APPENDIX D

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

Average of the Total Wages for 1982, Contribution and Benefit Base, Quarter of Coverage Amount, Retirement Test Exempt Amounts, Formulas for Computing Benefits, and Extended Table of Benefit Amounts for 1984

AGENCY: Social Security Administration, HHS.

ACTION: Social Security; Notice of Average of the Total Wages for 1982, Contribution and Benefit Base, Quarter of Coverage Amount, Retirement Test Exempt Amounts, Formulas for Computing Benefits, and Extended Table of Benefit Amounts for 1984.

SUMMARY: The Secretary has determined—

(1) The average of the total wages for 1982 to be $14,531.34;

(2) The Social Security contribution and benefit base to be $37,800 for remuneration paid in 1984 and self-employment income earned in taxable years beginning in 1984;

(3) The amount of earnings a person must have to be credited with a quarter of coverage in 1984 to be $390; and

(4) The monthly exempt amount under the Social Security retirement test for taxable years ending in calendar year 1984 to be $580 for beneficiaries age 65 and over and $430 for beneficiaries under age 65.

The formulas we use to compute the benefits for a worker and his or her family who first become eligible for benefits in 1984 are also described below.

Finally, a table reflecting the new higher average monthly wage and related benefit amounts made possible by the higher contribution and benefit base is also published. The table will be used primarily to compute the retirement benefits of workers who reached age 62 before 1979.

FOR FURTHER INFORMATION CONTACT: Eli Donkar, Office of the Actuary, Social Security Administration, 6401 Security Boulevard, Baltimore, Maryland 21235, telephone (301) 594-3365.

SUPPLEMENTARY INFORMATION: Sections 203(f)(8), 213(d) and 230(a) of the Social Security Act (42 U.S.C. 403(f)(8), 413(d) and 430(a)) require the Secretary of Health and Human Services to publish in the **FEDERAL REGISTER** on or before November 1, 1983, the contribution and benefit base, the amount of earnings required for a quarter of coverage, and the retirement test exempt amounts, for calendar year 1984. In addition, section 215(a)(1)(D) requires that the Secretary publish by November 1, 1983, the formula for computing a primary insurance amount for workers who first become eligible for benefits or die in 1984, and section 203(a)(2)(c) requires that the Secretary publish by November 1, 1983, the formula for computing a family's maximum benefits for families of workers who first become eligible for old-age benefits or die in 1984.

Average of the Total Wages for 1982

The determination of the average wage figure for 1982 is based on the 1981 average wage figure of $13,773.10 announced in the **Federal Register** on November 10, 1982 (47 FR 51003) along with the percentage increase in average wages from 1981 to 1982 measured by annual wage data tabulated by the Internal Revenue Service (IRS). The average amounts of wages calculated directly from IRS data were $14,144.50 and $14,923.19 for 1981 and 1982, respectively. To determine an average wage figure for 1982 at a level that is consistent with the series of average wages for 1951–1977 (published December 29, 1978 at 43 FR 61016), we multiplied the 1981 average wage figure of $13,773.10 by the percentage increase in average wages from 1981 to 1982 (based on IRS data) as follows (with the result rounded to the nearest cent): Average wage for 1982 = $13,773.10 × $14,923.19 ÷ $14,144.50 = $14,531.34. Therefore, the average wage for 1982 is determined to be $14,531.34.

Contribution and Benefit Base

General. The 1984 contribution and benefit base is $37,800.

The contribution and benefit base serves two purposes:

(1) It is the maximum annual amount of earnings on which Social Security taxes are paid.

(2) It is the maximum annual amount used in figuring a person's Social Security benefits.

Computation. Section 230(c) of the Social Security Act provides a table with the contribution and benefit base for each year 1978, 1979, 1980, and 1981. For years after 1981, section 230(b) of the Social Security Act contains a formula for determining the contribution and benefit base. Under the prescribed formula, the contribution and benefit base for 1984 shall be equal to the 1983 base of $35,700 multiplied by the ratio of (1) the average amount, per employee, of total wages for the calendar year 1982 to (2) the average amount of those wages for the calendar year 1981. Section 230(b) further provides that if the amount so determined is not a multiple of $300, it shall be rounded to the nearest multiple of $300.

Average Wages. The average wage for calendar year 1981 was previously determined to be $13,773.10. The average wage for calendar year 1982 has been determined to be $14,531.34, as stated herein.

Amount. The ratio of the average wage for 1982, $14,531.34, compared to that for 1981, $13,773.10, is 1.055052. Multiplying the 1983 contribution and benefit base of $35,700 by the ratio 1.055052 produces the amount of $37,665.36 which must then be rounded to $37,800. accordingly, the contibution and benefit base for 1984 is $37,800.

Quarter of Coverage Amount

General. The 1984 amount of earnings required for a quarter of coverage is $390. A quarter of coverage is the basic unit for determining whether a worker is insured under the Social Security program. For years before 1978, an individual generally was credited with a quarter of coverage for each quarter in which wages of $50 or more were paid, or for which $100 or more of self-employment income were credited, to the individual. Beginning in 1978, wages generally are no longer reported on a quarterly basis; instead, annual reports are made. With the change to annual reporting, section 352(b) of the Social Security Amendments of 1977 (Pub. L. 95–216) amended section 213(d) of the Social Security Act to provide that a quarter of coverage would be credited for each $250 of an individual's total wages and self-employment income for calendar year 1978 (up to a maximum of 4 quarters of coverage for the year). Section 213(d) also provides that this amount shall be redetermined each year and many change published in the **Federal Register** no later than November 1 of the year preceding the year for which the change is effective.

