

# CRS Report for Congress

## The Impact of Medicare Premiums on Social Security Beneficiaries

Updated January 7, 2008

Kathleen Romig  
Social Science Analyst  
Domestic Social Policy Division



Prepared for Members and  
Committees of Congress

# The Impact of Medicare Premiums on Social Security Beneficiaries

## Summary

Most Social Security beneficiaries pay Medicare premiums. Unless they qualify for low-income assistance, beneficiaries who participate in Medicare Part B (Supplementary Medical Insurance) or Part D (prescription drugs) must pay monthly premiums to receive coverage. Part B participants have premiums automatically deducted from their Social Security benefit checks. Starting in 2007, higher-income Part B beneficiaries must pay higher Part B premiums. An estimated 5% of Part B beneficiaries must pay income-related premiums in 2008. Part D participants may choose to have their premiums deducted from their Social Security checks. The amount of Part D premiums varies widely by plan. Beneficiaries must also pay other out-of-pocket costs when they use Part B and Part D services.

Medicare premiums are absorbing a growing share of Social Security benefits. To see the effect of growing premiums, consider a Social Security beneficiary who earned the average wage throughout his or her career (called a *medium earner*). If this retiree chose to participate in Part B — as the vast majority of Social Security beneficiaries do — the standard Part B premium would have absorbed about 5% of the retiree's benefits in 1999 and about 8% in 2008. The proportion of benefits needed to pay the standard Part B premium rose by almost 50% over the past decade.

The introduction of Medicare Part D adds to the premium expenses of beneficiaries who choose to participate; it also substantially reduces their out-of-pocket prescription drug costs. Part D premiums vary widely among plans; this report focuses on average premiums for standard coverage plans. If a medium earner chose to participate in both Part B and Part D, about 11% of his or her Social Security benefits would be used for combined Parts B and D premiums in 2008.

Medicare's trustees project that premiums for Parts B and D will grow at a faster rate than Social Security benefits in the future, thus consuming a greater proportion of benefits over time. By 2080, the Medicare trustees project that as a proportion of Social Security benefits, premiums will more than double. In 2080, a medium earner is projected to need 15% of his or her benefits to pay the Part B premium and 23% of his or her benefits to pay combined Parts B and D premiums.

The deduction of Medicare premiums affects beneficiaries differently, depending on their incomes and Social Security benefit amounts. Medicare premiums absorb a greater fraction of lower earners' Social Security benefits than of higher earners' benefits, because benefit amounts are progressive. However, some low-income beneficiaries are eligible for subsidies that cover their Medicare premiums and other out-of-pocket costs. Other beneficiaries with low benefits may be protected by a hold harmless provision that prevents a beneficiary's Social Security check from declining because of increases in the standard Part B premium.

Finally, it is important to note that although Social Security beneficiaries are affected by rising health-care costs, the benefits of participating in Medicare are substantially greater than the costs. This report will be updated as events warrant.

## Contents

Introduction .....	1
Background .....	2
Social Security Benefits .....	2
Annual Cost-of-Living Adjustment (COLA) .....	2
Medicare Premiums .....	3
Part B Premiums .....	4
Part D Premiums .....	5
Medicare Advantage (Part C) .....	6
Premium Subsidies for Low-Income Beneficiaries .....	6
Relationship Between Social Security Benefits and Medicare Premiums .....	7
Growth in Social Security Benefits and Part B Premiums .....	8
Hold Harmless Provision .....	9
Impact of Medicare Premiums on Social Security Beneficiaries .....	11
Actual Impact, 1999-2008 .....	11
Effect of Part B Premiums on Social Security Benefits .....	11
Effect of Part B Premium Increases on Social Security COLAs .....	13
Future Impact, 2009-2080 .....	14
Projected Effect of Part B Premiums on Social Security Benefits .....	14
Projected Effect of Part D Premiums on Social Security Benefits .....	16
Legislation in the 110 <sup>th</sup> Congress .....	18
Conclusion .....	18

## List of Figures

Figure 1. Annual Increase in Social Security Benefits and Standard Medicare Part B Premiums, 1999-2008 .....	8
Figure 2. Approximate Thresholds for Hold Harmless Provision, 1999-2008 .....	10
Figure 3. Percentage of Total Social Security Benefits Deducted for Standard Part B Premiums, 1999-2008 .....	12
Figure 4. Percentage of Social Security COLAs Absorbed by Standard Part B Increase, 1999-2008 .....	13
Figure 5. Percentage of Initial Social Security Benefits Deducted for Standard Medicare Part B Premiums, 2009-2080 .....	15
Figure 6. Percentage of Initial Social Security Benefits Deducted for Standard Part B and D Premiums, 2009-2080 .....	17

# The Impact of Medicare Premiums on Social Security Beneficiaries

## Introduction

Social Security and Medicare are large and important parts of America's safety net. More than 40 million older and disabled individuals — about 1 in 7 Americans — are beneficiaries of both Social Security and Medicare.<sup>1</sup> Social Security and Medicare account for a large amount of federal spending. In 2007, spending on the two programs was over \$1 trillion, more than one-third of the federal budget and about 7% of gross domestic product (GDP), one measure of the size of the U.S. economy.<sup>2</sup>

Although Social Security and Medicare both play important roles in the well-being of older and disabled Americans, the interactions between the two programs are rarely examined. These interactions will become increasingly important as policymakers look for ways to slow the growth in spending on Social Security and Medicare. This report focuses on how Medicare premiums affect Social Security beneficiaries. Medicare premiums are rising faster than Social Security benefits, consequently consuming an increasing share of benefits over time.

Rising Medicare premiums could have a large effect on Social Security beneficiaries, particularly on those with low incomes and those who rely on Social Security as their primary source of income. Some beneficiaries will be able to pay for rising health-care costs; others may have limited resources. For example, among Americans aged 65 and older, about two-thirds receive more than half of their income from Social Security, and more than one-third receive more than 90% of their income from Social Security. These beneficiaries may see a decline in their standard of living as their Medicare premiums rise.

---

<sup>1</sup> Social Security Administration, *2007 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*, May 1, 2007, at [<http://www.ssa.gov/OACT/TR/TR07/tr07.pdf>]. (Hereafter cited as *2007 Social Security Trustees Report*.) Centers for Medicare and Medicaid Services, *2007 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*, May 1, 2007, available at [<http://www.cms.hhs.gov/ReportsTrustFunds/downloads/tr2007.pdf>]. (Hereafter cited as *2007 Medicare Trustees Report*.)

<sup>2</sup> Congressional Budget Office, *The Budget and Economic Outlook: An Update*, August 23, 2007, at [<http://www.cbo.gov/ftpdocs/77xx/doc7731/01-24-BudgetOutlook.pdf>].

This report shows how the deduction of Medicare Part B and Part D premiums affects Social Security beneficiaries.<sup>3</sup> It describes how increases in Social Security benefits and Medicare premiums are calculated under current law and explains the circumstances under which Social Security beneficiaries are held harmless for increases in the standard Part B premium, as well as the premium assistance available to low-income beneficiaries. It shows the growth in Social Security benefits and Part B premiums in recent years and describes how rising Part B premiums have affected Social Security beneficiaries, comparing the effects of premium deductions on people with different levels of earnings. It also provides estimates of Social Security benefits and Medicare Parts B and D premiums to 2080, using the Social Security and Medicare trustees' intermediate projections, and describes how beneficiaries would be affected by projected Medicare premium increases. Finally, it outlines current legislation that would affect the relationship between Social Security benefits and Medicare premiums.

