ACTUARIAL NOTE

Number 120 May 1984

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 continues to be expressed in the dollar values of the 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 inflation makes such amounts noncomparable over time. 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 "1984 Annual Report—Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds" (1984 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 (1984) dollars. In addition, the Appendix to this note presents current-dollar projections of a more limited nature for the HI program and for the combined OASDI and HI programs. It should be emphasized that any comparison of recent or near-term trust fund operations with longer-range current-dollar projections—especially over a period extending 75 years into the future—which does not reflect the considerable effects of inflation, is very misleading.

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 to 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 1984 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 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, adjusted to include deemed wages based on military service and to reflect the lower effective tax rates (in comparison with the combined employee-employer rate) which apply to tips and multiple-employer "excess wages," and which did apply to net earnings from self-employment before 1984.

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 factors 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 1984 OASDI Trustees Report.

The CPI-W, after several years of varying increases, is assumed to increase annually by rates of 2.0, 3.0, 4.0, and 5.0 percent for Alternatives I, II-A, II-B, and III, respectively. Similarly, the average annual wage is assumed to increase by 4.5, 5.0, 5.5, and 6.0 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 1984 OASDI Trustees Report includes a more complete

¹House Document No. 98-200, dated April 5, 1984.

discussion of the payroll projections. The ultimate interest rate assumed is 5.06, 5.575, 6.08, and 6.575 percent for 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 (2.0, 3.0, 4.0, and 5.0 percent) with the respective ultimate real-interest-rate assumptions (3.0, 2.5, 2.0, and 1.5 percent).

Table 2 shows these economic variables or functions thereof. The form of these tables is similar to that of the tables on trust fund operations in order to facilitate constant-dollar calculations that may be of interest to economists and financial analysts. It is left to the individual analyst to decide which index to use to accomplish his or her particular purpose.

Table 1.—Projections of the Operations of OASI and DI Trust Funds for 1984-2060 by Alternative

