

ACTUARIAL NOTE

Number 117
October 1983

U.S. Department of
Health and Human Services
SOCIAL SECURITY ADMINISTRATION

LONG-RANGE PROJECTIONS OF SOCIAL SECURITY TRUST FUND OPERATIONS IN DOLLARS

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Some interest has been expressed in the dollar values of the estimated long-range projections of the operations of the combined Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds as well as the operations of the combined OASI, DI, and Hospital Insurance (HI) Trust Funds. Long-range projections typically are not shown as dollar amounts because of the noncomparability of such monetary units over time when inflation is taken into account. Instead, relative measures which are comparable over time have been developed. Two examples of such measures are cost rates and income rates, which express the cost and income of the program as percentages of taxable payroll. Another is the trust fund ratio, which expresses the assets of the Trust Funds as a proportion of the outgo during a specific period of time, usually the next year. These measures are discussed fully in the "1983 Annual Report, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds"¹ (1983 OASDI Trustees Report). They are the ones that have been used by Social Security program planners and legislators to evaluate the long-range status of the program and the long-range effect of proposed changes to the program. Nonetheless, in view of the interest that continues to be expressed in long-range dollar values, this note presents long-range OASDI projections in current dollars together with several indices which can be used to convert current dollars into constant dollars. In addition, the Appendix to this note presents financial projections of a more limited nature for the HI program and for the combined OASDI and HI programs.

Table 1 shows projections of the operations of the combined OASI and DI Trust Funds—that is, assets at the beginning of the year, tax income, total income, outgo, and assets at the end of the year. The footnotes in the table define these items. The projections are based on four sets of economic and demographic assumptions identified as Alternatives I, II-A, II-B, and III, which are described in detail in the 1983 OASDI Trustees Report. The projections of all these financial items are shown in current dollars.

A major consideration in converting current dollars to constant dollars is the selection of the index of conversion. Price indices adjust for the effects of price inflation. One price index presented in this note is the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), which is published by the Bureau of Labor Statistics, Department of Labor. The CPI-W was chosen mainly because it is used to determine automatic increases in OASDI benefits. Another

¹House Document No. 98-74, dated June 27, 1983.

price index presented is the Implicit Price Deflator for the Gross National Product, hereafter referred to as the GNP deflator. Also shown are the GNP values themselves.

Wage indices adjust for the combined effects of price inflation and real-wage growth. The particular wage index presented in this note is the average annual amount of total wages. This wage series is used to adjust many of the Social Security program amounts that are subject to automatic adjustment (such as the contribution and benefit base).

Payroll indices adjust for the effects of variations in the number of workers as well as for the effect of price inflation and real-wage growth. This note presents the OASDI taxable payroll, which consists of all earnings subject to OASDI tax rates (including deemed wages based on military service), adjusted to reflect the lower tax rates (in comparison with the combined employee-employer rate) which apply to self-employment income through 1983, tips, and multiple-employer "excess wages."

The application of an interest rate is another way of converting dollar values through time. The selection of an interest rate can be based on many types of investments, such as those by individuals, groups, or the Social Security trust funds. The particular series of interest-rate indices presented in this note is based on the interest rates for special public-debt obligations issuable to the Social Security trust funds, which form the basis of the interest calculations done for the 1983 OASDI Trustees Report.

The CPI-W, after several years of varying increases, is assumed to increase annually by rates of 2, 3, 4, and 5 percent under Alternatives I, II-A, II-B, and III, respectively. Similarly, the average annual wage is assumed to increase by 4.5, 5, 5.5, and 6 percent. After the first few years, no specific assumption is made about GNP growth; rather its projection is based on the complex interaction of many economic and demographic variables. Similarly, the projection of payroll growth is based on the interaction of many economic and demographic variables. Appendix A of the 1983 OASDI Trustees Report discusses the payroll projections more fully. The ultimate interest rate assumed is 5.06, 5.575, 6.08, and 6.575 percent under Alternatives I, II-A, II-B, and III, respectively. These assumptions are the result of the compound effect of the ultimate annual increases assumed for the CPI-W (2, 3, 4, and 5 percent) with the respective ultimate real-interest rate assumptions (3, 2.5, 2, and 1.5 percent).

Appendix

This appendix presents OASDI and HI tax income and outgo as projected under Alternative II-B. The projections shown are more limited than the OASDI projections shown in the main part of this note because more detailed 75-year HI projections are not available. The reason for this unavailability of long-range HI projections is that the standard HI projection period is 25 years. In addition, negative assets are not projected for the HI program. Therefore, for example, because the HI Trust Fund is projected to be exhausted in 1990 under Alternative II-B, projected combined assets for OASDI and HI thereafter are unavailable. Consequently, because projections of assets are available for only such limited number of years, they have been omitted from this presentation. Similarly, because estimates of negative income are unavailable, projections of net interest income have been omitted.

