



## SOCIAL SECURITY

### MEMORANDUM

Date: May 26, 2010

Refer To:

To: The Commissioner

From: Inspector General

Subject: Trust Fund Projections (A-15-10-20134)

The attached final quick response evaluation presents the results of our review. Our objective was to determine how the short- and long-range estimates for cost and income presented in the Annual Trustees Report fluctuated from year to year and how accurately the projections reflected the actual performance of the Old-Age, Survivors and Disability Insurance Trust Funds.

In preparing this report, we worked directly with the Office of the Chief Actuary and the Office of the Chief Economist. If you wish to discuss the final report, please call me or have your staff contact Steven L. Schaeffer, Assistant Inspector General for Audit, at (410) 965-9700.

A handwritten signature in black ink, appearing to read "Patrick P. O'Carroll, Jr." with a stylized flourish at the end.

Patrick P. O'Carroll, Jr.

Attachment

# ***QUICK RESPONSE EVALUATION***

## ***Trust Fund Projections***

**A-15-10-20134**



**May 2010**

## **Mission**

**By conducting independent and objective audits, evaluations and investigations, we inspire public confidence in the integrity and security of SSA's programs and operations and protect them against fraud, waste and abuse. We provide timely, useful and reliable information and advice to Administration officials, Congress and the public.**

## **Authority**

**The Inspector General Act created independent audit and investigative units, called the Office of Inspector General (OIG). The mission of the OIG, as spelled out in the Act, is to:**

- Conduct and supervise independent and objective audits and investigations relating to agency programs and operations.**
- Promote economy, effectiveness, and efficiency within the agency.**
- Prevent and detect fraud, waste, and abuse in agency programs and operations.**
- Review and make recommendations regarding existing and proposed legislation and regulations relating to agency programs and operations.**
- Keep the agency head and the Congress fully and currently informed of problems in agency programs and operations.**

**To ensure objectivity, the IG Act empowers the IG with:**

- Independence to determine what reviews to perform.**
- Access to all information necessary for the reviews.**
- Authority to publish findings and recommendations based on the reviews.**

## **Vision**

**We strive for continual improvement in SSA's programs, operations and management by proactively seeking new ways to prevent and deter fraud, waste and abuse. We commit to integrity and excellence by supporting an environment that provides a valuable public service while encouraging employee development and retention and fostering diversity and innovation.**

## OBJECTIVE

Our objective was to determine how the short- and long-range estimates for cost and income presented in the Annual Trustees Report fluctuated from year to year and how accurately the projections reflected the actual performance of the Old-Age, Survivors and Disability Insurance (OASDI) Trust Funds.

## BACKGROUND

The Social Security Trust Funds include the Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds. The OASDI program makes available a basic level of monthly income when insured workers attain retirement eligibility age, death, or disability. Benefits to retired workers and their families and to families of deceased workers are paid from the OASI Trust Fund. Benefits to disabled workers and their families are paid from the DI Trust Fund.

The Board of Trustees was established under the *Social Security Act* to oversee the financial operations of the OASI and DI Trust Funds.<sup>1</sup> The *Social Security Act* requires that the Board, among other duties, report annually to the Congress on the Trust Funds' actuarial (financial) status. Each year, the Trustees of the Social Security Trust Funds issue an Annual Report on their financial status, including projections of future revenue and expenditures. The Annual Reports are issued based on calendar year (CY) data for the previous year. For example, the 2008 Trustees Report was based on the CY 2007 data.

## LEGISLATIVE CHANGES TO SOCIAL SECURITY

In 1981, the President appointed a bipartisan National Commission on Social Security Reform (informally known as the Greenspan Commission) to study and make recommendations regarding the short-term financing crisis Social Security was facing. Estimates were that the OASI Trust Fund would run out of money as early as August 1983. The Commission's January 1983 report became the basis for the enactment of legislation that resolved the short-term financing problem while also making other significant changes to the *Social Security Act*, including:<sup>2</sup>

- A gradual increase in the age of eligibility for full retirement benefits from age 65 to age 66 in 2009 and age 67 in 2027.

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<sup>1</sup> The *Social Security Act* § 201(c), 42 U.S.C. § 401(c).

<sup>2</sup> Pub. L. No. 98-21, *Social Security Amendments of 1983*.

- Coverage of Federal civilian employees hired after December 31, 1983 and most current executive-level political appointees and elected officials (including members of Congress, the President, and the Vice President) and Federal judges, effective January 1984.
- A delay of the June 1983 Social Security cost of living adjustment (COLA) to December 1983. All future COLAs would be effective in December.
- Acceleration of scheduled tax increases for employees and employers, with an offsetting tax credit for employees for 1984; increase in the rates for the self-employed to equal the combined employee/employer rate but with partially offsetting credits and deductions.
- Inclusion of up to 50 percent of Social Security benefits in taxable income of higher income beneficiaries. The income thresholds (adjusted gross income plus one-half of Social Security benefits) were set at \$25,000 for single individuals, \$32,000 for couples filing jointly, and zero for couples filing separately.

As a result of the 1983 legislation, substantial increases in Trust Funds were estimated to occur well into the 21<sup>st</sup> century, so the program was partially advance funded, rather than being funded on a pay-as-you-go basis.

Also, the Trustees changed the method of calculating the actuarial balances from the “average-cost method”<sup>3</sup> to the “present-value method”<sup>4</sup> in CY 1988. Before the 1983 amendments took effect, the Trustees used the average-cost method to estimate the program’s long-range financing. Based on the long-range demographic and economic assumptions used at that time, the annual growth rate in taxable payroll was about the same as the annual rate at which the Trust Funds earned interest.<sup>5</sup> However, after the Amendments were enacted, the substantial increases in the Trust Funds along with reductions in long-range fertility rates and average real-wage growth caused the annual rate of growth in taxable earnings to become lower than the assumed interest rate. Therefore, the results of the average-cost method diverged from the present-value method. While the average-cost method still accounted for most of the effects of the assumed interest rate, it no longer accounted for all of the interest effects. The present-value method accounted for the full effect of the assumed interest rates. As a result, in 1988 the present-value method of calculating the actuarial balance was reintroduced.

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<sup>3</sup> Under the average-cost method, the sum of the annual cost rates (expressed as percentages of taxable payroll) over the 75-year projection period was divided by the total number of years, 75, to obtain the average-cost rate per year. The average-income rate was similarly calculated, and the difference between the average income rate and the average-cost rate was called the actuarial balance.

<sup>4</sup> The present-value method was used before 1973 when the average-cost method was first implemented. The present-value method uses the difference between the present value of tax income for the period, and the present value of the cost for the period, each divided by the present value of taxable payroll.

<sup>5</sup> This can also be interpreted as the annual income rate is the same as the annual cost rate.

## LONG-RANGE ESTIMATES

Actuarial estimates depend on a broad set of demographic, economic, and programmatic factors along with assumptions about those factors. Regarding the OASI and DI Trust Funds, factors that impact income and expenditure actuarial estimates include the size and characteristics of the population receiving benefits, the level of monthly benefit amounts, the size of the workforce, and the level of workers' earnings. These factors depend on future birth rates, death rates, immigration, marriage and divorce rates, retirement-age patterns, disability incidence and termination rates, employment rates, productivity gains, wage increases, inflation, and many other factors. Because of the extensive number of factors used in the long-range actuarial estimates, significant uncertainty surrounds the assumptions. Therefore, the Trustees have used several methods to help illustrate the uncertainty.

### *Alternative Assumptions*

From 1981 to 1990, the Trustees presented four projection scenarios: I, II-A, II-B, and III.<sup>6</sup> Starting in 1991 through the present, three scenarios were presented: I, II, and III, with “low-cost,” “intermediate,” and “high-cost” scenarios, respectively.<sup>7</sup> Scenario II-B from the 1983-1990 reports evolved into scenario II (intermediate) in the reports that followed from 1991 to the present.<sup>8</sup> The Intermediate scenario is regarded by the Trustees as their best estimate and thus was used for the review in this report.<sup>9</sup>

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<sup>6</sup> *1990 Annual Report of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*. Scenarios II-A and II-B used the same demographic assumptions but were different in their economic assumptions. See *1983 Annual Report – Federal Old-Age and Survivors Insurance and Disability Insurance Trust Fund*, pages 99-101. Scenario II-A assumed 2.0 percent real wage growth and 3 percent inflation over the long term, scenario II-B assumed 1.5 percent real wage growth and 4 percent inflation.

<sup>7</sup> *1991 Annual Report of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Fund*.

<sup>8</sup> *1991 Annual Report of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Fund*, page 1. “In previous reports, when there were two intermediate sets of assumptions, such tests were based on the alternative II-B assumptions. Comparisons of intermediate estimates in the 1991 report with corresponding estimates in the 1990 report are also based on the alternative II-B estimates in the 1990 report.”

<sup>9</sup> For the years 1988 to 1990, our review used the Intermediate II-B projection because that is the projection that evolved into the Intermediate projection used in later Trustees Reports.

## **Long-Range Sensitivity Analysis**

Along with presenting estimates based on alternative assumptions, the Trustees also provided estimates based on long-range sensitivity analyses since 1979. These estimates illustrate the sensitivity of the long-range actuarial status of the OASDI program to changes in selected individual assumptions. In the sensitivity analysis, the intermediate projection is used as the reference point, and one assumption at a time is varied. The variation used for each assumption reflects the levels used for that assumption in the low- and high-cost alternative projections.

## **Stochastic Simulations**

Since 2003, the Trustees also provided results from 5,000 independent stochastic simulations<sup>10</sup> of Trust Fund projections over the 75-year period. The additional estimates provide a range of possible outcomes for the projections. However, the additional estimates provided no indication of the probability that actual future experience will be inside or outside the range of these estimates. Each of the 5,000 simulations was determined by allowing individual assumptions to vary throughout the long-range period. The fluctuation in each variable was projected by using standard time-series modeling, a method designed to help make references based on historical data.

## **RECENT NEWS**

The sustainability of Social Security's OASDI Trust Funds has been the topic of many recent news articles. It has been reported in several articles that Social Security would pay out more in benefits than it would collect in taxes over the next several years and essentially go cash negative earlier than projected. The recent economic downturn has impacted the cash inflows to Social Security. The various articles predict Social Security will experience a cash deficit beginning in 2010.

February 2010 *USA Today* article<sup>11</sup> reported that Social Security took in \$3 billion more in taxes in 2009 than it paid out in benefits. This represented a \$60 billion decline from 2008. The article further stated that the decline in cash inflow was a result of higher unemployment rates and an increase in the number of retired and disabled beneficiaries.

