

## Notes

---

### Effects of Social Security Benefit Increase, December 1989

by Joseph Bondar\*

Effective December 1989, Social Security beneficiaries received a 4.7 percent cost-of-living adjustment (COLA) in their benefit payments. This increase, which was reflected in the checks issued on January 3, 1990, was the highest since the June 1982 increase of 7.4 percent. The January benefit checks to 39.2 million Social Security beneficiaries totaled \$934 million more than the amount paid in the previous month (table 1). The largest proportion of the benefit increase (74 percent) went to retired workers and their dependents; disabled workers and their dependents received 9 percent of the increase; and survivors received the remaining 17 percent. In 1988, 38.6 million Social Security beneficiaries received an additional \$728 million in benefits as a result of a 4.0 percent COLA (chart 1).

Benefit increases are initiated when the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the third calendar quarter of a year exceeds the CPI for the base quarter by at least 1/10 of 1 percent. The base is defined as either the third calendar quarter of the last year in which there was an automatic adjustment or any quarter in which a general benefit increase was effective. In

---

\*Division of Statistics Analysis, Office of Research and Statistics, Office of Policy, Social Security Administration.

1988, the CPI's for each month in the base quarter were 117.2, 117.7, and 118.5—an average of 117.8 for that quarter. The corresponding CPI's for 1989 were 123.2, 123.2, 123.6—an average of 123.3. The 4.7 percent increase results from dividing 123.3 by 117.8.

As a result of the December 1989 benefit increase, monthly retired-worker benefits received in January 1990 rose by an average of \$28.91 for men and \$22.14 for women, resulting in average monthly benefits of \$638.89 and \$487.93, respectively. Average monthly benefit payments to disabled workers were \$617.09 for men and \$438.20 for women, reflecting increases of \$28.12 and \$19.86, respectively. Average increases for dependents of retired and disabled workers ranged from \$6.62 for spouses of disabled workers to \$13.24 for spouses of retired workers. Among survivor beneficiaries, average increases were \$23.71 for widows and widowers and \$17.28 for children.

Social Security benefits are based on a worker's primary insurance amount (PIA). The PIA is based on the individual's covered earnings averaged over his or her working lifetime. Retired workers entitled at age 65 and disabled workers at any age may receive a monthly benefit equal to the PIA. A retired worker may elect to receive benefits as early as age 62, but the PIA will be

reduced 5/9 of 1 percent for each month of entitlement before age 65 (a maximum reduction of 20 percent). Widows and widowers entitled at age 65 may also receive a benefit equal to the full PIA, provided the deceased spouse had not received reduced benefits. Benefits are payable to a widow or widower at age 60 (age 50 if disabled) but are reduced 19/40 of 1 percent for each month of entitlement before age 65—up to a maximum reduction of 28.5 percent. Other dependents and survivor beneficiaries are entitled to set

proportions of the PIA, subject to a family maximum. For a worker who attained age 65 in 1989 and retired without having a prior period of disability, the maximum monthly benefit payable in January 1990 for December 1989 is \$941.80. Minimum and maximum benefits payable to workers who retired or will retire at age 65 during the period 1940-90 are shown in table 2.

The PIA's for workers who attained age 62, became disabled, or died before 1979 are computed from the average monthly wage

(AMW), which is based on the individual's actual earnings or self-employment income. The 1977 Social Security Amendments introduced wage indexing. This method, applicable to workers first eligible in 1979 or later, requires that earnings be indexed to reflect changes in average wage levels in the economy before the averaging of earnings takes place. A formula is then applied to the result—that is, the average indexed monthly earnings (AIME)—to obtain the PIA. For workers who attained age 62,

**Table 1.—Monthly benefits in current-payment status before and after December 1989 benefit increase, by type of beneficiary, sex, and reduction status**

[Amounts in thousands]

