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SCALED FACTORS FOR HYPOTHETICAL EARNINGS EXAMPLES UNDER THE 2015 TRUSTEES REPORT ASSUMPTIONS

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1. Introduction

The Office of the Chief Actuary (OCACT) has traditionally used hypothetical earnings histories to illustrate a range of benefit levels, replacement rates, money's worth measures, and internal rates of return under the Social Security program. OCACT has long used these illustrations to evaluate the program under present law. In addition, in recent years, these hypothetical earnings histories have formed the basis for illustrating possible program changes on benefit levels.[1]

OCACT developed four *scaled worker* hypothetical earnings patterns starting in 2001. These patterns express the hypothetical earnings at each age as a percent of the Social Security Administration's national average wage index (AWI).[2] Each of the four scaled patterns derives from one set of raw scaled factors based on average work and earnings of actual insured workers over their careers. At each age, the raw scaled factor reflects both the average earnings level of those who worked at that age and the percent of insured workers who actually worked at that age.

This note presents the four sets of scaled worker factors recently updated for the hypothetical very low, low, medium, and high lifetime earnings examples used in table V.C7 of the 2015 Trustees Report. Table 6 shows these final scaled factors. In other office publications, OCACT also includes a final hypothetical "maximum" earner with earnings equal to the OASDI maximum taxable earnings level for each year, in order to provide a fuller range of career taxable earnings levels under the Social Security program.

Prior to the development of *scaled factors*, OCACT generally used hypothetical *steady workers*, who earn a constant percentage of the AWI each year throughout their careers. These hypothetical steady earnings patterns tended to over-represent the proportion of actual lifetime earnings received at younger and older ages, and under-represent the proportion received at prime working ages for most workers.

In developing these four sets of scaled factors, we initially developed one set of *raw scaled factors* using earnings from the Continuous Work History Sample (CWHS). We made a preliminary adjustment to these raw factors for ages 62 and over to account for the select nature of these workers who continue working at such ages. Then, these *preliminary adjusted scaled factors* are further adjusted so that the resulting *career-average earnings levels*[3] are 25 percent, 45 percent, 100 percent, and 160 percent of the AWI for the very low, low, medium, and high hypothetical workers, respectively. We selected these career-average earnings levels in order to provide both a useful range of examples and continuity with previous estimates for hypothetical workers.

Table 1 compares overall earnings for these hypothetical workers to those of actual retiring workers. We use the Average Indexed Monthly Earnings[4] (AIME), which is based on a worker's earnings, as a measure of overall earnings. We develop the distribution of actual workers retiring in 2014, from a 1 percent sample of Social Security administrative records.

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[1] Refer to the February 2, 2011 letter from Stephen C. Goss for an example of this illustrative benefits analysis. This letter is located at: http://www.socialsecurity.gov/OACT/solvency/BowlesSimpsonRivlinDomenici_20110202.pdf.

[2] For more information on the national average wage index, including historical values, see: http://www.socialsecurity.gov/OACT/COLA/AWI.html.

[3] We define *career-average earnings* as the average of the highest 35 years of earnings, indexed for growth in average wages to the year prior to benefit entitlement. See further discussion under subsection 3.b. We introduced this revision with the 2003 Trustees Report.

[4] See http://www.socialsecurity.gov/OACT/COLA/Benefits.html#aime for more details on how to calculate the AIME.

Table 1.---Distribution of AIMEs of Actual Workers Retiring in 2014, Relative to AIMEs for Hypothetical Workers Retiring in 2014

Hypothetical worker[1] (Career-average earnings)[2]	Percent with AIME less than AIME for hypothetical case			Percent with AIME closest to AIME for hypothetical case[3]		
	All males	All females	Total, all workers	All males	All females	Total, all workers
Very Low ($11,208)	7.9	16.6	12.1	11.9	25.1	18.4
Low ($20,176)	16.3	33.6	24.8	17.0	30.0	23.3
Medium ($44,835)	42.2	73.1	57.3	28.6	30.7	29.6
High ($71,737)	71.8	93.0	82.2	28.2	12.2	20.3
Maximum ($108,009)	100.0	100.0	100.0	14.4	2.0	8.3

[1] See text for definition of hypothetical workers.

[2] Career-average earnings of hypothetical scaled workers retiring at age 62 in 2014. Earnings are wage indexed to 2013 in this calculation.

[3] Rounded values do not necessarily sum to 100 percent. The percentage of workers with AIME values closest to that of the hypothetical maximum worker is expected to decline in future years. This is due to a significant increase in the OASDI maximum taxable earnings, relative to the AWI, in 1981 and a smaller increase in 1990.

Note: Worker distributions include individuals who are dually entitled, or may become dually entitled to a higher benefit in the future, based on another worker's account. A significant proportion of entitled female workers, especially those with lower earnings, will receive higher benefits as aged spouse or aged widow beneficiaries. If such dually entitled workers were excluded from this analysis, the distributions would be skewed more toward the higher-level hypothetical workers.

Table 1 shows that 33.6 percent of female workers retiring in 2014 have AIMEs below that of a hypothetical low wage scaled worker and that about 42 percent of all workers retiring in 2014 have AIMEs closest to that of hypothetical low or very low wage scaled workers. OCACT first included the level of earnings corresponding to the very low scaled factors in 2004 and chose this level of earnings so that approximately half the retirees who were previously best-represented by the hypothetical low scaled worker would now be best-represented by the hypothetical very low scaled worker.