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<sup>10</sup> Stochastic models are used for projecting a probability distribution of potential outcomes. Such models allow for random variation in one or more variables through time. The random variation is generally based on fluctuations observed in historical data for a selected period. Distributions of potential outcomes are derived from a large number of simulations, each of which reflects random variation in the variable(s).

<sup>11</sup> Wolf, Richard, "Rash of Retirements Pushes Social Security to Brink." *USA Today*, 8 February 2010. Web. 22 February 2010.

In July 2009, *Fortune Magazine* compared the prior years of OASDI Trustees Reports and showed that cash flow projections had drastically shrunk from CY 2008 to 2009.<sup>12</sup> The article stated that the 2008 OASDI Trustees Report projected a cash surplus of \$87 billion in 2009 and \$88 billion in 2010; however, in the 2009 Social Security Trustees Report, the cash flow projections for 2009 and 2010 had shrunk by almost 80 percent, to \$19 billion and \$18 billion, respectively.

To gain a perspective on the year-to-year fluctuations and compare actuarial projections to actual performance of the Trust Funds, we reviewed relevant laws, analyzed the 1988 through 2009 Trustees Reports, and reviewed applicable news articles in light of the current economic climate. Specifically, we reviewed the 1988 through 2009 OASDI Trustee Reports for the following items:

1. projected costs and income for CYs 1995, 2000, 2005, and 2009 compared to actual amounts;
2. projected costs and income for CY 2010;
3. projected year the outgoing costs would exceed income;
4. projected year funds would be exhausted; and
5. future cost rates and income rates for CYs 2010, 2015, 2060, and the 75<sup>th</sup> year projection.

We also reviewed the income and cost projections for Fiscal Year (FY) 2010<sup>13</sup> reported by the Congressional Budget Office (CBO) in January 2006 – 2010.

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<sup>12</sup> Sloan, Allan, "The Next Great Bailout: Social Security." *Money.CNN.com/magazines/fortune*. *Fortune*, 30 July 2009. Web. 7 January 2010.

<sup>13</sup> The information obtained from the CBO Website was based on FY data.

# Results of Review

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Overall, our review focused on the fluctuations in projected costs and income for CYs 2009 and 2010. For CY 2009, the projections were compared to the actual state of the OASDI Trust Funds.

## PROJECTED COSTS AND INCOME

### CY 2009

We reviewed the Trustees Reports published from 2000 through 2009 to compare the projected income excluding interest<sup>14</sup> and costs for CY 2009 to the actual amounts reported by the Social Security Administration (SSA).<sup>15</sup> For 2009, we reviewed the intermediate assumption with the low- and high-cost assumptions to illustrate the volatility of the projections in comparison to the actual amounts.<sup>16</sup> The actual net cash flow for CY 2009 was \$3.4 billion (see Figure 1). The Trustees' cash projections for 2009 significantly differed from the actual net cash flow for all three Assumption categories. The graph, however, shows that the projections in the 2009 Trustees Report anticipated more accurately the drop in the net cash flow for CY 2009. Once the economic recession began in 2008, and the large 5.8 percent COLA of December 2008 was known, the Trustees altered their projections and assumptions to illustrate these changes and the expected course of the recession that was already underway.

To determine why there was such a large gap in the projected net cash flow from the actual balance, we reviewed the assumptions used for the projections in comparison to the effects the economy has had on those factors. Specifically, we reviewed factors in the 2005, 2007, and 2009 Trustees Reports that could potentially have impacted the Trust Funds' income and program costs for CY 2009. One factor that generated a reduction in revenue for the Trust Funds was the increase in unemployment. The 2005 Trustees Report projected an unemployment rate of 4.9, 5.4, and 7.2 percent for the low-cost, intermediate, and high-cost assumptions, respectively, for CY 2009. According to the Department of Labor (DoL) statistics, the actual unemployment rate as

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<sup>14</sup> For OASDI, income excluding interest consists of payroll-tax contributions, proceeds from taxation of OASDI benefits, and miscellaneous transfers from the General Fund of the Department of the Treasury. Cost consists of benefit payments, administrative expenses, net transfers from the Trust Fund to the Railroad Retirement program, and payments for vocational rehabilitation services for disabled beneficiaries.

<sup>15</sup> As of April 2010, the 2010 Trustees Report had not been released. Actual amounts for 2009 unemployment rates were obtained from the DoL.

<sup>16</sup> The Intermediate assumption (alternative II) is the set of assumptions that represented the Trustees' best estimates of likely demographic, economic, and program-specific conditions. Low-cost assumptions (alternative I) assumed relatively rapid growth, low inflation, and favorable demographic and program-specific conditions. High-cost assumptions (alternative III) assumed relatively slow economic growth, high inflation, and unfavorable demographic and program-specific conditions.

of December 2009 was 10 percent. Even the 2007 Trustees Report did not project such a high unemployment rate. The 2007 Report projected CY 2009 unemployment to be 4.7, 5.0, and 5.8 percent for the low-cost, intermediate, and high-cost assumptions, respectively. The 2009 Trustees Report projected an unemployment rate of only 8.5 percent for the high-cost assumption.

The high unemployment rates have had a significant impact on the cash flow for the Trust Funds. The net cash flow projections in the 2009 Trustees Report shrunk by almost 80 percent for CYs 2009 and 2010. In the previous Trustees Report, cash flow was projected to be \$87 billion and \$88 billion for CYs 2009 and 2010. However, based on the figures in the 2009 Report, those projections have decreased to \$19 billion and \$18 billion, respectively. Based on our review, we determined that the actual CY 2009 cash surplus was only \$3.4 billion, a difference of over \$15 billion. SSA's Chief Actuary was quoted in *Fortune Magazine* stating that the major reason for the decrease in cash surplus was that the recession had cost millions of jobs, reducing Social Security's tax income below projections.<sup>17</sup>

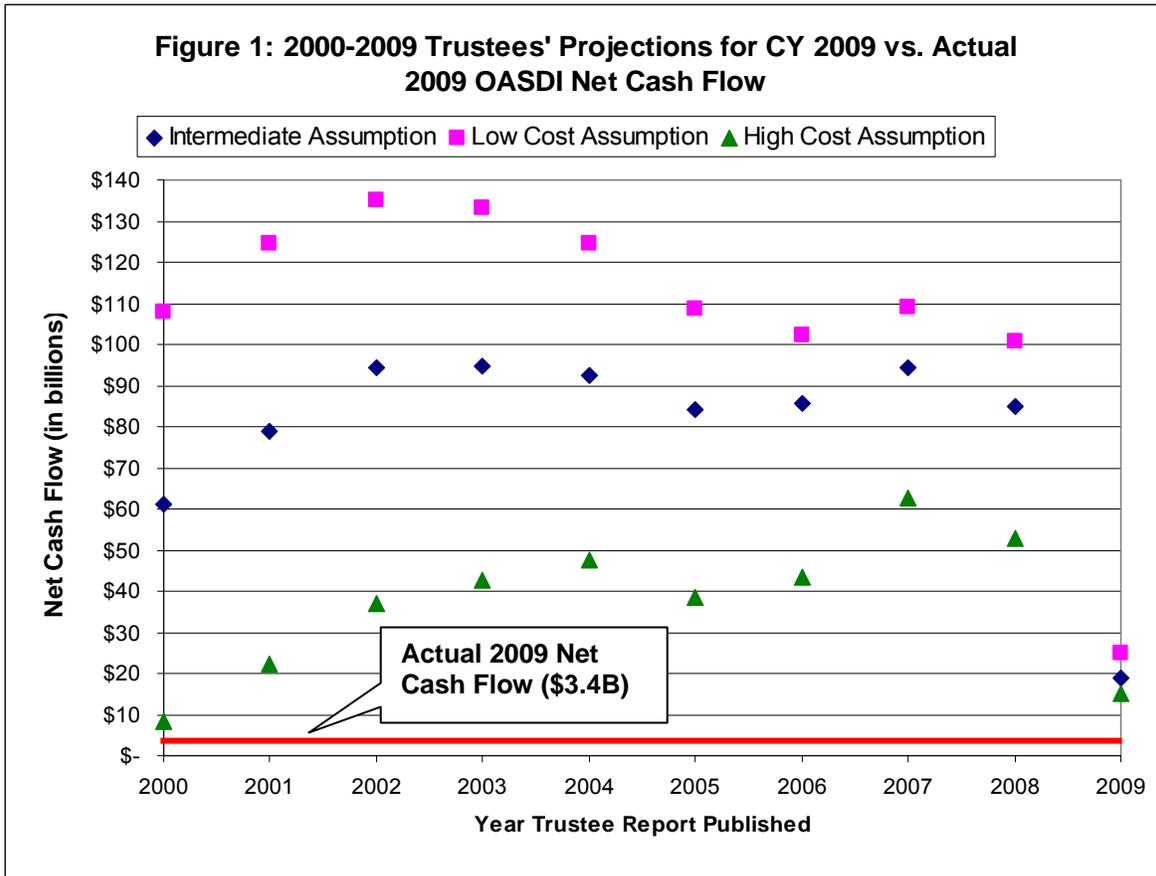
Additional program costs have also affected the Trust Funds' net cash flow. For instance, OASDI beneficiaries received a 2.3-percent COLA for 2008. However, based on the spike in energy costs, beneficiaries received a 5.8 percent increase in benefit payments in 2009. The 2008 Trustees Report only projected a 2.7 percent-COLA increase for CY 2009. The total amounts of retirement and disability claims have been expected to increase 9 and 12 percent, respectively, because of the downturn in the economy and the first baby boomer retirees. According to SSA, new claims, particularly for disability, will continue to increase beyond the actuaries' expectations. In the FY 2010 Justification of Estimates for Appropriations Committees, SSA stated, ". . . we now expect 220,000 more retirement claims and 340,000 disability claims in FY 2010 than we projected a year ago. We will process an additional 20,000 retirement claims and 200,000 initial disability claims over the FY 2009 level."<sup>18</sup> These additional costs and increased workload along with the reduced tax income have caused the Trust Funds' net cash flow to fall to an all time low since the enactment of the 1983 Amendments to the *Social Security Act*. A representative of the Committee for a Responsible Federal Budget, stated in a *USA Today* article,<sup>19</sup> "The impact of the recession shows that 'for all these projections, unexpected things happen.'"

