

THE 2005 ANNUAL REPORT OF THE BOARD OF
TRUSTEES OF THE FEDERAL OLD-AGE AND
SURVIVORS INSURANCE AND DISABILITY
INSURANCE TRUST FUNDS

COMMUNICATION

FROM

THE BOARD OF TRUSTEES, FEDERAL OLD-AGE
AND SURVIVORS INSURANCE AND DISABILITY
INSURANCE TRUST FUNDS

TRANSMITTING

THE 2005 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE
FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND THE FEDERAL
DISABILITY INSURANCE TRUST FUNDS



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**THE 2005 ANNUAL REPORT OF THE BOARD OF
TRUSTEES OF THE FEDERAL OLD-AGE AND
SURVIVORS INSURANCE AND DISABILITY
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I. INTRODUCTION

The Old-Age, Survivors, and Disability Insurance (OASDI) program in the United States provides protection against the loss of earnings due to retirement, death, or disability. The OASDI program consists of two separate parts which pay monthly benefits to workers and their families—Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI). Under OASI, monthly benefits are paid to retired workers and their families and to survivors of deceased workers. Under DI, monthly benefits are paid to disabled workers and their families.

The Board of Trustees was established under the Social Security Act to oversee the financial operations of the OASI and DI Trust Funds. The Board is composed of six members. Four members serve by virtue of their positions in the Federal Government: the Secretary of the Treasury, who is the Managing Trustee; the Secretary of Labor; the Secretary of Health and Human Services; and the Commissioner of Social Security. The other two members are appointed by the President and confirmed by the Senate to serve as public representatives: John L. Palmer and Thomas R. Saving, the current public Trustees, began serving their 4-year terms on October 28, 2000. They have continued serving through the issuance of this report under the provision of the Social Security Act that allows a public representative whose term has expired to continue in the position until the earlier of the time at which a successor takes office or the Board's next annual report. The Deputy Commissioner of the Social Security Administration (SSA) is designated as Secretary of the Board.

The Social Security Act requires that the Board, among other duties, report annually to the Congress on the financial and actuarial status of the OASI and DI Trust Funds. This annual report, for 2005, is the 65th such report.

II. OVERVIEW

A. HIGHLIGHTS

The report's major findings are summarized below.

In 2004

At the end of 2004, 48 million people were receiving benefits: 33 million retired workers and their dependents, 7 million survivors of deceased workers, and 8 million disabled workers and their dependents. During the year an estimated 157 million people had earnings covered by Social Security and paid payroll taxes. Total benefits paid in 2004 were \$493 billion. Income was \$658 billion, and assets held in special issue U.S. Treasury securities grew to \$1.7 trillion.

Short-Range Results

The OASI and DI Trust Funds, individually and combined, are adequately financed over the next 10 years under the intermediate assumptions. The combined assets of the OASI and DI Trust Funds are projected to increase from \$1,687 billion at the beginning of 2005, or 320 percent of annual expenditures, to \$3,697 billion at the beginning of 2014, or 417 percent of annual expenditures in that year. Combined assets were projected in last year's report to rise to 325 percent of annual expenditures at the beginning of 2005, and 446 percent at the beginning of 2014.

Long-Range Results

Under the intermediate assumptions, OASDI cost will increase rapidly between about 2010 and 2030, due to the retirement of the large baby-boom generation. After 2030, increases in life expectancy and relatively low fertility rates will continue to increase Social Security system costs, but more slowly. Annual cost will exceed tax income starting in 2017 at which time the annual gap will be covered with cash from redeeming special obligations of the Treasury, until these assets are exhausted in 2041. Separately, the DI fund is projected to be exhausted in 2027 and the OASI fund in 2043. For the 75-year projection period, the actuarial deficit is 1.92 percent of taxable payroll, 0.04 percentage point larger than in last year's report. The open group unfunded obligation for OASDI over the 75-year period is \$4.0 trillion in present value, \$0.3 trillion more than the unfunded obligation estimated a year ago.

Highlights

The OASDI annual cost rate is projected to increase from 11.13 percent of taxable payroll in 2005, to 16.74 percent in 2030, and to 19.08 percent in 2079, or to a level that is 5.70 percent of taxable payroll more than the projected income rate for 2079. Expressed in relation to the projected gross domestic product (GDP), OASDI cost is estimated to rise from the current level of 4.3 percent of GDP, to 6.1 percent in 2030, and to 6.4 percent in 2079.