Computation. Under the prescribed formula, the quarter of coverage amount for 1984 shall be equal to the 1978 amount of $250 multiplied by the ratio of (1) the average amount, per employee, of total wages for calendar year 1982 to (2) the average amount of those wages reported for calendar year 1976. The section further provides that if the amount so determined is not a multiple of $10, it shall be rounded to the nearest multiple of $10.

Average Wages. The average wage for calendar year 1976 was previously determined to be $9,226.48. This was published in the **Federal Register** on December 29, 1978, at 43 FR 61016. The average wage for calendar year 1982 has been determined to be $14,531.34 as stated herein.

Quarter of Coverage Amount. The ratio of the average wage for 1982, $14,531.34, compared to that for 1976, $9,226.48, is 1.57496. Multiplying the 1978 quarter of coverage amount of $250 by the ratio of 1.57496 produces the amount ot $393.74 which must then be rounded to $390. Accordingly, the quarter of coverage amount for 1984 is $390.

Retirement Test Exempt Amounts

(a) *Beneficiaries Aged 70 or Over.* Beginning with months after December 1982, there is no limit on the amount an individual aged 70 or over may earn and still receive Social Security benefits. The age at which the retirement test ceases to apply is reduced from age 72 to age 70 by Public Law 97-35, which amended section 203(c)(1) of the Social Security Act.

(b) *Beneficiaries Aged 65 through 69.* The retirement test monthly exempt amount for beneficiaries over age 65 is stated in the Social Security Act at section 203(f)(8)(D) for years 1978 through 1982. A formula is provided in section 203(f)(8)(B) for computing the exempt amount applicable for years after 1982. The monthly exempt amount of 1983 was determined by this formula to be $550. Under the formula, the exempt amount for 1984 shall be the 1983 exempt amount multiplied by the ratio of (1) the average amount, per employee, of the total wages for calendar year 1982 to (2) the average amount of those wages for calendar year 1981. The section further provides that if the amount so determined is not a multiple of $10, it shall be rounded to the nearest multiple of $10.

Average Wages. Average wages for this purpose are determined in the same way as for the contribution and benefit base. Therefore, the ratio of the average wages for 1982, $14,531.34 compared to that for 1981, $13,773.10 is 1.055052.

Exempt Amount for Beneficiaries Aged 65 through 69. Multiplying the 1983 retirement test montly exempt amount of $550 by the ratio of 1.055052 produces the amount of $580.28. This must then be rounded to $580. The retirement test monthly exempt amount for beneficiaries aged 65 through 69 is determined to be $580 for 1984. The corresponding annual retirement test exempt amount for these beneficiaries is $6,960.

(c) *Beneficiaries Under Age 65.* Section 203 of the Social Security Act provides that beneficiaries aged 65 and over have a higher retirement test monthly exempt amount than those beneficiaries under age 65. The exempt amount for beneficiaries under age 65 is determined by a formula provided in section 203(f)(8)(B) of the Social Security Act. Under the formula, the monthly exempt amount for beneficiaries under age 65 is $410 for 1983. The formula provides that the exempt amount for 1984 shall be the 1983 exempt amount for beneficiaries under age 65 multiplied by the ratio of (1) the average amount, per employee, of the total wages for calendar year 1982 to (2) the average amount of those wages for calendar year 1981. The section further provides that if the amount so determined is not a multiple of $10, it shall be rounded to the nearest multiple of $10.

Average Wages. Average wages for this purpose are determined in the same way as for the contribution and benefit base. Therefore, the ratio of the average wages for 1982, $14,531.34 compared to that of 1981, $13,773.10 is 1.055052.

Exempt Amount for Beneficiaries Under Age 65. Multiplying the 1983 retirement test monthly exempt amount of $410 by the ratio 1.055052 produces the amount of $432.57. This must then be rounded to $430. The retirement test monthly exempt amount for beneficiaries under age 65 is determined to be $430 for 1984. The corresponding annual retirement test exempt amount for these beneficiaries is $5,160.

Computing Benefits After 1978

The Social Security Amendments of 1977 changed the formula for determining an individual's primary insurance amount after 1978. This basic new formula is based on "wage indexing" and was fully explained with interim regulations published in the **Federal Register** on December 29, 1978 at 43 FR 60877. It generally applies when a worker after 1978 attains age 62, becomes disabled, or dies before age 62. This formula uses the worker's earnings after they have been adjusted, or "indexed," in proportion to the increase in average wages of all workers. Using this method, we determine the worker's "average indexed monthly earnings." We then compute the primary insurance amount, using the worker's "average indexed monthly earnings" and also adjust the computation formula to reflect changes in general wage levels.

Average Indexed Monthly Earnings. To assure that a worker's future benefits reflect the general rise in the standard of living that occurs during their working lifetime, we adjust or "index" the worker's past earnings to take into account the change in general wage levels that has occurred during the worker's years of employment. These adjusted earnings are then used to compute the worker's primary insurance amount.

For example, to compute the average indexed monthly earnings for a worker attaining age 62, becoming disabled, or dying before attaining age 62, in 1984, we divide the average of the total wages for 1982, $14,531.34, by the average of the total wages for each year prior to 1982 in which the worker had earnings. We then multiply the actual wages and self-employment income credited for those years by this ratio to obtain the worker's adjusted earnings for that year. After determining the number of years we must use to compute the primary insurance amount, we pick those years with highest indexed earnings, total those indexed earnings and divide by the total number of months in those years. This figure is rounded down to the next lower dollar amount, and becomes the average indexed monthly earnings figure to be used in computing the worker's primary insurance amount for 1984.