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<sup>17</sup> Sloan, Allan. "The Next Great Bailout: Social Security." *Money.CNN.com/magazines/fortune*. Fortune, 30 July 2009. Web. 7 January 2010.

<sup>18</sup> Appendix D shows a graph of projected SSA claims. This chart was part of the FY 2010 Justification of Estimates for the Appropriations Committees, <http://www.ssa.gov/budget/FY10ConsolidatedCJ.pdf>.

<sup>19</sup> See Footnote 11.



Source: OASDI Trustees Reports published from 2000 through 2009. Income values used exclude interest. <http://mwww.ba.ssa.gov/OACT/TR/index.html>.

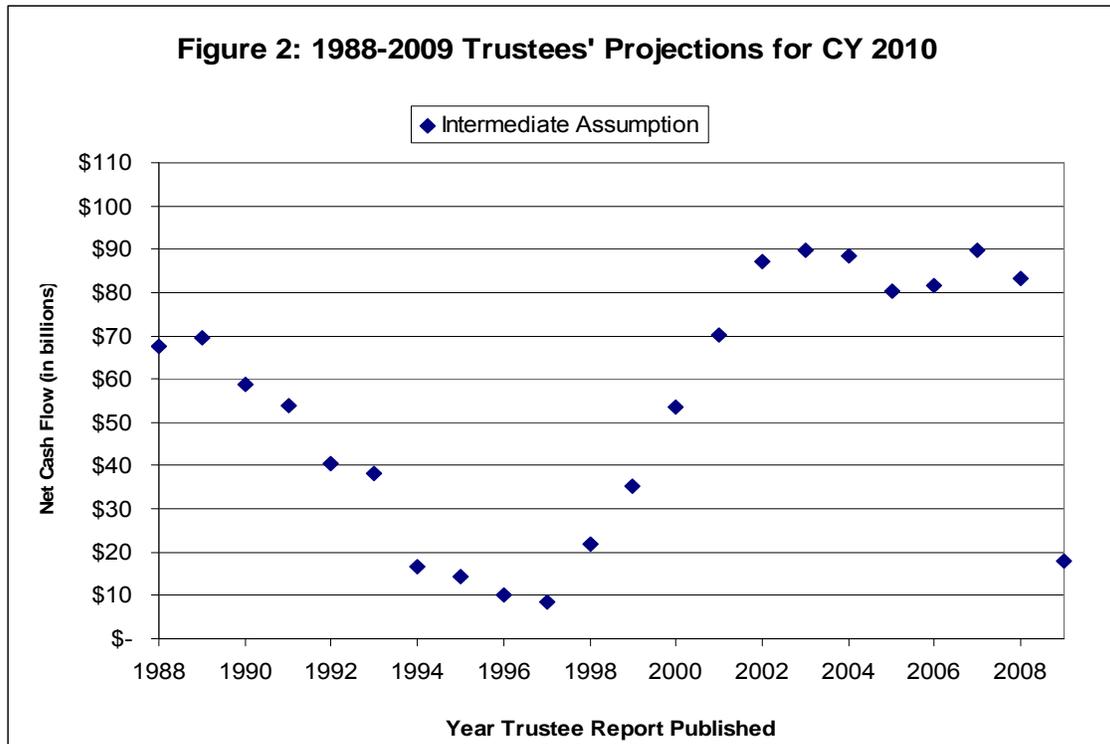
## CY 2010

We reviewed the CY 1988 through 2009<sup>20</sup> Trustees Reports to assess the fluctuation in the projected net cash flow of the OASDI Trust Funds for CY 2010. The Trustees' cash projections for 2010 fluctuated significantly from the 1988 report to the 2009 report (see Figure 2). Recent news articles have indicated that Social Security costs could exceed its income as early as 2010 because the economic recession has impacted the cash flow of Social Security far worse than projected. SSA's Chief Actuary stated in a *USA Today* article, "Things are a little bit worse than had been expected. Clearly, we're going to be negative for a year or two."<sup>21</sup> Based on the Trustees' projections in

<sup>20</sup> For the analysis of projected costs and income versus actual, the data from the 1988 Trustees Report were only reported in current dollars, whereas the data used for the remaining years were reported in constant dollars meaning it was adjusted for the Consumer Price Index (CPI). To make the 1988 data comparable, we received confirmation from the Office of the Actuary to divide the current income and costs amounts reported by the respective Adjusted CPI reported in the 1988 Trustees Report.

<sup>21</sup> See Footnote 11.

Figure 2, the Trust Fund's cash flow was never estimated to go negative. From 2002 through 2008, a surplus of over \$80 billion was projected for CY 2010. Based on the extensive number of economic, demographic, and programmatic factors used in the actuarial projections, future excess cash over expenses is difficult to accurately project.

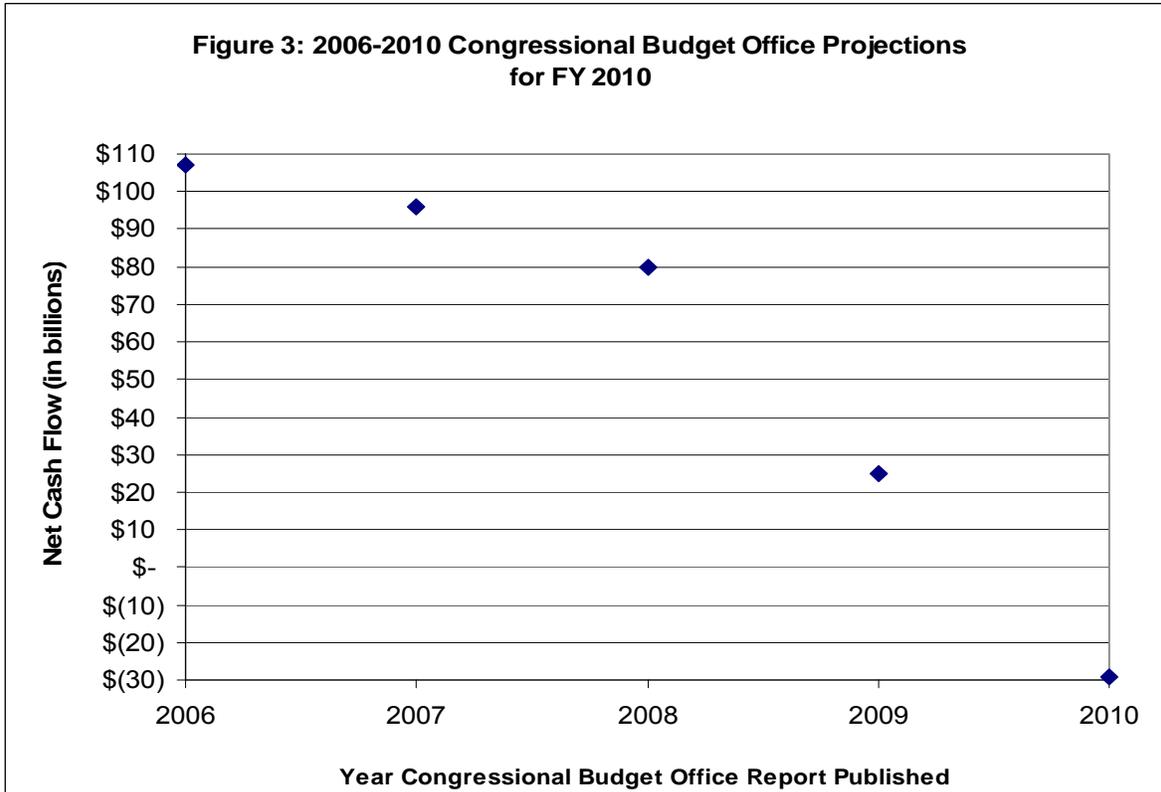


Source: OASDI Trustees Reports published from 1988 through 2009. Income values used exclude interest.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>.

Because of the current *Health Care and Education Reconciliation Act of 2010*,<sup>22</sup> the 2010 Trustees Report release date of April 1, 2010 has been delayed to June 30, 2010. At this time, we are uncertain of the effect the current legislation and the economy will have on the 2010 Trustees Report.

In addition to reviewing the projections in the Trustees Reports, we analyzed projections for 2010 reported by CBO. The CBO projections were based on FY data as opposed to the CY data reported in the Trustees Reports. The CBO projections also showed significant variance from the expected 2010 Trust Funds' performance (see Figure 3).

<sup>22</sup> Pub. L. No. 111-152.



Source: CBO Supplemental Data on Mandatory Spending Fact Sheets for OASDI. Income values used exclude interest. <http://www.cbo.gov>.

### Analysis of Additional CYs

A similar analysis was conducted for CYs 1995, 2000, and 2005. The analysis is located in Appendices E through G.

### PROJECTED FUTURE OUTCOME OF OASDI TRUST FUNDS

We reviewed the Trustees Reports published from 1988 through 2009 to assess the fluctuation in the projected year in which outgoing annual costs would exceed the tax income for the combined OASDI Trust Funds and the projected year funds would be exhausted. The analysis for this review is located in Appendices H and I.

### FUTURE PROJECTED INCOME AND COST RATES<sup>23</sup>

We reviewed the Trustees Reports published from 1988 through 2009 to measure the fluctuations in the projected future cost rates and income rates for CYs 2010, 2015, and 2060 and the projected 75<sup>th</sup> year for each report. Both the cost and income rates are

<sup>23</sup> All future projections are based on current law.

expressed as a percentage of taxable payroll.<sup>24</sup> The annual income rate is the sum of the tax contribution rate and the ratio of income from taxation of benefits to the OASDI taxable payroll for the year. The annual cost rate is the ratio of the cost of the program to the taxable payroll for the year. Because long-term projected income and cost rates are solely based on actuarial estimates and we do not have actual data for comparative purposes, we reviewed the rates to identify the fluctuations of Social Security's projected financial conditions throughout the 75-year projection period. The review of the long-term projected income and cost rates for CYs 2010, 2015, and 2060 and the 75<sup>th</sup> year are in Appendix J.

## **FUTURE OF THE DI TRUST FUNDS**

According to SSA's Chief Actuary, the solvency of the Trust Funds is not measured by the net cash flow. Net cash flow is negative when tax income alone is not sufficient to pay the total program cost. In this case, some of the Trust Funds' assets are redeemed to augment current tax revenue, allowing the timely, full payment of benefits. In fact, if the net cash flow shortfall is less than interest income to the fund, total fund assets will continue to grow.