Conclusion

Annual cost will begin to exceed tax income in 2017 for the combined OASDI Trust Funds, which are projected to become insolvent (i.e., unable to pay scheduled benefits in full on a timely basis) when assets are exhausted in 2041 under the long-range intermediate assumptions. For the trust funds to remain solvent throughout the 75-year projection period, the combined payroll tax rate could be increased during the period in a manner equivalent to an immediate and permanent increase of 1.92 percentage points, benefits could be reduced during the period in a manner equivalent to an immediate and permanent reduction of 12.8 percent, general revenue transfers equivalent to \$4.0 trillion (in present value) could be made during the period, or some combination of approaches could be adopted. Significantly larger changes would be required to maintain solvency beyond 75 years.

The projected trust fund deficits should be addressed in a timely way to allow for a gradual phasing in of the necessary changes and to provide advance notice to workers. The sooner adjustments are made the smaller and less abrupt they will have to be. Social Security plays a critical role in the lives of 48 million beneficiaries, and 159 million covered workers and their families. With informed discussion, creative thinking, and timely legislative action, we will ensure that Social Security continues to protect future generations.

Overview

B. TRUST FUND FINANCIAL OPERATIONS IN 2004

The table below shows the income, expenditures, and assets for the OASI, the DI and the combined OASDI Trust Funds in calendar year 2004.

Table II.B1.—Summary of 2004 Trust Fund Financial Operations

	Amounts (in billions)		
	OASI	DI	OASDI
Assets at the end of 2003	\$1,355.3	\$175.4	\$1,530.8
Total income in 2004	566.3	91.4	657.7
Net contributions	472.8	80.3	553.0
Taxation of benefits	14.6	1.1	15.7
Interest	79.0	10.0	89.0
Total expenditures in 2004	421.0	80.6	501.6
Benefit payments	415.0	78.2	493.3
Railroad Retirement financial interchange	3.6	.2	3.8
Administrative expenses	2.4	2.2	4.5
Net increase in assets in 2004	145.3	10.8	156.1
Assets at the end of 2004	1,500.6	186.2	1,686.8

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

In 2004, net contributions accounted for 84 percent of total trust fund income. Net contributions consist of taxes paid by employees, employers and the self-employed on earnings covered by Social Security. These taxes were paid on covered earnings up to a specified maximum annual amount, which was \$87,900 in 2004 and is increased each year automatically (to \$90,000 in 2005) as the average wage increases. The tax rates scheduled under current law for 2004 and later are shown in table II.B2.

Table II.B2.—Tax Rates for 2004 and Later

	OASI	DI	OASDI
Tax rate for employees and employers, each (in percent)	5.30	0.90	6.20
Tax rate for self-employed persons (in percent)	10.60	1.80	12.40

Two percent of OASDI Trust Fund income came from subjecting up to 50 percent of Social Security benefits above a certain level to Federal personal income taxation, and 14 percent of OASDI income came from interest earned on investment of OASDI Trust Fund reserves. Social Security's assets are invested in interest-bearing securities of the U.S. Government. In 2004 the combined trust fund assets earned interest at an effective annual rate of

Calendar Year 2004 Operations

5.7 percent. More than 98 percent of expenditures from the combined OASDI Trust Funds in 2004 went to pay retirement, survivor, and disability benefits totaling \$493.3 billion. The financial interchange with the Railroad Retirement program resulted in a payment of \$3.8 billion from the combined OASDI Trust Funds, or about 0.8 percent of total expenditures. The administrative expenses of the Social Security program were \$4.5 billion, or about 0.9 percent of total expenditures.

Assets of the trust funds provide a reserve to pay benefits whenever expenditures exceed income. Assets increased by \$156.1 billion in 2004 because income to each fund exceeded expenditures. At the end of 2004, the combined assets of the OASI and the DI Trust Funds were 320 percent of estimated expenditures for 2005.

C. ASSUMPTIONS ABOUT THE FUTURE

The actual future income and expenditures of the OASI and DI Trust Funds depend on many factors, including the size and characteristics of the population receiving benefits, the level of monthly benefit amounts, the size of the work force, and the level of workers’ earnings. These factors will depend in turn upon future birth rates, death rates, immigration, marriage and divorce rates, retirement-age patterns, disability incidence and termination rates, productivity gains, wage increases, inflation, and many other demographic, economic, and program-specific factors.