					[In billions]		
	Assets at beginning of	Tax	Total	_	Assets at		
Calendar year	year ¹	income ²	income ³	Outgo•	end of year1	Calenda	
Iternative I:						Alternative I	
1984	\$38.7	\$184.1	\$185.3	\$181.1	\$29.1	1984	
1985	43.1	202.5	204.6	191.5	41.7	1985	
1986	57.0	219.1	222.7	203.0	50.1	1986	
1987	66.5	236.2	241.8	215.3	75.9	1987	
1988	94.5	268.7	277.3	227.9	125.3	1988	
1989	145.5	288.2	300.6	240.3	185.7	1989	
1990 1991	207.5 289.1	309.7 329.2	326.4 349.8	245.9	266.2 351.0	1990	
1992	375.0	345.0	349.8 369.5	265.0 271.0	351.0 449.5	1991	
1993	474.4	366.3	395.2	288.5	556.2	1992 1993	
1994	582.5	389.2	423.E	293.5	686.4	1994	
1995	714.3	411.5	423.8 452.5	309.2	829.7	1995	
1996	859.2	434.9	482.7	318.7	993.7	1996	
1997	1,024.8	459.6	514.7	327.9	1,180.5	1997	
1998	1,213.4	485.7	548.5	339.1	1,389.9	1998	
1999	1,424.7	513.5	587.3	352.4	1,624.9	1999	
2000	1,661.7	543.1	629.1	366.5	1.887.4	2000	
2001	1,926.3	573.6	673.3	381.9	2,178.8	2001	
2002	2,219.9	605.5	720.2	398.7	2,500.4	2002	
2003	2,543.7	638.9	770.3	417.0	2,853.7	2003	
2004	2,899.4	673.9	823.5	437.2	3,240.0	2004	
2005	3,288.2	710.6	0.088	459.2	3,660.9	2005	
2006	3,711.6	748.3	939.4	483.4	4,116.8	2006	
2007	4,170.2	787.4	1,001.8	510.3	4,608.4	2007	
2008	4,664.5	828.0	1,067.5	539.8	5,136.0	2008	
2010	5 760 D	0446	1 000 7	007.0	0.000.0	0010	
2010	5,762.8	914.6	1,209.7	607.0	6,303.6	2010	
2015	9,161.5	1,164.4	1,630.6	844.5	9,869.1	2015	
2020	13,495.4	1,475.2	2,158.5	1,176.7	14,378.2	2020	
2025	18,885.7	1,875.7 2,396.9	2,829.0	1,606.4	19,982.8	2025	
2035	25,705.0 34,773.6	3,072.9	3,693.4 4,828.0	2,100.3 2,657.7	27,130.0	2030	
2040	47,303.7	3,938.3	6,329.5	3,283.1	27,138.0 36,738.8 50,087.1	2035 2040	
2045	64,863.3	5,052.1	8,334.4	4.089.0	68 771 7	2045	
2050	89,155.1	6,487.7	11,001.0	5,184.0	94,538.6	2050	
2055	122 309 5	8,348.9	14,541.6	6,629.3	129,663.8	2055	
2060	89,155.1 122,309.5 167,381.9	10,751.5	19,227.7	8,469.5	177,421.3	2060	
ternative II-A:						Alternative II	
1984	38.7	183.6	184.8	181.5	28.1	1984	
1985	42.1	201.5	203.4	193.5	38.0	1985	
1986	53.2	218.0	221.0	207.2	44.7	1986	
1987	61.0	235.3	239.8	222.0	57.1	1987	
1988	75.6	267.9	274.7	236.8	95.0	1988	
1989	115.1	287.8	297.8	251.7	141.1	1989	
1990	163.0	313.9	327.5	266.9	201.7	1990	