SSA's Chief Actuary also stated that Trust Fund solvency is defined for a point in time as the ability to pay all of the costs of providing scheduled benefits in full on a timely basis. The Trust Funds are thus solvent through any month where there is a positive asset balance at the end of the month. The Trustees report on the financial adequacy of the Trust Funds using the Trust Fund ratio. The Trust Fund ratio is defined as the assets at the beginning of a year expressed as a percentage of the projected cost for the year. Thus, the Trust Fund ratio represents the proportion of a year's cost that can be paid with the funds available at the beginning of the year. A Trust Fund ratio of 100 percent—that is, assets at the beginning of each year at least equal to the projected cost for the year—is generally assumed to provide a reasonable “contingency reserve”<sup>25</sup> and indicates the Trust Fund's ability to cover most short-term contingencies. That level of projected assets for any year means that if expenditures exceed total income, the Trust Fund reserves, combined with annual tax revenues, would be sufficient to pay full benefits for several years, allowing time for legislative action to restore financial adequacy.

Based on the 2009 Trustees Reports, the projected Trust Fund ratios for OASI alone, and for the OASI and DI combined, under the intermediate assumptions exceeded 100 percent throughout the short-range period and therefore OASI and DI satisfied the Trustees' short-term test of financial adequacy. However, considering the DI program alone, its Trust Fund ratio was projected to fall below the 100 percent level by the beginning of 2014. Figure 4 shows that while the Trustees are predicting the OASI

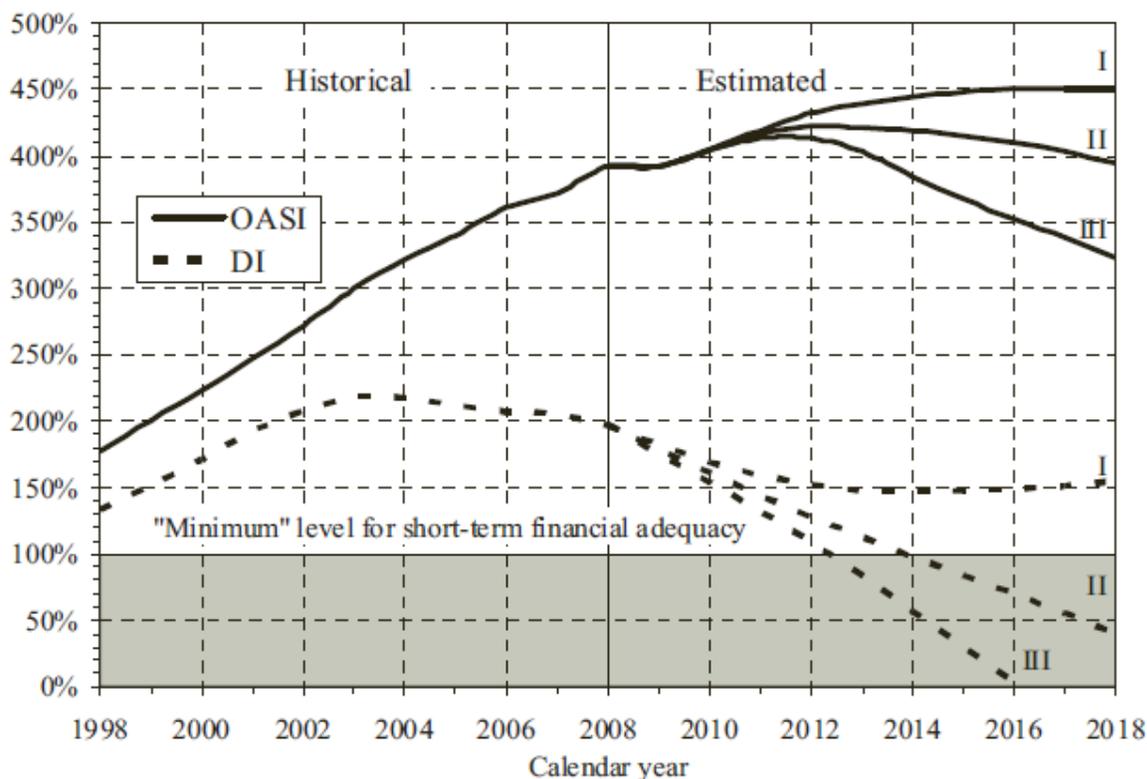
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<sup>24</sup> The OASDI taxable payroll consists of total earnings that are subject to OASDI taxes including relatively small adjustments.

<sup>25</sup> A Trust Fund level of about 1 year's cost is considered to be an adequate reserve for unforeseen contingencies.

Trust Fund to remain above the 100 percent Trust Fund ratio through 2018, the DI Trust Fund is expected to fall below 100 percent for the intermediate assumption (II) as early as 2014. The DI program costs have exceeded tax revenue since 2005 and Trust Fund exhaustion is projected for 2020.

**Figure 4: -Short-Range OASI and DI Trust Fund Ratios**  
Assets as a percentage of annual cost]



Source: OASDI Trustees Reports published in 2009.  
<http://mwww.ba.ssa.gov/OACT/TR/2009/tr09.pdf>

With the prospect of exhaustion of the DI Trust Fund looming in the near future, action should be taken to ensure that beneficiaries receive their full benefit payments. Absent another act of Congress, the *Social Security Act* does not permit further interfund borrowing.<sup>26</sup> The *Social Security Act* also specifies that benefit payments shall be made only from the Trust Funds (that is, accumulated Trust Fund assets and current tax income).<sup>27</sup> The *Antideficiency Act* prohibits Government spending that exceeds available funds.<sup>28</sup> Consequently, if the Social Security Trust Funds become insolvent—that is, if current tax income and accumulated assets are not sufficient to pay the benefits to which people are entitled—current law would effectively prohibit full Social Security benefits from being paid on time.

<sup>26</sup> The *Social Security Act* § 201(l)(1), 42 U.S.C. § 401(l)(1).

<sup>27</sup> The *Social Security Act* § 201(h), 42 U.S.C. § 401(h).

<sup>28</sup> 31 U.S.C. § 1341(a)(1)(A).

## Conclusion

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Overall, our review determined that the Intermediate Trustees' Projections did not closely anticipate the actual Trust Funds' performance for CYs 2009 and 2010. The extensive number of economic, demographic, and programmatic factors involved in the actuarial estimates makes it difficult to project the long-term flow of money needed to meet expenses when they become due. Other sources, such as CBO, also failed to predict the downturn in the economy.

Currently, the unexpected changes in the economy have caused the Trustees' projections to be more favorable than the current state of the Trust Funds. Factors such as the unexpected increase in the unemployment rate along with increased disability and retirement claims have caused the Trust Funds' cash surplus to fall lower than anticipated.

# Appendices

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APPENDIX A – Acronyms

APPENDIX B – Scope and Methodology

APPENDIX C – Social Security Amendments of 1983

APPENDIX D – Projected Social Security Administration Claims

APPENDIX E – Calendar Year 1995 Analysis

APPENDIX F – Calendar Year 2000 Analysis

APPENDIX G – Calendar Year 2005 Analysis

APPENDIX H – Projected Year the Outgoing Costs Would Exceed Income

APPENDIX I – Projected Year of Exhausted Funds

APPENDIX J – Future Projected Income Rates and Cost Rates

APPENDIX K – Trustee Report References

APPENDIX L – OIG Contacts and Staff Acknowledgments

## Acronyms

CBO	Congressional Budget Office
COLA	Cost of Living Adjustment
CPI	Consumer Price Index
CY Calendar	Year
DI Disab	ility Insurance
DoL	Department of Labor
FY Fiscal	Year
GDP	Gross Domestic Product
OASI	Old-Age and Survivors Insurance
OACT	Office of the Actuary
OASDI Old-Age,	Survivors and Disability Insurance
Pub. L. No.	Public Law Number
SSA	Social Security Administration
SSI	Supplemental Security Income
U.S.C.	United States Code

### Scope and Methodology

Our objective was to determine how the short- and long-range estimates for cost and income presented in the annual Trustees Reports fluctuated from year to year and how accurately the Trustees' projections reflected the actual performance of the Old-Age, Survivors and Disability Insurance (OASDI) Trust Funds. To accomplish our objective, we:

- Reviewed applicable Federal laws.
- Reviewed the Trustees Reports published from 1988 through 2009.
- Reviewed relevant news articles relating to the sustainability of the OASDI Trust Funds.
- Analyzed the projections for income and costs for several calendar years presented in the Trustees Reports.
- Analyzed the projections for income and costs for Fiscal Year 2010 reported by the Congressional Budget Office.
- Analyzed the projected year funds will become exhausted as well as the year in which outgoing costs will exceed income.

We performed our review in February and March 2010 in Baltimore, Maryland. The reports reviewed were the Trustees Reports published from 1988 to 2009. We conducted our review in accordance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspections*.

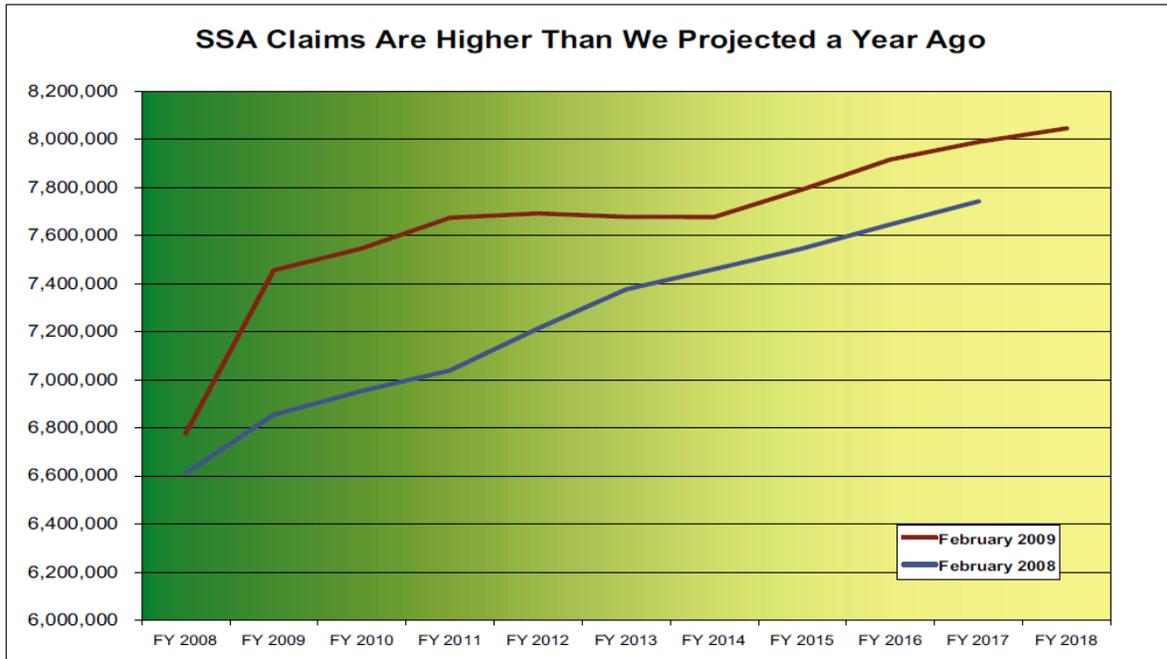
## Social Security Amendments of 1983

### 2. SOCIAL SECURITY AMENDMENTS OF 1983

During the past year several new laws were enacted that changed the Social Security program. By far the most important of these was the Social Security Amendments of 1983, which followed closely the recommendations of the National Commission on Social Security Reform that had been appointed by the President to find ways to strengthen Social Security financing. The main provisions of the 1983 amendments are listed below.