## Background

### Social Security Benefits

Social Security provides retirement, disability, and survivors benefits to workers and their families. People become insured for benefits by working in Social Security-covered employment (i.e., by paying Social Security payroll taxes).<sup>4</sup> Generally, people who qualify for retirement benefits may receive reduced Social Security benefits as early as age 62 or full benefits at the full retirement age.<sup>5</sup> Those who qualify for disability or certain survivors benefits may receive them at any age. The amount of a worker's Social Security benefit is calculated by applying a progressive benefit formula to his or her lifetime earnings, adjusted for wage growth.<sup>6</sup> Historically, the average Social Security benefit paid to new beneficiaries has increased at about the same rate as average earnings.

**Annual Cost-of-Living Adjustment (COLA).** After a person becomes eligible to receive Social Security benefits, his or her monthly benefit amount is increased annually to maintain purchasing power over time. At the end of each year, the Social Security Administration (SSA) announces the cost-of-living adjustment (COLA) payable in January of the following year. The amount of the COLA is based

---

<sup>3</sup> Medicare Part B, Supplementary Medical Insurance (SMI), covers physician services and other outpatient expenses. Medicare Part D covers prescription drugs through private plans.

<sup>4</sup> The amount of time a person must work in Social Security-covered employment to be insured for benefits depends on the type of benefit, among other factors. For more details, see CRS Report 94-27, *Social Security: Brief Facts and Statistics*, by Gary Sidor.

<sup>5</sup> The age at which workers may receive full retirement benefits is rising from 65 (for those born before 1938) to 67 (for those born after 1959).

<sup>6</sup> Social Security benefits provided to a worker's family, such as spouse benefits and survivor benefits, are based on the lifetime earnings of the worker. For more information, see CRS Report 94-27, *Social Security: Brief Facts and Statistics*, by Gary Sidor.

on inflation as measured by the Consumer Price Index — Urban Wage Earners and Clerical Workers (CPI-W).<sup>7</sup>

**COLA for 2008.** In January 2008, Social Security benefits increased by 2.3% for current beneficiaries. This benefit increase was based on the change in the CPI-W between October 2006 and September 2007. SSA estimated that the COLA increased the average retired worker's monthly benefit by \$24.<sup>8</sup>

## Medicare Premiums

Medicare is the federal health insurance program for people aged 65 and older and for certain disabled people. Medicare is composed of four parts:

- Part A: Hospital Insurance (HI);
- Part B: Supplementary Medical Insurance (SMI), which covers physician services and other outpatient expenses;
- Part C: Medicare Advantage (MA), which covers the same services as Parts A and B through private health insurance plans; and
- Part D: covers prescription drugs through private plans.

Participation in Part A is required for Social Security beneficiaries aged 65 and older and for those who have received disability benefits for more than 24 months.<sup>9</sup> Part A beneficiaries may choose to participate in Parts B, C, and D.<sup>10</sup>

Medicare is funded through a combination of payroll taxes, general revenues, and beneficiary premiums. Medicare Part A is funded primarily through the payroll taxes of current workers and their employers, which are credited to the HI trust

<sup>7</sup> The CPI-W tracks the prices of a fixed market basket of goods and services over time. Social Security's COLA is calculated as the change in the CPI-W from the third quarter of the prior calendar year to the third quarter of the current calendar year. If the CPI-W increases during this period, Social Security benefits for the next year increase proportionately. If the CPI-W decreases, Social Security benefits stay the same. See CRS Report 94-803, *Social Security: The Cost-of-Living Adjustment in January 2008*, by Gary Sidor and CRS Report RL30074, *The Consumer Price Index: A Brief Overview*, by Brian W. Cashell.

<sup>8</sup> Social Security Administration, *2008 Social Security Changes*, October 2007, at [<http://www.ssa.gov/pressoffice/factsheets/colafacts2008.htm>].

<sup>9</sup> People who receive Social Security benefits that confer eligibility for Part A (i.e., retirement benefits for those aged 65 and older and disability benefits after 24 months) may not waive Part A entitlement. (Social Security Administration, Program Operations Manual System, HI 00801.002, at [<https://s044a90.ssa.gov/apps10/poms.nsf/lrx/0600801002!opendocument>].)

<sup>10</sup> Of Part A beneficiaries, roughly 94% are enrolled in Part B, and about 20% are enrolled in Part C. In 2007, about 90% of Medicare beneficiaries had prescription drug coverage of some kind. About 55% were enrolled in stand-alone Part D plans or had prescription drug coverage through their Part C plans, and an additional 34% were enrolled in other health insurance plans that were subsidized by Part D. (CRS Report RL34280, *Medicare Part D Prescription Drug Benefit: A Primer*, by Jennifer O'Sullivan.)

fund.<sup>11</sup> Parts B and D are financed through a combination of beneficiary premiums and federal general revenues, which are credited to the SMI trust fund. Part C is financed through the HI and SMI trust funds; Part C participants must pay the Part B premium.<sup>12</sup> Because this report focuses on the payment of Medicare premiums, the analysis herein primarily relates to Parts B and D.

**Part B Premiums.** At the end of each year, the Centers for Medicare and Medicaid Services (CMS) announce Part B premiums for the next year. The Balanced Budget Act of 1997 permanently set the standard Part B premium to cover 25% of projected per capita Part B program costs for beneficiaries aged 65 and older.<sup>13</sup> If projected Part B costs increase or decrease, the premium rises or falls proportionately. Starting in 2007, higher-income beneficiaries pay higher Part B premiums.<sup>14</sup> An estimated 5% of Part B beneficiaries must pay income-related premiums in 2008.<sup>15</sup> Unless they qualify for low-income assistance, Part B participants must pay monthly premiums; they must also pay other out-of-pocket costs when they use Part B services.

**Part B Premiums for 2008.** In January 2008, the standard Part B premium rose to \$96.40 per month, an increase of 3.1% over 2007. The premium increase was necessary to cover the rising cost of Part B services and to build up trust fund reserves. In 2008, individuals whose modified adjusted gross income (AGI) exceeds \$82,000, and couples whose modified AGI exceeds \$164,000, are subject to higher premium amounts, as shown in **Table 1** below.<sup>16</sup> The analysis in this report focuses on the standard Part B premium, which is paid by most beneficiaries. In addition to premiums, Part B beneficiaries must also pay other out-of-pocket costs when they use services. The annual deductible for Part B services is \$135 in 2008. After the annual deductible is met, beneficiaries are responsible for coinsurance costs, which are generally 20% of Medicare-approved Part B expenses.

---

<sup>11</sup> About 99% of Medicare beneficiaries qualify for premium-free Part A coverage, which they earn if they (or their spouses) have worked at least 10 years in Medicare-covered employment. Individuals without sufficient work history who are otherwise eligible for Medicare may participate in the program if they pay monthly Part A premiums.

<sup>12</sup> The law requires that Part C participants pay the Part B premium. Some Part C plans subsidize the premium for their enrollees; others require that enrollees pay the full Part B premium plus an additional premium directly to the plan sponsor.

<sup>13</sup> Disabled Medicare beneficiaries under age 65 pay the same premium amount as those aged 65 or older, though their per capita Part B costs are higher.