The intermediate demographic and economic assumptions shown in table II.C1, designated as alternative II, reflect the Trustees’ best estimates of future experience, and therefore most of the figures in this overview depict only the outcomes under the intermediate assumptions. Any projection of the future is, of course, uncertain. For this reason, alternatives I (low cost) and III (high cost) are included to provide a range of possible future experience. The assumptions for these two alternatives are also shown in table II.C1, and their implications are highlighted in a separate section on the uncertainty of the projections.

Assumptions are reexamined each year in light of recent experience and new information. This careful review and updating of the assumptions on an annual basis helps ensure that they provide the Trustees’ best estimate of future possibilities.

Table II.C1.—Ultimate¹ Values of Key Demographic and Economic Assumptions for the Long-Range (75-year) Projection Period

Ultimate assumptions	Intermediate	Low Cost	High Cost
Total fertility rate (children per woman)	1.95	2.2	1.7
Average annual percentage reduction in total age-sex-adjusted death rates from 2029 to 207971	.33	1.23
Annual net immigration (in thousands)	900	1,300	672.5
Annual percentage change in:			
Productivity (total U.S. economy)	1.6	1.9	1.3
Average wage in covered employment	3.9	3.4	4.4
Consumer Price Index (CPI)	2.8	1.8	3.8
Real-wage differential (percent)	1.1	1.6	.6
Unemployment rate (percent)	5.5	4.5	6.5
Annual trust fund interest rate (percent)	5.8	5.5	6.0

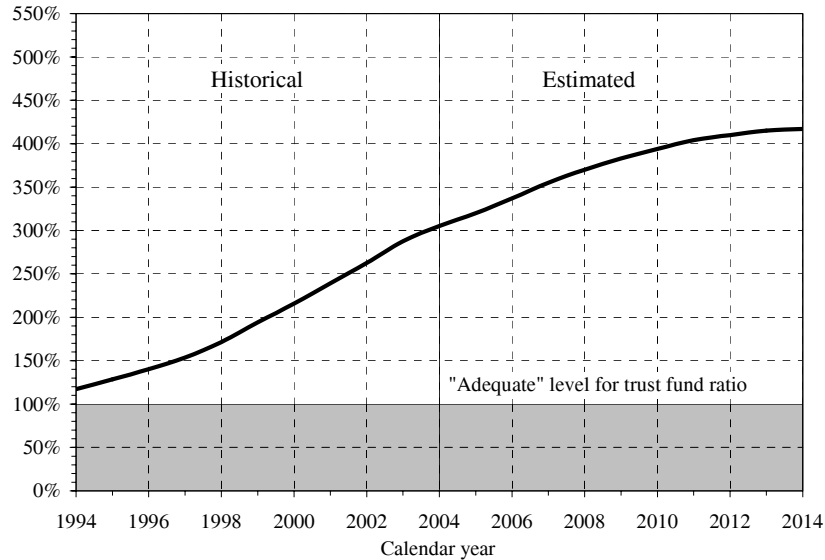
¹ Ultimate values are assumed to be reached within 5 to 25 years. See chapter V for details.

D. PROJECTIONS OF FUTURE FINANCIAL STATUS

Short-Range Actuarial Estimates

For the short range (2005-2014), the Trustees measure trust fund adequacy by comparing assets at the beginning of each year to projected program cost for that year under the intermediate set of assumptions. Having a trust fund ratio of 100 percent or more—that is, assets at the beginning of each year at least equal to projected outgo during the year—is considered a good indication of a trust fund’s ability to cover most short-term contingencies. Both the OASI and the DI trust fund ratios under the intermediate assumptions exceed 100 percent throughout the short-range period and therefore satisfy the Trustees’ short-term test for financial adequacy. Figure II.D1 below shows the trust fund ratios for the combined OASI and DI Trust Funds for the next 10 years.