1. Coverage of newly hired Federal employees.
2. Coverage of employees of nonprofit employers.
3. Ban on termination of coverage of State and local government employees.
4. Six-month delay in cost-of-living adjustments.
5. Modification of cost-of-living increases during periods of low trust fund balances (stabilizer provision).
6. Normalized tax transfers.
7. Extension of interfund borrowing authority.
8. Elimination of windfall benefits (for workers receiving pensions from noncovered employment).
9. Increase in normal retirement age after the year 2000.
10. Increase in delayed retirement benefits.
11. Reduced withholding rate under the retirement test.
12. Taxation of Social Security benefits.
13. Changes in tax rate schedule.
14. Acceleration of State and local tax collections.
15. Increase in benefits for certain surviving, divorced and disabled spouses.
16. Change in financing basis of noncontributory military service wage credits.
17. Reimbursement of Social Security funds for uncashed checks.
18. Change in public pension offset (for spouses with pensions from noncovered employment).
19. Taxation of contributions under salary reduction plans.
20. Suspension of benefits to certain nonresident aliens.
21. Expanded use of death certificates.
22. Other changes without significant cost impact, including provision for two more OASDI trustees from outside the government.

Source: Summary of the 1983 Trustees Report  
<http://www.ssa.gov/history/reports/trust/trustreports.html>

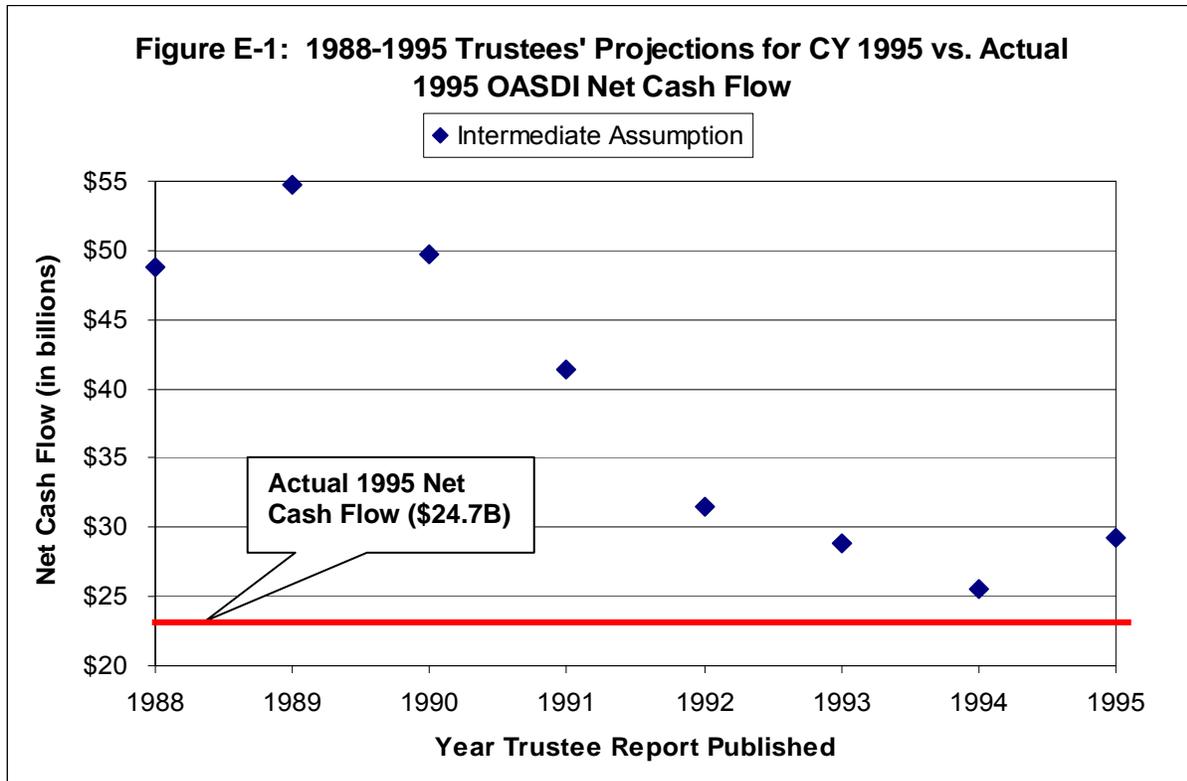


Source: Fiscal Year 2010 Social Security Administration Justification of Estimates for Appropriations Committees  
<http://www.ssa.gov/budget/FY10ConsolidatedCJ.pdf>

## Calendar Year 1995 Analysis

We reviewed the Trustees Reports published from 1988 through 1995 to compare the projected costs and income excluding interest for the Calendar Year (CY) 1995 to the actual amounts. Figure E-1 shows the actual cash surplus for CY 1995 was \$24.7 billion. In 1994, the Trustees most accurately projected this surplus with an estimate of \$25.5 billion.

We then reviewed the projected and actual demographic, economic, and methodological assumptions to consider possible causes in the fluctuation of the projected net cash flow to the actual. In the 1989 Trustees Report, the average annual percentage increase in average annual wage in covered employment was projected to increase 5.5 percent for CY 1995. However, based on the 1996 Trustees Report, the amount only increased 4.1 percent. Also, based on the 1989 Trustees Report, the number of projected beneficiaries to receive benefits in 1995 was about 42.1 million. A total of 43.4 million actually received monthly Old-Age, Survivors and Disability Insurance benefits at the end of December 1995. The increase in the number of beneficiaries and the decrease in payroll tax income—as a result of a smaller percentage increase of average annual wage—potentially impacted the gap between projected and actual net cash flow.

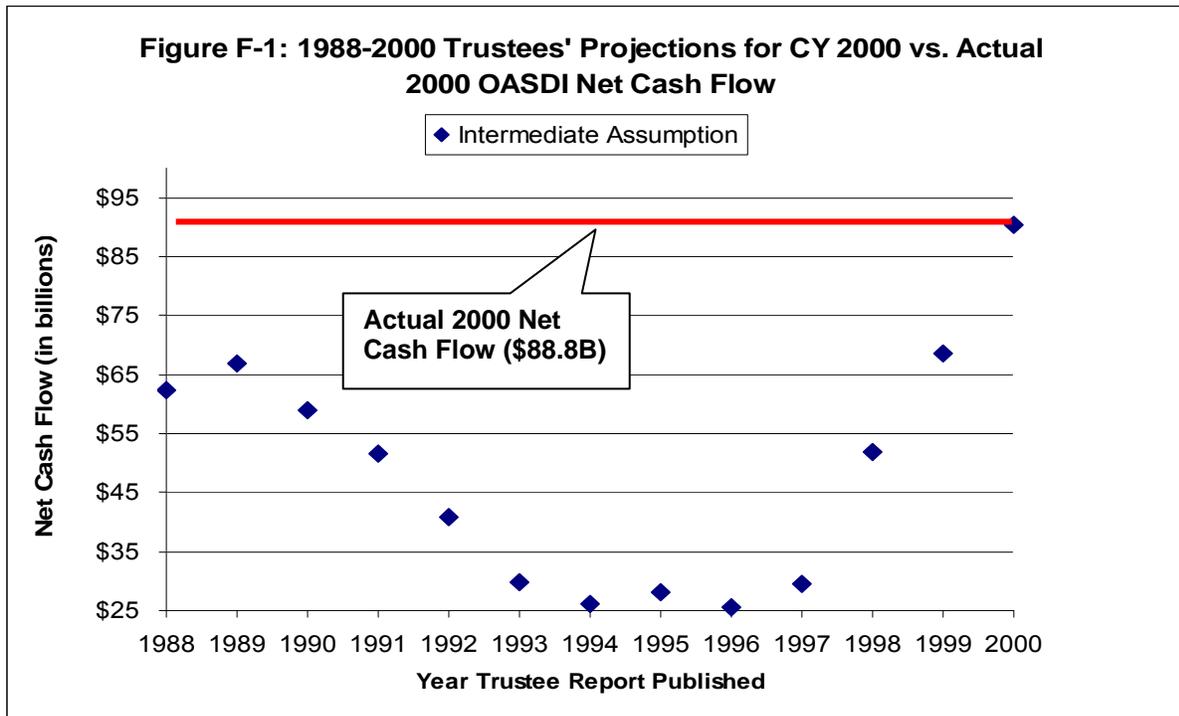


Source: OASDI Trustees Reports published from 1988 through 1995. Income values used exclude interest.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>

## Calendar Year 2000 Analysis

We reviewed the Trustees Reports published from 1988 through 2000 to compare the projected costs and income excluding interest for the Calendar Year (CY) 2000 to the actual amounts. Figure F-1 shows the actual cash surplus for CY 2000 was \$88.8 billion. The Trustees most accurately projected the 2000 net cash flow in the 2000 Trustees Report estimating a value of \$90.4 billion.

We then reviewed the projected and actual assumptions for CY 2000 to determine if any specific assumptions potentially affected the fluctuation in projected to actual net cash flow amounts. Specifically, we reviewed the 1996 Trustees Report because the projection in this report appeared to be one of the most inaccurate. In the 1996 report, the Trustees projected the average annual wage in covered employment to increase 4.3 percent for CY 2000. However, according to the 2001 Trustees report, the average annual wage actually increased 5.5 percent, which would result in more taxable payroll. Another factor that appeared to have affected the increase in actual income related to the unemployment rate. The 1996 Trustees Report also projected the unemployment rate to be 6.0 percent in CY 2000. The average annual unemployment rate for 2000 was actually 4.0 percent. Both of these factors could have potentially resulted in higher income for the Trust Funds. The reduced unemployment along with a higher percentage increase in average annual wages had an effect on the change in net cash flow.