Computing the Primary Insurance Amount. The primary insurance amount is the sum of three separate percentages of portions of the average indexed monthly earnings. In 1979 (the first year the formula was in effect), these portions were the first $180, the amount between $180 and $1,085, and the amount over $1,085. The amounts for 1984 are obtained by multiplying the 1979 amounts by the ratio between the average of the total wages for 1982, $14,531.34, and for 1977, $9,779.44. These results are then rounded to the nearest dollar. For 1984, the ratio is 1.48591. Multiplying the 1979 amounts of $180 and $1,085 by 1.48591 produces the amounts of $267.46 and $1,612.21. These must then be rounded to $267 and $1,612. Accordingly, the portions of the average indexed monthly earnings to be used in 1984 are determined to be the first $267, the amount between $267 and $1,612, and the amount over $1,612.

Consequently, for individuals who first become eligible for old-age insurance benefits or disability insurance benefits in 1984 or who die in 1984 before becoming eligible for benefits, we will compute their primary insurance amount by adding the following:

(a) 90 percent of the first $267 of their average indexed monthly earnings, plus

(b) 32 percent of the average indexed monthly earnings over $267 and through $1,612, plus

(c) 15 percent of the average indexed monthly earnings over $1,612.

This amount is then rounded to the next lower multiple of $.10 if it is not already a multiple of $.10. This formula and the adjustments we have described are contained in section 215(a) of the Social Security Act (42 U.S.C. 415(a)) as amended by Public Law 97–35.

Maximum Benefits Payable to a Family

The 1977 Amendments continued the long established policy of limiting the total monthly benefits which a worker's family may receive based on his or her primary insurance amount. Those amendments also continued the then existing relationship between maximum family benefits and primary insurance amounts but did change the method of computing the maximum amount of benefits which may be paid to a worker's family. The 1980 Amendments (Pub. L. 96–265) established a new formula for computing the maximum benefits payable to the family of a disabled worker. This new formula is applied to the family benefits of workers who first become entitled to disability insurance benefits after June 30, 1980 and who first become eligible for these benefits after 1978. The new formula was explained in a Final Rule published in the National Federal Register on May 8, 1981 at 46 FR 25601. For disabled workers initially entitled to disability benefits before July 1980, or whose disability began before 1979, the family maximum payable is computed the same as the old-age and survivor family maximum.

Computing the Old-Age and Survivor Family Maximum. The formula used to compute the family maximum is similar to that used to compute the primary insurance amount. It involves computing the sum of four separate percentages of portions of the worker's primary insurance amount. In 1979, these portions were the first $230, the amount between $230 and $332, the amount between $332 and $433, and the amount over $433. The amounts for 1984 are obtained by multiplying the 1979 amounts by the ratio between the average of the total wages for 1982, $14,531,34, and the average for 1977, $9,779.44. This amount is then rounded to the nearest dollar. For 1984, the ratio is 1.48591. Multiplying the amounts of $230, $332, and $433 by 1.48591 produces the amounts of $341.76, $493.32, and $643.40. These amounts are then rounded to $342, $493, and $643. Accordingly, the portions of the primary insurance amounts to be used in 1984 are determined to be the first $342, the amount between $342 and $493, the amount between $493 and $643, and the amount over $643.

Consequently, for the family of a worker who becomes age 62 or dies in 1984, the total amount of benefits payable to them will be computed so that it does not exceed:

(a) 150 percent of the first $342 of the worker's primary insurance amount, plus

(b) 272 percent of the worker's primary insurance amount over $342 through $493, plus

(c) 134 percent of the worker's primary insurance amount over $493 through $643, plus

(d) 175 percent of the worker's primary insurance amount over $643.

This amount is then rounded to the next lower multiple of $.10 if it is not already a multiple of $.10. This formula and the adjustments we have described are contained in section 203(a) of the Social Security Act (42 U.S.C. 403(a)) as amended by Pub. L. 97–35.

Extension of Benefit Table Effective January 1984

The following is an extension of the Table for Determining Primary Insurance Amount and Maximum Family Benefits provided in section 215(a)(5) of the Social Security Act. This extension reflects the higher average monthly wage and related benefit amounts now possible under the increased contribution and benefit base published by this Notice effective January 1984 in accordance with section 215(i) of the Social Security Act. The extended portion of the benefit table shown here will apply primarily to benefits based on earnings of workers who reached age 62 before 1979.

(Catalog of Federal Domestic Assistance Programs Nos. 13.802–13.805, and 13.807 Social Security Programs)

Dated: October 27, 1983.

Margaret M. Heckler,

Secretary of Health and Human Services.

TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING JANUARY 1984

I (Primary insurance benefit under 1939 act, as modified)—If an individual's primary insurnace benefit (as determined under subsec (d)) is—		II (primary insurance amount effective for December 1983)—or his primary insurance amount (as determined under subsec (c)) is—	III (average monthly wage)—or his average monthly wage (as determined under subsec (b)) is—		IV (primary insurance amount)—the amount referred to in the preceding paragraphs of this subsection shall be—	V (maximum family benefits) and the maximum amount of benefits payable (as provided in sec 203 (a)) on the basis of his wages and self-employment income shall be—
At least—	But not more than—		At least	But not more than—		
			2976	2980	1471.50	2575.10
			2981	2985	1472.50	2576.80
			2986	2990	1473.50	2578.60
			2991	2995	1474.50	2580.30
			2996	3000	1475.50	2582.10
			3001	3005	1476.50	2583.80
			3006	3010	1477.50	2585.60
			3011	3015	1478.50	2587.30
			3016	3020	1479.50	2589.10
			3021	3025	1480.50	2590.80
			3026	3030	1481.50	2592.60

TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING JANUARY 1984—Continued

I (Primary insurance benefit under 1939 act, as modified)—If an individual's primary insurnace benefit (as determined under subsec. (d)) is—		II (primary insurance amount effective for December 1983)—or his primary insurance amount (as determined under subsec. (c)) is—	III (average monthly wage)—or his average monthly wage (as determined under subsec. (b)) is—		IV (primary insurance amount)—the amount referred to in the preceding paragraphs of this subsection shall be—	V (maximum family benefits) and the maximum amount of benefits payable (as provided in sec. 203 (a)) on the basis of his wages and self-employment income shall be—
At least—	But not more than—		At least	But not more than—		
			3031	3035	1482 50	2594 30
			3036	3040	1483 50	2596 10
			3041	3045	1484 50	2597 80
			3046	3050	1485 50	2599 60
			3051	3055	1486 50	2601 30
			3056	3060	1487 50	2603 10
			3061	3065	1488 50	2604 80
			3066	3070	1489 50	2606 60
			3071	3075	1490 50	2608 30
			3076	3080	1491 50	2610 10
			3081	3085	1492 50	2611 80
			3086	3090	1493 50	2613 60
			3091	3095	1494 50	2615 30
			3096	3100	1495 50	2617 10
			3101	3105	1496 50	2618 80
			3106	3110	1497 50	2620 60
			3111	3115	1498 50	2622 30
			3116	3120	1499 50	2624 10
			3121	3125	1500 50	2625 80
			3126	3130	1501 50	2627 60
			3131	3135	1502 50	2629 30
			3136	3140	1503 50	2631 10
			3141	3145	1504 50	2632 80
			3146	3150	1505 50	2634 60

APPENDIX E.—AUTOMATIC ADJUSTMENTS UNDER OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE

The Social Security Act specifies that certain program amounts affecting the determination of OASDI benefits are to be adjusted annually to reflect changes in the general economy. The law prescribes specific formulas which, when applied to reported statistics, produce "automatic" revisions in these program amounts and hence in the benefit-computation procedures.

In this appendix, values are shown for the program amounts which are subject to automatic adjustment from the time that such adjustments became effective through 1984. Projected values for future years through 1989, based on the two intermediate sets of assumptions (alternatives II-A and II-B), are also shown. These assumptions are described in the subsection of this report entitled "Economic and Demographic Assumptions" and are shown in tables 10 and 11. The subsection entitled "Automatic Adjustments," and Appendices C and D, provide a more complete description of the program amounts affected by the automatic-adjustment procedures.

Under section 215(b)(3) of the Social Security Act, the average amount of total wages for each year after 1950 is used to index the earnings of most workers first becoming eligible for benefits in 1979 or later. This procedure converts a worker's past earnings to approximately their equivalent values near the time of the worker's retirement or other eligibility, and these values are used to calculate the worker's Average Indexed Monthly Earnings (AIME). The average amount of total wages for each year is also used to adjust most of the program amounts that are subject to the automatic-adjustment provisions. The announcement of the average wage determination for 1982, including a brief description of its derivation, is shown in Appendix D, which also describes the determinations of other program amounts that are in effect for 1984. Table E1 shows the average amount of total wages as announced for each year 1951 through 1982, together with projected values for 1983 through 1989 based on the two intermediate sets of assumptions.

TABLE E1.—AVERAGE AMOUNT OF TOTAL WAGES FOR 1951-82 AND PROJECTED FUTURE AMOUNTS FOR 1983-89, ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS

Calendar year	Actual amounts	
1951	$2,799.16	
1952	2,973.32	
1953	3,139.44	
1954	3,155.64	
1955	3,301.44	
1956	3,532.36	
1957	3,641.72	
1958	3,673.80	
1959	3,855.80	
1960	4,007.12	
1961	4,086.76	
1962	4,291.40	
1963	4,396.64	
1964	4,576.32	
1965	4,658.72	
1966	4,938.36	
1967	5,213.44	
1968	5,571.76	
1969	5,893.76	
1970	6,186.24	
1971	6,497.08	
1972	7,133.80	
1973	7,580.16	
1974	8,030.76	
1975	8,630.92	
1976	9,226.48	
1977	9,779.44	
1978	10,556.03	
1979	11,479.46	
1980	12,513.46	
1981	13,773.10	
1982	14,531.34	
	Projected future amount by alternative—	
	II-A	II-B
1983	$15,140.93	$15,140.93
1984	16,035.05	16,018.68
1985	16,916.96	16,946.16
1986	17,863.22	17,998.06
1987	18,865.64	19,114.59
1988	19,915.83	20,253.02
1989	20,999.09	21,410.42

The provisions for automatic cost-of-living increases in OASDI benefits were enacted in 1972 and first became effective with the benefit increase for June 1975. The notice announcing the December 1983 benefit increase is shown in Appendix C. (As a result of the Social Security Amendments of 1983, automatic benefit increases for 1983 and later are effective for December of each year.) Table E2 shows the automatic benefit increases determined for each year 1975-83 and the benefit increases for each year 1984-89 on the basis of the two intermediate sets of assumptions.