<sup>14</sup> The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (P.L. 108-173) increased the Part B premium percentage for high-income enrollees; the Deficit Reduction Act of 2005 (P.L.109-171) accelerated the phase-in period for such premiums.

<sup>15</sup> SSA, *Medicare Part B Premiums: Important Information For People Newly Eligible For Medicare 2008*, December 2007, at [<http://www.ssa.gov/pubs/10162.html>].

<sup>16</sup> For more information, see CRS Report RL32582, *Medicare: Part B Premiums*, by Jennifer O'Sullivan.

**Table 1. Part B Premiums, 2008**

Modified Adjusted Gross Income (AGI)		Premium
Single	Couple	
\$82,000 or less	\$164,000 or less	\$96.40
\$82,001-\$102,000	\$164,001-\$204,000	\$122.20
\$102,001-\$153,000	\$204,001-\$306,000	\$160.90
\$153,001-\$205,000	\$306,001-\$410,000	\$199.70
More than \$205,000	More than \$410,000	\$238.40

**Source:** Social Security Administration, *Medicare Part B Premiums: Important Information For People Newly Eligible For Medicare 2008*, December 2007, at [<http://www.ssa.gov/pubs/10162.html>].

**Note:** For more, see CRS Report RL32582, *Medicare: Part B Premiums*, by Jennifer O'Sullivan.

**Part D Premiums.** Medicare Part D was established in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA, P.L. 108-173) and began covering beneficiaries' prescription drugs through private plans in January 2006.<sup>17</sup> To participate in Part D, qualified individuals must enroll in a participating prescription drug plan. Unless they qualify for low-income assistance, Part D participants must pay monthly premiums; they must also pay other out-of-pocket costs when they use Part D services.

MMA established guidelines for *standard* Part D coverage, including specific deductible and coinsurance amounts and a formula for calculating average premiums. Individual prescription drug plans are also allowed to offer *alternative* coverage that has at least actuarially equivalent benefits. In other words, alternative coverage plans must pay, on average, equal or greater benefits per person than standard coverage plans. Alternative coverage plans may charge higher or lower premiums, deductibles, and coinsurance than standard coverage plans.<sup>18</sup> This report focuses on beneficiaries' premiums for *standard* Part D coverage, which vary by plan. On average, a beneficiary's premium covers 25.5% of the value of a standard coverage plan and the federal government pays for the remaining 74.5%.

**Part D Premiums for 2008.** The average premium for standard Part D coverage is \$27.93 in 2008. The annual deductible for standard coverage is \$275 in

---

<sup>17</sup> See CRS Report RL31966, *Overview of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003*, by Jennifer O'Sullivan, et al., and CRS Report RL31525, *Beneficiary Cost-Sharing Under the Medicare Prescription Drug Benefit*, by Jim Hahn.

<sup>18</sup> For example, in 2008 premiums for stand-alone Part D plans ranged from \$9.80 to \$107.50 per month. (Kaiser Family Foundation, *Medicare Part D 2008 Data Spotlight: Premiums*, November 2007, at [<http://www.kff.org/medicare/upload/7706.pdf>].)



2008. After meeting the deductible, beneficiaries pay 25% coinsurance costs for drug costs up to \$2,510, all of their drug costs between \$2,510 and \$5,726, and about 5% of drug costs above \$5,726.<sup>19</sup>

**Medicare Advantage (Part C).** Beneficiaries who are entitled to Medicare Part A and enrolled in Part B may choose to enroll in a private health insurance plan through Part C, also known as Medicare Advantage (MA), which provides health-care coverage in lieu of traditional Medicare. In 2007, about 20% of Medicare beneficiaries were enrolled in Part C, mostly in managed care plans.<sup>20</sup> Medicare Advantage plans are generally required to offer the same services as Medicare Parts A and B. MA managed care organizations must also offer at least one Medicare Advantage-prescription drug plan (MA-PD) that includes drug coverage at least equivalent to standard coverage in Part D plans. (Beneficiaries enrolled in MA managed care plans may not enroll in a stand-alone Part D plan.)<sup>21</sup>

**Part C Premiums.** Medicare Advantage participants' total premium amounts may be higher or lower than the Part B premium. Although the law requires that MA participants pay the Part B premium, some plans subsidize the premium for their enrollees. Other plans require that enrollees pay the full Part B premium plus an additional premium directly to the plan sponsor.<sup>22</sup>

**Premium Subsidies for Low-Income Beneficiaries.** The analysis in this report focuses on Social Security beneficiaries who pay Medicare premiums. However, low-income individuals (including MA participants) may qualify for low-income subsidies, which cover all or part of their Part B and Part D premiums.<sup>23</sup> About one in five of Medicare beneficiaries receive full Part B subsidies.

To qualify for subsidies, beneficiaries must have limited income and assets. Beneficiaries may qualify for full Part B premium subsidies if they have incomes of

<sup>19</sup> The majority of plans offered to beneficiaries in 2006 were alternative coverage plans. Many of these plans include tiered cost-sharing, under which costs are lower for generic drugs and higher for brand-name drugs.

<sup>20</sup> Kaiser Family Foundation, *Fact Sheet: Medicare Advantage*, June 2007, at [<http://www.kff.org/medicare/upload/2052-10.pdf>].

<sup>21</sup> MA providers of nonmanaged care plans (i.e., private fee-for-service [PFFS] plans and medical savings accounts [MSAs]) are *not* required to offer prescription drug coverage. Drug coverage is optional for PFFS providers; PFFS plan enrollees without drug coverage are permitted to enroll in a stand-alone Part D plan. MSAs may not offer drug coverage.

<sup>22</sup> As of 2006, the majority (55%) of MA participants' total premiums were equal to the Part B premium amount, then \$88.50 per month. About 42% of MA participants paid higher premiums, and about 3% paid lower premiums. On average, MA participants' total monthly premiums were about \$26 more than the Part B premium. (AARP Public Policy Institute, *2006 Medicare Advantage Benefits and Premiums*, by Marsha Gold, Maria Cupples Hudson, and Sarah Davis, November 2006, at [[http://assets.aarp.org/rgcenter/health/2006\\_23\\_medicare.pdf](http://assets.aarp.org/rgcenter/health/2006_23_medicare.pdf)].)

<sup>23</sup> For more information on subsidies for low-income Medicare beneficiaries, see CRS Report RL32582, *Medicare: Part B Premiums* and CRS Report RL32902, *Medicare Prescription Drug Benefit: Low-Income Provisions*, both by Jennifer O'Sullivan.

less than 135% of poverty and assets of less than \$4,000 for an individual or \$6,000 for a couple. Beneficiaries may qualify for full or partial Part D premium subsidies if they have incomes of less than 150% of poverty and assets of less than \$11,990 for an individual and \$23,970 for a couple in 2008.

Some beneficiaries who qualify for premium subsidies do not apply for them. For example, CMS has estimated that more than one-fourth of Medicare beneficiaries (roughly 11 million) qualify for full Part B subsidies.<sup>24</sup> In 2005, about two-thirds of qualifying individuals (7.5 million) received Part B subsidies.<sup>25</sup> CMS has also estimated that about a third of Medicare beneficiaries (roughly 14 million) qualify for full or partial Part D subsidies. In 2007, about 9.1 million beneficiaries received Part D subsidies, and an additional million low-income beneficiaries receive comprehensive drug coverage for little or no cost.<sup>26</sup> However, 3.3 million individuals eligible for subsidies had neither signed up for Part D nor had coverage through another source.