Type of beneficiary, sex, and reduction status	November 1988		December 1989 <sup>1</sup>		Average benefit amount		
	Total number	Benefit amount	Number	Benefit amount	November 1989	December 1989 <sup>1</sup>	Increase
All beneficiaries.....	39,102,907	\$19,103,432	39,151,370	\$20,037,582	...	...	...
Retired workers, spouses, and children..	27,809,395	14,109,769	27,842,330	14,797,300	...	...	...
Retired workers.....	24,294,479	13,147,922	24,326,604	13,789,570	\$541.19	\$566.85	\$25.66
Men <sup>2</sup> .....	12,704,011	7,749,175	12,718,425	8,125,615	609.98	638.89	28.91
Benefits actuarially reduced.....	8,133,820	4,454,814	8,152,366	4,677,541	547.69	573.76	26.07
Benefits not actuarially reduced...	4,570,089	3,294,345	4,565,957	3,448,056	720.85	755.17	34.32
Women <sup>2</sup> .....	11,590,468	5,398,747	11,608,179	5,663,955	465.79	487.93	22.14
Benefits actuarially reduced.....	8,408,369	3,524,682	8,423,029	3,698,524	419.19	439.10	19.91
Benefits not actuarially reduced...	3,180,726	1,873,785	3,183,813	1,965,145	589.11	617.23	28.12
Spouses.....	3,092,580	864,184	3,093,075	905,281	279.44	292.68	13.24
Children.....	422,336	97,663	422,651	102,449	231.22	242.40	11.16
Disabled workers, spouses, and children..	4,121,363	1,713,817	4,128,827	1,799,655	...	...	...
Disabled workers.....	2,887,554	1,532,660	2,895,364	1,609,780	530.78	555.99	25.21
Men.....	1,902,849	1,120,717	1,906,379	1,176,403	588.97	617.09	28.12
Women.....	984,705	411,943	988,985	433,376	418.34	438.20	19.86
Spouses.....	273,073	37,570	271,488	39,148	137.58	144.20	6.62
Children.....	960,736	143,586	961,975	150,727	149.45	156.68	7.23
Survivors.....	7,161,614	3,278,254	7,169,923	3,439,001	...	...	...
Widows and widowers, nondisabled....	4,962,998	2,470,784	4,969,243	2,592,458	497.84	521.70	23.86
Widows and widowers, disabled.....	101,709	35,616	101,630	37,270	350.17	366.73	16.56
Widowed mothers and fathers.....	311,203	114,909	312,079	120,970	369.24	387.62	18.38
Children.....	1,779,174	654,117	1,780,487	685,362	367.65	384.93	17.28
Parents.....	6,530	2,828	6,484	2,941	433.03	453.54	20.51
Special age-72 beneficiaries <sup>3</sup> .....	10,535	1,592	10,290	1,627	151.08	158.10	7.02

<sup>1</sup> For benefit checks received in January 1990.

<sup>2</sup> Includes transitionally insured workers.

<sup>3</sup> Authorized by 1966 legislation for persons aged 72 or older not insured under regular or transitional provisions of the Social Security Act.