TABLE E2.—OASDI PROGRAM AMOUNTS DETERMINED UNDER THE AUTOMATIC-ADJUSTMENT PROVISIONS FOR 1975-84 AND PROJECTED FUTURE AMOUNTS FOR 1985-89, ON THE BASIS OF THE INTERMEDIATE SETS OF ASSUMPTIONS

Calendar year	Benefit increase[1] (percent)	Contribution and benefit base	"Old-law" contribution and benefit base[2]	Retirement earnings test exempt amounts		Amount of earnings required for quarter of coverage[4]	AIME "bend points" in PIA formula		PIA "bend points" in maximum-family-benefit formula		
				Under age 65	Ages 65 and over[3]		First	Second	First	Second	Third
Actual experience:											
1975	8.0	$14,100	([5])	$2,520	$2,520	([6])	([5])	([5])	([5])	([5])	([5])
1976	6.4	15,300	([5])	2,760	2,760	([6])	([5])	([5])	([5])	([5])	([5])
1977	5.9	16,500	([5])	3,000	3,000	([6])	([5])	([5])	([5])	([5])	([5])
1978	6.5	17,700	([5])	3,240	[7]4,000	[8]$250	([5])	([5])	([5])	([5])	([5])
1979	9.9	[7]22,900	$18,900	3,480	[7]4,500	260	[8]$180	[8]$1,085	[8]$230	[8]$332	[8]$433
1980	14.3	[7]25,900	20,400	3,720	[7]5,000	290	194	1,171	248	358	467
1981	11.2	[7]29,700	22,200	4,080	[7]5,500	310	211	1,274	270	390	508
1982	7.4	32,400	24,300	4,440	[7]6,000	340	230	1,388	294	425	554
1983	3.5	35,700	26,700	4,920	6,600	370	254	1,528	324	468	610
1984	[9]4.7	37,800	28,200	5,160	6,960	390	267	1,612	342	493	643
Projected future experience:											
Alternative II-A:											
1985	4.6	39,300	29,400	5,400	7,200	410	279	1,680	356	514	670
1986	4.5	41,700	31,200	5,760	7,680	430	295	1,779	377	544	710
1987	4.2	44,100	33,000	6,120	8,160	460	311	1,877	398	574	749
1988	3.9	46,500	34,800	6,480	8,640	480	329	1,982	420	606	791
1989	3.6	49,200	36,900	6,840	9,120	510	347	2,093	444	640	835
Alternative II-B:											
1985	5.4	39,300	29,400	5,400	7,200	410	279	1,680	356	514	670
1986	5.5	41,700	31,200	5,760	7,560	430	295	1,777	377	544	709
1987	5.2	44,100	33,000	6,120	8,040	460	312	1,880	399	575	750
1988	4.6	46,800	35,100	6,480	8,520	490	331	1,997	423	611	797
1989	4.3	49,800	37,200	6,840	9,000	520	352	2,121	450	649	846

[1]Effective with benefits payable for June in each year 1975-82, and for December in each year after 1982.

[2]Contribution and benefit base that would have been determined automatically under the law in effect prior to enactment of the Social Security Amendments of 1977.

[3]In 1955-82, retirement earnings test did not apply at ages 72 and over; beginning in 1983, it does not apply at ages 70 and over.

[4]See Appendix D for a description of quarter-of-coverage requirements prior to 1978.

[5]No provision in law for this amount in this year.

[6]Amount not subject to automatic-adjustment provisions in this year.

[7]Amount specified by Social Security Amendments of 1977.

[8]Amount specified for first year by Social Security Amendments of 1977; amounts for subsequent years subject to automatic-adjustment provisions.

[9]Estimated on basis of alternative II-B assumptions. Corresponding estimate based on alternative II-A is 4.4 percent.

The law provides for an automatic increase in the contribution and benefit base for the year following a year in which an automatic benefit increase became effective. The base for 1975 was the first one determined on this basis. (Amendments enacted in December 1973 provided that the 11-percent general benefit increase that became effective in 1974 would be considered an automatic cost-of-living benefit increase for purposes of the automatic-adjustment provisions.) The bases for 1979-81 were specified by the 1977 amendments at levels above those which were expected to occur under the automatic-adjustment provisions (and which, in fact, as the experience developed, were above such levels). Starting again in 1982, the bases have been determined automatically on the basis of increases in average wages. Table E2 shows actual past and projected future amounts for the contribution and benefit base.

The law provides for the determination of the contribution and benefit bases that would have been in effect in each year after 1978 under the automatic-adjustment provisions as in effect before the enactment of the 1977 amendments. This "old-law" base is used in determining special-minimum benefits for certain workers who have many years of low earnings in covered employment. Beginning in 1986, the old-law base will be used in the calculation of benefits for certain workers who have pensions based on noncovered employment. It is also used for certain purposes under the Railroad Retirement program and the Employee Retirement Income Security Act of 1974. Table E2 shows the old-law bases for 1979-84, together with projections for 1985-89 on the basis of the two intermediate sets of assumptions.

The 1972 amendments specified that the amount of earnings exempted from the withholding of benefits under the retirement earnings test would increase automatically in the year following a year in which an automatic cost-of-living benefit increase became effective. The 1977 amendments modified this procedure by establishing different exempt amounts for those under age 65 and for those aged 65 and over. The former amounts continued to increase automatically, while the latter amounts were specified for 1978-82, after which they again increase automatically. The announcement of the exempt amounts for 1984 is shown in Appendix D, and table E2 shows the amounts for 1975-89.

The 1977 amendments specified the amount of earnings to be used in 1978 to credit a "quarter of coverage" and provided for automatic adjustment of this amount for future years. Appendix D describes the determination of the amount for 1984, and table E2 shows the amounts for 1978-89.

As mentioned previously, the 1977 amendments substantially revised the method of computing benefits for most workers first becoming eligible for benefits in 1979 and later. The formula used to compute the Primary Insurance Amount (PIA) for workers who first become eligible for benefits, or who died before becoming eligible, in 1979 is:

90 percent of the first $180 of AIME, plus
32 percent of AIME in excess of $180
but not in excess of $1,085, plus
15 percent of AIME in excess of $1,085.