## **Relationship Between Social Security Benefits and Medicare Premiums**

Ultimately, everyone who is eligible for Social Security retirement or disability benefits qualifies for Medicare.<sup>27</sup> Most people who participate in both programs pay Medicare premiums.<sup>28</sup> By law, the Medicare Part B premium is automatically deducted from the Social Security benefits of those enrolled in Part B (including MA and MA-PD participants).<sup>29</sup> Medicare Part D participants may choose to have their Part D premiums deducted from their benefits or to pay them directly to their prescription drug plan sponsors.

<sup>24</sup> Centers for Medicare and Medicaid Services, *Over 38 Million People with Medicare Now Receiving Prescription Drug Coverage*, June 14, 2006, at [<http://hhs.gov/news/press/2006pres/20060614.html>].

<sup>25</sup> Kaiser Commission on Medicaid and the Uninsured, *Dual Eligibles: Medicaid's Role for Low-Income Medicare Beneficiaries*, February 2006, at [<http://www.kff.org/medicaid/upload/Dual-Eligibles-Medicaid-s-Role-for-Low-Income-Medicare-Beneficiaries-Feb-2006.pdf>]. (Hereafter cited as Kaiser, *Dual Eligibles*.)

<sup>26</sup> Centers for Medicare and Medicaid Services, *Medicare Drug Plans Strong and Growing*, January 30, 2007, available at [<http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=2079&intNumPerPage=10&checkDate=&checkKey=&srchType=1&numDays=3500&srchOpt=0&srchData=&keywordType=All&chkNewsType=1%2C+2%2C+3%2C+4%2C+5&intPage=&showAll=&pYear=&year=&desc=false&cboOrder=date>].

<sup>27</sup> People aged 65 and older who qualify for Social Security benefits and people of any age who receive disability benefits (after a two-year waiting period) are entitled to Part A and are also eligible to enroll in Part B, in a private health insurance plan through Part C, and/or in a private prescription drug plan through Part D.

<sup>28</sup> Some beneficiaries do not pay Medicare premiums, either because they receive low-income assistance or because they choose not to enroll in Medicare Part B or Part D.

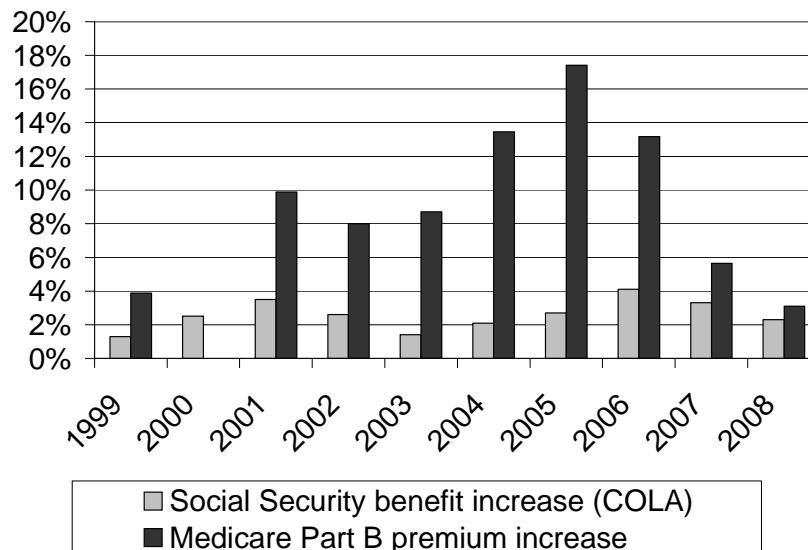
<sup>29</sup> 42 U.S.C. § 1840(a)(1). Part B premiums are also deducted from Railroad Retirement benefits (42 U.S.C. § 1840(b)(1)).

### Growth in Social Security Benefits and Part B Premiums.

Historically, the growth in Medicare Part B premiums has greatly exceeded the growth in Social Security benefits. Over the past decade, Social Security's annual COLA resulted in a cumulative benefit increase of about 26%; average worker benefits have increased by about 34%.<sup>30</sup> At the same time, standard Part B premiums have more than doubled, from \$45.50 in 1999 to \$96.40 in 2008. By law, all Part B premiums are set as a proportion of projected Part B program costs. Part B costs — like all health-care costs — have been rising dramatically. This cost growth is driven by many factors, including increasing life expectancy, new medical technology, program expansion, increases in the earnings of health professionals, and other medical price growth (which has been higher than overall inflation).

The cumulative growth in standard Part B premiums has been dramatic, but annual changes have been somewhat erratic. During the past 10 years, annual Part B premium increases have ranged from 0% to more than 17%. Social Security COLAs, meanwhile, have ranged from 1.3% to 4.1%. **Figure 1** shows the annual rates of increase in Medicare premiums and Social Security benefits from 1999 to 2008.

**Figure 1. Annual Increase in Social Security Benefits and Standard Medicare Part B Premiums, 1999-2008**



**Source:** Congressional Research Service calculations, based on figures from the *2007 Medicare Trustees Report* and the *2007 Social Security Trustees Report*.

**Note:** There was no increase in the Part B premium in 2000.

<sup>30</sup> The COLA increases the benefits paid to *current* beneficiaries. In contrast, average Social Security benefits (those paid to new and current beneficiaries) have risen at a faster rate than the annual COLA, because the formula for calculating initial Social Security benefits is linked to *wage* growth, whereas the COLA is based on *price* growth. Generally, wages rise faster than prices.

### **Hold Harmless Provision.**

A *hold harmless* provision reduces the Part B premium for beneficiaries whose Social Security COLAs are not sufficient to cover the standard Part B premium increase.<sup>31</sup> If, in a given year, the increase in the standard Part B premium would cause a beneficiary's Social Security check to be less than it was the year before, the premium is reduced to ensure that the nominal amount of the individual's Social Security check stays the same.<sup>32</sup> (See the **text box** below for an example.) However, high-income individuals who must pay income-related Part B premiums are *not* subject to the hold harmless provision. This means that for these high-income beneficiaries, Social Security checks can be reduced from one year to the next as a result of an increase in the Part B premium.

SSA determines which beneficiaries will be held harmless each year. In some cases, a beneficiary may be held harmless one year but not the next. In other cases, a beneficiary will be held harmless entirely because his or her premium was reduced in a previous year. The cumulative effect of the hold harmless provision can produce substantial savings for individuals with low benefits.

#### **Example of Hold Harmless Provision**

To see the effect of the hold harmless provision, consider an individual, Maria, who retires in 2005 with a monthly Social Security benefit of \$200. In 2005, Maria would receive a benefit check of \$121. (Maria's 2005 check is equal to her benefit amount of \$200, minus the 2005 Part B premium of \$78.20, rounded down to the nearest dollar.)

In 2006, the inflation rate used to calculate the Social Security COLA was 4.1%. Thus, Maria's COLA for 2006 would have been \$8.20 (4.1% times \$200). The Part B premium for 2006 was \$88.50 (\$10.30 more than in 2005). If the *entire* Part B premium were deducted, Maria's check would fall from \$121 in 2005 to \$119 in 2006. (Maria's 2006 check is equal to her 2005 benefit amount of \$200, plus the COLA of \$8.20, minus the 2006 Part B premium of \$88.50, rounded down to the nearest dollar.)