Figure II.D1.—Short-Range OASDI Trust Fund Ratios
 [Assets as a percentage of annual expenditures]



Long-Range Actuarial Estimates

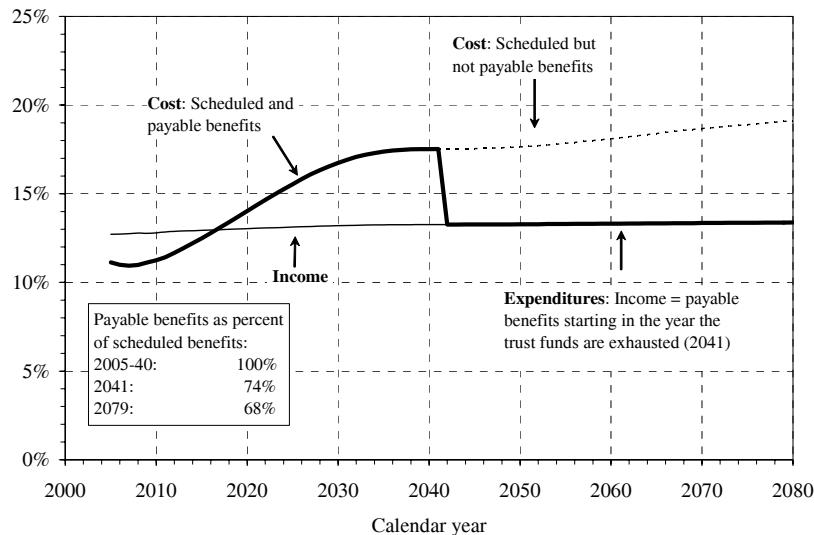
The financial status of the trust funds over the next 75 years is measured in terms of cost and income as a percentage of taxable payroll, trust fund ratios, the actuarial balance (also as a percentage of taxable payroll), and the open group unfunded obligation (expressed in present-value dollars). Considering

Overview

Social Security’s cost as a percentage of the total U.S. economic output (gross domestic product or GDP) provides an additional perspective.

The year-by-year relationship between income and cost rates shown in figure II.D2 illustrates the expected pattern of cash flow for the OASDI program over the full 75-year period. Under the intermediate assumptions, the OASDI cost rate is projected to decline slightly during 2005 through 2007 and then increase up to the current level within the next 3 years. It then begins to increase rapidly and first exceeds the income rate in 2017, producing cash-flow deficits thereafter. Despite these cash-flow deficits, beginning in 2017, redemption of trust fund assets will allow continuation of full benefit payments on a timely basis until 2041, when the trust funds will become exhausted. This redemption process will require a flow of cash from the General Fund of the Treasury. Pressures on the Federal Budget will thus emerge well before 2041. Even if a trust fund’s assets are exhausted, however, tax income will continue to flow into the fund. Present tax rates would be sufficient to pay 74 percent of scheduled benefits after trust fund exhaustion in 2041 and 68 percent of scheduled benefits in 2079.

Figure II.D2.—OASDI Income and Cost Rates Under Intermediate Assumptions
 [As a percentage of taxable payroll]

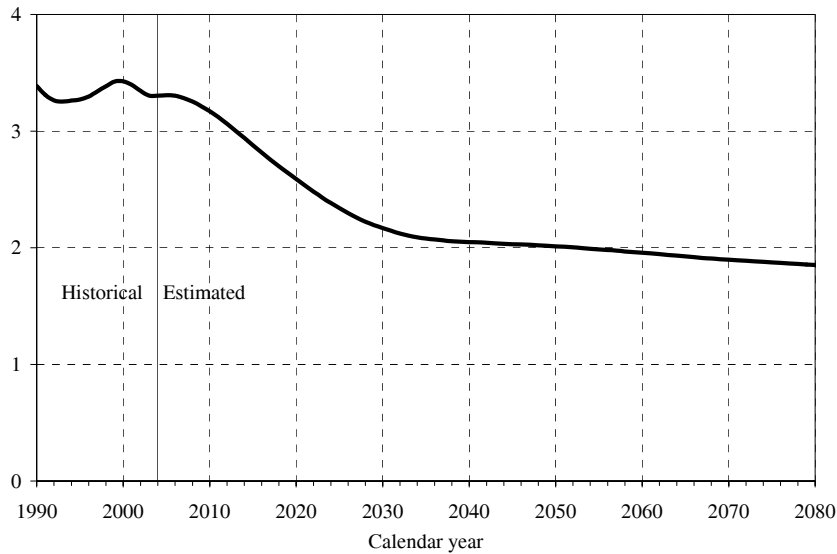


Social Security’s cost rate generally will continue rising rapidly through about 2030 as the baby-boom generation reaches retirement age. Thereafter, the cost rate is estimated to rise at a slower rate for about 15 years as the

baby boom ages and begins to decrease in size. Continued reductions in death rates and relatively low birth rates will cause a significant upward shift in the average age of the population and will push the cost rate to 19.1 percent of taxable payroll by 2079 under the intermediate assumptions. In a pay-as-you-go system (with no trust fund assets or borrowing authority), this 19.1-percent cost rate means the combination of the payroll tax (scheduled to total 12.4 percent) and proceeds from income taxes on benefits (expected to be 1.0 percent of taxable payroll in 2079) would have to equal 19.1 percent of taxable payroll to pay all currently scheduled benefits. After 2079, the upward shift in the average age of the population is likely to continue and to increase the gap between OASDI costs and income.