The amounts separating the individual's AIME into intervals—the "bend points"—are adjusted automatically by the changes in average wages as specified in section 215(a)(1)(B) of the Social Security Act. (A regular-minimum benefit of $122 and a special-minimum benefit varying by "years of coverage" are also provided, although for most workers first becoming eligible for benefits in 1982 and later, the regular-minimum benefit of $122 has been eliminated.) The determination of the bend points for the 1984 PIA formula is described in Appendix D. The bend points for 1979-84, and the values projected for 1985-89, are shown in table E2.

A similar formula is used to compute the maximum total amount of monthly benefits payable on the basis of the earnings of a retired or deceased individual. This formula is a function of the individual's PIA, and is shown below for workers who first became eligible for benefits, or who died before becoming eligible, in 1979:

150 percent of the first $230 of PIA, plus
272 percent of the PIA in excess of $230
but not in excess of $332, plus
134 percent of the PIA in excess of $332
but not in excess of $433, plus
175 percent of the PIA in excess of $433.

These PIA-interval bend points are adjusted automatically in accordance with section 203(a)(2) of the Act. Appendix D contains the announcement of the maximum-family-benefit bend points for 1984, and the values for 1975-89 are shown in table E2.

APPENDIX F.—ACTUARIAL COST PROJECTIONS FOR THE OASI, DI, AND HI PROGRAMS, COMBINED

In this appendix, cost projections for the OASI, DI, and Hospital Insurance (HI) Trust Funds are summarized to facilitate analysis of the adequacy of the combined income and assets of these three trust funds relative to their combined expenditures. These projections represent the combination of projections shown in this report and in the concurrent report for the HI Trust Fund.

Public Law 97-123 granted limited authority for borrowing among the OASI, DI, and HI Trust Funds; this authority expired on December 31, 1982. The Social Security Amendments of 1983 reauthorized interfund borrowing through the end of 1987. In addition, the current provisions of the law (1) prohibit new loans from a trust fund if its assets are below specified levels, and (2) set forth minimum standards for the repayment of interfund loans (including a requirement for the complete repayment of all such loans before 1990). Throughout this report and the concurrent HI Annual Report, the effects of these provisions are included in the estimated trust fund operations. The projections shown in this appendix for the combined trust funds are theoretical after 1987 because, under present law, no authority exists for transferring assets from one trust fund to another after 1987 except to repay prior loans. Thus, the emphasis in this appendix on combined operations should not obscure the financial status of the individual trust funds.

Table F1 shows estimated assets of the three funds, separate and combined, as a percentage of annual expenditures for calendar years 1984-93, based on the four alternative sets of assumptions used in this report. These estimates indicate that no further interfund loans would be necessary during 1984-87. The estimates also indicate that, except on the basis of alternative III, the $12.4 billion owed to the HI Trust Fund by the OASI Trust Fund would be repaid by early 1987 using the minimum standard in the law for repayment of such loans. Based on alternative III, the minimum standard would need to be exceeded to ensure the repayment of funds owed to HI before that fund would be depleted. Based on alternatives I, II-A, and II-B, the $5.1 billion owed to the DI Trust Fund by the OASI Trust Fund is assumed to be repaid in 1988. Based on alternative III, earlier repayment would be required to enable the continued timely payment of DI benefits.

Based on alternatives I, II-A, and II-B, the combined assets of the OASI and DI Trust Funds would begin to grow as a percentage of outgo after about 1984. Based on alternative III, assets would decline relative to outgo through the first half of 1988, after which significant growth would occur. The assets of the HI Trust Fund, as a percentage of annual expenditures, are projected to decline steadily based on all four sets of assumptions, except in years when repayments of prior interfund loans are received. As described in the concurrent HI Annual Report, the HI Trust Fund would be exhausted in 1995 based on alternative I, in 1991 based on alternatives II-A and II-B, and in 1989 based on alternative III. Table F1 indicates that the combined assets of the OASI, DI, and HI Trust Funds would be sufficient to meet combined obligations through the end of 1993 based on each of the four alternative sets of assumptions. (Combined assets would be insufficient to allow the timely payment of combined benefits beginning in 1994, based on the alternative III assumptions.) These projections suggest that a reallocation of tax rates among the OASI, DI, and HI programs, or the extension of interfund-borrowing authority beyond 1987, could be sufficient to prevent the HI Trust Fund's short-range financing problems for a number of years. Under adverse economic conditions, however, the margin for safety would be small throughout the short-range projection period. If actual economic conditions were somewhat worse than those assumed for alternative III, for example, the assets of the three trust funds, if combined, could be depleted in the relatively near future.

TABLE F1.—PROJECTED ASSETS[1] OF THE OASI, DI, AND HI TRUST FUNDS, SEPARATE AND COMBINED, AT BEGINNING OF YEAR, AS A PERCENTAGE OF ANNUAL EXPENDITURES DURING YEAR ON THE BASIS OF THE FOUR ALTERNATIVE SETS OF ASSUMPTIONS, CALENDAR YEARS 1984-93