Because Maria's 2006 benefit check would be less than her 2005 benefit check (a result of the increase in the Part B premium), she would be held harmless. In other words, Maria's Part B premium would be reduced by \$2, so that the nominal amount of her monthly Social Security check for 2006 would stay the same as it was in 2005 (\$121).

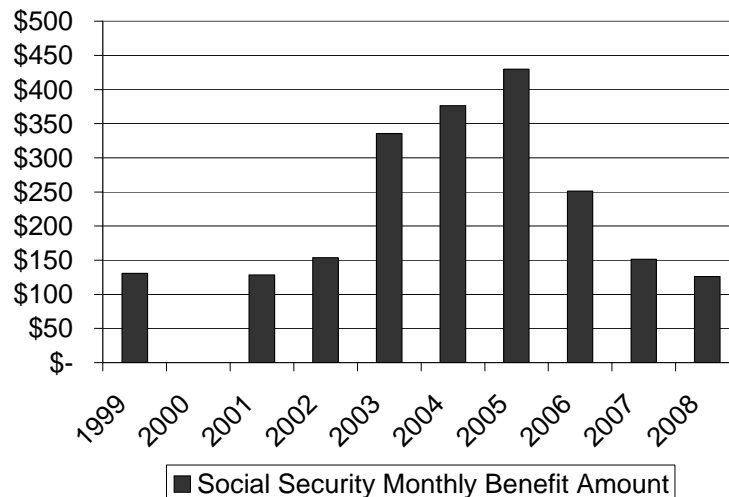
<sup>31</sup> 42 U.S.C. § 1839(f). The hold harmless provision was first implemented in January 1987.

<sup>32</sup> To be held harmless in a given year, a beneficiary must have had Part B premiums deducted from both the December check of the prior year and the January check of the current year. Changes in a beneficiary's benefit amount (other than the COLA) do not affect whether the beneficiary is held harmless. If a beneficiary's benefit amount changes during a year in which he or she is held harmless (e.g., a beneficiary starts to receive a government pension offset), the Part B premium amount does *not* change. For more information on the hold harmless provision, see Social Security Administration, *Variable Supplementary Medical Insurance Premiums*, Actuarial Note No. 147, by Jacqueline A. Walsh and Burt M. Kestenbaum, March 2006, at [[http://www.ssa.gov/OACT/NOTES/pdf\\_notes/note147.pdf](http://www.ssa.gov/OACT/NOTES/pdf_notes/note147.pdf)]. (Hereafter cited as SSA Actuarial Note No. 147.)

A beneficiary is *not* held harmless if the increase in his or her Part D premium (or the combined increase in Part B and Part D premiums) causes his or her Social Security check to decline. In other words, a person's Social Security check may decrease from one year to the next as a result of Part D premium increases.

Whether a beneficiary is held harmless depends on the amount of the standard Part B premium increase relative to the amount of his or her Social Security COLA in a given year. An individual's Social Security COLA is determined by multiplying his or her benefit amount by the inflation rate (i.e., the CPI-W). Part B premiums are determined by projected Part B program costs. Thus, the number of people held harmless can vary widely from year to year, depending on annual inflation rates and projected Part B costs. For example, about 1.8 million Part B participants (6% of those paying premiums) were held harmless in 2005, while roughly one million participants (3% of those paying premiums) were held harmless in 2006.<sup>33</sup> Low-income beneficiaries who are not required to pay Part B premiums are not affected by the hold harmless provision, nor are high-income beneficiaries who must pay income-related Part B premiums.

**Figure 2. Approximate Thresholds for Hold Harmless Provision, 1999-2008**



**Source:** Congressional Research Service calculations, based on figures from the *2007 Medicare Trustees Report* and the *2007 Social Security Trustees Report*.

**Note:** Some beneficiaries with benefits below the thresholds shown in this figure would not have had their Part B premiums reduced because their benefit checks would not have declined as a result of the Part B premium increase, due to the fact the Social Security benefits are rounded down to the nearest dollar. There was no increase in the Medicare Part B premium in 2000.

**Figure 2** shows the approximate thresholds beneath which Social Security beneficiaries who paid Part B premiums were held harmless from 1999 to 2008. The Part B premium increase is reduced for most beneficiaries with monthly Social

<sup>33</sup> SSA Actuarial Note No. 147.

Security benefits below the threshold in a given year.<sup>34</sup> If a beneficiary had benefits above the threshold in a given year, he or she would pay the full Part B premium increase in that year. In 2008, a beneficiary with a monthly Social Security benefit of less than \$126 could be held harmless — that is, could pay a reduced Part B premium so that his or her Social Security checks would not decline due to the Part B premium increase.

## Impact of Medicare Premiums on Social Security Beneficiaries

### Actual Impact, 1999-2008

During the past decade, Medicare Part B premiums have absorbed a growing fraction of beneficiaries' Social Security benefits. The deduction of Part B premiums does not affect all beneficiaries equally. Paying the standard Part B premium, as most beneficiaries do, requires a relatively larger deduction from small Social Security benefits than from large benefits. Social Security benefits are based on workers' lifetime earnings; consequently, low earners are disproportionately affected by the deduction of Medicare premiums.

**Effect of Part B Premiums on Social Security Benefits.** The following section illustrates how the deduction of Medicare Part B premiums would have affected the Social Security benefits of three hypothetical workers who retired in 1998: a low earner, a medium earner, and a high earner.<sup>35</sup> The *low earner* is assumed to have earned 45% of the average wage during each year of his or her career (about \$19,000 in 2008) and to receive a monthly Social Security benefit of about \$700 in 2008.<sup>36</sup> The *medium earner* is assumed to have earned the average wage during each year of his or her career (about \$42,000 in 2008) and to receive a monthly Social Security benefit of about \$1,200 in 2008. The *high earner* is assumed to have earned 160% of the average wage during each year of his or her career (about \$68,000 in 2008) and to receive a monthly Social Security benefit of \$1,500 in 2008. All of the hypothetical workers are assumed to have been born in

---

<sup>34</sup> Some beneficiaries with benefits below these thresholds would *not* have had their Part B premiums reduced because their benefit checks would not have declined as a result of the Part B premium increase, due to the fact the Social Security benefits are rounded down to the nearest dollar. These thresholds apply only to beneficiaries who were not held harmless in the previous year. For more information, see SSA Actuarial Note No. 147.

<sup>35</sup> The hypothetical workers were developed by SSA's actuaries. See Social Security Administration, Office of the Chief Actuary, Actuarial Note Number 144, *Internal Rates of Return Under the OASDI Program for Hypothetical Workers*, by Orlo R. Nichols, et al., June 2001, at [<http://www.ssa.gov/OACT/NOTES/note2000s/note144.html>].

<sup>36</sup> The *average wage* is defined by SSA's Average Wage Index (AWI). The AWI tends to overestimate workers' lifetime earnings. See University of Michigan Retirement Research Center, Working Paper WP 2004-074, *Modeling Lifetime Earnings Paths: Hypothetical versus Actual Workers*, by Andrew Au, Olivia Mitchell, and John W.R. Phillips, March 2004, at [<http://www.mrrc.isr.umich.edu/publications/Papers/pdf/wp074.pdf>].