1991	224.9	333.2	350.6	282.3	270.0	1991	
1992	294.4	353.3	374.6	297.5	347.1	1992	
1993	372.5	374.6	400.1	313.4	433.8	1993	
1994	460.9	399.6	430.1	328.3	535.6	1994	
1995	564.3	423.9	459.9	342.8	652.7	1995	
1996	683.2	449.7	491.7	356.8	787.6	1996	
1997	819.9	476.9	525.3	370.3	942.6	1997	
1998	976.9	505.7	560.9	386.4	1,117.1	1998	
1999	1,153.5	536.7	601.8	405.5	1,313.4	1999	
2000	1,352.0 1,574.4	569.5	645.9	425.9	1,533.4 1,778.3	2000	
2001	1,5/4.4	603.8	692.8	447.8	1,778.3	2001	
2002	1,821.7	639.7 677.5	742.6	471.5	2,049.4	2002	
2003	2,095.4	677.5	795.8	497.4	2,347.9	2003	
2005	2,396.5 2,726.3	717.4 759.3	852.6 913.0	525.6 556.4	2,674.9	2004 2005	
2006	2,726.3 3,085.9	759.3 802.6	913.0 976.4	556.4 590.1	3,031.5 3,417.8	2005 2006	
2007	3,065.9	847.6	1,043.0	627.3	3,417.8 3,833.6	2005	
2008	3,894.1	894.2	1,113.0	668.0	4,278.5	2008	
		994.3					
2010	4,820.3	1,283.9	1,264.4 1,707.0	760.2	5,257.3 8,149.7	2010	
2010	70114		1.707.0	1,085.0	0,149./	2015	
2015	7,614.1	1,200.9	0.047.4				
2015	10,919.4	1,644.9	2.247.4	1,548.6	11,508.1	2020	
2015 2020 2025	10,919.4 14,525.2	1,644.9 2,108.5	2.247.4	2,172.9	15.116.7	2025	
2015 2020 2025 2030	10,919.4 14,525.2 18.305.3	1,644.9 2,108.5 2,709.3	2,247.4 2,904.7 3.708.5	2,172.9 2,925.9	15.116.7	2025 2030	
2015 2020 2025 2030 2035	10,919.4 14,525.2 18,305.3 22,456.8	1,644.9 2,108.5 2,709.3 3,487.3	2,247.4 2,904.7 3,708.5 4,710.3	2,172.9 2,925.9 3,821.2	15,116.7 18,908.3 23,115.3	2020 2025 2030 2035	
2015 2020 2025 2030 2035	10,919.4 14,525.2 18,305.3 22,456.8 27,349.3	1,644.9 2,108.5 2,709.3 3,487.3 4,479.8	2,247.4 2,904.7 3,708.5 4,710.3 5,968.4 7,568.6	2,172.9 2,925.9 3,821.2 4,869.8	15,116.7 18,908.3 23,115.3 28,152.0	2025 2030 2035 2040	
2015 2020 2025 2030 2035 2040 2045.	10,919.4 14,525.2 18,305.3 22,456.8 27,349.3 33,395.6	1,644.9 2,108.5 2,709.3 3,487.3 4,479.8 5,752.5	2,247.4 2,904.7 3,708.5 4,710.3 5,968.4 7,568.6	2,172.9 2,925.9 3,821.2 4,869.8 6,232.3	15,116.7 18,908.3 23,115.3 28,152.0 34,352.3	2025 2030 2035 2040 2045.	
2015 2020 2025 2030 2035	10,919.4 14,525.2 18,305.3 22,456.8 27,349.3	1,644.9 2,108.5 2,709.3 3,487.3 4,479.8	2,247.4 2,904.7 3,708.5 4,710.3 5,968.4	2,172.9 2,925.9 3,821.2 4,869.8	15,116.7 18,908.3 23,115.3 28,152.0	2025 2030	

