 373 | 11,098 | 46,318 | 24.0 |
| 2010 | 7,553 | 1,698 | 811 | 1,211 | 411 | 11,683 | 47,351 | 24.7 |
| 2011 | 8,763 | 230 | 1,336 | 1,243 | 426 | 11,998 | 48,634 | 24.7 |
| 2012 | 8,841 | 233 | 1,347 | 1,247 | 439 | 12,106 | 50,293 | 24.1 |
| 2013 | 8,632 | 227 | 1,314 | 1,206 | 453 | 11,832 | 51,987 | 22.8 |
| 2014 | 9,224 | 214 | 1,233 | — | 466 | 11,136 | 53,536 | 20.8 |
| 2015 | 8,407 | 196 | 1,125 | — | 478 | 10,205 | 55,063 | 18.5 |
| 2016 | 7,603 | 178 | 1,018 | — | 491 | 9,289 | 56,629 | 16.4 |
| 2017 | 6,997 | 165 | 937 | — | 504 | 8,603 | 58,264 | 14.8 |
| 2018 | 6,655 | 157 | 892 | — | 518 | 8,223 | 59,957 | 13.7 |
| 2019 | 6,589 | 156 | 883 | — | 533 | 8,161 | 61,708 | 13.2 |
| 2020 | 6,655 | 158 | 892 | — | 548 | 8,253 | 63,508 | 13.0 |
| 2025 | 7,513 | 178 | 1,007 | — | 625 | 9,323 | 72,603 | 12.8 |
| 2030 | 8,323 | 197 | 1,115 | — | 692 | 10,329 | 80,424 | 12.8 |

[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 2009 the Part B-only private plan enrollment consisted of 3,000 in local CCPs, 2,000 in PFFS plans, and 68,000 in the other coverage category.

## 3. Cost Projection Methodology

### *a. Background*

Benchmarks form the foundation for payments to 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, a plan's 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 the rebate share of the "savings" to aid 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. Prior to 2011, the rebate share of the difference between a plan's benchmark and bid is 75 percent. For 2012 and later, the rebate percentage will be based on the quality rating of the health plan, which will range from 50 to 70 percent once fully phased in for 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 since CMS receives diagnosis data after the payment date.

Rebate payments are based on the projected risk profile of the plan and are not adjusted based on subsequent actual risk scores.

### *b. Incurred Basis*

Private health plan 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 2006-2009 for each coverage category. These amounts include adjustments processed after the payment due date for retroactive enrollment and risk score updates. The annual per capita benchmark 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 the applicable percent of the positive difference, if any, between the 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.

For the period 2006 through 2009, aggregate payments for bids and rebates experienced double-digit annual growth resulting from rapid increases in private plan enrollment, growth in per capita Medicare fee-for-service costs affecting the benchmarks, inflation in plan costs, and growth in private plan risk scores.

For 2010, growth in aggregate bid payments is expected to be 5 percent, and the aggregate rebate payments are projected to decrease by 17 percent. These departures from past trends are primarily the result of a relatively low enrollment increase of 5 percent, a relatively low MA benchmark growth rate, a decrease in risk scores due to the application of an across-the-board reduction to account for differences in coding between private plans and Medicare fee-for-service providers,[75] and the initial phase-out of indirect medical education costs from the benchmark rates. In aggregate, the 2010 bids experienced little growth over those for 2009.

Benchmark growth for 2011 and later will be significantly lower than historical trends because of the ACA benchmark freeze for 2011 and the phase-in of the fee-for-service based ratebook beginning in 2012, which will result in lower benchmark rates in most areas. Also, the projected increase in the per capita fee-for-service base of the benchmark will be dampened by the productivity offsets to Medicare fee updates and other savings provisions of the Affordable Care Act.

The estimated increases in per capita bids for 2011 and later are tied to the per capita fee-for-service growth rates. The expectation is that bids will grow faster than benchmarks, resulting in significantly lower per capita rebates, through 2018.

### *c. Cash Basis*

Cash MA expenditures are largely identical to incurred amounts, since both arise primarily from the monthly capitation payments to plans. Small cash payment adjustments are developed from incurred spending by accounting for the payment lag that results from CMS'

[75]The risk-adjusted formula is calibrated using detailed data on beneficiaries in fee-for-service Medicare. If the nature of diagnosis coding changes over time in a different way for MA plans than in fee-for-service, then the risk-adjustment process becomes distorted. Periodic adjustments to overall MA risk scores are now authorized to minimize such distortions.

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, separately for the Part A and Part B trust funds. The incurred payments are reported separately for the bid-related and rebate expenditures. As noted, 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 | 36.4 | 4.3 | 40.7 | 39.0 |
| 2008 | 44.3 | 5.4 | 49.7 | 50.6 |
| 2009 | 52.9 | 6.3 | 59.2 | 59.4 |
| 2010 | 55.5 | 5.2 | 60.7 | 60.8 |
| 2011 | 57.9 | 5.1 | 63.0 | 62.9 |
| 2012 | 57.8 | 4.4 | 62.2 | 62.2 |
| 2013 | 57.0 | 3.4 | 60.4 | 60.4 |
| 2014 | 54.4 | 2.4 | 56.8 | 56.9 |
| 2015 | 49.8 | 1.6 | 51.4 | 51.5 |
| 2016 | 46.1 | 1.4 | 47.5 | 47.5 |
| 2017 | 43.3 | 1.3 | 44.6 | 44.6 |
| 2018 | 42.3 | 1.3 | 43.6 | 43.7 |
| 2019 | 43.2 | 1.4 | 44.6 | 44.6 |
| Expenditures from the Part B account of the SMI trust fund: | | | | |
| 2006 | 28.8 | 3.2 | 32.0 | 31.5 |
| 2007 | 35.6 | 3.9 | 39.5 | 38.9 |
| 2008 | 43.1 | 5.0 | 48.1 | 48.1 |
| 2009 | 48.0 | 5.5 | 53.5 | 53.4 |
| 2010 | 50.6 | 4.6 | 55.2 | 55.4 |
| 2011 | 52.6 | 4.5 | 57.1 | 57.1 |
| 2012 | 55.9 | 4.2 | 60.1 | 60.0 |
| 2013 | 56.9 | 3.3 | 60.2 | 60.2 |
| 2014 | 56.1 | 2.4 | 58.5 | 58.6 |
| 2015 | 53.2 | 1.7 | 54.9 | 54.9 |
| 2016 | 50.0 | 1.5 | 51.5 | 51.6 |
| 2017 | 48.1 | 1.4 | 49.5 | 49.6 |
| 2018 | 48.2 | 1.4 | 49.6 | 49.6 |
| 2019 | 50.2 | 1.5 | 51.7 | 51.7 |

[1] All expenditures for non-Medicare Advantage coverage are included in the bid category.

### *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 | $8,205 | $6,925 | $7,624 | $10,027 | $4,841 | $8,084 |
| 2007 | 8,555 | 7,369 | 8,320 | 9,992 | 5,044 | 8,347 |
| 2008 | 8,836 | 8,092 | 9,226 | 10,444 | 5,350 | 8,762 |
| 2009 | 9,082 | 8,723 | 9,257 | 10,993 | 5,286 | 9,122 |
| 2010 | 9,012 | 8,386 | 8,874 | 12,045 | 5,236 | 9,113 |
| 2011 | 9,083 | 8,428 | 8,818 | 12,238 | 4,935 | 9,240 |
| 2012 | 9,256 | 8,591 | 8,989 | 12,493 | 5,031 | 9,414 |
| 2013 | 9,506 | 8,833 | 9,221 | 12,875 | 5,208 | 9,661 |
| 2014 | 10,240 | 9,135 | 9,502 | n/a | 5,430 | 9,959 |
| 2015 | 10,429 | 9,301 | 9,630 | n/a | 5,603 | 10,124 |
| 2016 | 10,721 | 9,539 | 9,870 | n/a | 5,793 | 10,382 |
| 2017 | 11,051 | 9,815 | 10,150 | n/a | 6,027 | 10,678 |
| 2018 | 11,474 | 10,190 | 10,537 | n/a | 6,286 | 11,067 |
| 2019 | 11,946 | 10,623 | 10,981 | n/a | 6,571 | 11,512 |
| Rebate expenditures[2] | | | | | | |
| 2006 | 958 | 616 | 565 | 1,489 | — | 920 |
| 2007 | 947 | 703 | 953 | 1,777 | — | 951 |
| 2008 | 1,123 | 613 | 784 | 1,874 | — | 1,049 |
| 2009 | 1,212 | 478 | 663 | 1,833 | — | 1,064 |
| 2010 | 989 | 319 | 437 | 1,177 | — | 841 |
| 2011 | 872 | 337 | 340 | 1,119 | — | 799 |
| 2012 | 789 | 293 | 293 | 972 | — | 716 |
| 2013 | 640 | 168 | 164 | 729 | — | 564 |
| 2014 | 516 | 60 | 49 | n/a | — | 435 |
| 2015 | 395 | 0 | 0 | n/a | — | 323 |
| 2016 | 389 | 0 | 0 | n/a | — | 313 |
| 2017 | 390 | 0 | 0 | n/a | — | 309 |
| 2018 | 409 | 0 | 0 | n/a | — | 324 |
| 2019 | 440 | 0 | 0 | n/a | — | 349 |
| Total expenditures | | | | | | |
| 2006 | 9,163 | 7,541 | 8,189 | 11,515 | 4,841 | 9,003 |
| 2007 | 9,502 | 8,072 | 9,273 | 11,769 | 5,044 | 9,299 |
| 2008 | 9,959 | 8,705 | 10,011 | 12,318 | 5,350 | 9,811 |
| 2009 | 10,294 | 9,201 | 9,921 | 12,826 | 5,286 | 10,186 |
| 2010 | 10,001 | 8,705 | 9,311 | 13,222 | 5,236 | 9,953 |
| 2011 | 9,955 | 8,765 | 9,158 | 13,357 | 4,935 | 10,040 |
| 2012 | 10,045 | 8,884 | 9,282 | 13,465 | 5,031 | 10,130 |
| 2013 | 10,145 | 9,001 | 9,385 | 13,603 | 5,208 | 10,225 |
| 2014 | 10,755 | 9,195 | 9,551 | n/a | 5,430 | 10,394 |
| 2015 | 10,825 | 9,301 | 9,630 | n/a | 5,603 | 10,446 |
| 2016 | 11,111 | 9,539 | 9,870 | n/a | 5,793 | 10,695 |
| 2017 | 11,441 | 9,815 | 10,150 | n/a | 6,027 | 10,987 |
| 2018 | 11,884 | 10,190 | 10,537 | n/a | 6,286 | 11,391 |
| 2019 | 12,386 | 10,623 | 10,981 | n/a | 6,571 | 11,862 |

[1]Values represent the sum of per capita expenditures for Part A and Part B.
[2]All expenditures for non-Medicare Advantage coverage are included in the bid category.

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.