1930, to have worked full-time each year from age 22 to 65 with no interruptions, to have retired in 1998 at age 65, and to pay the standard Part B premium without low-income assistance.<sup>37</sup> **Figure 3** shows the percentage of each hypothetical worker's Social Security benefits deducted to pay the standard Part B premium from 1999 to 2008.

**Figure 3. Percentage of Total Social Security Benefits Deducted for Standard Part B Premiums, 1999-2008**



**Source:** Congressional Research Service calculations, based on figures from the *2007 Medicare Trustees Report* and the *2007 Social Security Trustees Report*.

**Note:** The calculations in this figure are based on individuals who retired in 1998. Estimates for other cohorts would vary.

As shown in **Figure 3**, a growing proportion of Social Security benefits have been deducted to pay Part B premiums over the 10-year period. The proportion of Social Security benefits needed to pay the Part B premium was stable from 1999 to 2001, in part because there was no premium increase in 2000. During this period, the medium earner needed approximately 5% of his or her Social Security benefits to pay the Part B premium each year. As the Part B premium increased from 2001 to 2008, the proportion of Social Security benefits needed to pay the Part B premium rose substantially. By 2008, the Part B premium absorbed about 8% of the medium earner's benefits.

Lower earners need a greater fraction of their Social Security benefits to pay the Part B premium than do higher earners. For example, in 2008 the low earner in this illustration needs about 13% of his or her Social Security benefits to pay the Part B

<sup>37</sup> The low earner could potentially qualify for assistance in paying Part B premiums if he or she had little or no income besides Social Security benefits, had assets below the statutory limit (\$4,000 for an individual and \$6,000 for a couple), and applied for assistance.

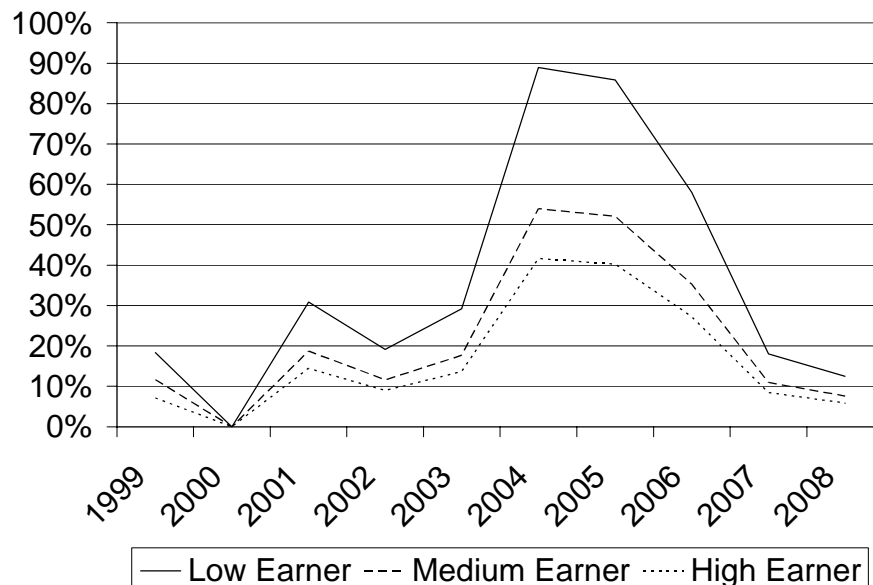
premium. In contrast, the high earner needs about 6% of his or her benefits to pay the Part B premium.

**Effect of Part B Premium Increases on Social Security COLAs.** The Social Security COLA is designed to ensure that Social Security benefits keep up with overall inflation. However, in some years, a disproportionate share of the COLA is absorbed by the increase in the Part B premium. In these years, beneficiaries' ability to pay for all other goods and services decreases.

Using the same three hypothetical workers as examples, **Figure 4** shows the percentage of the Social Security COLA absorbed by the annual increase in Medicare premiums in each year from 1999 to 2008. The proportion of the COLA needed to pay the increase in the Part B premium has varied substantially over time. In recent years, a large proportion of beneficiaries' COLAs have been absorbed by the Part B premium increase. For example, in 2004 and 2005 the Part B premium increase absorbed more than half of the medium earner's COLA. In 2008, the Part B premium increase absorbed about 8% of the medium earner's COLA.

Those with lower benefits need a greater fraction of their Social Security COLAs to cover the Part B premium increase than those with higher benefits. In 2008, the Part B premium increase absorbed about 13% of the low earner's COLA and about 6% of the high earner's COLA. None of the workers in this example would have been held harmless, because paying the full Part B premium increase would not have caused their benefit checks to decrease from any one year to the next.

**Figure 4. Percentage of Social Security COLAs Absorbed by Standard Part B Increase, 1999-2008**



**Source:** Congressional Research Service calculations, based on figures from the *2007 Medicare Trustees Report* and the *2007 Social Security Trustees Report*.

**Note:** The calculations in this figure are based on individuals who retired in 1998. Estimates for other cohorts would vary.



## Future Impact, 2009-2080

Most experts agree that Medicare costs will continue to outstrip the growth in prices (and thus Social Security COLAs) and wages (and thus initial Social Security benefits). The trustees of Social Security and Medicare project that over the long term, annual inflation will average 2.8%, annual wage growth will average 3.9%, and annual increases in Parts B and D costs per beneficiary will average 5% or more. Long-range projections are inherently imprecise; the further into the future one looks, the wider the range of possible outcomes. Projections of Medicare cost growth are particularly uncertain. Sources of uncertainty range from the difficulty of predicting medical breakthroughs to the ongoing implementation of Part D.

### **Projected Effect of Part B Premiums on Social Security Benefits.**

If Part B costs rise at the rate the trustees have projected, premiums will absorb an increasing share of beneficiaries' Social Security benefits. In fact, many experts believe that Part B costs will grow faster than the trustees have projected.

#### **Why the Trustees' Projections of Medicare Part B Premiums May Be Too Low**

**Trustees Assume Cuts to Physician Payments.** The Medicare trustees make their projections of future program costs and premiums based on the provisions of the law that authorizes Medicare. The law requires a sustainable growth rate (SGR) formula to be used to calculate Medicare physician payments, which account for about 50% of Part B costs. Application of this formula would result in cuts to physician fees of about 5% each year until 2012. The Medicare trustees assume that these cuts will be made.

However, congressional action has prevented cuts to physician fees for 2003 to 2007. Many Members of Congress were concerned about the impact of potential payment reductions on beneficiaries' access to services. The trustees acknowledge that "multiple years of significant reductions in physician payments per service are very unlikely to occur before legislative changes intervene." If the trustees had *not* assumed that physician payments would be cut, projected Part B costs would be significantly higher. Consequently, projected Part B premiums would be higher, because they are proportionate to projected program costs.

**Trustees Assume Medicare Cost Growth Will Slow.** The Medicare trustees assume that the growth in Medicare costs (and thus premiums) will slow in the future. The Congressional Budget Office (CBO) explains that "in their long range forecasts, the Medicare trustees assume that the development and increasing use of new medical technologies will cause spending per enrollee to continue to grow faster than [inflation and wages] but that significant pressures will be brought to bear on the entire health-care system to reduce [costs]." Consequently, the trustees project that the growth in Medicare premiums will also slow. The trustees' intermediate projection is that Part B premiums will increase by an average annual rate of about 5% over the long term.