'Assets at the end of the calendar year are the total monies in the OASI and DI Trust Funds at that time, including amounts owed to the HI Trust Fund. Assets at the beginning of the calendar year are the assets at the end of the prior year increased by the advance tax transfers for January. Both columns of assets reflect (through 1989) interfund-borrowing transfers which are not included in either the income or outgo figures.

²Tax income consists of net OASDI payroll taxes and income from taxation of benefits.

Calendar year	Assets at beginning of year ¹	Tax income ²	Total income ³	Outgo4	Assets at end of year
Alternative II-B:					
1984	\$38.7	\$183.2	\$184.4	\$181.5	\$27.7
1985	41.7	201.4	203.2	194.1	36.8
1986	52.1	218.8	221.6	209.3	43.6
1987 1988	60.0	237.0	241.2	226.2	51.7
1989	70.3 105.8	270.7 291.5	277.2	243.4	85.4
1990	148.6	318.6	301.2 331.8	260.3	126.4
1991	204.3	340.0	356.9	277.6 295.1	180.7 242.5
1992	267.5	361.8	382.5	313.5	311.5
1993	337.7	385.5	410.4	332.8	389.1
1994	417.0	412.5	442.3	351.2	480.2
1995	509.9	439.0	474.2	369.4	585.0
1996	616.6	467.3	508.2	387.2	706.0
1997	739.7	497.2	544.3	404.6	845.7
1998 1999	881.5	528.9	582.6	425.0	1,003.3
2000	1,041.4 1,221.6	563.1	626.7	448.9	1,181.1
2000	1,423.9	599.5 637.9	674.1 725.0	474.4	1,380.8 1,604.0
2001 2002	1,649.9	678.4	725.0 779.3	501.7 531.1	1,604.0 1,852.2
2003	1,901.0	721.1	837.4	563.2	2,126.4
2004	2,178.3	767.3	900.4	598.3	2,120.4
2005	2,483.8	816.0	967.7	636.5	2,428.6 2,759.9
2006	2,818.5	866.6	1,038.7	678.3	3,120.2
2007	3,182.4	919.4	1,113.6	724.4	3,509.4
2008	3,575.2	974.7	1,192.6	774.9	3,927.0
2010	4,447.0	1,094.1	1,364.3	889.9	4,847.6
2015	7,066.2	1,445.3	1,870.8	1,298.2	7,541.7 10,521.1
2020	10,047.6	1,896.6	2,496.1	1,896.0	10,521.1
2025	12,989.1	2,490.2	3,257.4	2,726.5	13,354.7
2030	15,470.0	3,277.7	4,182.9	3,768.0	15,668.3
2035	17,348.4	4,324.0	5,329.6	5,052.0	17,341.0
2040 2045	18,576.1	5,689.5	6,755.6	6,607.0	17,341.0 18,350.0 18,393.1 16,297.8
2050	18,993.7 17,616.8	7,482.6 9,834.7	8,555.0 10,794.9	8,663.7	18,393.1
2055	12,719.3	12,948.8	13,572.7	11,467.6 15,205.2	10,236.3
2060	2,191.0	17,065.3	17,000.5	20,068.5	-1,997.7
Alternative III:					
1984	38.7	181.5	182.6	181.9	25.6
1985	39.1	194.8	195.9	196.0	25.4
1986	40.0	210.2	211.2	211.4	25.2
1987	40.8	227.4	228.3	227.4	26.1
1988 1989	44.0 49.5	260.0	261.9	245.6	29.9
1990	71.5	280.8 309.0	284.4 314.6	264.3 284.1	50.0
1991	103.6	332.0	340.1	305.2	80.5 115.4
1992	140.0	355.6	366.0	331.7	149.6
1993	175.5	380.6	393.3	355.4	187.5
1994	215.1	408.8	424,1	379.5	232.1
1994 1995	261.6	436.9	455,1	403.5	283.7
1996	315.3	466.7	487.9	427.1	344.6
1997	378.3	498.4	523.0	450.1	417.5
1998	453.5	532.1	560.3	477.0	500.8
1999	539.3	568.5	602.2	508.6	594.5
2000	635.6 743.1	607.2 648.5	647.2 695.5	542.5 579.0	699.2 815.7
2002	862.5	692.1	746.8	618.3	944.2
2003	994.1	738.1	801.3	661.2	1,084.3
2004	1.137.5	788.2	860.6	708.3	1,236.6
2004 2005	1,293.3	841.2	923.5	759.7	1.400.4
2006	1,460.8	896.4	989.3	816.0	1,573.7 1,753.9
2007	1,638.0	954.0	1,058.1	877.9	
2008	1,822.2	1,014.4	1,130.0	945.9	1,938.0
2010 2015	2,200.2 2,972.0	1,145.0 1,530.1	1,283.7 1,711.3	1,100.7 1,652.3	2,306.3 2,928.8
2020	2,680.2	2.021.8	2,169.0	2.481.4	2,233.8
2020 2025	-,192.9	2,660.5	2,595.4	3,680.7	-1.452.9
2030	-7,908.6	3,495.1	2,891.7	5,263.3	10,507.9
2030 2035	-23.374.9	4,589.0	2,928.6	5,263.3 7,317.9	-28,061.1
2040	-50,823.4	6,010.0	2,494.5	9,940.2	-58,655.7
2045	-96,709.7	7,819.3	1,215.9	13,473.3	-109,467.1
2050	-171,557.9	10,153.4	-1,470.9	18,273.4	-191,948.8
2055	-290,819.0 -476,175.8	13,191.5 17,155.4	-6,406.7 -14,799.9	24,597.0 32,762.2	-322,659.6
2060	ists of tax incom				-524,823.5 m the general

