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CONVERSION OF EXISTING BENEFITS UNDER FORMULA CHANGES

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Each time that the Social Security Act has been amended to change the general level of monthly benefits payable under the OASDI program, it has included a method for converting the benefits currently being paid to a higher amount.

No monthly benefits were paid under the original (1935) Act, which provided for old-age benefits beginning in 1942 based on total covered wages. The first monthly benefits actually paid were determined under the provisions of the 1939 Amendments. Beginning at that point, then, this note will trace the change in amounts to current beneficiaries.

All monthly benefits--old-age, disability, dependents, and survivors--are based on a "primary" computed from the worker's earnings record. First denoted as "primary insurance benefit" (PIB), and now labeled "primary insurance amount" (PIA), this "primary" is based on average monthly wage (AMW). Initially, average monthly wage was just that, the total covered wages from 1937 to the quarter of retirement or death, divided by the number of months in that period. The only exclusions permitted were quarters prior to attainment of age 22 which were not quarters of coverage, and quarters after attainment of age 65 in the years 1937-38 (because employees over age 65 were not covered in those years).

While the concept of "average monthly wage" has been retained, it has been modified to permit drop-outs, exclusions, and substitutions, so that it now represents the average for selected years, ranging from a minimum of 2 to a maximum of 38--currently, 8 in the usual "new" case in 1964, increasing by 1 year every calendar year. Thus any comparison based on AMW is somewhat distorted at the outset. Further, the maximum

AMW possible has been increased from \$250 to \$400 by increases in the maximum creditable annual earnings. For comparative purposes, this discussion is limited to the PIB based on an AMW of \$250 or less, and the resulting PIA.

The formula contained in each of the various amendments is shown in Table 1, and the accompanying minimum and maximum provisions are shown in Table 2. While the 1939 formula provided for no specified maximum PIB, because there was no limit on the number of increment years that might be used, an effective maximum resulted from provisions enacted in 1950, limiting the number of increment years to 14 (1937-50 inclusive). Thus for an AMW of \$250, the formula produces \$40 increased by 14% to \$45.60. The first PIB, then, could range from a minimum of \$10 to a maximum at the beginning of 1940 of \$41.20 (for 3 increment years), increasing by 40¢ each year through 1950.

1949-50 Legislation

In 1949, major revisions to the program were considered, and were enacted in 1950. The new formula for future beneficiaries was based on AMW after 1950, in part because of broad extension in coverage, and in part because of the substantial increase in wage levels during the 1940's.

For beneficiaries already on the rolls an increase was proposed, to reflect the increase in wage levels, and this first conversion was the subject of lengthy study, as to both method and amount. The steps are shown in Table 3 for selected PIB's. The matter was approached with mathematical precision by assuming, for each dollar of PIB (line 1), the number of associated increment years (line 2) ranging from 2.5 for the

minimum of \$10 to 12 for the maximum of \$45 (the maximum PIB of \$40 would be increased to \$44.80 by 12 years, and to \$45.20 by the 13 years, 1937-49 inclusive).

Then, the AMW (line 3) was computed which exactly produced the PIB. The AMW was then increased by a factor (line 4) ranging from 2 at the minimum to 1 at the maximum, to produce a constructed AMW (line 5), increased to reflect the general wage increases but heavily weighted in the lower ranges. It may be noted that the increase in general wage levels since the late 1930's had been about 100% (thus "justifying" the factor of 2 used at the bottom of the range). The benefit formula under consideration (50% of the first \$100 of AMW plus 10% of the remainder, increased by $\frac{1}{2}\%$ for each increment year) was applied to the constructed AMW to produce a PIA (line 6) ranging from \$25 to \$68.90. These precisely computed amounts were rounded to the next higher multiple of 10¢ and then adjusted by an examination of first differences (line 7).