In general, the per capita increases in bids for 2006 through 2009 were in the single-digit range and were correlated with the Medicare fee-for-service trend and change in risk profile of the plan populations. Per capita bid payments in 2010 are expected to decrease for all types of coverage (except for SNP) since the application of the risk score coding intensity adjustment more than offsets the relatively low Medicare fee-for-service growth. The growth in SNP per capita bids for 2010 is expected to increase as a result of the change in definition of "Medicare required" benefits, which takes into account the waiver of plan cost sharing for many beneficiaries who are dually eligible for Medicare and Medicaid. Beginning in 2011, the overall per capita bid trend is expected to be consistent with the growth in Medicare fee-for-service expenditures. The bid trends by coverage category for 2011 reflect the influence of the migration of enrollees from PFFS plans.

There was significant variation in the per capita trend in rebates for 2006 through 2009, which reflected the difference in the annual trend between bids and benchmarks. All types of coverage experienced significant decreases in rebates for 2010 as a result of the reduction in risk-adjusted benchmarks—both in absolute terms and relative to the change in bids.

After 2019, average Medicare payments to private plans per enrollee will follow the aggregate growth trends of the HI and SMI Part B per capita benefits, as 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 (Part A) and SMI (Parts B and D) during 2010 through 2019. These projections are made for individual categories of Medicare-covered services, such as inpatient hospital care and physician 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. With enactment of the Affordable Care Act, such increases are subject to greater uncertainty in the long term, especially for the Medicare program. For this report, the long-range Medicare cost growth assumptions under current law were derived in two steps. First, a "baseline" long-range growth rate assumption was developed consistent with methods used in prior

reports. Second, this baseline projection was adjusted for specific ACA provisions affecting annual increases in Medicare payment rates for most categories of health services providers.

**1. Baseline Long-Range Scenario**

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, the baseline per capita rate of health care cost growth is assumed to be the same for each part of Medicare as well as for total national health expenditures generally. This baseline rate is defined as the per capita increase in health care costs due to the combined effects of general inflation, medical-specific "excess" price inflation (above general price growth), growth in the utilization of services per person, and increases in the "intensity" or average complexity per service. It is measured prior to demographic impacts, which vary by group and category of service, and before the application of the productivity adjustments to Medicare price updates, as required by the Affordable Care Act. Use of a common baseline rate of cost growth for all categories of health care recognizes 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 baseline 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 baseline 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 projection assumes that overall health care spending per capita and Medicare spending per beneficiary grow at the same baseline 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 assumptions generated by the economic model are determined in such a way that the average baseline 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 2019 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, where both projections exclude the effects of the Affordable Care Act.[76]

With this last constraint, the assumed per beneficiary baseline growth rate from the economic model for all Medicare services in 2034 is about 1.3 percentage points above the level of GDP growth for that year. This differential gradually declines to about 0.8 percent in 2054 and to less than 0.3 percent in 2084. For the infinite horizon, the assumed baseline growth rate is GDP plus zero percent. Following prior practice, in between the 10th and 25th years of the projection the baseline 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 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

[76]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.gov/ReportsTrustFunds/downloads/projectionmethodology.pdf.

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.[77]

**2. Adjusted Current-Law Medicare Scenario**

The baseline long-range cost growth rates must be modified to reflect demographic impacts and the price-update adjustments for Medicare Parts A and B under the Affordable Care Act. For example, Part A skilled nursing and home health services are used much more frequently by beneficiaries at ages 80 and above than by younger beneficiaries. As the beneficiary population ages, Part A costs will increase at a faster rate due to increased use of these services. In contrast, the incidence of prescription drug use is more evenly distributed by age, and an increase in the average age of Part D enrollees has relatively little effect on Part D costs.

Under the Affordable Care Act, the annual increase in Medicare prices for most types of health services will be reduced by the 10-year moving average increase in private, non-farm business multifactor productivity.[78] These gains, which are estimated to average 1.1 percent per year, affect all Part A providers and most non-physician Part B providers. They are not relevant for Part D, where drug plan premiums are set through a competitive bidding process.

The Part A growth rate assumptions after 2019 are set equal to the baseline rates, as described above, minus the full amount of the 10-year average productivity increase. For most of the projection period, this process yields a net Part A per capita growth rate (before demographics) that is less than the increase in per capita GDP.

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[77]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.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/.

[78]"Multifactor productivity" is a measure of real output per combined unit of labor and capital, reflecting the contributions of all factors of production.

A similar process is followed for Part B, except that the productivity reduction is applied only to the provider categories affected by this adjustment, for example, outpatient hospitals, ambulatory surgical centers, diagnostic laboratories, and most other non-physician services. Average physician expenditures per beneficiary are increased at the rate of per capita GDP growth, as required (on average) by the sustainable growth rate formula in current law. All other outlays, which constitute about 16.8 percent of total Part B expenditures in 2019, are increased at the baseline rate of growth.

As noted above, the Medicare payments to Part D plans and qualifying employers are not affected by the productivity adjustments. Accordingly, Part D costs per enrollee are assumed to increase by the full baseline cost growth rates in 2020 and later.

The long-range implications of the current-law productivity adjustments are very uncertain, but they could have serious consequences for the Medicare program if left unchanged. The basis for the Medicare cost growth rate assumptions, described above, has been chosen primarily to incorporate the ACA provisions in a simple, straightforward manner in part due to consideration of this uncertainty and in part due to the difficulty of modeling such consequences. Purposely not considered at this time are the potential effects of sustained slower Medicare payment increases on provider participation; beneficiary access to care; utilization, intensity, and quality of services; and other factors. Similarly, the possible changes in payment mechanisms, delivery systems, and other aspects of health care that could arise in response to the payment limitations and the ACA-directed research activities are not modeled.

Reference has also been made in this report to key projection results under an illustrative alternative set of long-range growth rate assumptions. As described in a supplemental memorandum by the Office of the Actuary at CMS, these assumptions equal the baseline growth rates in 2034 and later.[79] In between 2019 and 2034, the alternative assumptions grade smoothly from the detailed short-range growth rate estimates, including the impact of the productivity adjustments to Medicare price updates, and the ultimate baseline assumptions, which do not reflect the price adjustments. The resulting pattern of growth rates is equivalent to assuming that the price adjustments are gradually phased out during 2020 to 2034.

[79]This memorandum is available at http://www.cms.gov/ActuarialStudies/Downloads/2010TRAlternativeScenario.pdf.

*Actuarial Methodology*

As recommended by both the 2000 and 2004 Medicare Technical Review Panels, the Trustees and their staffs are continuing to pursue research into the factors affecting long-range growth in Medicare and total national health expenditures. One goal is to develop 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. To help determine the most appropriate long-range Medicare growth assumptions for future reports, the Trustees will convene an independent panel of expert actuaries and economists to study the effects of the new payment rules and recommend optimal methods for establishing long-range assumptions.

# V. APPENDICES

## *A. MEDICARE AMENDMENTS SINCE THE 2009 REPORT*

Since the 2009 annual report was transmitted to Congress on May 12, 2009, five laws have been enacted that have a significant effect on the Medicare trust funds: the Department of Defense Appropriations Act of 2009, the Temporary Extension Act of 2010, the Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act of 2010, the Continuing Extension Act of 2010 and the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010.

The Department of Defense Appropriations Act (DODAA) of 2009 (Public Law 111-118, enacted on December 19, 2009) included two provisions that affected the HI and SMI programs.

### DODAA Provision Affecting HI and Part B of SMI

- The funding for the Medicare Improvement Fund is decreased by $1.0 billion to $21.29 billion, of which $20.74 billion will be made available in fiscal year 2014 and $550 million in 2015.

### DODAA Provisions Affecting Part B of SMI Only

- For January and February of 2010, the physician fee schedule conversion factor remained the same as the 2009 conversion factor, rather than decreasing by 21.3 percent, as would otherwise have occurred.

- For March through December of 2010, the physician fee schedule conversion factor will be computed as if the conversion factor for the prior 2 months had not been changed by the Department of Defense Appropriations Act.

### DODAA Provision Affecting Part D of SMI Only

- For January and February of 2010, the Federal poverty guidelines remained at the 2009 levels.

The Temporary Extension Act (TEA) of 2010 (Public Law 111-144, enacted on March 2, 2010) included three provisions that affected the SMI program.

**TEA Provisions Affecting Part B of SMI Only**

- For March of 2010, the physician fee schedule conversion factor remained the same as the 2009 conversion factor, rather than decreasing by 21.3 percent, as would otherwise have occurred.

- For April through December of 2010, the physician fee schedule conversion factor will be computed as if the conversion factor for the prior 3 months had not been changed by the Department of Defense Appropriations Act and the Temporary Extension Act.

- 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, the Medicare, Medicaid, and SCHIP Extension Act, and the Medicare Improvements for Patients and Providers Act, are further extended until March 31, 2010.

**TEA Provision Affecting Part D of SMI Only**

- For March of 2010, the Federal poverty guidelines remained at the 2009 levels.

The Patient Protection and Affordable Care Act (Public Law 111-148, enacted on March 23, 2010) as amended by the Health Care and Education Reconciliation Act of 2010 (Public Law 111-152, enacted on March 30, 2010), collectively referred to as the Affordable Care Act (ACA), included a very large 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.

**ACA Provisions Affecting HI and SMI**

- The Center for Medicare and Medicaid Innovation (CMI) is established within the Centers for Medicare & Medicaid Services (CMS). The purpose of the CMI is to test innovative payment and service delivery models to reduce program expenditures under Medicare, Medicaid, and CHIP while preserving or enhancing the quality of care furnished to individuals. Models that address a defined population with poor clinical outcomes or avoidable expenditures are to be addressed, and those that improve the coordination, quality, and efficiency of health care services are to be given preference over others that do not. In carrying out these

functions, relevant Federal agencies and experts in medicine and health care management will be consulted.

Taking into account the results of an evaluation, the Secretary of Health and Human Services has the authority to expand the duration and scope of a demonstration, even nationwide, if (i) the Secretary determines that an expansion would reduce spending without reducing quality or improve quality without increasing spending; and (ii) the CMS Chief Actuary certifies that an expansion would reduce (or not increase) net program spending under applicable titles.

- Groups of providers and suppliers who voluntarily meet certain statutory criteria, including quality measurements, can be recognized as accountable care organizations (ACOs). This designation allows them to share in the cost savings that they achieve for the Medicare program. Beginning January 1, 2012, these ACOs can qualify for bonus payments if they achieve a threshold savings amount.

- Alternate payment methodologies for Medicare services are to be established, evaluated, and tested through a 5-year, national voluntary program, designed to furnish incentives for providers to coordinate patient care across the continuum and to be jointly accountable for an entire episode of care around a hospitalization. An episode of care is the full period that a patient stays in a hospital plus the first 30 days following discharge. The Secretary may expand the duration and scope of the pilot after January 1, 2016 if the Secretary, with certification from the Chief Actuary of CMS, determines that such expansion would reduce Medicare spending without reducing quality of care.