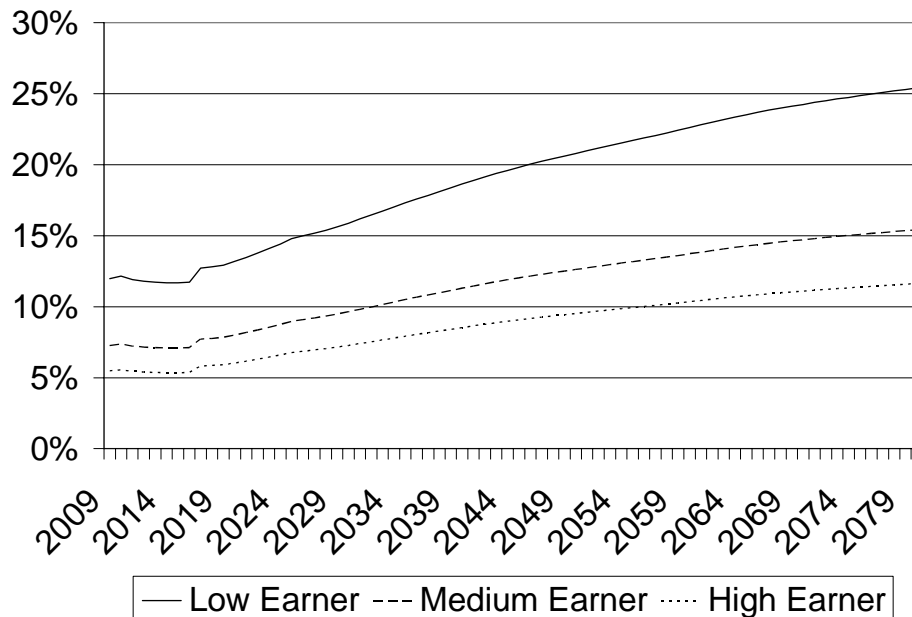
Many experts believe this projected growth rate is too low. One reason is that the trustees' projections are significantly lower than past growth rates for Part B premiums. If Part B premiums continue to rise at the same rate as they have in the past, they will increase much more rapidly than the Medicare trustees project.

**Sources:** CRS Report RL32582, *Medicare: Part B Premiums*, by Jennifer O'Sullivan; 2007 *Medicare Trustees Report*; and CBO, *The Long-Term Budget Outlook*, December 2007.

**Figure 5** shows the proportion of Social Security benefits that a hypothetical low, medium, and high earner would need to pay standard Part B premiums in each year from 2009 to 2080, using the trustees' intermediate projections. None of the workers were assumed to be subject to higher Part B premiums for high-income beneficiaries that began in 2007. Each year in the graph shows the projected percentage of Social Security benefits that each worker would need to pay Medicare premiums *if he or she turned 65 and retired in January of that year*.

The estimates in **Figures 5 and 6** show the proportion of *initial* Social Security benefits needed to pay Medicare premiums for a series of different cohorts. Initial Social Security benefits are indexed to wages. In contrast, the estimates in **Figure 3** show the proportion of Social Security benefits needed to pay Medicare premiums for a single cohort over time. After the initial year, benefits are indexed to inflation using the COLA. This difference is important because **Figure 3** compares Medicare premium growth to *price* growth (i.e., inflation), whereas **Figures 5 and 6** compare Medicare premium growth to *wage* growth. On average, Medicare premiums have grown faster than both wages and prices and are projected to do so in the future.

**Figure 5. Percentage of Initial Social Security Benefits Deducted for Standard Medicare Part B Premiums, 2009-2080**



**Source:** Congressional Research Service calculations using intermediate projections from the *2007 Medicare Trustees Report* (data underlying figure III.C1, provided by CMS).

**Note:** Part B premiums are *not* expected to decrease as a proportion of Social Security benefits, as they are shown to do in the early years of **Figure 5**. **Figure 5** is based on the trustees' projections; the trustees acknowledge that their short-run projections of Part B costs are "unrealistically low" due to the assumption that physician payments will be cut (*2007 Medicare Trustees Report*, p. 21). In addition, **Figures 5 and 6** show a cohort of hypothetical workers *each year* in the first year of their retirements, whereas **Figure 3** shows a single cohort of hypothetical workers over time.

Beneficiaries are projected to need a much larger fraction of their Social Security benefits to pay Part B premiums in the future. For example, the medium earner who retires in 2009 is projected to need 7% of his or her benefits to pay the Part B premium in the first year of retirement. The medium earner who retires in 2080 is projected to need more than twice that share, using 15% of his or her benefits to pay the Part B premium in the first year of retirement.

In the future, as in the past, low earners will need a greater fraction of their benefits to pay the Part B premium than will high earners. A low earner retiring in 2080 is projected to need 25% of his or her benefits to pay the Part B premium in the first year of retirement. In contrast, a high earner retiring in 2080 is projected to need 12% of his or her benefits to pay the Part B premium in the first year of retirement.

### **Projected Effect of Part D Premiums on Social Security Benefits.**

Since Medicare Part D was implemented in 2006, it is difficult to project how it might change over time. (See the **text box** below.) Early estimates of Part D costs varied widely. The nature of Part D makes it difficult to project premiums, because individual plans set premiums for their beneficiaries. In general, prescription drug spending has been rising at least as much as overall health spending; this trend is expected to continue.<sup>38</sup>

#### **Uncertainties in Projecting Part D Premiums**

**How will drug prices and utilization change?** Changes in drug prices and utilization could have a significant impact on Part D premiums. If generic drugs become increasingly available or more widely used, premiums could be lower than expected. Alternatively, pharmaceutical breakthroughs or increased use of expensive prescriptions could lead to higher premiums.

**How many prescription drug plans will compete for beneficiaries?** In the first several years of implementation, a greater-than-expected number of plans offered Part D benefits. If a large number of plans continue to offer Part D benefits, competition to attract beneficiaries could drive down premiums. Alternatively, some analysts believe that the fierce competition for beneficiaries will force some plans out of Part D in future years, reducing competition and leading to higher premiums.

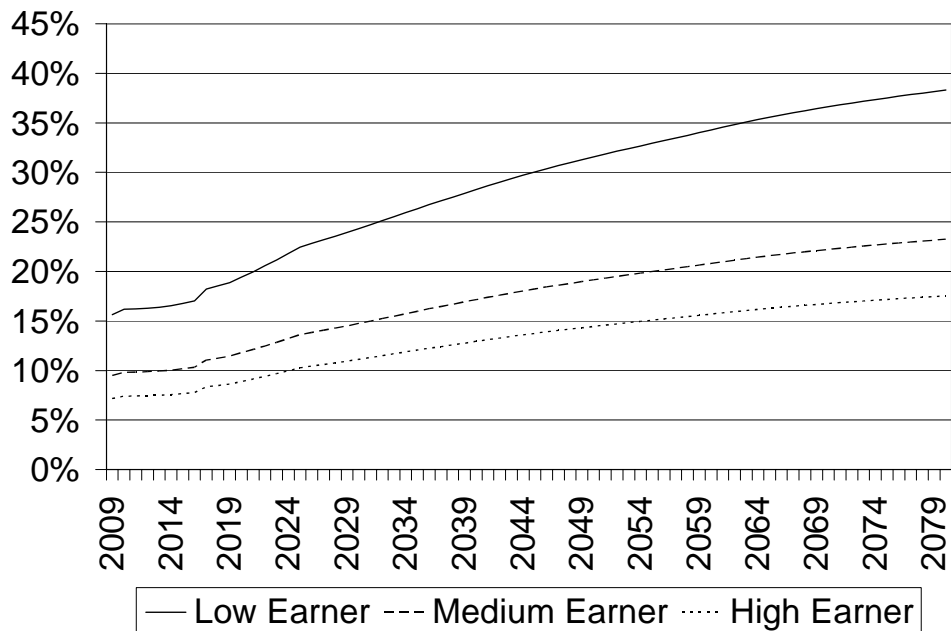
**Figure 6** shows the proportion of Social Security benefits needed to pay *combined* Part B and Part D premiums for hypothetical workers retiring in each year from 2009 to 2080, using the trustees' intermediate projections. Each year in the graph shows the projected percentage of Social Security benefits that a low, medium, and high earner would need to pay Medicare premiums if he or she turned 65 and retired in January of that year. All beneficiaries are assumed to pay the standard Part B premium as well as the *average* premium for *standard* Part D coverage. In interpreting **Figure 6**, it is important to note that Part D premiums vary widely by