Calendar year	OASI	DI	OASDI	HI	Total OASDI and HI
Alternative I:					
1984	20	35	21	28	23
1985	22	29	23	26	23
1986	28	29	28	26	28
1987	31	34	31	48	35
1988	41	43	41	51	44
1989	58	84	61	50	58
1990	82	107	84	48	76
1991	106	141	109	43	93
1992	134	181	138	37	113
1993	159	215	164	29	130
Alternative II-A:					
1984	20	35	21	28	23
1985	21	27	22	25	22
1986	26	25	26	22	25
1987	28	25	27	34	29
1988	32	28	32	38	33
1989	44	60	46	31	42
1990	60	70	61	21	51
1991	78	95	80	8	62
1992	97	119	99	([2])	71
1993	116	143	119	([2])	80
Alternative II-B:					
1984	20	35	21	28	23
1985	21	27	21	25	22
1986	25	24	25	22	24
1987	27	23	27	31	27
1988	29	25	29	36	31
1989	39	55	41	28	38
1990	53	64	54	17	45
1991	68	86	69	4	53
1992	83	108	85	([2])	60
1993	99	130	101	([2])	66
Alternative III:					
1984	20	35	21	28	23
1985	19	25	20	24	21
1986	19	19	19	19	19
1987	18	18	18	15	17
1988	18	18	18	6	15
1989	19	19	19	8	16
1990	25	28	25	([2])	16
1991	33	40	34	([2])	16
1992	41	53	42	([2])	15
1993	48	64	49	([2])	11

[1]Assets of the OASI and DI Trust Funds, but not of the HI Trust Fund, include advance tax transfers for January. Assets are defined differently for the OASDI and HI programs because of their different cash flows. These differences do not affect the interpretation of the estimates shown in this table.

[2]Assets are projected to be negative, and are projected not to recover before the end of the long-range projection period.

Note: The assumptions underlying the projections of the HI Trust Fund are described in Appendix A of the HI Annual Report. The combined OASDI and HI Trust Fund ratios are theoretical in years after the HI Trust Fund is depleted.

Table F2 shows projected cost rates for the OASI, DI, and HI programs during the period 1984-2008 based on alternatives II-A and II-B. This table also shows a comparison of total cost rates and total income rates for the three trust funds combined. As previously discussed, cost rates represent program expenditures as a percentage of effective taxable payroll. The total income rate represents the employee-employer tax rate for the combined OASI, DI, and HI Trust Funds, plus the OASDI income rate attributable to income from the taxation of OASDI benefits, as described earlier in this report. The definition of effective taxable payroll is slightly different for OASDI and HI, because of the different coverage provisions for Federal civilian employees and Railroad employees under the two programs. This difference does not materially affect the comparisons. In addition, the cost rates shown for the HI program exclude the cost associated with rebuilding and maintaining the HI Trust Fund at a level suitable for a contingency reserve. Table 8 of the HI Annual Report presents these additional costs.

TABLE F2.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BASED ON ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1984-2008

[As a percentage of taxable payroll[1]]

Calendar year	Cost rate				Total income rate	Balance[3]
	OASI	DI	HI[2]	Total		
Alternative II-A:						
1984	10.15	1.15	2.71	14.01	14.19	0.19
1985	10.03	1.08	2.83	13.94	14.30	.36
1986	9.96	1.05	2.94	13.95	14.51	.57
1987	9.92	1.02	3.04	13.98	14.53	.55
1988	9.87	1.00	3.16	14.03	15.26	1.23
1989	9.80	.98	3.27	14.06	15.28	1.22
1990	9.77	.98	3.40	14.16	15.57	1.41
1991	9.74	.98	3.54	14.25	15.59	1.33
1992	9.68	.98	3.67	14.33	15.61	1.28
1993	9.63	.98	3.80	14.41	15.62	1.22
1994	9.48	.98	3.91	14.37	15.68	1.30
1995	9.31	.99	4.03	14.33	15.68	1.35
1996	9.11	.99	4.14	14.25	15.67	1.43
1997	8.89	.99	4.24	14.12	15.67	1.55
1998	8.73	.99	4.34	14.06	15.67	1.60
1999	8.60	1.01	4.44	14.05	15.66	1.61
2000	8.48	1.03	4.52	14.04	15.66	1.63
2001	8.38	1.06	4.62	14.05	15.66	1.61
2002	8.30	1.08	4.69	14.07	15.66	1.59
2003	8.23	1.11	4.78	14.12	15.66	1.55
2004	8.17	1.15	4.86	14.18	15.67	1.48
2005	8.14	1.19	4.94	14.26	15.67	1.41
2006	8.13	1.23	5.03	14.39	15.67	1.28
2007	8.16	1.27	5.11	14.54	15.68	1.14
2008	8.20	1.32	5.24	14.76	15.68	.92
25-year average: 1984-2008	9.07	1.06	4.05	14.19	15.42	1.23
Alternative II-B:						
1984	10.17	1.15	2.71	14.03	14.19	.16
1985	10.06	1.09	2.83	13.98	14.30	.32
1986	10.03	1.05	2.95	14.03	14.52	.48
1987	10.04	1.03	3.07	14.13	14.53	.40
1988	10.04	1.01	3.19	14.25	15.27	1.02
1989	10.01	1.00	3.31	14.32	15.28	.96
1990	10.02	1.00	3.45	14.47	15.58	1.11
1991	9.99	.99	3.59	14.57	15.60	1.02
1992	9.98	1.00	3.73	14.71	15.62	.91
1993	9.95	1.00	3.87	14.82	15.64	.81
1994	9.84	1.01	4.00	14.85	15.69	.84
1995	9.71	1.02	4.13	14.86	15.69	.84
1996	9.54	1.02	4.26	14.82	15.69	.87
1997	9.35	1.02	4.37	14.74	15.69	.95
1998	9.21	1.03	4.48	14.72	15.69	.96
1999	9.11	1.05	4.60	14.75	15.69	.93
2000	9.01	1.07	4.70	14.78	15.69	.91
2001	8.92	1.10	4.80	14.82	15.69	.86
2002	8.85	1.13	4.89	14.87	15.69	.82
2003	8.79	1.16	4.99	14.95	15.69	.74

TABLE F2.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BASED ON ALTERNATIVES II-A AND II-B, CALENDAR YEARS 1984-2008 (Cont.)