- Beginning no later than January 1, 2012, a Medicare demonstration program will be conducted to test a payment incentive and service delivery model that uses physician- and nurse practitioner-directed home-based primary care teams designed to reduce expenditures and improve health outcomes in the provision of items and services to certain chronically ill Medicare beneficiaries.

- Beginning January 1, 2011, a 5-year Community Care Transitions Program is established under Medicare. Under this program, the Secretary is to fund eligible hospitals (those with high admission rates, as defined under section 3025 of the ACA) and certain community-based organizations that furnish

improved care transition services to high-risk Medicare beneficiaries.

- A 15-member Independent Payment Advisory Board is established to develop and submit proposals to Congress aimed at extending the solvency of Medicare, slowing Medicare cost growth, and improving the quality of care delivered to Medicare beneficiaries. The Board is required to submit proposals to the President for years in which the projected rate of growth in Medicare spending per beneficiary exceeds a target growth rate. Determinations of the projected and target growth rates are to be made by the CMS Office of the Actuary (OACT) beginning in 2013. The Board is required to submit its first proposal to the President by January 15, 2014, for implementation in 2015. If the Board fails to submit a proposal to the President by January 15, the Secretary will be required to submit to Congress, by January 25, a contingent proposal meeting the same requirements. For years 2014 through 2017, the Board will be required to submit proposals for years in which the projected rate of growth in Medicare spending per beneficiary exceeds the average of the projected percentage increase in the Consumer Price Index for All Urban Consumers (CPI-U) and the Consumer Price Index for Medical Care (CPI-M). Beginning with determinations made in 2018, proposals will be required only for years in which the projected rate of growth in Medicare spending exceeds the estimated increase in the Gross Domestic Product (GDP) plus 1.0 percent.

  Recommendations proposed by the Board are required to reduce Medicare spending by the lesser of (i) 0.5 percentage point in 2015, 1.0 percentage point in 2016, 1.25 percentage points in 2017, or 1.5 percentage points in 2018 and subsequent years; and (ii) the amount by which the rate of growth in Medicare spending exceeds the target growth rate. Proposals cannot increase Medicare spending over a 10-year period. The Board's proposals will take effect unless Congress passes an alternative measure that achieves the same level of savings. Congress is allowed to consider alternative provisions on a fast-track basis. The Board is prohibited from making proposals that ration care, raise taxes or Part B premiums, or change Medicare benefits, eligibility, or cost-sharing standards. Under certain circumstances, the Board's recommendations cannot affect payments for inpatient hospital admissions, hospice care benefits, or diagnostic laboratory tests.

- Beginning on July 1, 2014 and annually thereafter, the Board is required to issue a public report with standardized information on health care costs, access to care, utilization, and quality of care that allows for comparison by region, types of services, types of providers, and by both private payers and the Medicare program.

- A 5-year program, titled the Community-Based Care Transitions Program, is established beginning January 1, 2011, to provide funding to hospitals or community-based organizations to furnish improved care transition services to high-risk Medicare beneficiaries. High-risk beneficiaries are defined as individuals with multiple chronic conditions or certain other risk factors associated with hospital readmission or substandard transition into post-hospitalization care. The Secretary may expand the program if the CMS Office of the Actuary determines that expansion would reduce spending without reducing quality. The language authorizes a transfer of $500 million from the Medicare trust funds to finance this program from fiscal years 2011 through 2015.

- The Recovery Audit Contractor (RAC) program is expanded to Medicare Parts C and D by December 2010. Among the requirements for Part C and Part D, RACs are to ensure that each Medicare Advantage and stand-alone prescription drug plan have in place an anti-fraud program to review the reinsurance payments of Part D plans, and to compare enrollment estimates of Part D plans for high-cost beneficiaries.

**ACA Provisions Affecting HI and Part B of SMI**

- The $22.3 billion in funding for 2014 in the Medicare Improvement Fund was eliminated.

- Rebasing of the Home Health Prospective Payment System (HH PPS) is required, beginning in calendar year 2014 and phasing in over 4 years, ending in calendar year 2017. There will be equal incremental adjustments, not exceeding 3.5 percent of the amount that would otherwise have been paid under the pre-rebased system. In addition, the Secretary is required to establish, specifically for each home health agency, an annual cap on outlier payments of 10 percent of total payments that an agency receives in a given year, beginning in calendar year 2011. Also, the pool for outlier payments is reduced from 5 percent to 2.5 percent of HH PPS payments. A 3-percent add-on payment for home health agencies serving rural areas is provided for, beginning on April 1,

2010 and extending through December 31, 2015. The Secretary is directed to evaluate the costs related to providing care to low-income beneficiaries in medically underserved areas and to submit a report to Congress by March 1, 2014. Subject to the study's results, the Secretary is authorized to begin a 4-year pilot for fiscal years 2015 through 2018.

- The market basket provider payment updates and annual provider price updates related to the CPI are reduced by varying amounts by type of provider during 2010-2019 and permanently by productivity adjustments, with staggered implementation dates. The productivity offset would equal the percentage change in the 10-year moving average of annual private nonfarm business multifactor productivity. More specifically, the legislation does the following:

    - Reduces the inpatient prospective payment system (IPPS), outpatient prospective payment system (OPPS), inpatient psychiatric facility (IPF), and inpatient rehabilitation facility (IRF) updates by 0.25 percentage point in fiscal years 2010 and 2011.

    - Reduces the long-term care hospital (LTCH) update by 0.25 percentage point in 2010 and 0.5 percentage points in 2011.

    - Reduces the IPPS, LTCH, OPPS, IPF, and IRF updates by 0.1 percentage point in fiscal years 2012 and 2013; by 0.3 percentage point in fiscal year 2014; by 0.2 percentage point in fiscal years 2015 and 2016; and by 0.75 percentage point in each fiscal year from 2015 through 2019.

    - Reduces the hospice updates by 0.3 percentage point in fiscal years 2013 through 2019.

    - Reduces the home health updates by 1 percentage point in calendar years 2011 through 2013.

    - Reduces the dialysis services updates by 1 percentage point in fiscal years 2012 through 2019.

    - Reduces the laboratory services update by 1.75 percentage points in calendar years 2011 through 2015.

    - Provides for updates based on CPI minus full productivity for ambulance services, ambulatory surgical centers, laboratory

services, certain durable medical equipment and prosthetics, and other items beginning in calendar year 2011.

- Provides for updates based on market basket minus full productivity for inpatient and outpatient hospitals, skilled nursing facility (SNF), IPFs, IRFs, dialysis services, and LTCHs beginning in 2012; for hospice providers in fiscal year 2013; and for home health agency (HHA) beginning in fiscal year 2015.

- For 2011, Medicare Advantage (MA) benchmarks will be held at the 2010 levels. Beginning in 2012, MA benchmarks are modified by reducing current-law MA county-level benchmarks on a sliding scale using quartile rankings that are based on current average fee-for-service costs in an area. The specific quartiles are as follows: for 25 percent of counties with the highest level of per capita fee-for-service spending, benchmarks are set at 95 percent of fee-for-service, and for the second, third, and fourth quartiles, benchmarks are set at 100 percent, 107.5 percent, and 115 percent of fee-for-service, respectively. Benchmarks are capped at the current-law amount and the changes are phased in using three alternative phase-in schedules, depending on a county's benchmark reduction: (i) a 2-year phase-in beginning in 2012 and completed in 2013, for areas with benchmark changes of less than $30; (ii) a 4-year phase-in beginning in 2012 and completed in 2015, for areas with benchmark changes of at least $30, but less than $50; and (iii) a 6-year year phase-in beginning in 2012 and completed in 2017, for areas with benchmark changes of at least $50. The provision continues to phase out IME payments to MA plans and exempts PACE plans from this new payment methodology.

- Starting in 2012, plans with at least a 4-star rating on a 5-star quality rating scale will receive an increase in their benchmark. Qualifying plans receive an increase of 1.5 percentage points in 2012, 3.0 percentage points in 2013, and 5.0 percentage points starting in 2014. The increases are doubled for qualifying plans in a qualifying county, which is defined as a county with (i) lower than average per capita spending in fee-for-service Medicare; (ii) 25 percent or more beneficiaries enrolled in MA as of December 2009; and (iii) a payment rate in 2004 based on the minimum amount applicable to a metropolitan statistical area. Plans with low enrollment will be deemed to qualify for a quality increase in 2012. Starting in 2013, the Secretary is required to establish a method of determining plan quality for plans with low

enrollment. New plans will be deemed to meet quality requirements, but the percentage increase in their benchmarks will be lower in 2013 and 2014.

- An MA plan receives a rebate if its bid is below the benchmark. The rebate is equal to a percentage of the difference between the bid and the benchmark. Prior to the ACA, all such plans received a 75-percent rebate to be used to provide additional benefits not covered under Medicare, reduced cost sharing, and/or reduced Part B or Part D premiums. The ACA varies plan rebates based on quality. The highest quality plans (4.5 stars or higher) receive a 70-percent rebate if their bid is below the benchmark, plans with at least 3.5 stars and less than 4.5 stars receive a 65-percent rebate, and plans with fewer than 3.5 stars receive a 50-percent rebate. In 2012, plans with low enrollment will be treated as having a 4.5-star rating (with a 70-percent rebate). Starting in 2012, new plans, which are defined as those that are offered by organizations that have not had a contract as an MA organization in the preceding 3 years, will be treated as having 3.5 stars. The change in rebate percentages will be phased in over 3 years. The ACA prohibits plans from reducing the Medicare Part B premium as a supplemental benefit starting in 2012.

- In general, MA plan payments are risk-adjusted to account for the variation in the cost of providing care to enrollee groups with differing health status. Risk adjustment is designed to compensate plans for the increased cost of treating older and sicker beneficiaries and thus discourage plans from preferential enrollment of healthier individuals. The Deficit Reduction Act of 2005 required the Secretary to adjust for patterns of diagnosis coding differences between MA plans and providers under Parts A and B of Medicare for plan payments in 2008, 2009, and 2010. The ACA requires the Secretary to conduct further analyses on the differences in coding patterns and adjust for those differences after 2010. Starting in 2014, the ACA specifies minimum coding intensity adjustments as follows: in 2014, the adjustment will be at least the value of the adjustment in 2010 plus 1.3 percentage points; for 2015 to 2018, the adjustment will be not less than the adjustment for the previous year increased by 0.25 percentage point; and, starting in 2019, the coding intensity adjustment will be not less than 5.7 percent.

- Medicare eligibility is extended to certain individuals diagnosed with mesothelioma, certain cancers, asbestosis, pleural thickening or pleural plaques that require medical treatment, or

other medical conditions that result from environmental exposure. To be eligible, individuals must have resided or worked in an area subject to a declaration of public health emergency resulting from environmental exposure for at least 6 months. A primary pilot program is authorized, as are additional optional pilots for Medicare beneficiaries in designated public health emergency areas, to furnish comprehensive, coordinated care. Also established is a program to make competitive grants for screening at-risk individuals for environmental health conditions and for providing education about screening and the availability of Medicare benefits.