³Total income consists of tax income, interest income, and payments from the general fund of the Treasury for costs of benefits paid to certain noninsured persons who attained age 72 before 1968 and also have less than three quarters of coverage.

^{&#}x27;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 the noninsured persons described above.

Table 2.—Selected Economic Variables for 1983-2060 by Alternative

[GNP and taxable payroll in billions]

Calendar year	CPI ¹	GNP deflator ²	GNP	Average wage ³	Taxable payroll4	Compound interest rate factors	Calendar year	CPI ¹	GNP deflator ²	GNP	Average wage ³	Taxable payroll*	Compound interest rate factors
Alternative I:							Alternative II-B:						
1983	96.21	96.09	\$3,311	\$15,141	\$1,487	0.8944	1983	95.49	95.62	\$3,311	\$15,141	\$1,487	0.8941 1.0000
1984	100.00	100.00 103.84	3,655 3,978	16,046 16,885	1,612	1.0000 1.1037	1984	100.00 105.31	100.00 105.30	3,632 3,963	16,019 16,946	1,603 1,740	1.1080
1985	103.85 107.74	103.84	4,299	17,775	1,750 1,893	1.2094	1985 1986	111.10	111.09	4,308	17,998	1,889	1.2260
1986 1987	111.61	111.61	4,632	18,735	2,038	1.3196	1987	116.87	116.87	4.668	19,115	2.044	1 3575
1988	115.30	115.30	4,977	19,739	2,187	1.3196 1.4298	1988	122,36	122.36	5,034	20,253	2,202	1.4942 1.6309
1989	118.70	118.71	5,328	20,760	2,339	1.5377	1989	127.62	127.62	5,408	21,410	2,364	1.6309
1990	121.73	121.73	5,638	21,745	2,448	1.6396	1990	132.72	132.72	5,793	22,592	2,519 2,686	1.7629 1.8897 2.0133 2.1423 2.2755
1991	124.35	124.36	5,945 6,266	22,696	2,607 2.726	1.7323 1.8164	1991	138.03 143.55	138.03 143.55	6,185 6,584	23,816 25,112	2,855	2 0133
1992	126.83 129.37	126.84 129.37	6,609	23,698 24,736	2,726	1.9057	1992 1993	149.30	149.30	7,014	26,484	3.038	2.1423
1993 1994	131.96	131.96	6,992	25,849	3,065	2.0011	1994	155.27	155.27	7,479	27,941	3,236	2.2755
1995	134.60	134.59	7,389	27,012	3,239	2.1024	1995	161.48	161.48	7,973	29,478	3,443	2.4138 2.5606
1996	137.29	137.28	7,814	28,228	3,425	2.2087	1996	167.94	167.94	8,504	31,099	3,666	2.5606
1997	140.03	140.03	8,259	29,498	3,622	2.3205	1997	174.66	174.66	9,065	32,810 34,614	3,902 4,152	2.7163 2.8814
1998	142.84 145.69	142.83 145.68	8,728 9,230	30,826 32,213	3,828 4,049	2.4379 2.5613	1998 1999	181.64 188.91	181.64 188.90	9,663 10,305	36,518	4,132	3.0566
1999 2000	148.61	148.59	9,763	33,662	4,049	2.6909	2000	196.46	196.46	10,990	38,526	4,420 4,705	3.0566 3.2424
2001	151.58	151.56	10,311	35,177	4,524	2.8270	2001	204.32	204.32	11,716	40,645	5,007	3.4396
	154.61	154.59	10,885	36,760	4,776	2.9701	2002	212.50	212.49	12,483	42.881	5,324	26497
2003	157.70	157.68	11,488	38,414	5,040	3.1204	2003	221.00	220.99	13,293	45,239	5,659	3.8705
	160.86	160.83	12,117	40,143	5,316	3.27 8 3 3.4442	2004	229.84	229.82 239.01	14,169	47,727	6,020	4.1059
2005	164.07	164.04	12,780	41,949 43,837	5,604 5,900	3.4442 3.61 8 4	2005	239.03 248.59	239.01	15,100 16,068	50,352 53,122	6,400 6,794	3.8705 4.1059 4.3555 4.6203
2000	167.35 170.70	167.32 170.66	13,461 14,169	45,837 45,810	6,207	3.8015	2006 2007	258.53	258.51	17,082	56,043	7,205	4.9012
2007 2008	174.12	174.07	14,899	47,871	6,524	3.9939	2008	268.87	268.85	18,142	59,126	7,634	5.1992
2010	181.15	181.10	16,455	52,277	7,200	4.4083	2010	290.82	290.78	20,430	65,809	8,558 11,248	5.8507 7.8591 10.5570 14.1811