After consideration, the Ways and Means Committee of the House of Representatives recommended (and the House passed) a bill containing a conversion table which showed, for each dollar of PIB, a PIA (line 8) which generally represented the average of the amounts so carefully derived and the PIB plus \$15. This procedure was followed so that, on the average, primary benefit amounts would be increased by about 70%--paralleling the rise in the cost of living since the late 1930's--rather than by about 85%, as would have been the case if the initial conversion table had been used. Between the rounding, the averaging, and the grading, the original mathematical precision became obscured. The decision to round the PIA to the next higher 10¢ was retained, finally enacted, and remained a provision of the law until 1958. The conversion table also showed the AMW (line 9) which had produced the precisely computed PIA (not the PIA of the bill), after rounding to the nearest 50¢ at the lower levels and nearest \$1 at the higher levels, and after minor grading.

In the Senate, new primary amounts were developed, based on a formula of 50% of the first \$100 and 15% of the remainder, with no provisions for increment years, which formula was the one contained in the final legislation. This formula was applied to the adjusted AMW for amounts over \$100, and for lower amounts was graded upward from a minimum of \$20, producing new PIA's (line 10) ranging from \$20 to \$72.50, as

compared with the House Bill range of \$25 to \$64.40. The resulting average primary benefit would have shown about an 85% increase.

The PIA's (line 11) contained in the conversion table enacted into law were based on acceptance of the Senate minimum of \$20 and a maximum of the average of the House and Senate maximums. The intermediate PIA's in the enacted conversion table were obtained by an average of the amounts in the House and Senate versions, except that at the lower end of the table the figures followed more closely the Senate ones and small adjustments were made so that they moved smoothly. Associated with each dollar of PIB in the conversion table was the AMW (line 12) that would produce that amount under the Senate formula, except in the upper ranges (PIB of \$40 or over). For an average wage of \$250, the formula produced a primary amount of \$72.50, but a maximum conversion amount of \$68.50 had been agreed to, so that the AMW for a PIB of \$40 or over had to be "forced" between \$195 and \$250. This associated AMW was used only to determine maximum family benefits (80% of AMW but not more than \$150), so that since the 80% maximum did not apply for an AMW of over \$187, this "forcing" served no real purpose except to retain the maximum average wage that was possible under the 1939 Amendments.

The final result was to double the PIB at the lower levels, with a 50% increase at the maximum, but with the maximum converted PIB actually \$4 less than the PIA produced by the new formula applied to an AMW of \$250.

1952 and Subsequent Legislation

In 1952, the first step in the formula was increased from 50% to 55% of the first \$100 of AMW; however, for current beneficiaries the increase provided was $12\frac{1}{2}\%$, but not less than \$5. This increase was applied directly to the 1950 PIA to obtain the 1952 PIA (line 13). In other words, current beneficiaries received an increase of the greater of $12\frac{1}{2}\%$ or \$5, while for future awards the increase produced by the formula was the lesser of 10% or \$5. Future awards would generally be based on a higher AMW, and in any case could be computed under the PIB method with conversion to a 1952 PIA if it produced a higher benefit.

The difference for an AMW of \$250, between current beneficiaries and new awards, was reduced from \$4 to 40¢, since the $12\frac{1}{2}\%$ increase

raised the 1950 PIA of \$68.50 to \$77.10, while the new formula applied to an AMW of \$250 actually produced \$77.50. Thus, the principle of the 1950 Senate Bill of associating the conversion amounts, for a given AMW inserted into the new benefit formula, with the computed amounts for new awards was substantially achieved under the 1952 Amendments. Again, each PIB was associated with the AMW (line 14), rounded to the nearest dollar, which would produce the PIA. Rounding of the AMW to the next lower dollar remains a provision of the Act--the next lower dollar being chosen in view of the fact that the PIA was rounded to the next higher multiple of 10¢.

The AMW of the 1952 conversion table was utilized for the conversion under the 1954 Amendments, which provided the greater of (a) an increase of \$5 over the 1952 PIA or (b) the 1954 PIA that the formula would produce from the AMW associated with the PIB in the 1952 conversion table. For each dollar of PIB less than \$30, the increase was \$5, and the associated AMW (line 16) was that necessary to produce the 1954 PIA (line 15) according to the 1954 benefit formula. For a higher PIB, the 1954 formula when applied to the AMW in the 1952 conversion table produced an increase over the PIA in the 1952 conversion table of more than \$5, and the same AMW was thus retained in the 1954 conversion table. The slight differential between conversion cases and new awards at an AMW of \$250 was thus eliminated.