- A permanent 1.0 floor on the hospital wage index is established for inpatient services furnished by hospitals located in frontier States, beginning in fiscal year 2011. The hospital wage index floor is applied on a permanent basis to outpatient services furnished by hospitals located in frontier States, and a permanent floor of 1.0 is applied on the practice expense geographic adjustment under the physician fee schedule for services furnished in frontier States, beginning in calendar year 2011. Budget neutrality is waived for such floors.

- Several program integrity provisions that currently exist are enhanced:

    - One provision expands the National Practitioner Data Bank (renamed the Integrated Data Repository) to collect data from all Federal health programs and provide access to data collected by other agencies, including the Social Security Administration.

    - Beginning January 2010, the maximum period for submission of Medicare claims is reduced from a 3-year window after the year in which services were provided to not more than 12 months.

    - For written orders and certifications made on or after July 1, 2010, physicians or eligible professionals who order durable medical equipment or home health agency services must be enrolled in the Medicare program. The Secretary is given the authority to extend these requirements to physicians and eligible professionals who order other categories of Medicare items and services, including covered Part D drugs, if the Secretary determines that doing so would help reduce fraud, waste, and abuse.

- Beginning January 1, 2010, physicians are required to have a face-to-face encounter (including through telehealth) with the individual prior to issuing a certification or re-certification for home health services or DME. Physicians furnishing home health services under Part A are required to document that they had a face-to-face encounter with the patient within a reasonable time frame, while physicians furnishing such services under Part B are required to document that they had a face-to-face encounter within the 6-month period preceding the certification. In the case of DME, physicians are required to document that a physician, physician assistant, nurse practitioner, or clinical nurse specialist had a face-to-face encounter during the 6-month period preceding the certification. The Secretary is authorized to apply the face-to-face encounter requirement to other Medicare items and services based upon a finding that doing so would reduce the risk of waste, fraud, and abuse.

**ACA Provisions Affecting HI**

- Beginning in fiscal year 2013, hospital payments will be adjusted based on performance under a Value Based Purchasing (VBP) program. The Secretary will establish VBP performance standards, including levels of achievement and improvement, and a methodology for assessing the total performance of each hospital. Starting in fiscal year 2013, the Secretary will fund the VBP incentive payments by reducing the base operating diagnosis-related group (DRG) payments for each hospital's discharges in a fiscal year by an applicable percentage, as follows: 1.0 in 2013; 1.25 in 2014; 1.5 in 2015; 1.75 in 2016; and 2.0 in 2017 and in subsequent years. These reductions will apply to all hospitals.

- The Secretary is required to select quality measures for long-term care hospitals, inpatient rehabilitation facilities, and hospices and to implement quality measure reporting programs for these providers by rate year or fiscal year 2014, depending on the provider.

- Starting October 1, 2008, acute care hospitals using the inpatient prospective payment system could not receive additional Medicare payment for complications that were acquired during a patient's hospital stay for certain select conditions. These hospital-acquired conditions (HACs): (i) are high cost, high volume, or both; (ii) are identified though a secondary diagnosis

that will result in the assignment to a different, higher paid MS-DRG (Medicare severity DRG); and (iii) are reasonably preventable through the application of evidence-based guidelines. Beginning with discharges during fiscal year 2015, acute care hospitals in the top quartile of national, risk-adjusted HAC rates for an applicable period in a fiscal year will receive 99 percent of their otherwise applicable payment. The Secretary will submit a report to Congress by January 1, 2012 with recommendations with respect to expanding Medicare's HAC payment policy to other facilities, including IRFs, LTCHs, hospital outpatient departments, inpatient psychiatric facilities, cancer hospitals, skilled nursing facilities, ambulatory surgery centers, and health clinics.

- Starting with discharges on October 1, 2012, the Secretary will establish a hospital readmissions reduction program for certain potentially preventable Medicare inpatient hospital readmissions covering three conditions with high volume or high rate (or both). Medicare's base operating DRG payment amounts will be reduced by an adjustment factor.

- The prohibition on implementing the short-stay outlier policy, the one-time adjustment to the standardized amount, and the payment adjustments for LTCHs whose admissions from co-located or non-co-located hospitals exceed 25 percent is extended for an additional 2 years. The moratorium on the establishment of new LTCHs and on the increase in hospital beds in LTCHs is extended for an additional 2 years.

- The Medicare-dependent hospital program is extended for 1 year through fiscal year 2012.

- During fiscal years 2011 and 2012, eligibility for the low-volume payment adjustment is expanded to those hospitals that are more than 15 miles from other hospitals (instead of the current requirement of more than 25 miles) and with less than 1,600 Part A entitled discharges (instead of the current requirement of 800 total discharges). In addition, the Secretary is required to create a sliding payment scale, with larger payments (starting at a 25-percent adjustment) going to low-volume hospitals with 200 or fewer discharges and no payment adjustment for hospitals with greater than 1,600 discharges.

- Beginning no later than 2015 and continuing on an annual basis, Disproportionate Share Hospital (DSH) payments will be equal to

25 percent of current DSH payments. An additional payment will be made to reflect hospitals' continued uncompensated care costs based on the calculation of a formula that is the product of three factors: (i) the difference in the hospital's DSH payments because of this legislation; (ii) the difference in the percentage change in the uninsured under-65 population from 2014 (as calculated from current CBO estimates) minus 0.1 percentage point in 2014 and minus 0.2 percentage point for 2015 through 2019; and (iii) the percentage of uncompensated care provided by the hospital

- The reclassifications authorized under section 508 of the Medicare Modernization Act are extended for 1 year, through September 30, 2010. Beginning April 1, 2010, data for section 508 hospitals will be included in the hospital wage index if doing so would increase the wage index value. Section 508 hospitals will be provided with a lump-sum payment accounting for the difference in the wage index value received in the first half of the fiscal year and that received in the second half of the fiscal year. The Secretary is required to submit a plan to Congress to comprehensively reform the hospital wage index system by December 31, 2011.

- An additional HI payroll tax of 0.9 percent will be collected from high-income workers with earnings over $200,000 for single filers and $250,000 for joint filers, effective for taxable years after December 31, 2012. The earnings thresholds are not indexed.

**ACA Provision Affecting SMI**

- Certain Part B biosimilar generic drugs will be paid at the sum of the average sales price methodology using the National Drug Codes assigned to such products and 6 percent of the amount determined for the reference biological product. Although not specifically mentioned in the legislation, this provision will also affect Part D biologicals.

**ACA Provisions Affecting Part B of SMI Only**

- Physician Quality Reporting Initiative (PQRI) incentive payments are extended through 2014, and a penalty is implemented, beginning in 2015, for providers who do not report quality measures. Eligible professionals who successfully report in 2010 will receive a 1-percent bonus in 2011; those who successfully report in 2011, 2012, and 2013 will receive a 0.5-percent bonus in

2012, 2013, and 2014, respectively. An additional 0.5-percent incentive payment will be available in years 2011 through 2014 for eligible professionals who also meet the requirements of a Maintenance of Certification Program. Eligible professionals who fail to participate successfully in the program will face a 1.5-percent payment penalty in 2015 and a 2-percent payment penalty in 2016 and in subsequent years.

- The 1.00 floor on the geographic index for physician work is extended for an additional year for services before January 1, 2011, and the employee wage and rent portions of the practice expense geographic adjustment are changed by reflecting half of the difference from the national average in 2010 and 2011. Wage areas will be held harmless if the adjustment would reduce payments during these 2 years.

- The exceptions process for therapy caps is extended through December 31, 2010.

- The policy that allows certain independent laboratories to directly bill Medicare for the technical component of physician pathology services is extended through December 31, 2010.

- Certain ambulance add-on payments are extended through December 31, 2010. These add-on payments include a 3-percent bonus for services originating in rural areas, a 2-percent bonus for services originating in other locations, and a "super rural" bonus for rural areas with the lowest population densities. In addition, air ambulance services in areas considered rural on December 31, 2006 will continue to be classified and paid as rural through December 31, 2010.

- A 5-percent bonus payment for certain Medicare mental health services is extended through December 31, 2010.

- A 12-month special enrollment period is created for TRICARE beneficiaries who are entitled to Medicare Part A based on disability or ESRD but who have declined Part B. This 12-month special enrollment period is available to individuals once in their lifetime and begins on the day after the last day of the initial enrollment period.

- Payment for bone density scans will be 70 percent of the relative value for 2006, adjusted by the 2006 conversion factor and any geographic adjustments, through 2011. In addition, the Secretary

is authorized to enter into an agreement with the Institute of Medicine to conduct a study on the ramifications of Medicare payment reductions for dual-energy x-ray absorptiometry on beneficiary access to bone mass density tests.

- Small rural hospitals (with no more than 100 beds) and sole community hospitals (SCHs) can receive additional Medicare payments if their outpatient payments under the prospective payment system are less than under the prior hospital outpatient department reimbursement system. Small rural hospitals will receive 85 percent of the payment difference in calendar year 2010. The 100-bed limitation for SCHs is removed, and all SCHs will receive 85 percent of the payment difference in calendar year 2010.

- The utilization rate assumption that is used in calculating advanced imaging payments is increased from 50 to 75 percent for 2011 and subsequent years. The technical component payment reduction for sequential imaging of contiguous body parts is increased from 25 to 50 percent beginning in 2010 (but is not applied for services furnished prior to July 1, 2010). The provision also directs the Chief Actuary of CMS to report by January 1, 2013 on whether this provision would reduce spending by more than $3 billion for the period of 2010-2019.

- The purchase-up-front option for standard power-driven wheelchairs is eliminated, and the rules for rental payments are changed, paying 15 percent (instead of 10 percent) of the purchase price for the first 3 months of the rental period and 6 percent (instead of 7.5 percent) for the remaining 10 months, effective January 1, 2011.

- The National Association of Insurance Commissioners (NAIC) is requested to create new standards for Medigap plans C and F that include nominal cost sharing to encourage the appropriate use of Part B physician services. The nominal cost sharing is to be based on evidence either published or derived from integrated delivery systems. These new standards are to be available in 2015.

- The income thresholds used to calculate Part B income-related premiums are frozen at 2010 levels for 2011 through 2019.

- A new benefit is created for an annual wellness visit to develop and update a personalized prevention plan, including a health

risk assessment (HRA) completed prior to or as part of the visit. The Secretary is directed to establish guidelines for HRAs and standards for interactive telephonic or web-based HRAs within 1 year of enactment and must develop a model HRA within 18 months of enactment. The Secretary must also issue guidance identifying elements to be included in a beneficiary's first wellness visit and establishing a yearly schedule of appropriate elements for subsequent visits. During the 12-month period following a beneficiary's enrollment in Medicare Part B, the beneficiary is eligible (as under current law) to receive a one-time initial preventive physical examination (known as a "Welcome to Medicare" visit). Each year thereafter, the beneficiary is eligible to receive personalized prevention plan services under the new benefit. The benefit is paid under the physician fee schedule with no cost sharing and is excluded from the hospital outpatient PPS. The provision is effective for services furnished on or after January 1, 2011.