Source: OASDI Trustees Reports published from 1988 through 2000. Income values used exclude interest.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>

## **Calendar Year 2005 Analysis**

We reviewed the Trustees Reports published from 1988 through 2005 to compare the projected income excluding interest and costs for the Calendar Year (CY) 2005 to the actual amounts. Figure G-1 shows the actual cash surplus for CY 2005 was \$77.6 billion. The 1989 Trustees Report most accurately projected the 2005 cash balance with an estimated \$77.5 billion surplus.

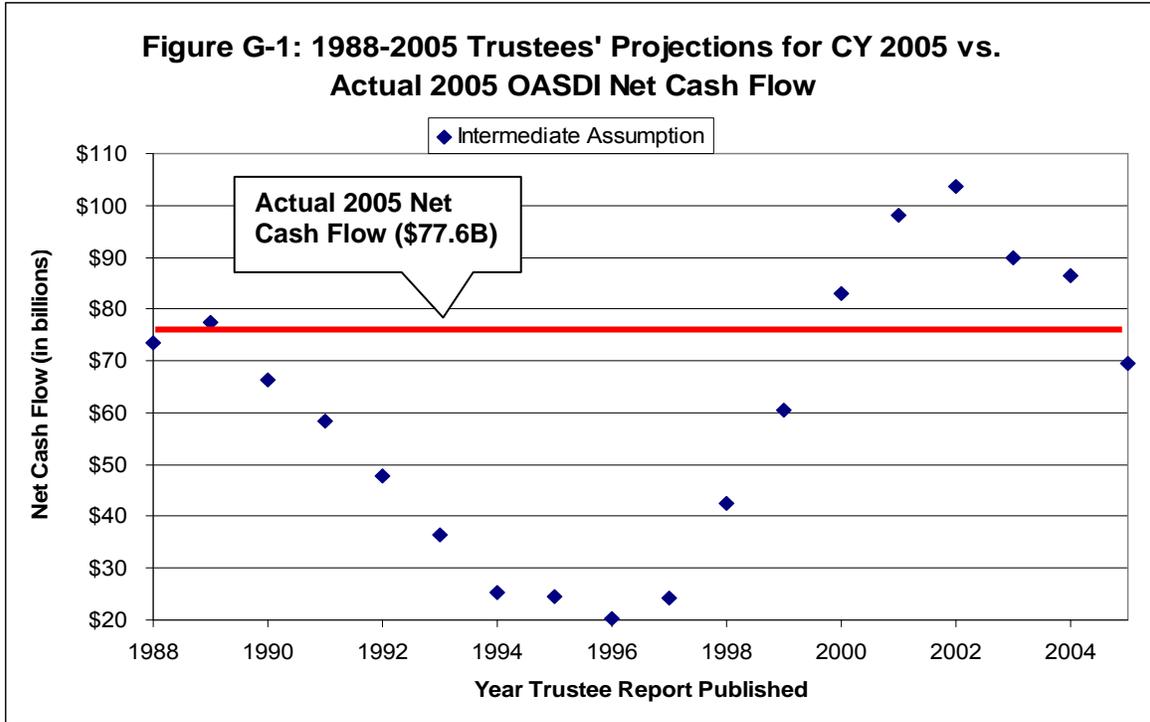
We then reviewed estimated and actual assumptions that potentially affected the 2005 net cash flow. Specifically, we reviewed the assumptions projected in the 1996 and 2002 Trustees Reports. As shown in Figure G-1, these 2 years are the most inaccurate under and overestimates, respectively. The 1996 Trustees Report projected Real Gross Domestic Product (GDP)<sup>1</sup> to increase in CY 2005 by 2 percent. However, according to the 2006 Trustees Report, the real GDP actually increased 3.6 percent. The 1996 Report also projected for CY 2005 approximately 152.4 million people will have earnings covered by Social Security and paid payroll taxes. In CY 2005, there was actually an estimated 159 million people who paid payroll taxes. This increase of over 6.5 million people impacted the surplus. The 1996 Report also projected 49.6 million beneficiaries receiving benefits in CY 2005. However, at the end of 2005, approximately 48 million people received benefits that resulted in a lower cost than projected.

The 2002 Trustees Report projected an average annual percentage increase in the Consumer Price Index (CPI)<sup>2</sup> for CY 2005 as 2.9 percent. The 2006 Trustees Report presented the increase in CPI for 2005 as 3.5 percent. This gap in the increase of CPI likely affected the lower costs projected for 2005. This resulted in a larger surplus than projected.

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<sup>1</sup> GDP is defined as the value of total output of goods and services.

<sup>2</sup> The CPI is an official measure of inflation in consumer prices. The Trustees Reports references to CPI relate to the CPI for Urban Wages Earners and Clerical Workers (CPI-W).



Source: OASDI Trustees Reports published from 1988 through 2005. Income values used exclude interest.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>

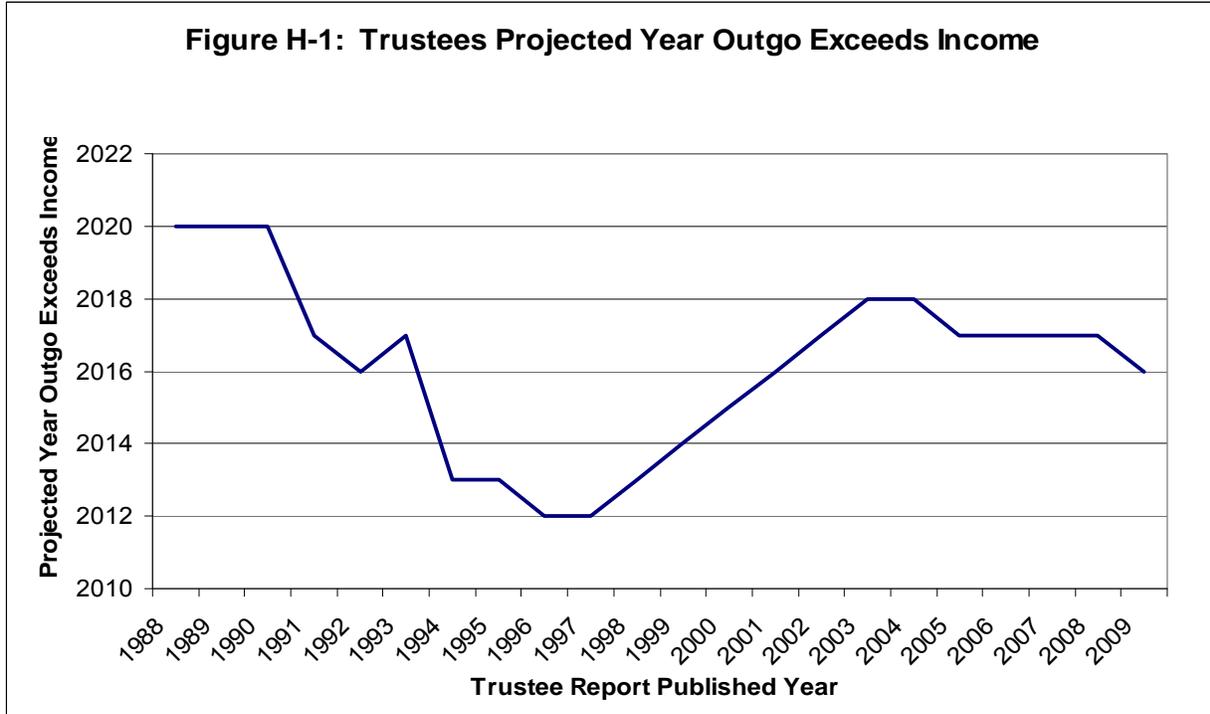
## Projected Year Outgoing Costs Would Exceed Income

We reviewed the Calendar Years (CY) 1988 through 2009 OASDI Trustees Reports to assess the fluctuation in the projected year in which outgoing annual costs would exceed the tax income for the combined Old-Age, Survivors and Disability Insurance (OASDI) Trust Funds. Figure H-1 shows the Trustees projected this scenario as early as 2012 and as late as 2020. From the 1990 to 1991 Trustees Reports, the projected year of excess costs over income changed from year 2020 to year 2017. Based on the 1991 Trustees Report, this change was due to several demographic trends. First, rapid growth was expected in the aged population beginning around the year 2010 because of the large number of persons born in the 2 decades after World War II. Second, assumed declines in death rates increased the number of aged persons more gradually, but on a steady and permanent basis. At the same time, birth rates, which declined in the 1960s, were assumed to remain relatively low in the future. However, increases in net immigration, which resulted from the *Immigration Act of 1990*<sup>1</sup>, contributed to larger numbers of young people, partially offsetting the lower fertility rates.

Another large fluctuation in years occurred from the 1993 Trustees Report to the 1994 Report. Based on projections in 1993, the Trustees estimated that outgoing costs would exceed income in 2017; however, the 1994 report states that outgoing costs would exceed income in 2013. Based on the 1994 Trustees Report, several economic assumptions were modified that resulted in the fluctuation. The most significant change was a decrease in the annual rate of change in the real average wage. The assumed real-wage differential was reduced from 1.1 percent in the 1993 report to 1.0 percent for the intermediate set of assumptions in the 1994 report. The second economic assumption change was the lowering of the projected labor force participation rates reflecting increases in the expected number of people who would receive disabled worker benefits. Also, one minor demographic assumption change was decreasing the total fertility rate to reflect observed birth rates in 1992 which were lower than expected. Each of the modifications resulted in a decrease in the long-range actuarial balance.

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<sup>1</sup> Pub. L. No. 101-649



Source: OASDI Trustees Reports published from 1988 through 2009.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>

Based on several news venues, it is predicted that the 2010 Trustees Report will show a significant fluctuation in the year outgoing costs exceed income from the 2009 Trustees Report. The projections in 2009 anticipated Social Security’s annual surplus of tax income over expenditures would fall sharply and remain constant until 2010 because of the economic recession, and cash flow deficits would begin in 2016. However, it has been indicated that Social Security costs could exceed income as early as 2010 because the economic recession has impacted the cash flow of Social Security far worse than projected.