2015	200.00	199.94	20,949	65,146	9,132	5.6423	2015	353.82	353.78	27,209	86,009	11,248	7.8591
2020	220.82	220.73 243.68	26,554 33,800	81,184	11,520 14,593	7.2218 9.2434	2020	430.48 523.74	430.40 523.64	36,009 47,682	112,411 146,916	14,674 19,155	10.5570
2025 2030	243.80 269.18	269.02	43,311	101,170 126,076	18,609	11.8309	2025 2030	637.21	637.06	63,400	192,014	25,108	19.0492
2035	297.19	297.00	55,760	157,114	23,843	15.1428	2035	775.27	775.06	84,626	250,954	33,039	25 5885
2040	328.13	327.89	71,836	195,793	30,571	19.3817	2040	775.27 943.23	942.95	112,807	327,987	43,417	34.3726 46.1721
2045	362.28	361.98	92,607	243,993	39,222	24.8073	2045	1,147.58	1,147.20	150,272	428,666	57,020	46.1721
2050	399.98	399.63	119,560	304,060	50,396	31.7516 40.6399	2050	1,396.21 1,698.70	1,395.69 1.698.02	200,252 267,323	560,249 732,223	74,911 98,591	62.0222 83.3134
2055 2060	441.62 487.58	441.19 487.07	154,642 200,161	378,914 472,196	64,873 83,569	52.0163	2055 2060	2,066.73	2,065.83	357,309	956,986	129,921	111.9135
Alternative II-A:							Alternative III:						
1983	95.77	95.90	3,311	15,141	1,487	0.8942	1983	95.03	95.07	3,311	15,141	1,487	0.8940 1.0000
1984	100.00	100.00	3,637	16,035	1,606	1.0000	1984	100.00 105.70	100.00	3,601 3,820	15,916 16,674	1,587 1,680	1.0000
1985 1986	104.61 109.32	104.60 109.31	3,956 4,280	16,917 17.863	1,741 1,883	1.1059 1.2177	1985 1986	112.04	105.70 112.04	4,158	17,698	1,815	1.1091 1.2308
1987	113.89	113.90	4,616	18,866	2,030	1.3373	1987	118.20	118.20	4,505	18,726	1,959	1.3677
1988	118.33	118.34	4,964	19,916	2,179	1,4585	1988	124.24	124.23	4,863	19,821	2,112	1.5104
1989	122.60	122.60	5,323	20,999	2,334	1.5776	1989	130.44	130.44	5,244	21,003	2,274	1.6542 1.7978
1990	126.64	126.65	5,691	22,118	2,482	1.6924 1.8022	1990	136.97	136.97	5,655	22,303	2,440	1.7978
1991	130.44	130.44	6,043	23,211	2,634	1.8022 1.9119	1991	143.82	143.82	6,073 6,489	23,676 25,112	2,620 2,802	1.9420 2.0874
1992 1993	134.35 138.39	134.36 138.39	6,410 6,803	24,382 25,602	2,791 2.954	2.0222	1992 1993	151.01 158.56	151.01 158.56	6,936	26,608	2,993	2.2383
1994	142.54	142.55	7,219	26,882	3.138	2.1363	1994	166.48	166.48	7.415	28,205	3,199	2.3907
1995	146.81	146.82	7,663	28,227	3,328	2.2554	1995	174.81	174.81	7,944	29,897	3,417	2.5479
1996	151.22	151.22	8,140	29,638	3,532	2.3811	1996	183.55	183.55	8,510	31,691	3,650	2.7154
1997	155.75	155.76	8,642	31,120	3,747	2.5138	1997	192.73	192.72	9,112	33,592	3,898	2.8939
1998	160.43 165.24	160.43	9,174	32,676	3,975	2.6540 2.8019	1998	202.36	202.36	9,754 10,447	35,608 37,744	4,162 4,446	3.0842 3.2870
1999	170.20	165.23 170.19	9,744 10,350	34,310 36,025	4,219 4,477	2.9581	1999 2000	212.48	212.48 223.10	11,187	40,009	4,748	3.2070
2001	175.30	175.29	10,982	37,826	4,747	3 1231	2001	223.10 234.26	234.26	11,979	42,409	5,069	3.5031 3.7334
2002	180.56	180.55	11,647	39,718	5,029	3.1231 3.2972	2002	245.97	245.97	12,818	44,954	5,409	3.9789
2003	185.98	185.96	12,345	41,704	5,325	3.4810	2003	258.27	258.26	13 705	47,651	5,766	4.2405
	191.56	191.54	13,085	43,789	5,638	3.6751	2004	271.18	271.18	14,673	50,510	6,155	4.5193
2005	197.30	197.28	13,865	45,978	5,966	3.8799	2005	284.74	284.74	15,704	53,541	6,566	4.8165
2006	203.22 209.32	203.20 209.29	14,670	48,277	6,304	4.0962 4.3246	2006	298.98 313.93	298.98 313.92	16,779 17,906	56,753 60,159	6,992 7,437	5.1332 5.4707