- Beneficiary cost-sharing (both deductible and coinsurance) is eliminated for preventive services recommended with a grade of A or B by the U.S. Preventive Services Task Force (USPSTF). In addition, the Part B deductible is waived for colorectal cancer screening tests regardless of the code billed for a diagnosis. Both are effective for services furnished on or after January 1, 2011.

- Effective January 1, 2010, the Secretary is authorized to modify coverage of any preventive service to make it consistent with USPSTF recommendations; to modify the components of the initial preventive physical exam; to block payment for any preventive service with a "D" (discourage) recommendation by USPSTF.

- Of the largest MSAs, based on total population, an additional 21 will be included in the Round 2 competition for the durable medical equipment (DME) competitive bidding program. In addition, by 2016 all areas must be subject to either competitive bidding or payment rate adjustments using competitively bid rates.

- Community mental health centers are required to demonstrate that they provide at least 40 percent of their services to individuals not eligible for Medicare. Also, Medicare reimbursement is restricted for mental health services delivered in an individual's home or in an inpatient or residential setting.

- Enhanced oversight will be applied to new DME providers for up to 90 days in a situation in which there is a significant risk of fraud.

**ACA Provisions Affecting Part D of SMI Only**

- A voluntary agreement has been reached with the Pharmaceutical Research and Manufacturers of America to provide discounts of 50 percent for brand-name drugs used by Part D enrollees in the Part D coverage gap. These discounts will begin on January 1, 2011. The amount of the discount, in addition to the amount actually paid by the enrollee, will count toward out-of-pocket costs incurred by the plan enrollee. Plan enrollees receiving the low-income subsidy or enrolled in an employee-sponsored retiree drug plan will not be eligible for the discount. Drugs sold and marketed in the U.S. by a manufacturer will not be covered under Part D unless the manufacturer agrees to participate in the discount program. In 2010, Medicare Part D enrollees who enter the coverage gap will receive a rebate of $250. Additionally, beneficiary cost sharing is reduced for brand-name drugs from 100 percent in 2010 (minus the $250 rebate) to 25 percent by 2020. For generic drugs, which are not subject to the required 50-percent discount, beneficiary cost sharing in the coverage gap will be reduced to 93 percent in 2011 and phased down to 25 percent in 2020. Also, several modifications are made to the methodology used to determine updates to the total out-of-pocket expenditure amounts for years 2014 through 2019.

- Effective with the 2011 plan year, the Medicare Advantage rebate amounts are excluded from the Medicare Advantage-Prescription Drug (MA-PD) premium bids when calculating the regional low-income premium benchmarks.

- Beginning in 2011, plans that bid a nominal amount above the regional low-income subsidy (LIS) benchmark amount can choose to absorb the cost of the small difference between their bid and the LIS benchmark in order to qualify as a LIS-eligible plan. The Secretary has discretion to auto-enroll LIS beneficiaries into these plans in order to maintain adequate LIS plan choices. The "de minimis" threshold amount will be established by the Secretary.

- Beginning in January 2011, Part D enrollees whose income exceeds certain thresholds are required to pay higher premiums. The income thresholds and premium adjustments will be set in

the same manner to those under Part B, including the use of frozen thresholds in 2011-2019.

- Costs paid by the Indian Health Service or under an AIDS Drug Assistance Program are allowed to count toward the out-of-pocket threshold for costs incurred on or after January 1, 2011.

The Continuing Extension Act (CEA) of 2010 (Public Law 111-157, enacted on April 15, 2010) included two provisions that affected the SMI program.

**CEA Provisions Affecting Part B of SMI Only**

- Through May of 2010, the physician fee schedule conversion factor remained the same as the 2009 conversion factor, rather than decreasing by 21.3 percent, as would otherwise have occurred.

- For June through December of 2010, the physician fee schedule conversion factor will be computed as if the conversion factor for the prior 5 months had not been changed by the Department of Defense Appropriations Act and the Temporary Extension Act.

**CEA Provision Affecting Part D of SMI Only**

- The Federal poverty guidelines remained at the 2009 levels through May 2010.

The Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (Public Law 111-192, enacted on June 25, 2010) included three provisions that affected the HI and SMI programs.

**Provision Affecting HI and Part B of SMI**

- The Internal Revenue Service is to disclose to HHS tax return information regarding delinquent tax debt with respect to taxpayers who apply to enroll or reenroll as Medicare service providers or suppliers. This information is to be taken into account in determining whether to deny the enrollment or to apply enhanced oversight to the service provider or supplier.

**Provisions Affecting Part B of SMI Only**

- In the formula for determining physician payment rates, the update to the single conversion factor is set at 2.2 percent for June 1, 2010 through November 30, 2010.

- All non-diagnostic outpatient hospital services (other than ambulance and maintenance renal dialysis services) that are incurred within 3 days of an inpatient hospital admission, and that are related to the admission, are not paid separately; instead, the costs for these outpatient services are built into the inpatient hospital payment. No separate payments will be made retroactively for such services that occurred before the date of enactment of the new law.

## *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 2010 through 2019 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 2001-2009, with the 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 | 4,388 | 4,111 | $1,709 | 10,209 | 3.0 | 9.5 | — | 27.4 |
| 2007 | 4,548 | 4,293 | 1,563 | 10,404 | 3.6 | 4.4 | −8.6% | 1.9 |
| 2008 | 5,151 | 4,297 | 1,511 | 10,959 | 13.3 | 0.1 | −3.3 | 5.3 |
| 2009 | 5,205 | 4,728 | 1,810 | 11,743 | 1.0 | 10.0 | 19.8 | 7.1 |
| Intermediate estimates: | | | | | | | | |
| 2010 | 5,230 | 4,936 | 1,797 | 11,963 | 0.5 | 4.4 | −0.7 | 1.9 |
| 2011 | 5,291 | 4,713 | 2,015 | 12,019 | 1.2 | −4.5 | 12.1 | 0.5 |
| 2012 | 5,348 | 4,795 | 2,107 | 12,250 | 1.1 | 1.8 | 4.6 | 1.9 |
| 2013 | 5,382 | 4,977 | 2,233 | 12,592 | 0.6 | 3.8 | 6.0 | 2.8 |
| 2014 | 5,469 | 5,192 | 2,364 | 13,025 | 1.6 | 4.3 | 5.9 | 3.4 |
| 2015 | 5,472 | 5,364 | 2,538 | 13,374 | 0.0 | 3.3 | 7.4 | 2.7 |
| 2016 | 5,595 | 5,551 | 2,713 | 13,860 | 2.3 | 3.5 | 6.9 | 3.6 |
| 2017 | 5,722 | 5,784 | 2,895 | 14,401 | 2.3 | 4.2 | 6.7 | 3.9 |
| 2018 | 5,879 | 6,057 | 3,101 | 15,037 | 2.8 | 4.7 | 7.1 | 4.4 |
| 2019 | 6,056 | 6,362 | 3,330 | 15,749 | 3.0 | 5.0 | 7.4 | 4.7 |

[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 4 decades—by approximately 1.0 percent, 4.7 percent, 1.0 percent, and 2.8 percent per year in the 1970s, 1980s, 1990s, and 2000s, respectively. The differential in the 2000s resulted 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. The estimated HI increase is low in 2010 and 2011 due to lower provider updates as a result of the economy, downward adjustments in payment levels being made through legislation and regulation, and lower increases in private health plan payments than in past years. In addition, the HI increase remains lower than the SMI Part B increase in 2010 and later (with the exception of 2011, which reflects

the full impact of the 2010 reductions in physician fees) due to the productivity and other adjustments impacting all of the HI providers but only some of the SMI Part B providers.

For the period 2011-2012, 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 about −23.0 percent in December 2010, −6.5 percent in January 2011, and −2.9 percent in January 2012. 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. In addition, the reduction in Medicare price updates for most categories of providers will reduce growth rates by about 1.1 percent annually.

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 did 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, resulting in per capita drug cost growth rates that were lower than normal for those years. In contrast, actual drug spending exceeded the plan bids in 2008, resulting in more than $2 billion in additional outlays for 2009. The combination of reconciliation receipts in 2008 and additional reconciliation payment in 2009 caused the large rate of growth in the 2009 benefits.

The comparison of average annual increases is distorted by the increases for Part D mentioned above and by SGR penalties and bonuses for Part B. The average annual increases in Part D per beneficiary costs are expected to be between 3 to 5 percent greater than for HI or SMI Part B for the period 2010-2019. With the inclusion of the Part D costs in the total, overall Medicare per

beneficiary cost growth is expected to be roughly 0.7 percent higher over the 2010-2019 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 |
| 2010 | 1,100 | 275 | 550 | 137.50 | 461 | 254 |
| Intermediate estimates: | | | | | | |
| 2011 | 1,140 | 285 | 570 | 142.50 | 451 | 248 |
| 2012 | 1,172 | 293 | 586 | 146.50 | 454 | 250 |
| 2013 | 1,208 | 302 | 604 | 151.00 | 457 | 251 |
| 2014 | 1,252 | 313 | 626 | 156.50 | 464 | 255 |
| 2015 | 1,300 | 325 | 650 | 162.50 | 464 | 255 |
| 2016 | 1,348 | 337 | 674 | 168.50 | 474 | 261 |
| 2017 | 1,388 | 347 | 694 | 173.50 | 486 | 267 |
| 2018 | 1,428 | 357 | 714 | 178.50 | 499 | 274 |
| 2019 | 1,468 | 367 | 734 | 183.50 | 514 | 283 |

[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 2010 included an estimate of the aggregate cost to HI beneficiaries for the changes in the deductible and coinsurance amounts from 2009 to 2010. At the time the notice was published, it was estimated that in 2010 there would be 8.80 million inpatient deductibles paid at $1,100 each, 2.30 million inpatient days subject to coinsurance at $275 per day (for hospital days 61 through 90), 1.13 million lifetime reserve days subject to coinsurance at $550 per day, and 41.74 million extended care days subject to coinsurance at $137.50 per day. Similarly, it was estimated that in 2009 there would be 8.70 million deductibles paid at $1,068 each, 2.27 million days subject to coinsurance at $267 per day (for hospital days 61 through 90), 1.12 million lifetime reserve days subject to coinsurance at $534 per day, and 40.79 million extended care days subject to coinsurance at $133.50 per day. The total increase in cost to beneficiaries was estimated to be $730 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 2012 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-plus years—then future Part B premiums and Part B deductibles will reflect the impact of any legislative changes.

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 significant additional increases designed to offset the loss of revenues attributable to the "hold-harmless" provision, as described in section III.C.