[As a percentage of taxable payroll[1]]

Calendar year	Cost rate				Total income rate	Balance[3]
	OASI	DI	HI[2]	Total		
Alternative II-B: (Cont.)						
2004	8.74	1.20	5.09	15.03	15.69	.66
2005	8.70	1.24	5.18	15.13	15.69	.57
2006	8.70	1.29	5.29	15.27	15.70	.43
2007	8.72	1.33	5.38	15.43	15.70	.27
2008	8.77	1.38	5.52	15.67	15.71	.04
25-year average: 1984-2008	9.45	1.10	4.18	14.72	15.44	.71

[1]Effective taxable payroll is slightly different for OASDI and HI, because of different coverage provisions for Federal civilian employees and Railroad employees under the respective programs. The difference does not materially affect the comparison.

[2]Cost rates exclude amounts required for trust fund building and maintenance.

[3]The balance is the total income rate minus the OASDI-HI cost rate. Positive balances are surpluses, and negative balances are deficits.

The pattern of projected OASI and DI cost rates for the balance of this century has already been discussed in this report. The HI costs as a percentage of taxable payroll are projected to continue increasing throughout this period based on both alternatives II-A and II-B, for reasons described in the HI Annual Report. Based on alternative II-A, total OASDI and HI costs would fluctuate around their 25-year average level, of 14.19 percent of taxable payroll through the year 2000, before rising steadily to 14.76 percent in 2008. Based on alternative II-B, combined cost rates would increase gradually during 1984-93, remain fairly stable until 2001, and then begin increasing, reaching 15.67 percent in 2008.

Based on both alternatives, total cost rates for OASDI and HI combined would be less than the combined total income rates in each of the 25 years 1984 through 2008. On average, over the 25-year period, total OASDI-HI income would exceed total OASDI-HI costs by 1.23 percent and 0.71 percent of taxable payroll, respectively, on the basis of alternatives II-A and II-B.

Table F3 presents corresponding cost and income rate comparisons on the basis of alternative II-B for the next 75 years, along with averages for the three 25-year periods comprising the long-range projection period.

TABLE F3.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BASED ON ALTERNATIVE II-B, CALENDAR YEARS 1984-2058
[As a percentage of taxable payroll[1]]

Calendar year	Cost rate				Total income rate	Balance[3]
	OASI	DI	HI[2]	Total		
1984	10.17	1.15	2.71	14.03	14.19	0.16
1985	10.06	1.09	2.83	13.98	14.30	.32
1990	10.02	1.00	3.45	14.47	15.58	1.11
1995	9.71	1.02	4.13	14.86	15.69	.84
2000	9.01	1.07	4.70	14.78	15.69	.91
2005	8.70	1.24	5.18	15.13	15.69	.57
2010	8.95	1.44	5.65	16.05	15.73	-.32
2015	9.99	1.55	6.23	17.77	15.79	-1.99
2020	11.31	1.61	6.99	19.91	15.86	-4.05
2025	12.55	1.68	7.87	22.10	15.94	-6.16
2030	13.36	1.65	8.65	23.66	15.99	-7.66
2035	13.68	1.61	9.14	24.43	16.03	-8.40
2040	13.59	1.63	9.37	24.58	16.04	-8.54
2045	13.52	1.67	9.42	24.62	16.06	-8.56
2050	13.63	1.68	9.45	24.76	16.07	-8.69
2055	13.77	1.65	9.46	24.89	16.07	-8.81
25-year averages:						
1984-2008	9.45	1.10	4.18	14.72	15.44	.71
2009-2033	11.42	1.60	7.22	20.24	15.87	-4.36
2034-2058	13.65	1.65	9.38	24.68	16.06	-8.62
75-year average:						
1984-2058	11.51	1.45	6.92	19.88	15.79	-4.09

[1]Effective taxable payroll is slightly different for OASDI and HI, because of different coverage provisions for Federal civilian employees and Railroad employees under the respective programs. The difference does not materially affect the comparisons.

[2]HI cost rates exclude amounts required for trust fund building and maintenance.

[3]The balance is the total income rate minus the OASDI-HI cost rate. Positive balances are surpluses, and negative balances are deficits.

A description of the trend in long-range OASDI cost rates has already been given in this report. The HI cost rates are projected to increase substantially based on the alternative II-B assumptions, from their current level of 2.71 percent to about 9.40 percent by the end of the long-range projection period. Combined OASDI and HI cost rates would also increase substantially after the turn of the century, reaching 24.89 percent of taxable payroll by 2055 on the basis of the intermediate II-B assumptions. Beginning in about 2010, combined cost rates would exceed combined total income rates, with the difference growing over time. The average actuarial balances would be an average surplus of 0.71 percent of taxable payroll over the first 25-year subperiod, followed by average deficits of 4.36 and 8.62 percent over the second and third 25-year subperiods, respectively. Over the 75-year period, the combined actuarial deficit would average 4.09 percent of taxable payroll on the basis of the alternative II-B assumptions.

As noted previously, in this report and in the HI Annual Report, long-range projections such as these are subject to considerable uncertainty and should be interpreted carefully. On the basis of the alternative II-B assumptions, however, which are designed to represent intermediate economic and demographic conditions, the combined cost of the OASDI and HI programs would significantly exceed the combined income of those programs after the turn of the century.

APPENDIX G.—STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the techniques and methodology used herein in evaluating the actuarial status of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds are generally accepted within the actuarial profession; and (2) the assumptions used and the resulting cost estimates are, in the aggregate, reasonable for the purpose of evaluating the financial and actuarial status of the trust funds, taking into consideration the experience and expectations of the program.

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