The primary reason that the OASDI cost rate will increase rapidly between 2010 and 2030 is that, as the large baby-boom generation born in the years 1946 through 1964 retires, the number of beneficiaries will increase much more rapidly than the number of workers. The estimated number of workers per beneficiary is shown in figure II.D3. In 2004, there were about 3.3 workers for every OASDI beneficiary. The baby-boom generation will have largely retired by 2030, and the projected ratio of workers to beneficiaries will be only 2.2 at that time. Thereafter, the number of workers per beneficiary will slowly decline, and the OASDI cost rate will continue to increase.

Figure II.D3.—Number of Covered Workers Per OASDI Beneficiary



Overview

The maximum projected trust fund ratios for the OASI, DI, and combined funds appear in table II.D1. The year in which the maximum projected trust fund ratio is attained and the year in which the assets are projected to be exhausted are shown as well.

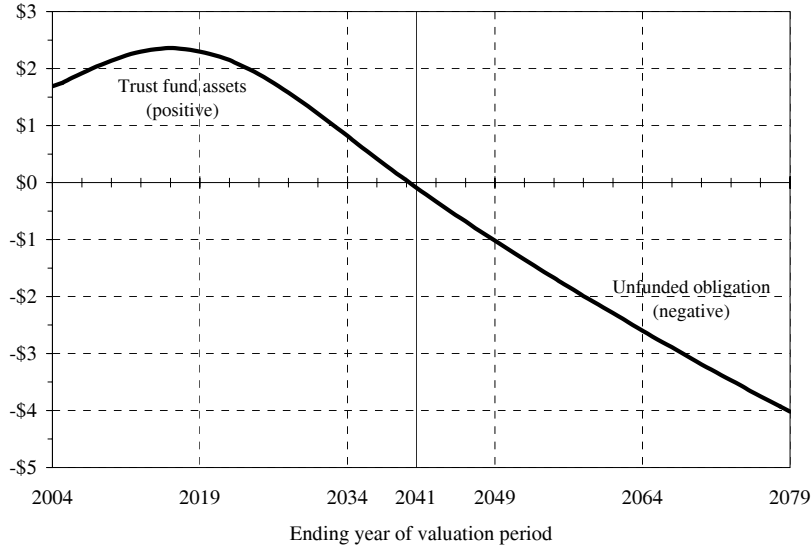
Table II.D1.—Projected Maximum Trust Fund Ratios Attained and Trust Fund Exhaustion Dates Under the Intermediate Assumptions

	OASI	DI	OASDI
Maximum trust fund ratio (percent)	469	215	418
Year attained	2015	2005	2015
Year of trust fund exhaustion	2043	2027	2041

The actuarial balance is a measure of the program’s financial status for the 75-year valuation period as a whole. It is essentially the difference between income and cost of the program expressed as a percentage of taxable payroll over the valuation period. This single number summarizes the adequacy of program financing for the period. When the actuarial balance is negative, the actuarial deficit can be interpreted as the percentage that would have to be added to the current law income rate in each of the next 75 years, or subtracted from the cost rate in each year, to bring the funds into actuarial balance. In this report, the actuarial balance under the intermediate assumptions is a deficit of 1.92 percent of taxable payroll for the combined OASI and DI Trust Funds. The actuarial deficit was 1.89 percent in the 2004 report and has been in the range of 1.86 percent to 2.23 percent for the last ten reports.

Another way to illustrate the financial shortfall of the OASDI system is to examine the cumulative value of taxes less costs, in present value. Figure II.D4 shows the present value of cumulative OASDI taxes less costs over the next 75 years. The balance of the combined trust funds peaks at \$2.4 trillion in 2016 (in present value) and then turns downward. This cumulative amount continues to be positive, indicating trust fund assets, or reserves, through 2040. However, after 2040 this cumulative amount becomes negative, indicating a net unfunded obligation. Through the end of 2079, the combined funds have a present-value unfunded obligation of \$4.0 trillion. This unfunded obligation represents 1.8 percent of future taxable payroll and 0.6 percent of future GDP, through the end of the 75-year projection period.