**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 |
| 2010 | 110.50 | 155 | 31.94 | 310 | 2,830 | 4,550 |
| Intermediate estimates: | | | | | | |
| 2011 | 120.10 | 168 | 33.41 | 310 | 2,840 | 4,550 |
| 2012 | 113.80 | 159 | 35.01 | 330 | 3,010 | 4,800 |
| 2013 | 117.20 | 164 | 36.59 | 345 | 3,170 | 5,050 |
| 2014 | 123.10 | 172 | 38.65 | 360 | 3,320 | 5,300 |
| 2015 | 128.10 | 179 | 41.39 | 380 | 3,500 | 5,600 |
| 2016 | 133.90 | 187 | 43.96 | 405 | 3,710 | 5,850 |
| 2017 | 141.30 | 197 | 47.10 | 430 | 3,940 | 6,150 |
| 2018 | 150.90 | 210 | 50.60 | 460 | 4,200 | 6,450 |
| 2019 | 160.10 | 223 | 54.47 | 490 | 4,480 | 6,750 |

[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, the Part B deductible was fixed by statute and had only occasionally been adjusted. The Medicare Modernization Act 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 2007-2019, 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 |
| 2010 | 154.70 | 221.00 | 287.30 | 353.60 |
| Intermediate estimates: | | | | |
| 2011 | 168.10 | 240.10 | 312.10 | 384.20 |
| 2012 | 159.30 | 227.60 | 295.90 | 364.20 |
| 2013 | 164.10 | 234.40 | 304.70 | 375.00 |
| 2014 | 172.30 | 246.10 | 319.90 | 393.80 |
| 2015 | 179.30 | 256.10 | 332.90 | 409.80 |
| 2016 | 187.40 | 267.70 | 348.00 | 428.30 |
| 2017 | 197.80 | 282.60 | 367.40 | 452.20 |
| 2018 | 211.30 | 301.80 | 392.30 | 482.90 |
| 2019 | 224.10 | 320.20 | 416.30 | 512.30 |

[1]Includes the impact of the 3-year transition in 2007 and 2008.

In 2010 the initial threshold is $85,000 for an individual tax return and $170,000 for a joint return. The thresholds are not indexed to inflation in the years 2011-2019; thereafter, the thresholds are indexed to inflation.

Part B premiums may also vary from the standard rate because a "hold-harmless" provision lowers the premium rate for most 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 by 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 the deductible or coinsurance (clinical lab tests, home health agency services, and most 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 was around $28, and the average premium for 2010 is expected to be around $30. 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 are two provisions that affect the premium rate for certain Part D beneficiaries. First, there is a Part D late enrollment penalty for those beneficiaries enrolling after their initial

enrollment period. Second, there will be an "income-related" premium in addition to the premium charged by the plan the individual enrolled in for those individuals whose modified adjusted gross income exceeds a specified threshold starting in 2011. The amount of the "income-related" premium is dependent on the individual's income level and the extra premium amount is the difference between 35, 50, 65 or 80 percent and 25.5 percent applied to the National Average Monthly Bid Amount adjusted for reinsurance. Table V.C4 displays the projected Part D income-related premium amounts for 2011-2019, based on the intermediate set of assumptions.

**Table V.C4.—Part D Income-Related Premium Amounts**

| | Percentage of program costs represented by premium | | | |
|---|---|---|---|---|
| Calendar year | 35% | 50% | 65% | 80% |
| Intermediate estimates: | | | | |
| 2011 | 45.90 | 65.50 | 85.20 | 104.80 |
| 2012 | 48.10 | 68.70 | 89.20 | 109.80 |
| 2013 | 50.20 | 71.70 | 93.30 | 114.80 |
| 2014 | 53.10 | 75.80 | 98.50 | 121.30 |
| 2015 | 56.80 | 81.20 | 105.50 | 129.80 |
| 2016 | 60.30 | 86.20 | 112.10 | 137.90 |
| 2017 | 64.70 | 92.40 | 120.10 | 147.80 |
| 2018 | 69.50 | 99.20 | 129.00 | 158.80 |
| 2019 | 74.80 | 106.80 | 138.80 | 170.90 |

In addition, 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 thresholds are indexed in subsequent years by the Consumer Price Index (CPI). Under the current statutory adjustment formula, the asset figures for 2010 would decrease for both an individual and a couple as a result of decreases in the CPI. However, legislative changes have thus far frozen these thresholds at the 2009 level through May 2010.

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) $2.50 for generic or preferred multiple-source drugs or $6.30 for preferred single-source drugs. The latter copayment amounts from 2010 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. Starting in 2011, the coverage gap will be gradually filled in as provided for by the ACA. When the gap is ultimately filled in 2020, the beneficiaries will share 25% of the drug costs between the deductible and the catastrophic threshold under the standard coverage.

## *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 a 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.[80]

**Illustration with Actual Data for 2009**

The trust fund and budget perspectives can be illustrated with actual data on Federal financial operations for fiscal year 2009, 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.

[80]A more complete treatment of this topic can be found in the *2009 Financial Report of the United States Government* at www.fms.treas.gov/fr/ and in a Treasury report titled "Social Security and Medicare Trust Funds and the Federal Budget: An Expanded Exposition," available at www.treas.gov/offices/economic-policy/social_security.shtml. Additional information is available in a *Health Care Financing Review* article titled "Medicare Financial Status, Budget Impact, and Sustainability: Which Concept Is Which?", available at www.cms.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 2009**

(In billions)

| Revenue and expenditures categories | Trust funds | | | | Other government | Total[1] |
|---|---|---|---|---|---|---|
| | HI | SMI | OASDI | Combined | | |
| Revenues from public: | | | | | | |
| Payroll and benefit taxes | $206.5 | — | $689.0 | $895.5 | — | $895.5 |
| Premiums[2] | 4.7 | $57.8 | — | 62.5 | — | 62.5 |
| Other taxes, fees, and payments[3] | — | 7.5 | — | 7.5 | $1,139.1 | 1,146.6 |
| Total | 211.2 | 65.3 | 689.0 | 965.5 | 1,139.1 | 2,104.6 |
| Total expenditures to public[4] | 238.0 | 260.2 | 669.7 | 1,167.9 | 2,353.8 | 3,521.7 |
| **Net Results for Budget Perspective** | **−26.8** | **−194.9** | **19.4** | **−202.4** | **−1,214.7** | **−1,417.1** |
| Revenues from other government accounts: | | | | | | |
| Transfers | 1.9 | 194.3 | — | 196.1 | -196.1 | 0.0 |
| Interest credits | 15.9 | 3.0 | 118.0 | 136.8 | -136.8 | 0.0 |
| Total | 17.7 | 197.2 | 118.0 | 332.9 | -332.9 | 0.0 |
| **Net Results for Trust Fund Perspective** | **−9.1** | **2.3** | **137.3** | **130.6** | **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 $1,417.1 billion was the total Federal Budget deficit for fiscal year 2009.
[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 $4.1 billion transferred to the Railroad Retirement Board.

Notes: 1. For comparison, HI taxable payroll, OASDI taxable payroll, and GDP were $6,484 billion, $5,332 billion, and $14,254 billion, respectively, in 2009.
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 $9.1 billion less than total expenditures in 2009, as shown at the bottom of the first column.[81] For the SMI trust fund, the statutory revenues from beneficiary premiums, State transfers, general revenue transfers, and interest earnings collectively exceeded expenditures by $2.3 billion in 2009. 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 $118.0 billion in interest payments) exceeded total expenditures by $137.3 billion.

[81]Surplus 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.[82] For HI, the difference between such revenues ($211.2 billion) and total expenditures made to the public ($238.0 billion) was $26.8 billion in 2009, indicating that HI had a negative effect on the overall budget in 2009. 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 $194.9 billion in 2009 outlays represented a substantial net draw on the Federal Budget in that year.[83] For OASDI, the difference between revenues from the public ($689.0 billion) and total expenditures ($669.7 billion) was $19.4 billion, indicating that OASDI had a positive effect on the overall budget last year.

Thus, from the trust fund perspective, SMI and OASDI had annual surpluses in 2009 and HI had a significant deficit. From the budget perspective, OASDI made a positive contribution to the Federal Budget, though by a much smaller amount than the trust fund surplus, and HI and SMI had a net draw on the budget. HI, SMI, and OASDI collectively had a trust fund surplus of $130.6 billion in fiscal year 2009, but a net draw of $202.4 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

[82]For this purpose, "the public" includes State governments since they are outside of the Federal Government.

[83]Three types of trust fund transactions constituted this net budget obligation: $194.3 billion was drawn in the form of general revenue transfers, and another $3.0 billion in interest payments, and $2.3 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 $2.7 trillion and $7.9 trillion, respectively, in present value terms.[84]

**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, 2010)

| Revenue and expenditure categories | HI | SMI | OASDI | Combined |
|---|---|---|---|---|
| Revenues from public: | | | | |
| Payroll and benefit taxes | $14.4 | — | $40.1 | $54.5 |
| Premiums | 0.0 | $6.3 | — | 6.3 |
| Other taxes and fees[1] | — | 1.0 | — | 1.0 |
| Total | 14.4 | 7.3 | 40.1 | 61.8 |
| Total expenditures to public | 17.1 | 27.5 | 48.1 | 92.6 |
| **Net Results for Budget Perspective** | **−2.7** | **−20.1** | **−7.9** | **−30.8** |
| Revenues from other government accounts: | | | | |
| Transfers | 0.0 | 20.0 | 0.0 | 20.0 |
| Interest credits | n/a | n/a | n/a | n/a |
| Total | 0.0 | 20.0 | 0.0 | 20.0 |
| Trust fund assets on January 1, 2010 | 0.3 | 0.1 | 2.5 | 2.9 |
| **Net Results for Trust Fund Perspective** | **−2.4** | **0.0** | **−5.4** | **−7.8** |

[1]Includes Part D State transfers.

Notes: 1. For comparison, the present values of HI taxable payroll, OASDI taxable payroll, and GDP are $384.3 trillion, $304.5 trillion, and $843.3 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, $0.1 trillion for SMI, and $2.5 trillion for OASDI—that could be drawn down to cover a part of the projected

[84]Interest income is not a factor in this table, as dollar amounts are in present value terms.

shortfall in tax revenues. Two points about this comparison are important to note:

- 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 highly improbable 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.[85]

The situation for SMI is somewhat different. SMI expenditures for Part B and Part D are projected to exceed premium revenues by $20.1 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 $30.8 trillion.[86] To put this very large figure in perspective, it would represent 3.6 percent of the present value of projected GDP over the same period ($843 trillion). The components of the $30.8-trillion total are as follows:

[85]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.

[86]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)[87] | $7.8 trillion | (0.9% of GDP) |
| HI, SMI, and OASDI asset redemptions | $2.9 trillion | (0.3% of GDP) |
| SMI Parts B and D general revenue financing | $20.0 trillion | (2.4% 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.

As discussed elsewhere in this report, there is a significant likelihood that the projected HI and SMI expenditures are substantially understated as a result of potentially impracticable elements of current law. Although this issue does not affect the nature of the budget and trust fund perspectives described in this appendix, it is important to note that actual long-range present values for HI expenditures and SMI expenditures and revenues are likely to exceed the amounts shown in table V.D2 by a substantial margin.