The 1958 Amendments provided a 7% increase in the PIA (line 17), but not less than \$3, with the resulting amount rounded to the nearest dollar, and generally did not change the AMW (line 18) associated with the PIB, while the 1961 Amendments increased only the minimum PIA (line 19) and minimum AMW (line 20).

Table 4 summarizes the conversion for selected PIB's. It may be noted that the effect has been to quadruple the PIB at the minimum, while it slightly more than doubled at the maximum. Recalling that one purpose of the 1950 Amendments was to make adjustments for wage increases in the 1940's, it is interesting to examine the AMW that is in effect assumed for the conversion. For the lower PIB's, the AMW has been at least doubled. However, for a PIB of \$30 or more, there has been practically no change, and in fact for a PIB of \$40-45, the AMW was initially decreased in 1950. To put it another way, an individual with wages of \$250 a month for 1937-50 inclusive would receive benefits during 1951-54 based, in effect, on a lower AMW than he had actually earned, and a lower benefit than the individual retiring in 1952 after 2 years of earnings at \$250 a month.

In addition to the four general increases in benefit levels, there have been three amendments increasing the percentage of PIA payable to certain survivors (as well as the increases in minimums and maximums shown in Table 2). The increases are summarized in Table 5.

The effect of general benefit increases can be examined by a comparison of monthly benefit amounts for the month preceding the effective date of the change and the following month. Table 6 shows the average monthly benefit in current-payment status for the effective month of each change and the preceding month. For old-age beneficiaries, the increase in the average benefit has usually exceeded the general relative increase provided by the changes, largely as a result of increases in the minimum that exceeded the overall percentage increases. For all beneficiaries, the average increase has been slightly higher in those cases where the percentage of PIA payable to survivors has increased (1950, 1960, and 1961 Amendments).

Table 1
BENEFIT FORMULAS

Amendments of	Formula applied to AMW
1939	40% of first \$50 plus 10% of next \$200, increased by 1% for each year of coverage
1950	50% of first \$100 plus 15% of next \$200
1952	55% of first \$100 plus 15% of next \$200
1954	55% of first \$110 plus 20% of next \$240
1958	58.85% of first \$110 plus 21.4% of next \$290

Table 2
MINIMUM AND MAXIMUM PROVISIONS

Amendments of	Primary		Family Benefit		Maximum Creditable Earnings
	Minimum	Maximum	Minimum	Maximum	
1939	\$10	\$45.60 ^{a/}	\$10.00	\$85.00	\$3,000
1950	20	80.00	15.00	150.00	3,600
1952	25	85.00	18.80	168.75	3,600
1954	30	108.50	30.00	200.00	4,200
1958	33	127.00	33.00	254.00	4,800
1961	40	127.00	40.00	254.00	4,800

^{a/} Not specified in the 1939 Amendments--effective amount after modification under 1950 Amendments.

Table 3

DEVELOPMENT OF CONVERSION TABLES IN 1950 AND SUBSEQUENT AMENDMENTS
FOR SELECTED PRIMARY INSURANCE BENEFIT AMOUNTS
UNDER THE 1939 AMENDMENTS