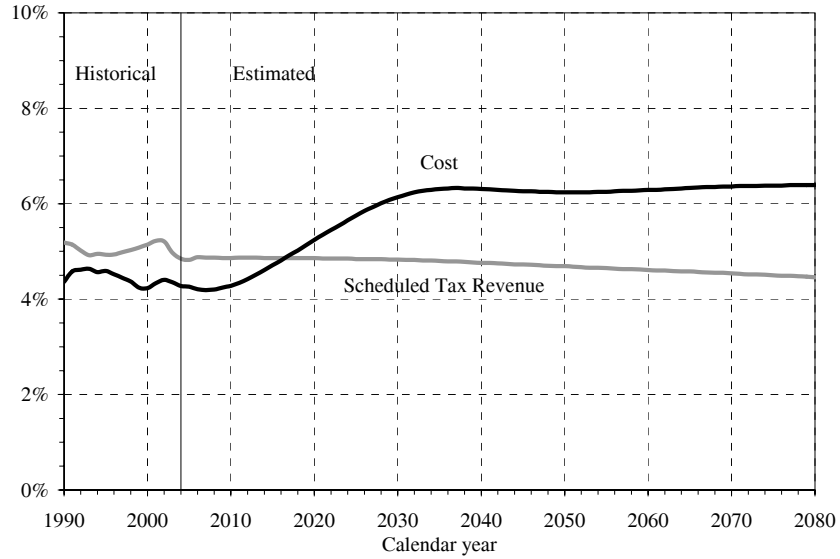
Figure II.D4.—Cumulative OASDI Income Less Cost, Based on Present Law Tax Rates and Scheduled Benefits
 [Present value as of January 1, 2005, in trillions]



Still another important way to look at Social Security’s future is to view its cost as a share of U.S. economic output. Figure II.D5 shows that Social Security’s cost as a percentage of GDP will grow from 4.3 percent in 2005 to 6.1 percent in 2030, and then gradually increase to 6.4 percent in 2079. However, Social Security’s scheduled tax income is projected to be about 4.8 percent of GDP in both 2005 and 2030, and then to decrease to 4.5 percent in 2079.

Overview

Figure II.D5.—OASDI Cost and Scheduled Tax Revenue as a Percentage of GDP



Even a 75-year period is not long enough to provide a complete picture of Social Security’s financial condition. Figures II.D4, II.D5, and II.D6 show that the program’s financial condition continues to worsen at the end of the period. Overemphasis on summary measures for a 75-year period can lead to incorrect perceptions and to policy prescriptions that do not move toward a sustainable system. Thus, careful consideration of the trends in annual deficits and unfunded obligations toward the end of the 75-year period is important. In order to provide a more complete description of Social Security’s very long-run financial condition, this report also includes summary measures for a time period that extends to the infinite horizon. These calculations show that extending the horizon beyond 75 years continues to increase the unfunded obligation. Over the infinite horizon, the shortfall is \$11.1 trillion in present value, or 3.5 percent of future taxable payroll and 1.2 percent of future GDP. These calculations of the shortfall indicate that much larger changes would be required to achieve solvency over the infinite future as compared to changes needed to balance 75-year period summary measures.

Changes From Last Year's Report

The long-range OASDI actuarial deficit of 1.92 percent of taxable payroll for this year's report is slightly larger than the deficit of 1.89 percent of taxable payroll shown in last year's report under intermediate assumptions. On balance, the overall positive effect of changes in assumptions, methods, and data does not offset the negative impact of changing the valuation period for this measure. For a description of the specific changes identified in table II.D2 below, see section IV.B.7 on page 64.

The open group unfunded obligation over the 75-year projection period, has increased from \$3.7 trillion (present discounted value as of January 1, 2004) to \$4.0 trillion (present discounted value as of January 1, 2005). Thus, the negative impact of advancing the valuation date by 1 year and including the additional year 2079 in the new valuation period, was the predominant effect for this measure.