The following table shows the tax income and outgo projected under Alternative II-B for the OASDI, HI, and the combined OASDI and HI programs. The footnotes in the table define these items. The form of this table is similar to that of table 7 in the main part of this note in order to facilitate constant-dollar calculations that may be of interest to economic and financial analysts.

Appendix Table.—OASDI, HI, and Combined OASDI and HI Tax Income and Outgo Projected Under Alternative II-B, Calendar Years 1983-2055
[In billions]

Calendar year	OASDI		HI		Total	
	Tax income ^a	Outgo ^a	Tax income ^a	Outgo ^a	Tax income	Outgo
1983.....	\$163.4	\$169.5	\$38.3	\$40.8	\$201.7	\$210.3
1984.....	179.8	180.3	42.9	45.7	222.7	226.0
1985.....	197.4	193.8	48.2	51.4	245.6	245.2
1986.....	212.9	209.9	55.5	57.3	268.4	267.2
1987.....	229.1	225.2	59.5	63.6	288.6	288.8

Appendix Table.—OASDI, HI, and Combined OASDI and HI Tax Income and Outgo Projected Under Alternative II-B, Calendar Years 1983-2055
(Cont.)
[In billions]

Calendar year	OASDI		HI		Total	
	Tax income ^a	Outgo ^a	Tax income ^a	Outgo ^a	Tax income	Outgo
1988.....	260.3	240.8	63.6	70.6	323.9	311.4
1989.....	280.4	256.5	68.0	78.1	348.4	334.6
1990.....	307.0	272.7	72.4	86.4	379.4	359.1
1991.....	329.1	289.8	77.4	95.2	406.5	385.0
1992.....	353.0	307.7	82.6	104.9	435.6	412.6
1993.....	376.4	322.6	87.9	115.2	464.3	437.8
1994.....	400.2	338.4	93.3	126.1	493.5	464.5
1995.....	425.6	355.2	99.0	138.3	524.6	493.5
1996.....	452.9	372.9	105.4	151.6	558.3	524.5
1997.....	482.1	391.7	112.2	165.2	594.3	556.9
1998.....	513.1	413.0	119.4	180.3	632.5	593.3
1999.....	546.4	435.6	127.1	196.4	673.5	632.0
2000.....	581.8	459.7	135.3	213.7	717.1	673.4
2001.....	618.5	485.2	143.7	232.5	762.2	717.7
2002.....	657.0	512.7	152.6	252.0	809.6	764.7
2003.....	698.3	543.0	162.0	273.7	860.3	816.7
2004.....	742.2	575.8	171.9	297.1	914.1	872.9
2005.....	788.5	611.5	182.4	322.7	970.9	934.2
2006.....	836.8	650.5	193.4	350.2	1,030.0	1,000.7
2007.....	886.8	693.3	204.8	380.7	1,091.6	1,074.0
2010.....	1,052.3	848.3	242.3	468.8	1,294.6	1,317.1
2015.....	1,387.5	1,233.3	317.6	681.2	1,705.1	1,914.5
2020.....	1,821.0	1,797.5	414.2	999.7	2,235.2	2,797.2
2025.....	2,394.6	2,570.8	541.5	1,473.3	2,936.1	4,044.1
2030.....	3,154.7	3,560.0	710.7	2,119.9	3,865.4	5,679.9
2035.....	4,158.9	4,814.0	934.3	2,931.7	5,093.2	7,745.7
2040.....	5,470.6	6,329.1	1,227.1	3,930.9	6,697.7	10,260.0
2045.....	7,192.5	8,309.0	1,610.7	5,176.6	8,803.2	13,485.6
2050.....	9,454.9	10,989.8	2,116.2	6,822.9	11,571.1	17,812.7
2055.....	12,449.6	14,583.1	2,784.9	8,998.0	15,234.5	23,581.1

^aOASDI tax income consists of net OASDI payroll taxes and, after 1983, taxes on benefits; for 1983 it includes the amount transferred from the general fund of the Treasury to the OASI and DI Trust Funds on May 20, 1983, for costs of noncontributory wage credits for military service performed before 1957. The OASDI income is on a cash basis.

^aOASDI outgo consists of benefit payments, administrative expenses, net transfers under the financial interchange between the OASI and DI Trust Funds and the Railroad Retirement Account, payments for vocational rehabilitation services for disabled beneficiaries, and payments to certain noninsured persons who attained age 72 before 1968 and have less than three quarters of coverage. The OASDI outgo is on a cash basis.

^aHI tax income consists of HI payroll taxes (including taxes from railroad employment) and reimbursements from the general fund of the Treasury for costs of noncontributory wage credits for military service. The HI income is on an incurred basis.

^aHI outgo consists of HI outlays for insured beneficiaries and administrative expenses. The HI outgo is on an incurred basis.