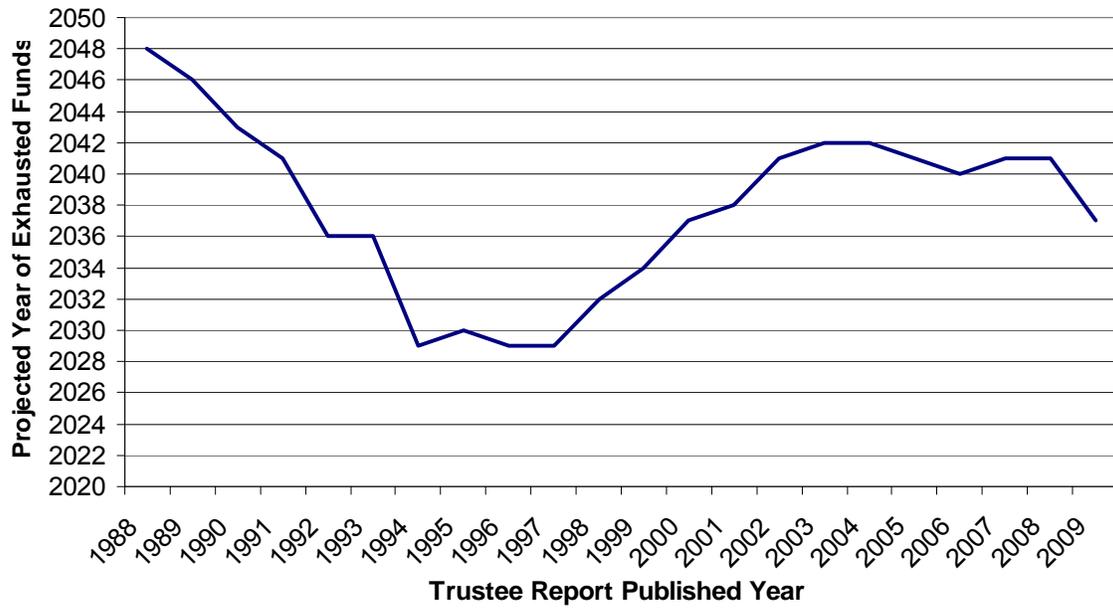
## Projected Year of Exhausted Funds

We reviewed the Trustees Reports published from 1988 through 2009 to assess the fluctuation in the projected year funds would be exhausted in the Old-Age, Survivors and Disability Insurance (OASDI) Trust Funds. Figure I-1 shows that the projected year has fluctuated from as early as 2029, which was projected in the 1994, 1996, and 1997 Trustees Reports to as distant as 2048, which was estimated in the 1988 Trustees Report. According to the 1994 Trustees Report, the fluctuation from the 1993 report to the 1994 report was largely due to updated mortality rates. The projected rates for males were lowered based on updated data, which was lower than expected for 1992 and 1993. Economic assumptions also had significant effects on the long-range actuarial balance. First, the ultimate real-wage differential<sup>1</sup> was reduced from 1.1 to 1.0 percent for the intermediate set of assumptions. Second, projected labor force participation rates were lowered. These rates reflected an increase in the expected number of people who would receive disabled worker benefits in the future. Third, data for 1993 indicated a larger than expected drop in the proportion of taxable covered wages. This effect, presumably based on higher increases in wages for high paid workers than for low and average wage earners, resulted in a slightly lower level of taxable payroll throughout the long-range projection period.

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<sup>1</sup> The percentage change in the average covered wage minus the percentage change in the Consumer Price Index. This differential is closely related to assumed growth rates in average earnings and productivity.

**Figure I-1: Trustees Projected Year of Exhausted Funds**



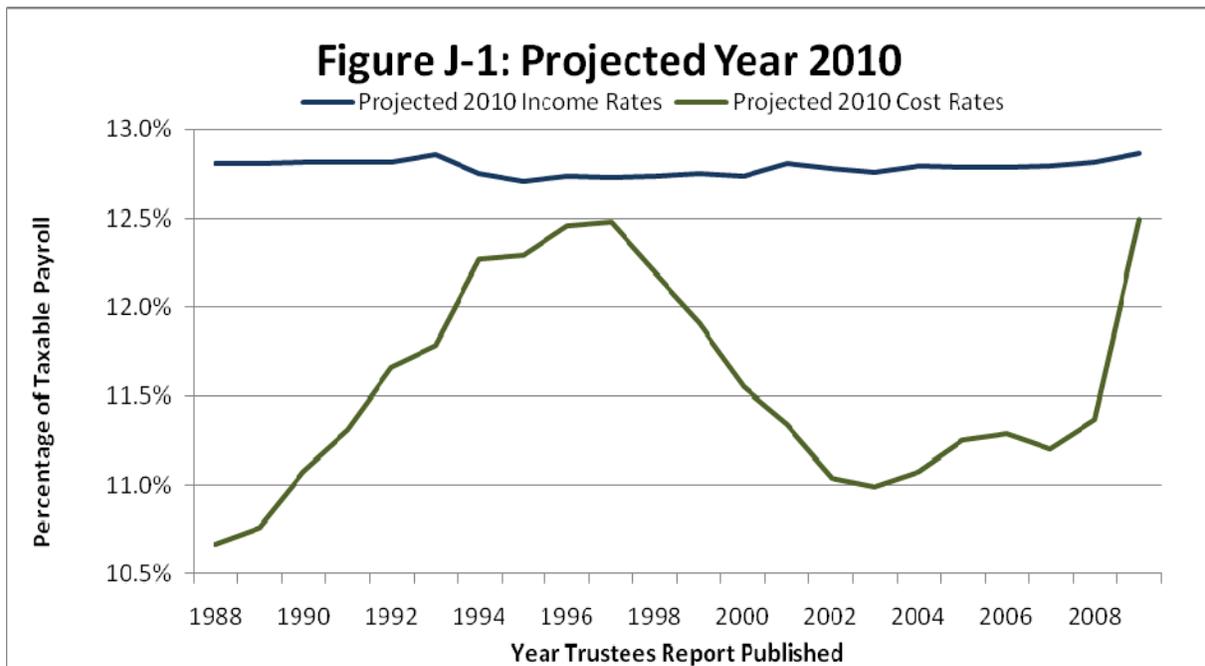
Source: OASDI Trustees Reports published from 1988 through 2009.

<http://mwww.ba.ssa.gov/OACT/TR/index.html>

# Future Projected Income Rates and Cost Rates<sup>1</sup>

## Projected Calendar Year 2010

We reviewed the Trustees Reports published from 1988 through 2009 to measure the fluctuations in the projections of the cost rates and income rates excluding interest for Calendar Year (CY) 2010. Based on Figure J-1, the income rates have remained relatively constant because the projections are largely a reflection of the tax rates specified in the law. Conversely, the cost rates fluctuate due to various factors. For instance, the projected cost rates for CY 2010 increased rapidly from the 1988 to 1997 Trustees Reports due to the increase in the projected number of beneficiaries compared to the number of covered workers. Cost rates then began to decline as the Trustees projected a more favorable economic growth until the 2008 Trustees Report when the current economic recession began to affect the projected cost rates.

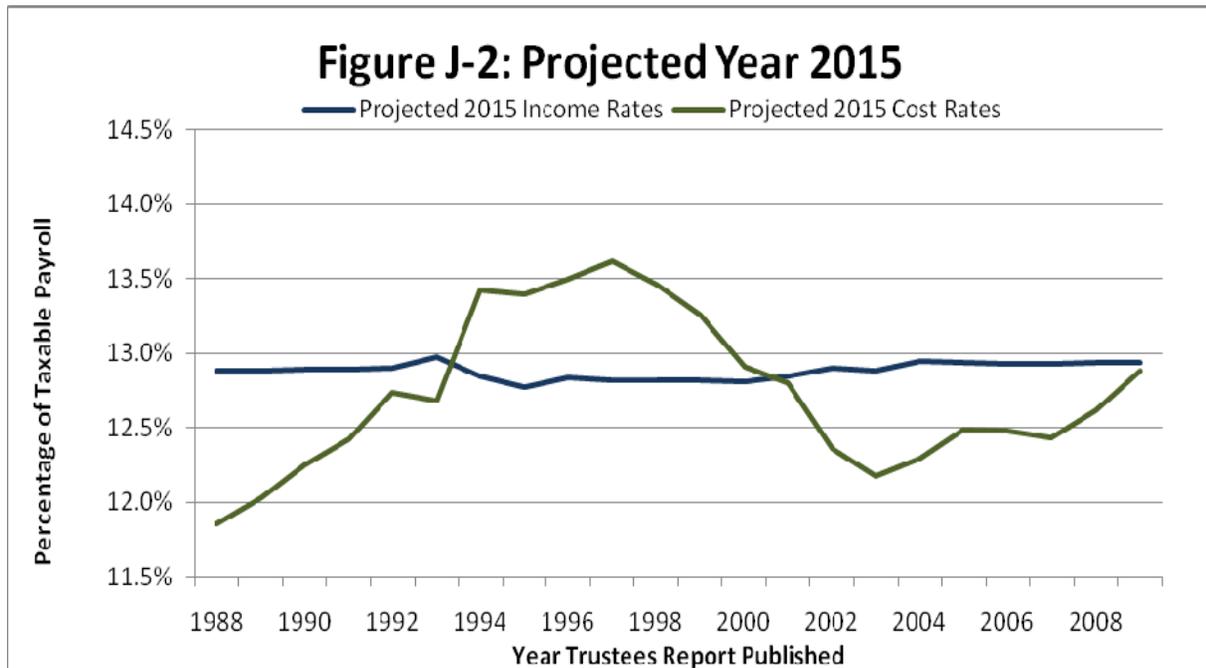


Source: OASDI Trustees Reports published from 1988 through 2009. Income rates used exclude interest. <http://mwww.ba.ssa.gov/OACT/TR/index.html>

<sup>1</sup> See Future Projected Income and Cost Rates section in Results of Review for a description of the income rates, cost rates, and taxable payroll.