**Table 2.—Minimum and maximum monthly retired-worker benefits payable to individuals retiring at age 65, 1940-90**

Year attained age 65 <sup>1</sup>	Minimum benefit amount		Maximum benefit amount				Year attained age 65 <sup>1</sup>	Minimum benefit amount		Maximum benefit amount			
	Payable at time of retirement	Payable effective December 1989 <sup>2</sup>	Payable at time of retirement		Payable effective December 1989 <sup>2</sup>			Payable at time of retirement	Payable effective December 1989 <sup>2</sup>	Payable at time of retirement		Payable effective December 1989 <sup>2</sup>	
			Men	Women	Men	Women				Men	Women	Men	Women
1940	\$10.00	\$231.90	\$41.20	\$41.20	\$448.50	\$448.50	1966	\$44.00	\$231.90	\$132.70	\$135.90	\$624.50	\$639.70
1941	10.00	231.90	41.60	41.60	448.50	448.50	1967	44.00	231.90	135.90	140.00	639.70	672.80
1942	10.00	231.90	42.00	42.00	453.90	453.90	1968	<sup>3</sup> 55.00	231.90	<sup>3</sup> 156.00	<sup>3</sup> 161.60	649.40	672.80
1943	10.00	231.90	42.40	42.40	453.90	453.90	1969	55.00	231.90	160.50	167.30	668.40	696.50
1944	10.00	231.90	42.80	42.80	458.90	458.90	1970	64.00	231.90	189.80	196.40	687.00	711.30
1945	10.00	231.90	43.20	43.20	458.90	458.90	1971	70.40	231.90	213.10	220.40	701.10	724.60
1946	10.00	231.90	43.60	43.60	474.40	464.40	1972	70.40	231.90	216.10	224.70	711.30	729.10
1947	10.00	231.90	44.00	44.00	468.80	468.80	1973	84.50	231.90	266.10	276.40	729.60	757.90
1948	10.00	231.90	44.40	44.40	468.80	468.80	1974	84.50	231.90	274.60	284.90	752.50	781.00
1949	10.00	231.90	44.80	44.80	473.30	473.30	1975	93.80	231.90	316.30	333.70	781.00	823.90
1950	10.00	231.90	45.20	45.20	479.40	479.40	1976	101.40	231.90	364.00	378.80	831.70	865.70
1951	20.00	231.90	68.50	68.50	479.40	479.40	1977	107.90	231.90	412.70	422.40	886.40	907.10
1952	20.00	231.90	68.50	68.50	479.40	479.40	1978	114.30	231.90	459.80	459.80	932.50	932.50
1953	25.00	231.90	85.00	85.00	529.50	529.50	1979	121.80	231.90	503.40	503.40	958.50	958.50
1954	25.00	231.90	85.00	85.00	529.50	529.50	1980	133.90	231.90	572.00	572.00	990.90	990.90
1955	30.00	231.90	98.50	98.50	529.50	529.50	1981	153.10	231.90	677.00	677.00	1,026.00	1,026.00
1956	30.00	231.90	103.50	103.50	559.30	559.30	1982	<sup>4</sup> 170.30	231.90	<sup>4</sup> 679.30	<sup>4</sup> 679.30	925.70	925.70
1957	30.00	231.90	108.50	108.50	584.70	584.70	1983	<sup>4</sup> 166.40	202.90	709.50	709.50	900.30	900.30
1958	30.00	231.90	108.50	108.50	584.70	584.70	1984	<sup>4</sup> 150.50	177.20	703.60	703.60	862.60	862.60
1959	33.00	231.90	116.00	116.00	584.70	584.70	1985	(5)	(5)	717.20	717.20	849.70	849.70
1960	33.00	231.90	119.00	119.00	599.40	599.40	1986	(5)	(5)	760.10	760.10	873.40	873.40
1961	33.00	231.90	120.00	120.00	604.10	604.10	1987	(5)	(5)	789.20	789.20	895.20	895.20
1962	40.00	231.90	121.00	123.00	609.50	619.90	1988	(5)	(5)	838.60	838.60	913.00	913.00
1963	40.00	231.90	122.00	125.00	614.50	629.20	1989	(5)	(5)	899.60	899.60	941.80	941.80
1964	40.00	231.90	123.00	127.00	619.90	639.70	1990	(5)	(5)	975.00	975.00	...	...
1965	44.00	231.90	131.70	135.90	619.90	639.70							

<sup>1</sup> Assumes retirement at beginning of year.

<sup>2</sup> Final benefit amount payable after Supplementary Medical Insurance (SMI) premium or any other deduction is rounded to next lower \$1.

<sup>3</sup> Effective for February 1968.

<sup>4</sup> Derived from transitional guarantee computation based on 1978 primary insurance amount (PIA) table.