[87]Additional revenues and/or expenditure reductions totaling $7.8 trillion, together with $2.9 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 2019*

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 2009. 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 2009**
[In thousands]

| | |
|---|---|
| Total assets of the trust fund, beginning of period | $318,999,746 |
| Revenue: | |
| Payroll taxes | $194,102,352 |
| Income from taxation of OASDI benefits | 12,376,000 |
| Interest on investments | 15,873,270 |
| Premiums collected from voluntary participants | 2,816,695 |
| Premiums collected from Medicare Advantage participants | 111,060 |
| Transfer from Railroad Retirement account | 496,000 |
| Reimbursement, transitional uninsured coverage | 614,000 |
| Reimbursement, program management general fund | 281,000 |
| CMS interfund interest receipts[1] | 487 |
| SSA interfund interest payments to SSA trust funds[1] | −1,009 |
| Quinquiennial Adjustment, CMS | 968,000 |
| Interest on reimbursements, Railroad Retirement | 28,272 |
| Other | 2,308 |
| Reimbursement, Union activity | 931 |
| Fraud and abuse control receipts: | |
| Criminal fines | 620,965 |
| Civil monetary penalties | 16,582 |
| Civil penalties and damages, CMS | 13,840 |
| Civil penalties and damages, Department of Justice | 451,333 |
| 3% administrative expense reimbursement, Department of Justice | 14,555 |
| 3% administrative expense reimbursement, CMS | 2,541 |
| Fraud and abuse appropriation for FBI | 126,258 |
| Total revenue | $228,915,443 |
| Expenditures: | |
| Net benefit payments | $234,658,530 |
| Administrative expenses: | |
| Treasury administrative expenses | 183,993 |
| Salaries and expenses, SSA[2] | 887,312 |
| Salaries and expenses, CMS[3] | 1,149,894 |
| Salaries and expenses, Office of the Secretary, HHS | 38,542 |
| Payment Assessment Commission, HHS | 6,842 |
| Fraud and abuse control expenses: | |
| HHS Medicare integrity program | 676,211 |
| HHS Office of Inspector General | 217,025 |
| Department of Justice | −69,586 |
| FBI | 252,516 |
| Total administrative expenses | 3,342,748 |
| Total expenditures | $238,001,278 |
| Net addition to the trust fund | −9,085,835 |
| Total assets of the trust fund, end of period | $309,913,911 |

[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]For facilities, goods, and services provided by SSA.
[3]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 2009**

[In thousands]

| | | |
|---|---|---|
| Total assets of the Part B account in the trust fund, beginning of period | | $58,323,159 |
| Revenue: | | |
| Premiums from enrollees: | | |
| Enrollees aged 65 and over | $42,833,540 | |
| Disabled enrollees under age 65 | 9,026,231 | |
| Total premiums | | 51,859,771 |
| Premiums collected from Medicare Advantage participants | | 98,487 |
| Government contributions: | | |
| Enrollees aged 65 and over | 118,817,470 | |
| Disabled enrollees under age 65 | 31,930,675 | |
| Total government contributions | | 150,748,146 |
| Other | | 14,022 |
| Interest on investments | | 2,968,034 |
| SSA interfund interest receipts[1] | | 993 |
| CMS interfund interest payments[1] | | −487 |
| Total revenue | | $205,688,966 |
| Expenditures: | | |
| Net Part B benefit payments | | $200,334,665 |
| Administrative expenses: | | |
| Transfer to Medicaid[2] | 449,420 | |
| Treasury administrative expenses | 355 | |
| Salaries and expenses, CMS[3] | 1,697,333 | |
| Salaries and expenses, Office of the Secretary, HHS | 35,228 | |
| Salaries and expenses, SSA | 888,520 | |
| Medicare Payment Advisory Commission | 4,561 | |
| Railroad Retirement administrative expenses | 9,076 | |
| Transitional assistance administrative expenses | 149 | |
| Prescription drug administrative expenses | 1,371 | |
| Total administrative expenses | | 3,086,013 |
| Total expenditures | | $203,420,677 |
| Net addition to the trust fund | | 2,268,288 |
| Total assets of the Part B account in the trust fund, end of period | | $60,591,448 |

[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]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.

[3]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 2009**

[In thousands]

| | | |
|---|---|---|
| Total assets of the Part D account in the trust fund, beginning of period | | $825,935 |
| Revenue: | | |
| Premiums from enrollees | | |
| Premiums deducted from Social Security benefit checks | $2,150,264 | |
| Premiums paid directly to plans[1] | 3,653,408 | |
| Total premiums | | 5,803,673 |
| Government contributions: | | |
| Prescription drug benefits | 43,286,558 | |
| Prescription drug administrative expenses | 232,220 | |
| Total government contributions | | 43,518,778 |
| Payments from States | | 7,504,098 |
| Interest on investments | | 11,917 |
| Total revenue | | $56,838,465 |
| Expenditures: | | |
| Part D benefit payments[1] | | $56,557,826 |
| Part D administrative expenses | | 232,220 |
| Total expenditures | | $56,790,046 |
| Net addition to the trust fund | | 48,419 |
| Total assets of the Part D account in the trust fund, end of period | | $874,354 |

[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 1970-2019**

[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 |
| 2009 | 491.4 | 498.2 | −6.8 | 371.4 |
| Intermediate estimates: | | | | |
| 2010 | 499.2 | 526.2 | −27.1 | 344.3 |
| 2011 | 538.1 | 556.1 | −18.1 | 326.2 |
| 2012 | 581.1 | 554.4 | 26.7 | 352.9 |
| 2013 | 637.0 | 601.7 | 35.3 | 388.2 |
| 2014 | 690.4 | 639.2 | 51.2 | 439.5 |
| 2015 | 740.4 | 673.9 | 66.5 | 506.0 |
| 2016 | 805.3 | 731.6 | 73.7 | 579.7 |
| 2017 | 861.3 | 763.5 | 97.8 | 677.5 |
| 2018 | 924.0 | 801.3 | 122.7 | 800.2 |
| 2019 | 1,006.1 | 878.7 | 127.4 | 927.5 |

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

## Table V.E5.—Operations of the HI Trust Fund during Fiscal Years 1970-2019

[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 |
| 2009 | 194.1 | 12.4 | 0.5 | 0.6 | 2.8 | 1.0 | 17.5 | 228.9 | 234.7 | 3.3 | 238.0 | −9.1 | 309.9 |
| Intermediate estimates: | | | | | | | | | | | | | |
| 2010 | 184.3 | 14.1 | 0.5 | -0.1 | 3.2 | 0.0 | 15.9 | 217.9 | 243.9 | 3.4 | 247.3 | −29.3 | 280.6 |
| 2011 | 201.0 | 17.5 | 0.5 | 0.3 | 3.3 | 0.0 | 14.8 | 237.4 | 257.6 | 3.6 | 261.2 | −23.8 | 256.8 |
| 2012 | 213.9 | 19.2 | 0.5 | 0.3 | 3.4 | 0.0 | 14.0 | 251.2 | 259.8 | 3.9 | 263.7 | −12.4 | 244.3 |
| 2013 | 231.5 | 21.8 | 0.5 | 0.3 | 3.5 | 0.0 | 13.4 | 271.0 | 275.1 | 4.3 | 279.4 | −8.4 | 235.9 |
| 2014 | 251.2 | 24.5 | 0.6 | 0.2 | 3.6 | 0.0 | 13.0 | 293.1 | 288.5 | 4.7 | 293.2 | −0.1 | 235.8 |
| 2015 | 266.1 | 27.1 | 0.6 | 0.2 | 3.7 | 0.0 | 13.1 | 310.7 | 297.0 | 5.2 | 302.2 | 8.5 | 244.3 |
| 2016 | 284.4 | 29.8 | 0.6 | 0.2 | 3.8 | 0.0 | 14.2 | 333.1 | 315.2 | 5.8 | 320.9 | 12.1 | 256.4 |
| 2017 | 299.1 | 32.8 | 0.6 | 0.2 | 4.0 | 0.0 | 15.8 | 352.5 | 327.3 | 6.3 | 333.7 | 18.9 | 275.3 |
| 2018 | 314.9 | 35.8 | 0.6 | 0.2 | 4.2 | 0.0 | 17.5 | 373.1 | 342.5 | 6.9 | 349.4 | 23.7 | 299.0 |
| 2019 | 330.0 | 38.7 | 0.6 | 0.2 | 4.4 | 0.0 | 19.3 | 393.2 | 366.7 | 7.4 | 374.1 | 19.1 | 318.1 |

[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]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 the Health Insurance Portability and Accountability Act of 1996 (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 the Balanced Budget Act of 1997 (Public Law 105-33).
[8]Includes the lump-sum general revenue adjustment of −$1.2 billion, as provided for by section 151 of the Social Security Amendments of 1983 (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 the Social Security Amendments of 1983 (Public Law 98-21).

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 1970-2019**

[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 |
| 2009 | 57.7 | 194.3 | 7.5 | 3.1 | 262.5 | 256.9 | 3.3 | 260.2 | 2.3 | 61.5 |
| Intermediate estimates: | | | | | | | | | | |
| 2010 | 61.4 | 212.2 | 4.7 | 2.9 | 281.3 | 275.8 | 3.2 | 279.0 | 2.3 | 63.7 |
| 2011 | 64.3 | 224.6 | 7.2 | 4.5 | 300.6 | 291.7 | 3.2 | 294.9 | 5.7 | 69.5 |
| 2012 | 73.4 | 241.2 | 9.1 | 6.1 | 329.9 | 287.2 | 3.5 | 290.7 | 39.1 | 108.6 |
| 2013 | 81.8 | 266.2 | 9.7 | 8.4 | 366.0 | 318.5 | 3.8 | 322.3 | 43.7 | 152.3 |
| 2014 | 90.3 | 285.4 | 10.2 | 11.4 | 397.3 | 341.7 | 4.2 | 345.9 | 51.3 | 203.7 |
| 2015 | 98.5 | 305.8 | 10.7 | 14.7 | 429.7 | 367.0 | 4.6 | 371.7 | 58.0 | 261.6 |
| 2016 | 107.0 | 335.5 | 11.5 | 18.3 | 472.3 | 405.6 | 5.1 | 410.7 | 61.6 | 323.2 |
| 2017 | 116.5 | 356.3 | 12.4 | 23.4 | 508.7 | 424.3 | 5.6 | 429.8 | 78.9 | 402.1 |
| 2018 | 128.5 | 380.5 | 13.5 | 28.5 | 550.9 | 445.9 | 6.0 | 451.9 | 99.0 | 501.1 |
| 2019 | 141.6 | 423.6 | 14.7 | 32.9 | 612.9 | 498.1 | 6.5 | 504.6 | 108.3 | 609.4 |

[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 ($8.5 billion) transferred 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.