Table II.D2.—Reasons for Change in the 75-Year Actuarial Balance Under Intermediate Assumptions
[As a percentage of taxable payroll]

Item	OASI	DI	OASDI
Shown in last year's report:			
Income rate	11.90	1.94	13.84
Cost rate	13.46	2.27	15.73
Actuarial balance	-1.56	-.33	-1.89
Changes in actuarial balance due to changes in:			
Legislation / Regulation00	.00	.00
Valuation period ¹	-.06	-.01	-.07
Demographic data and assumptions	+.02	+.01	+.03
Economic data and assumptions	-.06	-.01	-.06
Disability data and assumptions	+.01	-.02	-.01
Projection methods and data	+.04	+.03	+.07
Total change in actuarial balance	-.04	.00	-.04
Shown in this report:			
Actuarial balance	-1.60	-.32	-1.92
Income rate	11.93	1.94	13.87
Cost rate	13.53	2.26	15.79

¹ In changing from the valuation period of last year's report, which was 2004-78, to the valuation period of this report, 2005-79, the relatively large negative annual balance for 2079 is included. This results in a larger long-range actuarial deficit. The fund balance at the end of 2004, i.e., at the beginning of the projection period, is included in the 75-year actuarial balance.

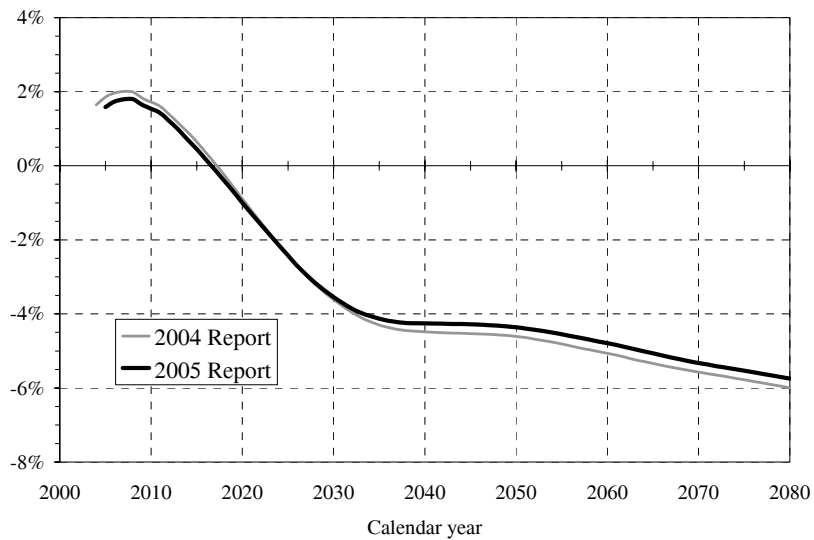
Note: Totals do not necessarily equal the sums of rounded components.

Figure II.D6 shows that this year's projections of annual balances start at a slightly lower level than those in last year's report. Over the period 2015 through 2030, annual balances are similar between the two reports. After 2030, the annual shortfall of program income is somewhat smaller than projected last year. A number of data updates and changes in methods contrib-

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uted to this improvement. Section IV.B.7 on page 64 provides a detailed presentation of these changes.

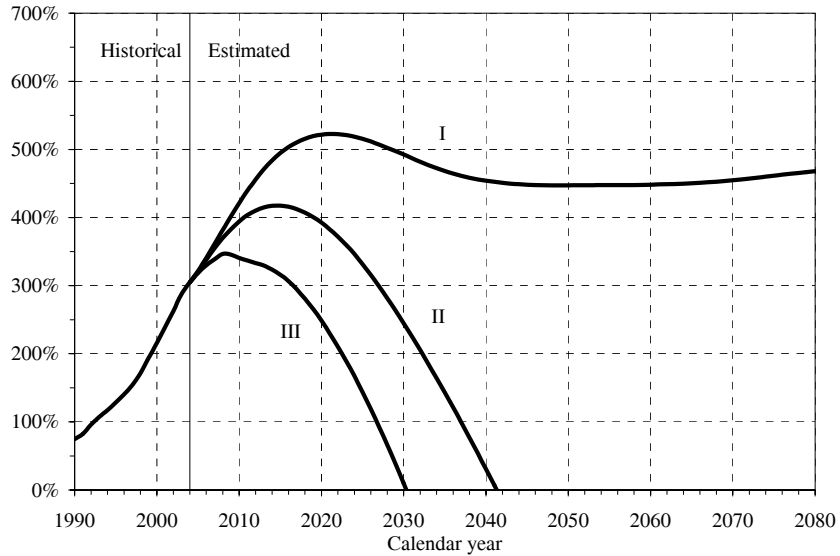
Figure II.D6.—OASDI Annual Balances: 2004 and 2005 Trustees Reports
[As a percentage of taxable payroll under the intermediate assumptions]