<sup>5</sup> Minimum PIA eliminated for workers who attained age 62 in 1982 or later. (Minimum is retained until 1991 for members of religious orders who are under a vow of poverty, provided that the order elected Social Security coverage before December 29, 1981.)

became disabled, or died in 1989, the formula is:

90 percent of the first \$339 of AIME, plus

32 percent of AIME in excess of \$339 through \$2,044, plus

15 percent of AIME in excess of \$2,044.

The resulting amount is rounded down to the lower \$0.10 (if it is not a multiple of \$0.10). The 4.7 percent cost-of-living increase is then applied and the amount is rounded again to the lower \$0.10 to obtain the December 1989 PIA.

The percentages listed above—90, 32, and 15—remain constant from year to year. The figures \$339 and \$2,044 are known as the bend points. The comparable

bend points in effect for 1990 are \$356 and \$2,145 (table 3). The bend points are computed by obtaining the ratio of average wages in the economy 2 years before the current year to the 1977 average wage, multiplying the result by the 1979 bend points, and rounding to the nearest dollar. The 1989 bend points were derived by dividing the 1987 average wage (\$18,426.51) by the 1977 average (\$9,779.44), which yields a ratio of 1.884209, and multiplying that ratio by \$180 and \$1,085—the 1979 bend points.

Examples of benefits payable to various family groups based on the worker's earnings history are presented in table 4. The earnings amounts used in the examples range from those of a hypothetical

worker who earned the Federal minimum wage in all the years used in the computation to those of a worker who earned maximum creditable wages. Family benefits for workers who earned the average wage in all computation years as well as 75 percent and 150 percent of the average are also shown. A worker who retired at age 62 in 1989 and earned the minimum hourly wage for a 40-hour work week during all of his or her working years will have an AIME of \$803 and a primary insurance amount of \$474.80. After applying the reduction of 20 percent for early retirement and rounding to the next lower dollar the worker receives a monthly benefit of \$379. A maximum wage earner will have an AIME

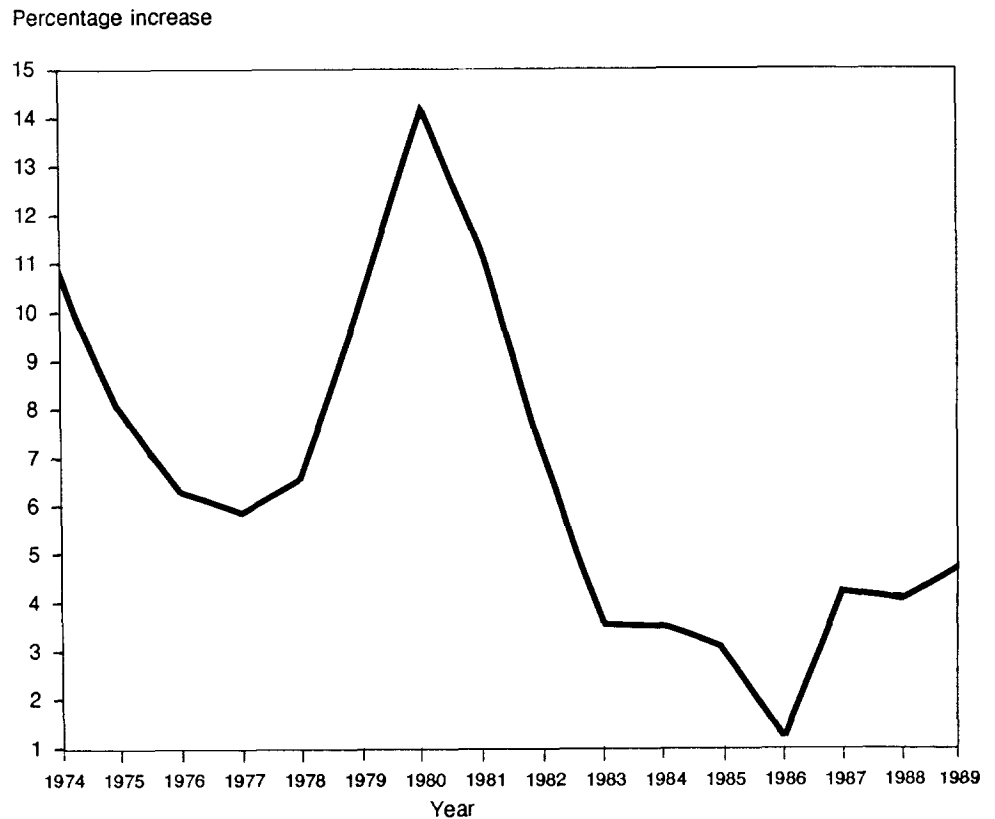
three times that of a minimum wage worker. However, the monthly benefit of \$768 is approximately twice the benefit amount of the minimum wage worker because the PIA computation is weighted to replace a greater portion of a low wage earner's preretirement income.