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 1970-2019**

[In billions]

| | Income | | | | Expenditures | | | Account | |
|---|---|---|---|---|---|---|---|---|---|
| Fiscal year[1] | Premium income | General revenue[2] | 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 | 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 |
| 2009 | 51.9 | 150.7 | 3.1 | 205.7 | 200.3 | 3.1 | 203.4 | 2.3 | 60.6 |
| Intermediate estimates: | | | | | | | | | |
| 2010 | 54.9 | 160.7 | 2.9 | 218.5 | 212.9 | 2.9 | 215.9 | 2.7 | 63.3 |
| 2011 | 56.6 | 166.6 | 4.5 | 227.7 | 218.5 | 3.0 | 221.5 | 6.2 | 69.5 |
| 2012 | 63.9 | 187.1 | 6.1 | 257.1 | 215.5 | 3.2 | 218.7 | 38.4 | 107.8 |
| 2013 | 70.4 | 202.9 | 8.4 | 281.7 | 234.5 | 3.6 | 238.0 | 43.7 | 151.5 |
| 2014 | 77.2 | 217.4 | 11.4 | 306.1 | 250.9 | 3.9 | 254.8 | 51.3 | 202.8 |
| 2015 | 83.7 | 231.2 | 14.6 | 329.5 | 267.2 | 4.3 | 271.5 | 57.9 | 260.7 |
| 2016 | 90.4 | 246.7 | 18.2 | 355.3 | 288.0 | 4.8 | 292.8 | 62.5 | 323.2 |
| 2017 | 98.1 | 265.8 | 23.4 | 387.3 | 303.1 | 5.2 | 308.4 | 78.9 | 402.1 |
| 2018 | 108.0 | 289.2 | 28.4 | 425.7 | 322.1 | 5.7 | 327.8 | 97.8 | 499.9 |
| 2019 | 118.8 | 314.7 | 32.9 | 466.4 | 352.1 | 6.1 | 358.2 | 108.2 | 608.1 |

[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 ($8.5 billion) transferred 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.

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 2004-2019**

[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 | 52.3 | −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 |
| 2009 | 5.8 | 43.5 | 7.5 | 0.0 | 56.8 | 56.6 | 0.2 | 56.8 | 0.0 | 0.9 |
| Intermediate estimates: | | | | | | | | | | |
| 2010 | 6.5 | 51.5 | 4.7 | 0.0 | 62.7 | 62.9 | 0.2 | 63.1 | −0.4 | 0.5 |
| 2011 | 7.7 | 58.0 | 7.2 | 0.0 | 72.9 | 73.1 | 0.3 | 73.4 | −0.5 | 0.0 |
| 2012 | 9.6 | 54.1 | 9.1 | 0.0 | 72.8 | 71.8 | 0.3 | 72.0 | 0.8 | 0.8 |
| 2013 | 11.4 | 63.2 | 9.7 | 0.0 | 84.4 | 84.0 | 0.3 | 84.3 | 0.0 | 0.8 |
| 2014 | 13.0 | 67.9 | 10.2 | 0.0 | 91.2 | 90.8 | 0.3 | 91.1 | 0.0 | 0.9 |
| 2015 | 14.8 | 74.6 | 10.7 | 0.0 | 100.2 | 99.8 | 0.3 | 100.1 | 0.0 | 0.9 |
| 2016 | 16.6 | 88.8 | 11.5 | 0.0 | 117.0 | 117.6 | 0.3 | 117.9 | −0.9 | 0.0 |
| 2017 | 18.5 | 90.6 | 12.4 | 0.0 | 121.5 | 121.1 | 0.3 | 121.5 | 0.0 | 0.0 |
| 2018 | 20.5 | 91.2 | 13.5 | 0.0 | 125.2 | 123.7 | 0.3 | 124.1 | 1.2 | 1.2 |
| 2019 | 22.8 | 108.9 | 14.7 | 0.0 | 146.5 | 146.0 | 0.4 | 146.4 | 0.1 | 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 2008 and 2009. The assets at the end of fiscal year 2009 totaled $309.9 billion: $309.7 billion in the form of U.S. Government obligations and an undisbursed balance of $0.2 billion.

**Table V.E9.—Assets of the HI Trust Fund, by Type, at the End of Fiscal Years 2008 and 2009[1]**

| | September 30, 2008 | September 30, 2009 |
|---|---|---|
| Investments in public-debt obligations sold only to the trust funds (special issues): | | |
| Certificates of indebtedness: | | |
| 3.125-percent, 2010 | —— | $4,520,508,000.00 |
| 3.750-percent, 2009 | $4,611,407,000.00 | —— |
| Bonds: | | |
| 3.250-percent, 2023-2024 | —— | 18,380,800,000.00 |
| 3.500-percent, 2010 | 1,491,940,000.00 | —— |
| 3.500-percent, 2011-2018 | 27,461,388,000.00 | 27,461,388,000.00 |
| 4.000-percent, 2010 | 1,201,235,000.00 | —— |
| 4.000-percent, 2011-2023 | 36,303,539,000.00 | 36,303,539,000.00 |
| 4.125-percent, 2010 | 986,225,000.00 | —— |
| 4.125-percent, 2011-2020 | 27,680,245,000.00 | 27,680,245,000.00 |
| 4.625-percent, 2010 | 977,468,000.00 | —— |
| 4.625-percent, 2011-2019 | 25,637,711,000.00 | 25,637,711,000.00 |
| 5.000-percent, 2010 | 979,723,000.00 | —— |
| 5.000-percent, 2011-2022 | 31,464,438,000.00 | 31,464,438,000.00 |
| 5.125-percent, 2010 | 903,573,000.00 | —— |
| 5.125-percent, 2011-2021 | 28,743,453,000.00 | 28,743,453,000.00 |
| 5.250-percent, 2010 | 2,028,429,000.00 | —— |
| 5.250-percent, 2011-2017 | 27,341,821,000.00 | 27,341,821,000.00 |
| 5.625-percent, 2010 | 2,537,725,000.00 | —— |
| 5.625-percent, 2011-2016 | 26,008,754,000.00 | 26,008,754,000.00 |
| 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 |
| 6.500-percent, 2010 | 10,782,402,000.00 | 2,247,066,000.00 |
| 6.500-percent, 2011-2015 | 19,024,892,000.00 | 19,024,892,000.00 |
| 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, 2009 | 7,687,497,000.00 | —— |
| Total investments | $318,740,983,000.00 | $309,701,733,000.00 |
| Undisbursed balance | 258,763,157.22 | 212,177,939.04 |
| Total assets | $318,999,746,157.22 | $309,913,910,939.04 |

[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, 2009 was 5.0 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 2009 was 3.25 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 2008 and 2009. At the end of 2009, assets totaled $61.5 billion: $61.8 billion in the form of U.S. Government obligations and an undisbursed balance of −$0.3 billion.

**Table V.E10.—Assets of the SMI Trust Fund, by Type, at the End of Fiscal Years 2008 and 2009[1]**

| | September 30, 2008 | September 30, 2009 |
|---|---|---|
| Investments in public-debt obligations sold only to the trust funds (special issues): | | |
| Certificates of indebtedness: | | |
| 3.125-percent, 2010 | —— | $6,082,811,000.00 |
| 3.250-percent, 2009 | —— | 43,809,000.00 |
| 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 | —— |
| Bonds: | | |
| 3.250-percent, 2012-2024 | —— | 8,302,096,000.00 |
| 4.000-percent, 2011 | 882,474,000.00 | —— |
| 4.000-percent, 2012-2023 | 16,169,478,000.00 | 16,169,478,000.00 |
| 5.000-percent, 2017-2022 | 14,896,093,000.00 | 14,896,093,000.00 |
| 5.125-percent, 2010 | 2,101,665,000.00 | —— |
| 5.125-percent, 2011 | 3,033,135,000.00 | 347,930,000.00 |
| 5.125-percent, 2012-2017 | 2,772,618,000.00 | 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 | $59,089,947,000.00 | $61,763,952,000.00 |
| Undisbursed balance[2] | 1,203,257,239.42 | −298,150,188.59 |
| Total assets | $60,293,204,239.42 | $61,465,801,811.41 |

[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, 2009 was 4.4 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 2009 was 3.25 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. Currently, these positions are vacant and the President's nominees await Senate confirmation hearings. 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 2010 began October 1, 2009 and will end September 30, 2010.

**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.

**Infinite horizon.** The period extending into the indefinite future.

**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.

**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 physician 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.

**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 physician 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 physician 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.

## TABLES

## FIGURES

## *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) with the important caveats noted below, 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 30 percent over the next 3 years—an implausible result.

Further, while the Patient Protection and Affordable Care Act, as amended, makes important changes to the Medicare program and substantially improves its financial outlook, there is a strong likelihood that certain of these changes will not be viable in the long range. Specifically, the annual price updates for most categories of non-physician health services will be adjusted downward each year by the growth in economy-wide productivity. The best available evidence indicates that most health care providers cannot improve their productivity to this degree—or even approach such a level—as a result of the labor-intensive nature of these services.

Without major changes in health care delivery systems, the prices paid by Medicare for health services are very likely to fall increasingly short of the costs of providing these services. By the end of the long-range projection period, Medicare prices for hospital, skilled nursing facility, home health, hospice, ambulatory surgical center, diagnostic laboratory, and many other services would be less than half of their level under the prior law. Medicare prices would be considerably below the current relative level of Medicaid prices, which have already led to access problems for Medicaid enrollees, and

far below the levels paid by private health insurance. Well before that point, Congress would have to intervene to prevent the withdrawal of providers from the Medicare market and the severe problems with beneficiary access to care that would result. Overriding the productivity adjustments, as Congress has done repeatedly in the case of physician payment rates, would lead to far higher costs for Medicare in the long range than those projected under current law.

For these reasons, the financial projections shown in this report for Medicare do not represent a reasonable expectation for actual program operations in either the short range (as a result of the unsustainable reductions in physician payment rates) or the long range (because of the strong likelihood that the statutory reductions in price updates for most categories of Medicare provider services will not be viable). I encourage readers to review the "illustrative alternative" projections that are based on more sustainable assumptions for physician and other Medicare price updates. These projections are available at http://www.cms.gov/ActuarialStudies/Downloads/2010TRAlternativeScenario.pdf.

The Board of Trustees will convene an independent panel of expert actuaries and economists to consider these issues further and to make recommendations to the Board regarding the most appropriate long-range growth assumptions for Medicare projections. The panel's work should help both to inform the selection of assumptions for the 2011 report and to assess the sustainability of the Medicare price adjustments under current law.

Although the current-law projections are poor indicators of the likely future financial status of Medicare, they serve the useful purpose of illustrating the exceptional improvement that would result if viable means can be found to permanently slow the growth in health care expenditures. The Affordable Care Act establishes a broad program of research into innovative new delivery and payment models in an effort to improve the quality and cost-effectiveness of health care for Medicare—and, by extension, for the nation as a whole. As the Trustees note, the projections in this year's annual report provide an unequivocal incentive to vigorously pursue the development of effective and sustainable new approaches, with the potential to make quality health care much more affordable.

Finally, as the Chairman of the Federal Reserve recently noted, "the economic outlook remains unusually uncertain." Due to the sensitivity of HI trust fund operations to wage increases and

unemployment, the recession adds a significant further element of uncertainty to the trust fund projections.

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