(1) PIB under 1939 Amendments	<u>\$10</u>	<u>\$20</u>	<u>\$30</u>	<u>\$40</u>	<u>\$45</u>
1949-50 Legislation					
(2) Assumed increment years	2.5	7.0	8.5	10.0	12.0
(3) Computed AMW	\$24.39	\$46.73	\$126.50	\$213.64	\$250.00
(4) Factor to increase AMW	2.00	1.55	1.12	1.01	1.00
(5) Constructed AMW	\$48.78	\$72.43	\$141.68	\$215.78	\$250.00
(6) Computed PIA	25.00	37.50	56.50	64.70	68.90
(7) Graded PIA	25.00	37.50	56.80	64.80	68.80
(8) House bill PIA	25.00	36.30	50.90	59.90	64.40
(9) House bill AMW	50.00	72.50	141.00	217.00	250.00
(10) Senate bill PIA	20.00	37.00	56.20	67.60	72.50
(11) 1950 Amendments PIA	20.00	37.00	54.00	64.00	68.50
(12) 1950 Amendments AMW	40.00	74.00	126.60	195.00	250.00
1952 and Subsequent Legislation					
(13) 1952 Amendments PIA	25.00	42.00	60.80	72.00	77.10
(14) 1952 Amendments AMW	45.00	76.00	139.00	213.00	250.00
(15) 1954 Amendments PIA	30.00	47.00	66.30	81.10	88.50
(16) 1954 Amendments AMW	55.00	85.00	139.00	213.00	250.00
(17) 1958 Amendments PIA	33.00	50.00	71.00	87.00	95.00
(18) 1958 Amendments AMW	54.00	85.00	141.00	216.00	253.00
(19) 1961 Amendments PIA	40.00				
(20) 1961 Amendments AMW	67.00			Same as 1958 Amendments	

Table 4

CONVERSION OF PIB AND IMPUTED AMW

PIA under Conversion Tables
of Subsequent Amendments

<u>PIB</u>	<u>1950</u>	<u>1952</u>	<u>1954</u>	<u>1958</u>	<u>1961</u>
\$10	\$20.00	\$25.00	\$30.00	\$33	\$40
15	30.00	35.00	40.00	43	43
20	37.00	42.00	47.00	50	50
25	46.50	52.40	57.40	61	61
30	54.00	60.80	66.30	71	71
35	59.20	66.60	73.90	79	79
40	64.00	72.00	81.10	87	87
45	68.50	77.10	88.50	95	95

AMW (to nearest \$1) that Produces Primary
under Formula of Amendments

<u>PIB</u>	<u>1939^{a/}</u>	<u>1950</u>	<u>1952</u>	<u>1954</u>	<u>1958</u>	<u>1961</u>
\$10	\$24	\$40	\$45	\$55	\$56	\$68
15	36	60	64	73	73	73
20	47	74	76	85	85	85
25	81	93	95	104	104	104
30	126	127	139	139	139	139
35	171	161	177	177	177	177
40	214	193	213	213	214	214
45	252	223	247	250	251	251

^{a/} Based on assumed increment years of from 2½ to 12.

Table 5

MONTHLY BENEFIT INCREASES

Amendments of	Increase in Benefit Level	Increase in Survivor Percentage of Primary Insurance Amount
1950	About 77%; from 100% at lowest level to 50% at highest level	Parent: from 50% to 75% Child: from 50%, to 50% plus 25% divided by number of children in family
1952	Greater of 12½% or \$5	
1954	At least \$5	
1958	Greater of 7% or \$3	
1960	None	Child: from 50% plus 25% divided by number of children in family to 75%
1961	Minimum only increased	Widow, widower, and sole surviving parent: from 75% to 82½%

Table 6

AVERAGE MONTHLY BENEFIT IN CURRENT-PAYMENT STATUS

Month	Old-Age Beneficiaries		All Beneficiaries	
	Amount	Increase	Amount	Increase
August 1950	\$26.36		\$20.78	
September 1950	46.62	76.9%	37.67	81.3%
August 1952	42.36		35.47	
September 1952	48.79	15.2	40.47	14.1
August 1954	51.97		43.23	
September 1954	58.75	13.0	48.98	13.3
November 1958 ^{a/}	66.35		56.12	
January 1959	71.40	7.6	60.46	7.7
November 1960	74.02		62.78	
December 1960	74.04	---	63.07	.5 ^{b/}
July 1961	74.68		63.58	
August 1961	75.77	1.5	65.02	2.3 ^{b/}

^{a/} December 1958 not available.

^{b/} The increase for certain survivor beneficiaries is averaged over all beneficiaries.