In addition to the cost-of-living adjustment, which is indexed to rises in the CPI, other items are adjusted to reflect increased wages. These items include the contribution and benefit base, the amount of earnings required to obtain a quarter of coverage (QC), the exempt amounts for earnings of those aged 62-69, and the bend points used in the benefit formula (discussed above).

The amount of wages required for a quarter of coverage in 1990 (\$520) is determined by multiplying \$250 (the QC requirement in 1978) by the ratio of the 1988 average wage to the 1976 average wage ( $\$250 \times (\$19,334.04 / \$9,226.48)$ ) and then rounding to the nearest multiple of \$10. Similarly, the exempt amounts in 1990 for workers aged 62-69 who continue to work are derived by multiplying the monthly exempt amount in the previous year by the ratio of the 1988 wage to the 1987 wage and then rounding to the nearest multiple of \$10. Thus, the monthly exempt amount for workers aged 62-64 is the product of \$540—the 1988 exempt amount—and 1.0492513 ( $\$19,334.04 / \$18,426.51$ )—the 1988 wage ratio—which equals \$570 (after rounding) or \$6,840 annually. For workers aged 65-69, the exempt amount is equal to \$740 multiplied by 1.0492513—or \$780 monthly and \$9,360 annually.

Normally, the 1990 contribution and benefit base would have been computed by dividing the 1988 average wage of \$19,334.04 by the

**Chart 1.—Cost-of-living adjustments, 1974-89<sup>1</sup>**



<sup>1</sup> For 1974-82, adjustments effective in June; 1983-89 adjustments effective in December.

**Table 3.—Average annual wage, contribution and benefit base, ratio, and bend points, 1974-90**

Year	Average wage	Contribution and benefit base	Ratio <sup>1</sup>	PIA bend points	
				1	2
1974	\$8,030.76	\$13,200	...	...	...
1975	8,630.92	14,100	...	...	...
1976	9,226.48	15,300	...	...	...
1977	9,779.44	16,500	...	...	...
1978	10,556.03	17,700	...	...	...
1979	11,479.46	22,900	...	...	...
1980	12,513.46	25,900	1.0794105	\$180	\$1,085
1981	13,773.10	29,700	1.1738361	194	1,171
1982	14,531.34	32,400	1.2795682	211	1,274
1983	15,239.24	35,700	1.4083731	230	1,388
1984	16,135.07	37,800	1.4859072	254	1,528
1985	16,822.51	39,600	1.5582937	267	1,612
1986	17,321.82	42,000	1.6498971	280	1,691
1987	18,426.51	43,800	1.7201915	297	1,790
1988	19,334.04	45,000	1.7712487	310	1,866
1989	(2)	48,000	1.8842091	319	1,922
1990	(2)	51,300	1.9770089	339	2,044
				356	2,145

<sup>1</sup> Ratio of average annual wage 2 years before year of eligibility to 1977 wages.

<sup>2</sup> Not available.