2007	215.60	215.56	15,508 16,376	50,691 53,225	6,654 7,016	4.5657	2007 2008	329.63	329.62	19,087	63,768	7,901	5.8304
2008			18,236	58,681	7,792	5.0890	2010	363.41	363.41	21,643	71,650	8,902	6.6223 9.1051
2010	228.73	228.68	10,200			6 6740	2015	463.82	463.81	29,247	95,884	11,815	9.1051
2010	228.73 265.16	265.09	23,633	74,894	10,013	0.0746	00.55			00,575		1,010	
2010 2015 2020	228.73 265.16 307.39	265.09 307.29	23,633 30,400	95,585	12 758	6.6748 8.7547	2020	591.96	591.95	39,058	128,314	15,481	12.5187
2010 2015 2020 2025	228.73 265.16 307.39 356.35	265.09 307.29 356.20	23,633 30,400 39,129	95,585 121,994	12,758 16,264	11.4828	2025	591.96 755.51	591.95 755.50	39,058 51,904	128,314 171,713	15,481 20,185	12.5187 17.2122
2010	228.73 265.16 307.39 356.35 413.11	265.09 307.29 356.20 412.90	23,633 30,400 39,129 50,570	95,585 121,994 155,698	12,758 16,264 20,819	11.4828 15.0609	2020 2025 2030	591.96 755.51 964.25	591.95 755.50 964.23	39,058 51,904 68,940	128,314 171,713 229,791	15,481 20,185 26,306	12.5187 17.2122 23.6654
2010	228.73 265.16 307.39 356.35 413.11 478.91	265.09 307.29 356.20 412.90 478.63	23,633 30,400 39,129 50,570 65,566	95,585 121,994 155,698 198,715 253,616	12,758 16,264 20,819 26,737 34,309	11.4828 15.0609 19.7541	2020 2025 2030 2035	591.96 755.51 964.25 1,230.65	591.95 755.50 964.23 1,230.62	39,058 51,904 68,940 91,633	128,314 171,713 229,791 307,512	15,481 20,185 26,306 34,308 44,688	12.5187 17.2122 23.6654 32.5379 44.7370
2010	228.73 265.16 307.39 356.35 413.11 478.91 555.19 643.61	265.09 307.29 356.20 412.90 478.63 554.82 643.14	23,633 30,400 39,129 50,570 65,566 84,942 109,972	95,585 121,994 155,698 198,715 253,616 323,686	12,758 16,264 20,819 26,737 34,309 43,998	11.4828 15.0609 19.7541 25.9097 33.9835	2020	591.96 755.51 964.25 1,230.65 1,570.65 2,004.60	591.95 755.50 964.23 1,230.62 1,570.62 2,004.56	39,058 51,904 68,940 91,633 121,639 160,275	128,314 171,713 229,791 307,512 411,521 550,707	15,481 20,185 26,306 34,308 44,688 57,779	12.5187 17.2122 23.6654 32.5379 44.7370 61.5096
2010	228.73 265.16 307.39 356.35 413.11 478.91 555.19 643.61 746.13	265.09 307.29 356.20 412.90 478.63 554.82 643.14 745.52	23,633 30,400 39,129 50,570 65,566 84,942 109,972 142,441	95,585 121,994 155,698 198,715 253,616 323,686 413,114	12,758 16,264 20,819 26,737 34,309 43,998 56,449	11.4828 15.0609 19.7541 25.9097 33.9835 44.5732	2020 2025 2030 2035 2040 2045 2050	591.96 755.51 964.25 1,230.65 1,570.65 2,004.60 2,558.43	591.95 755.50 964.23 1,230.62 1,570.62 2,004.56 2,558.38	39,058 51,904 68,940 91,633 121,639 160,275 211,194	128,314 171,713 229,791 307,512 411,521 550,707 736,971	15,481 20,185 26,306 34,308 44,688 57,779 74,711	12.5187 17.2122 23.6654 32.5379 44.7370 61.5096 84.5707
2010	228.73 265.16 307.39 356.35 413.11 478.91 555.19 643.61	265.09 307.29 356.20 412.90 478.63 554.82 643.14 745.52 864.19	23,633 30,400 39,129 50,570 65,566 84,942 109,972	95,585 121,994 155,698 198,715 253,616 323,686	12,758 16,264 20,819 26,737 34,309 43,998	11.4828 15.0609 19.7541 25.9097 33.9835	2020	591.96 755.51 964.25 1,230.65 1,570.65 2,004.60 2,558.43 3,265.28	591.95 755.50 964.23 1,230.62 1,570.62 2,004.56	39,058 51,904 68,940 91,633 121,639 160,275	128,314 171,713 229,791 307,512 411,521 550,707	15,481 20,185 26,306 34,308 44,688 57,779	12.5187 17.2122 23.6654 32.5379 44.7370 61.5096