<sup>38</sup> Borger, Christine, et al., "Health Spending Projections Through 2015: Changes on the Horizon," *Health Affairs* (25), February 22, 2006, available at [<http://content.healthaffairs.org/cgi/reprint/25/2/w61>].

plan, and that Part D premiums may be deducted from beneficiaries' Social Security checks or be paid directly to the plan.

Together, Part B and Part D premiums are projected to consume an increasing share of beneficiaries' Social Security benefits over time. For example, the medium earner retiring in 2009 is projected to need 9% of benefits to pay Parts B and D premiums in the first year of retirement. The medium earner retiring in 2080 is projected to need more than twice that share, using 23% of benefits to pay Parts B and D premiums in the first year of retirement.

**Figure 6. Percentage of Initial Social Security Benefits Deducted for Standard Part B and D Premiums, 2009-2080**



**Source:** Congressional Research Service calculations using intermediate projections from the *2007 Medicare Trustees Report* (data underlying figure III.C1, provided by CMS).

**Note:** Part B premiums are *not* expected to decrease as a proportion of Social Security benefits, as they are shown to do in the early years of **Figure 5**. **Figure 5** is based on the trustees' projections; the trustees acknowledge that their short-run projections of Part B costs are "unrealistically low" due to the assumption that physician payments will be cut (*2007 Medicare Trustees Report*, p. 21). In addition, **Figures 5 and 6** show a cohort of hypothetical workers *each year* in the first year of their retirements, whereas **Figure 3** shows a single cohort of hypothetical workers over time.

Low earners will need a greater proportion of their Social Security benefits to pay for combined Parts B and D premiums than will high earners. A low earner who retires in 2080 is projected to need about 38% his or her Social Security benefits to pay Parts B and D premiums in the first year of retirement. In contrast, a high earner who retires in 2080 is projected to need 18% of his or her benefits to pay Parts B and D premiums in the first year of retirement.

## Legislation in the 110<sup>th</sup> Congress

Any changes to the way Medicare premiums or Social Security benefits are calculated would also change the number of beneficiaries held harmless. To date, there are two bills in the 110<sup>th</sup> Congress that would hold more Social Security beneficiaries harmless for increases in Medicare premiums.

**H.R. 4807**, introduced by Representative Stephanie Herseth Sandlin, and **S. 2501**, introduced by Senator Tim Johnson, would extend the current law hold harmless provision to apply to increases in Medicare Part D premiums. In addition, these bills would limit the combined annual increase in the Part B premium and the average Part D premium for standard coverage to 25% of each beneficiary's annual Social Security COLA. By including Part D premiums in the hold harmless provision and limiting the proportion of the COLA used to pay for premium increases, H.R. 3954 and S. 1795 would raise the thresholds at which beneficiaries are held harmless. As a result, more beneficiaries would be held harmless, and part of these beneficiaries' premium costs could be shifted to Medicare. No cost estimates for these bills are available at the time of this writing.

## Conclusion

Rising Medicare premiums are consuming a growing share of beneficiaries' Social Security benefits. An increasing number of Americans will be affected by this interaction as the number of Social Security and Medicare beneficiaries grows over time. The Social Security trustees project that by 2050, the proportion of Americans aged 65 and older — most of whom are eligible for both Social Security and Medicare — will almost double.<sup>39</sup>

Low-income beneficiaries and those who rely primarily on Social Security may see a decline in their standard of living as their Medicare expenses rise. Premiums for Parts B and D are projected to increase significantly faster than Social Security benefits. Out-of-pocket costs for Parts B and D are projected to grow at the same rates as premiums, contributing to the growing health-care expenses of beneficiaries. Most beneficiaries are likely to have income apart from their Social Security benefits. However, many of tomorrow's beneficiaries, like today's, are likely to rely mostly on Social Security, especially as traditional pension coverage declines and many Americans save little or nothing for retirement.<sup>40</sup> These beneficiaries could struggle to cover their health-care expenses.

Rising health-care costs have serious consequences, not just for Social Security beneficiaries, but for everyone who pays health-care costs. Premiums for employer-sponsored health insurance are also rising faster than wages and inflation, which

---

<sup>39</sup> 2007 *Social Security Trustees Report*.

<sup>40</sup> CRS Report RL30122, *Pension Sponsorship and Participation: Summary of Recent Trends*; CRS Report RL30922, *Retirement Savings and Household Wealth: A Summary of Recent Data*, both by Patrick Purcell.

contributes to the declining number of employers offering health insurance coverage, from 69% in 2000 to 60% in 2007.<sup>41</sup> About one-fifth of Americans under age 65 have no health insurance coverage.<sup>42</sup>

Federal and state budgets are also struggling to meet growing health-care costs. CBO projects that Medicare's costs will more than triple as a share of the economy by 2050.<sup>43</sup> Similarly, CBO projects that the federal costs of Medicaid, the federal-state low-income health-care program, will more than double as a share of the economy; growth will cause similar strains for state budgets. Growth of this magnitude has important economic effects. According to CBO, the rate at which health-care costs grow relative to national income is the most important factor affecting the nation's long-term fiscal outlook.<sup>44</sup>

Finally, it is important to remember that Social Security beneficiaries gain from their participation in the Medicare program. Medicare provides health-care coverage to the vast majority of Americans aged 65 and older and to most disability beneficiaries. Together, Medicare and Medicaid cover a majority of participating Social Security beneficiaries' health-care expenses. Although Social Security beneficiaries are affected by rising health-care costs, the benefits of participating in Medicare are substantially greater than the costs.

---

<sup>41</sup> Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2007 Annual Survey*, September 2007, at [<http://www.kff.org/insurance/7672/upload/76723.pdf>].

<sup>42</sup> CRS Report 96-891, *Health Insurance Coverage: Characteristics of the Insured and Uninsured Populations in 2006*, by Chris L. Peterson and April Grady.

<sup>43</sup> For 2007, Medicare costs were 2.7% of GDP; the entire federal budget was 20% of GDP. For 2050, projected Medicare costs are 8.9% of GDP. (Congressional Budget Office, *The Long-Term Budget Outlook*, December 2007, at [<http://www.cbo.gov/ftpdocs/88xx/doc8877/12-13-LTBO.pdf>]. Hereafter cited as *CBO Long-Term Outlook*, 2007.)

<sup>44</sup> *CBO Long-Term Outlook*, 2007.