1987 average of \$18,426.51 and multiplying the result by the 1989 base of \$48,000, yielding a base of \$50,400 after rounding to the nearest multiple of \$300. However, legislation enacted in late 1989 raised the base to \$51,300 to take into account the rise in average wages due to "deferred compensation" (deferred income tax

contributions to certain retirement plans under Section 401(k) of the Internal Revenue Code). Deferred compensation has been included in earnings covered for Social Security purposes since 1984 but has not been included in the average wage used to adjust the various program amounts. The 1989 legislation

provided for a transitional rule to be used to compute the bases for years 1990-92. The transitional rule requires that the computed average wage be increased by 2 percent to account for deferred compensation. Beginning in 1993, deferred compensation will also be used to adjust the other program amounts.

**Table 4.—Monthly benefits for selected beneficiary families with first eligibility in 1989, by average indexed monthly earnings for selected wage levels, effective December 1989<sup>1</sup>**

Beneficiary family	Worker with annual earnings equal to—				
	Federal minimum wage <sup>2</sup>	75 percent of average wage	Average wage <sup>3</sup>	150 percent of average wage	Maximum taxable wage <sup>4</sup>
Retired-worker families <sup>5</sup>					
Average indexed monthly earnings.....	\$803.00	\$1,153.00	\$1,537.00	\$2,096.00	\$2,490.00
Primary insurance amount.....	474.80	592.00	720.70	898.80	960.70
Maximum family benefit.....	738.30	1,057.30	1,317.10	1,574.00	1,682.30
Monthly benefit amount for—					
Retired worker claiming benefits at age 62: <sup>5</sup>					
Worker only.....	379.00	473.00	576.00	719.00	768.00
Worker with spouse claiming benefits at—					
Age 65 or older.....	616.00	769.00	936.00	1,168.00	1,248.00
Age 62 <sup>5</sup> .....	557.00	695.00	846.00	1,056.00	1,128.00
Survivor families <sup>6</sup>					
Average indexed monthly earnings.....	\$758.00	\$1,156.00	\$1,541.00	\$2,312.00	\$3,278.00
Primary insurance amount.....	459.70	593.10	722.10	932.70	1,084.40
Maximum family benefit.....	697.30	1,060.10	1,319.00	1,633.40	1,898.90
Monthly benefit amount for—					
Survivors of worker deceased at age 40: <sup>6</sup>					
1 surviving child.....	344.00	444.00	541.00	699.00	813.00
Widowed mother or father and 1 child.....	688.00	888.00	1,082.00	1,398.00	1,626.00
Widowed mother or father and 2 children.....	696.00	1,059.00	1,317.00	1,632.00	1,896.00
Disabled-worker families <sup>7</sup>					
Average indexed monthly earnings.....	\$799.00	\$1,154.00	\$1,538.00	\$2,206.00	\$2,771.00
Primary insurance amount.....	473.50	592.40	721.00	916.10	1,004.80
Maximum family benefit, disability <sup>8</sup> .....	710.20	888.60	1,081.50	1,374.10	1,507.10
Monthly benefit amount for—					
Disabled worker age 50: <sup>7</sup>					
Worker only.....	473.00	592.00	721.00	916.00	1,004.00
Worker, spouse, and 1 child.....	709.00	888.00	1,081.00	1,374.00	1,506.00

<sup>1</sup> For benefit checks received in January 1990.

<sup>2</sup> Federal minimum wage x 2,080 hours per year = annual earnings.

<sup>3</sup> Average annual wage (see table 3).

<sup>4</sup> Maximum amount of wages that can be credited to a worker's Social Security record.

<sup>5</sup> Assumes maximum reduction and no prior period of disability.

<sup>6</sup> Assumes deceased worker began to work at age 22, died at age 40, had no earnings in 1988, and had no prior period of disability.

<sup>7</sup> Assumes worker began to work at age 22, became disabled at age 50, and had no prior period of disability.

<sup>8</sup> The 1980 Amendments to the Social Security Act provide for different family maximum amounts

for disability cases. For disabled workers entitled after June 1980, the maximum is the smaller of (1) 85 percent of the worker's average indexed monthly earnings (or 100 percent of the primary insurance amount (PIA), if larger), or (2) 150 percent of the PIA.