## Projected Calendar Year 2015

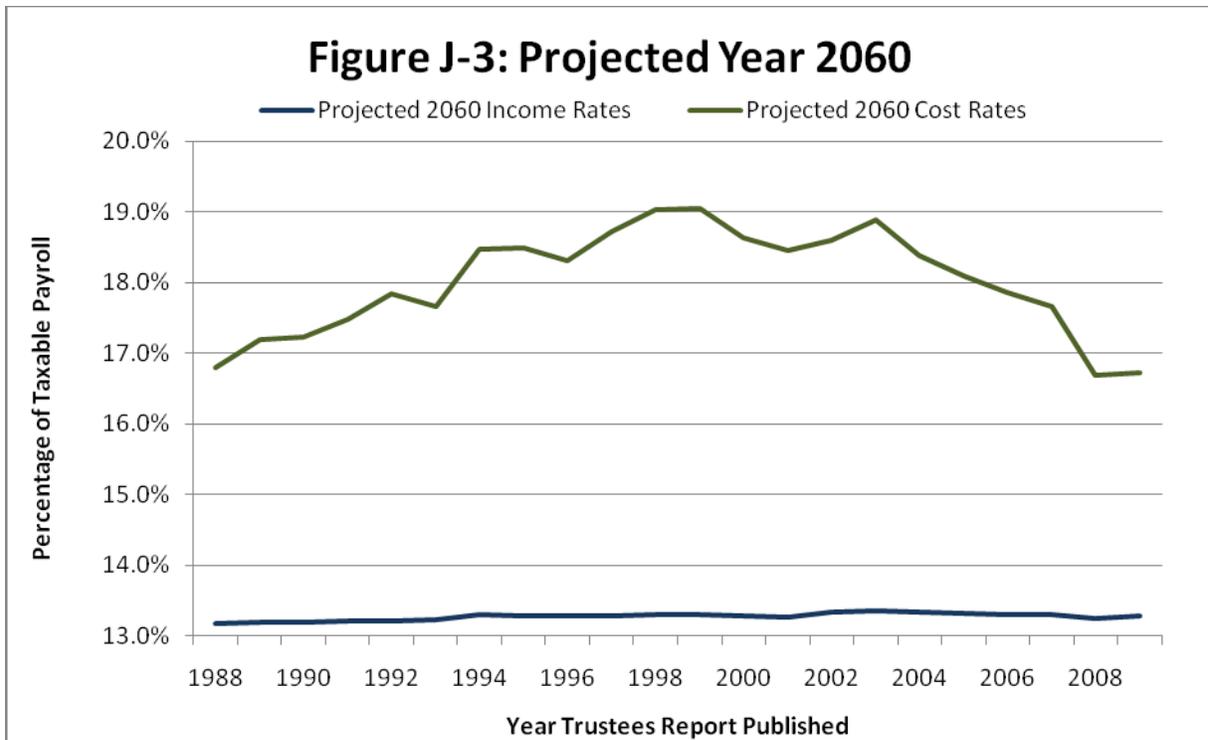
We reviewed the Trustees Reports noted above to measure the fluctuations in the projections of the cost rates and income rates for CY 2015. Figure J-2 shows several years in which the cost rates were projected to exceed the income rates. For more information on projected years in which costs exceeded income, see Appendix H.



Source: OASDI Trustees Reports published from 1988 through 2009. Income rates used exclude interest.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>

## Projected Calendar Year 2060

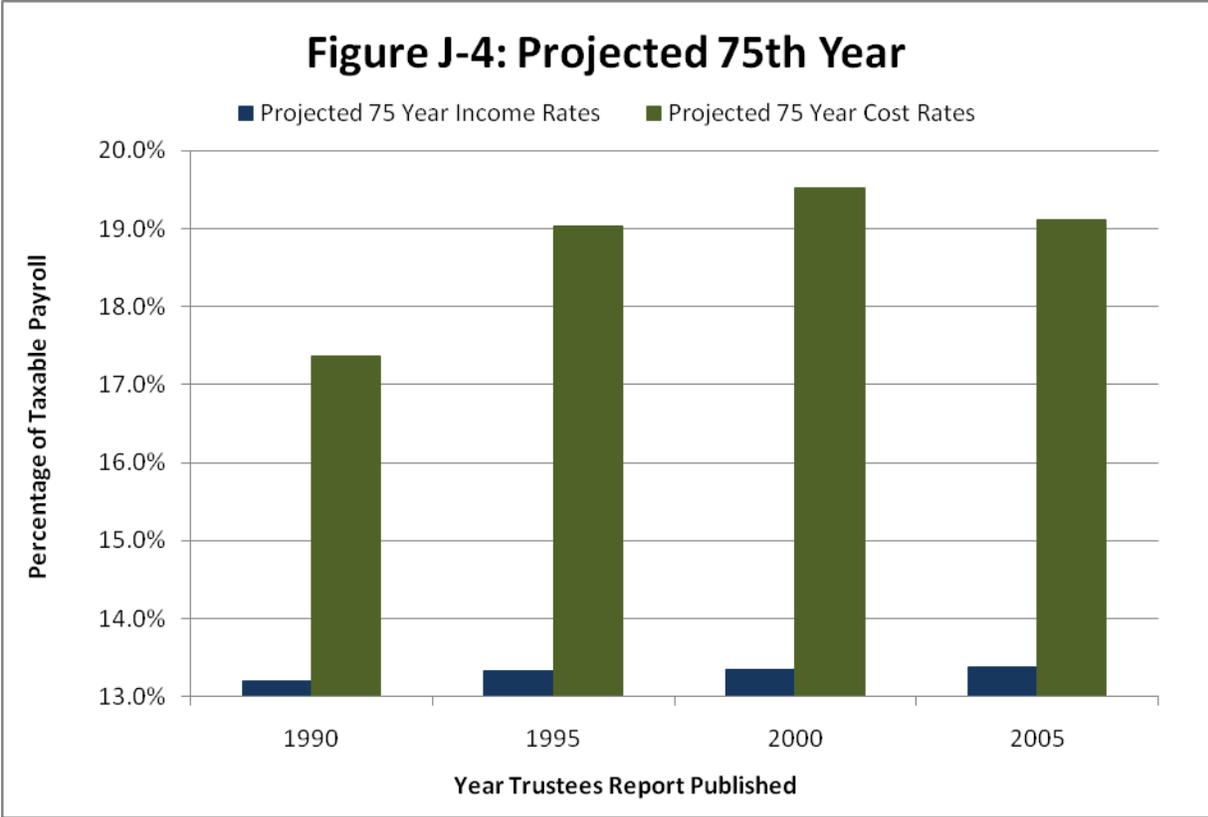
We also reviewed the Trustees Reports to observe the trend of projections for cost rates and income rates for CY 2060. Figure J-3 demonstrates the Trustees projections of higher cost rates than income rates for each year.



Source: OASDI Trustees Reports published from 1988 through 2009. Income rates used exclude interest.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>

### Projected 75<sup>th</sup> Year

Finally, we reviewed the Trustees Reports to analyze the variations in the projections of cost and income rates for the 75<sup>th</sup> projected year. The long-range estimates in the Trustees Reports are provided in increments of 5 years. Therefore, we reported the cost and income rates from the 1990, 1995, 2000, and 2005 Trustees Reports for the 75<sup>th</sup> year. Figure J-4 shows that the Trustees' cost rate projections have fluctuated on several occasions. The uncertainty in the vast number of assumptions used to project income and cost rates in 75 years allows for fluctuations.



Source: OASDI Trustees Reports published from 1988 through 2009. Income rates used exclude interest.  
<http://mwww.ba.ssa.gov/OACT/TR/index.html>

## Appendix K

The table below provides the table number reference from each Trustees Report that was used as the source for the graphs throughout the report.

	Figure 1	Figure 2	Figure E-1	Figure F-1	Figure G-1	Figure J-1	Figure J-2	Figure J-3	Figure J-4
1988	- Table	G1 & G2	Table G1 & G2	Table G1 & G2	Table G1 & G2	Table 26	Table 26	Table 26	-
1989	-	Table F2	Table F2	Table F2	Table F2	Table 26	Table 26	Table 26	-
1990	-	Table F2	Table F2	Table F2	Table F2	Table 26	Table 26	Table 26	Table 26
1991	-	Table F2	Table F2	Table F2	Table F2	Table 26	Table 26	Table 26	-
1992	- Table	III.B2	Table III.B2	Table III.B2	Table III.B2	Table II.F.13	Table II.F.13	Table II.F.13	-
1993	- Table	III.B.2	Table III.B.2	Table III.B.2	Table III.B.2	Table II.F.13	Table II.F.13	Table II.F.13	-
1994	- Table	III.B2	Table III.B2	Table III.B2	Table III.B2	Table II.F13	Table II.F13	Table II.F13	-
1995	- Table	III.B2	Table III.B2	Table III.B2	Table III.B2	Table II.F13	Table II.F13	Table II.F13	Table II.F13
1996	- Table	III.B2	- Table	III.B2	Table III.B2	Table II.F13	Table II.F13	Table II.F13	-
1997	- Table	III.B2	- Table	III.B2	Table III.B2	Table II.F13	Table II.F13	Table II.F13	-
1998	- Table	III.B2	- Table	III.B2	Table III.B2	Table II.F13	Table II.F13	Table II.F13	-
1999	- Table	III.B2	- Table	III.B2	Table III.B2	Table II.F13	Table II.F13	Table II.F13	-
2000	Table III.B2	Table III.B2	- Table	III.B2	Table III.B2	Table II.F13	Table II.F13	Table II.F13	Table II.F13
2001	Table VI.E8	Table VI.E8	--		Table VI.E8	Table IV.B1	Table IV.B1	Table IV.B1	-
2002	Table VI.E8	Table VI.E8	--		Table VI.E8	Table IV.B1	Table IV.B1	Table IV.B1	-
2003	Table VI.F8	Table VI.F8	--		Table VI.F8	Table IV.B1	Table IV.B1	Table IV.B1	-
2004	Table VI.F8	Table VI.F8	--		Table VI.F8	Table IV.B1	Table IV.B1	Table IV.B1	-

	<b>Figure 1</b>	<b>Figure 2</b>	<b>Figure E-1</b>	<b>Figure F-1</b>	<b>Figure G-1</b>	<b>Figure J-1</b>	<b>Figure J-2</b>	<b>Figure J-3</b>	<b>Figure J-4</b>
2005	Table VI.F7	Table VI.F7	--		Table VI.F7	Table IV.B1	Table IV.B1	Table IV.B1	Table IV.B1
2006	Table VI.F7	Table VI.F7	--		-	Table IV.B1	Table IV.B1	Table IV.B1	-
2007	Table VI.F7	Table VI.F7	--		-	Table IV.B1	Table IV.B1	Table IV.B1	-
2008	Table VI.F7	Table VI.F7	--		-	Table IV.B1	Table IV.B1	Table IV.B1	-
2009	Table VI.F7	Table VI.F7	--		-	Table IV.B1	Table IV.B1	Table IV.B1	-

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