Uncertainty of the Projections

Significant uncertainty surrounds the intermediate assumptions. The Trustees have traditionally used low cost (alternative I) and high cost (alternative III) assumptions to indicate this uncertainty. Figure II.D7 shows the projected trust fund ratios for the combined OASI and DI Trust Funds under the intermediate, low cost, and high cost assumptions. The low cost alternative is characterized by assumptions that improve the financial condition of the trust funds, including a higher fertility rate, slower improvement in mortality, a higher real-wage differential, and lower unemployment. The high cost alternative, in contrast, features a lower fertility rate, more rapid declines in mortality, a lower real-wage differential, and higher unemployment.

Figure II.D7.—Long-Range OASDI Trust Fund Ratios Under Alternative Assumptions
 [Assets as a percentage of annual cost]



These three alternatives have traditionally been constructed to provide a reasonable range of possible future experience. However, these alternatives do not address the probability that actual experience will be within or outside the range. As an additional way of illustrating uncertainty, this report includes estimates from a model of the trust funds that provides a probability distribution of possible future outcomes (see appendix E). The results of this model suggest that outcomes better than the traditional low cost alternative and outcomes worse than the high cost alternative have very low probabilities of occurring.

E. CONCLUSION

Under current law the cost of Social Security will soon begin to increase faster than the program's income, because of the aging of the baby-boom generation, expected continuing low fertility, and increasing life expectancy. Based on the Trustees' best estimate, program cost will exceed tax revenues starting in 2017 and throughout the remainder of the 75-year projection period. Social Security's combined trust funds are projected to allow full payment of benefits until they become exhausted in 2041. At that time annual tax income to the trust funds is projected to equal about 74 percent of program costs. Separately, the OASI and DI funds are projected to have sufficient funds to pay full benefits on time until 2043 and 2027, respectively. By 2079, however, annual tax income is projected to be only about two-thirds as large as the annual cost of the OASDI program.

Over the full 75-year projection period the actuarial deficit estimated for the combined trust funds is 1.92 percent of taxable payroll—slightly higher than the 1.89 percent deficit projected in last year's report. This deficit indicates that financial adequacy of the program for the next 75 years could be restored if the Social Security payroll tax were immediately and permanently increased from its current level of 12.4 percent (for employees and employers combined) to 14.32 percent. Alternatively, all current and future benefits could be immediately reduced by about 13 percent. Other ways of reducing the deficit include making transfers from general revenues or adopting some combination of approaches.

If no action were taken until the combined trust funds become exhausted in 2041, much larger changes would be required.

- For example, payroll taxes could be raised to finance scheduled benefits fully in every year starting in 2041. In this case, the payroll tax would be increased to 16.66 percent at the point of trust fund exhaustion in 2041 and continue rising to 18.10 percent in 2079.
- Similarly, benefits could be reduced to the level that is payable with scheduled tax rates in every year beginning in 2041. Under this scenario, benefits would be reduced 26 percent at the point of trust fund exhaustion in 2041, with reductions reaching 32 percent in 2079.

Either of these examples would eliminate annual deficits after trust fund exhaustion. Because of the increasing average age of the population (due to expected improvement in life expectancy), Social Security's annual cost will very likely continue to grow faster than scheduled tax revenues after 2079.

Conclusion

As a result, ensuring solvency of the system beyond 2079 would likely require larger changes than those expected to be needed for 2079.

The projected trust fund deficits should be addressed in a timely way to allow for a gradual phasing in of the necessary changes and to provide advance notice to workers. The sooner adjustments are made the smaller and less abrupt they will have to be. Social Security plays a critical role in the lives of 48 million beneficiaries, and 159 million covered workers and their families. With informed discussion, creative thinking, and timely legislative action, we will ensure that Social Security continues to protect future generations.

For further information related to the contents of this report, see the following websites.

- www.socialsecurity.gov/OACT/TR/TR05/index.html
- www.cms.hhs.gov/publications/trusteesreport/
- www.treas.gov/offices/economic-policy/social_security.html