¹The CPI is a modification of the Consumer Price Index for Urban Wage Earners and Chirical Workers (CPI-W), as defined by the Bureau of Labor Statistics (BLS), Department of Labor. The CPI-W is the index on which OASDI automatic benefit increases are based. For a given year, the modification divides the average of the 12 monthly CPI-W values by the analogous 1984 value and multiplies the result by 100, thereby initializing the CPI-W at 100 in 1984.

^{*}The GNP deflator is a modification of the Implicit Price Deflator for Gross National Product as defined by BLS; the modification initializes the Implicit Price Deflator for GNP at 100 in 1984.

³Average wage is the average annual amount of total wages; it is used in the calculations of initial benefits and the automatic adjustment of the contribution and benefit base.

^{*}Taxable payroll consists of total earnings subject to OASDI tax rates, adjusted to include deemed wages based on military service and to reflect the lower effective tax rates (in comparison with the combined employee-employer rate) which apply to tips and multiple-employer "excess wages," and which did apply to net earnings from self-employment before 1984.

⁶The compound interest-rate factor is based on the interest rates for special public-debt obligations issuable to the OASI and DI Trust Funds. Each can be used to convert dollar values between July 1, 1984, and July 1 of the year shown.

This appendix presents OASDI and HI tax income and outgo as projected based on 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 1991 based on Alternative II-B, projected combined assets for OASDI and HI thereafter are unavailable. Consequently, because projections of assets are available for only such a 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 based on Alternative II-B for the OASDI, HI. and combined OASDI and HI programs. The footnotes to the table define these items. The form of this table is similar to that of table 2 in the main part of this note in order to facilitate constant-dollar calculations that may be of interest to economists and financial analysts.

Appendix Table.—OASDI, HI, and Combined OASDI and HI Tax Income and Outgo Projected Based on Alternative II-B, Calendar Years 1984-2055 [In billions]

	OASDI		Н]	OASDI-HI		
Calendar year	Tax income ¹	Outgo²	Tax income ³	Outgo•	Tax income	Outgo	
1984	\$183.2	\$181.5	\$43.7	\$45.7	\$226.9	\$227.2	
1985	201.4	194.1	49.1	51.6	250.5	245.7	
1986	218.8	209.3	57.1	58.3	275.9	267.6	
1987	237.0	226.2	61.6	65.2	298.6	291.4	
1988	270.7	243.4	66.2	72.9	336.9	316.3	
1989	291.5	260.3	70.9	81.0	362.4	341.3	

Appendix Table.--OASDI, HI, and Combined OASDI and HI Tax Income and Outgo Projected Based on Alternative II-B, Calendar Years 1984-2055 (Cont.)

	OAS	SDI	Н	l	OASDI-HI		
Calendar year	Tax income ¹	Outgo ²	Tax income ³	Outgo4	Tax income	Outgo	
1990	\$318.6	\$277.6	\$75.5	\$89.8	\$394.1	\$367.4	
1991	340.0	295.1	80.3	99.4	420.3	394.5	
1992	361.8	313.5	85.3	109.6	447.1	423.1	
1993	385.5	332.8	90.6	120.8	476.1	453.6	
1994	412.5	351.2	96.4	132.9	508.9	484.1	
1995	439.0	369.4	102.5	146.0	541.5	515.4	
1996	467.3	387.2	108.9	160.0	576.2	547.2	
1997	497.2	404.6	115.9	174.5	613.1	579.1	
1998	528.9	425.0	123.2	190.5	652.1	615.5	
1999	563.1	448.9	131.0	207.7	694.1	656.6	
2000	599.5	474.4	139.4	225.7	738.9	700.1	
2001	637.9	501.7	148.2	245.4	786.1	747.1	
2002	678.4	531.1	157.4	265.6	835.8	796.7	
2003	721.1	563.2	167.2	287.9	888.3	851.1	
2004	767.3	598.3	177.8	312.1	945.1	910.4	
2005	816.0	636.5	188.9	337.5	1.004.9	974.0	
2006	866.6	678.3	200.4	365.4	1,067.0	1,043.7	
2007	919.4	724.4	212.4	394.1	1,131.8	1,118.5	
2008	974.7	774.9	225.0	428.1	1,199.7	1,203.0	
2010	1,094.1	889.9	252.0	490.8	1,346.1	1.380.7	
2015	1,445.3	1,298.2	330.8	710.9	1,776.1	2.009.1	
2020	1,896.6	1,896.0	431.4	1,039.7	2,328.0	2,935.7	
2025	2,490.2	2,726.5	563.1	1,528.3	3,053.3	4,254.8	
2030	3,277.7	3,768.0	738.1	2,201.2	4,015.8	5,969.2	
2035	4,324.0	5,052.0	971.3	3,059.7	5,295.3	8,111.7	
2040	5,689.5	6,607.0	1,276.4	4,122.5	6,965.9	10,729.5	
2045	7,482.6	8,663.7	1,676.3	5,447.5	9,158.9	14,111.2	
2050	9,834.7	11,467.6	2,202.3	7,179.6	12,037.0	18,647.2	
2055	12,948.8	15,205.2	2,898.5	9,458.1	15,847.3	24,663.3	

OASDI tax income consists of net OASDI payroll taxes and income from taxation of benefits, on a cash basis

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

³HI tax income consists of HI payroll taxes (including taxes from railroad employment) and reimbursements from the general fund of the Treasury for costs of deemed wage credits for military service. The HI income is on an incurred basis.

4HI outgo consists of HI outlays for insured beneficiaries and administrative expenses. The HI outgo is on an incurred basis.