Dually entitled workers, though still insured for worker benefits, receive a larger benefit as a dependent on another worker's account (generally as a spouse or widow(er)) than they would as a worker beneficiary only. A significant proportion of entitled female workers, especially those with lower earnings, will receive higher benefits as aged spouse or aged widow beneficiaries. If we excluded such dually entitled workers from this analysis, a higher percentage of the remaining workers would have earnings closer to the higher-level hypothetical workers.

2. Developing Raw Scaled Factors from Earnings in the CWHS

Development of the raw scaled factors occurs in three steps:

a. Select workers in the CWHS for computing the factors;

b. Tabulate the earnings for these workers; and

c. Develop the raw scaled factors from the tabulated earnings.

a. Select Workers in the CWHS for Computing the Factors

The CWHS is a 1-percent sample of workers with some OASDI taxable earnings during their lifetime. The Office of Systems updates it annually based on specifications from the Office of Research, Evaluation, and Statistics. We develop the factors in this actuarial note using the CWHS containing earnings data through 2012. The CWHS contains earnings for all the workers in the sample. It is important to limit analysis only to workers who are likely either to be eligible for retirement or disability benefits, or to have dependents eligible for survivors benefits. To include only those workers, we used the status of *fully insured*. A worker is considered fully insured if he or she has a total number of quarters of coverage (QCs)[5] at least equal to the number of years after attainment of age 21 through the last year considered in the analysis (in this case 2011). A further requirement is that the worker must have a minimum of 6 QCs. Since a worker achieves *permanent insured* status with 40 QCs, any worker with 40 QCs is fully insured no matter how many years have elapsed since age 21. Any *fully insured* worker is likely to

[5] The QC is the basic unit for determining whether a worker is insured for Social Security benefits. In 2015, for example, a worker needed to have $1,220 in covered earnings to obtain a QC. Workers can earn up to 4 QCs per calendar year. Since 1978 the amount of covered earnings required to obtain a QC has been automatically indexed each year with the growth in SSA's national average wage index. See: http://www.socialsecurity.gov/OACT/COLA/QC.html for more information, including a list of historical QC amounts.

become eligible for a Social Security retirement benefit if he or she survives to eligibility age.

b. Tabulate Earnings for These Workers

The updated CWHS file contains taxable earnings for years 1951 through 2012. Due to posting delays, the earnings for 2012 in this file are less complete than for earlier years and were not used in our analysis. For each of the workers classified as fully insured as of 2011 (based on all earnings after 1950), our analysis includes earnings for the most recent 20-year period (1992 through 2011) for ages 21 and over. We classify earnings by age of worker, and express earnings as their ratio to the AWI for the specific year.

OCACT developed scaled factors taking into account both the variations in earnings by age and the probabilities that workers may have years with zero earnings. The earnings records selected include years with zero earnings, but not years in which the worker was deceased[6] or receiving a retired worker or disabled worker Social Security benefit.

c. Develop Raw Scaled Factors from the Tabulated Earnings

To normalize earnings from different years, annual earnings amounts for each year are divided by the AWI for that year. For each fully insured worker, normalized earnings are tabulated by age for each age 21 and over for years 1992-2011, as described in the preceding paragraph. The normalized earnings are summed by age and a corresponding worker count is kept. The raw scaled factors are determined by dividing the tabulated sum for each age, including years at zero earnings, by the corresponding numbers of workers. Table 2 displays the results.

Table 2.---Raw Scaled Worker Factors for the 2015 Trustees Report

Age	Percent with Earnings	Average earnings as % of AWI for those with earnings	Factor
21	0.843	0.310	0.261
22	0.847	0.370	0.314
23	0.851	0.458	0.390
24	0.852	0.540	0.460
25	0.852	0.608	0.518
26	0.852	0.666	0.568
27	0.851	0.720	0.613
28	0.852	0.767	0.653
29	0.851	0.808	0.687
30	0.850	0.844	0.718
31	0.849	0.876	0.744
32	0.848	0.904	0.767
33	0.848	0.927	0.787
34	0.848	0.948	0.804
35	0.848	0.966	0.820
36	0.849	0.982	0.833
37	0.850	0.996	0.846
38	0.850	1.008	0.857
39	0.851	1.020	0.868
40	0.851	1.031	0.877
41	0.851	1.041	0.886
42	0.851	1.049	0.893
43	0.851	1.057	0.900
44	0.850	1.065	0.906
45	0.849	1.074	0.912
46	0.847	1.082	0.917
47	0.845	1.088	0.920
48	0.842	1.093	0.921
49	0.839	1.098	0.921
50	0.836	1.101	0.920
51	0.831	1.102	0.916
52	0.826	1.100	0.909
53	0.820	1.097	0.900
54	0.814	1.092	0.889
55	0.806	1.082	0.873
56	0.796	1.064	0.847
57	0.783	1.047	0.820
58	0.770	1.027	0.791
59	0.754	1.007	0.760
60	0.735	0.980	0.720
61	0.707	0.950	0.672
62	0.772	1.097	0.847
63	0.769	1.136	0.873
64	0.750	1.140	0.855

[6] Data concerning worker deaths appears in the CWHS. However, death data in the CWHS does not include all state-reported death data. Therefore, we also used Social Security's NUMIDENT file to identify deaths of individuals in the CWHS. The NUMIDENT file contains, among other things, death data including state-reported deaths.

3. Adjust Raw Scaled Factors to Match Selected Career-Average Earnings Levels

Adjustment of the raw scaled factors occurs in three steps:

a. Calculate preliminary adjusted scaled factors from the raw scaled factors by overriding the scaled factors at ages 62-64;

b. Construct the earnings pattern and calculate the career-average earnings for a hypothetical scaled worker using the preliminary adjusted scaled factors; and

c. Calculate very low, low, medium, and high *final scaled factors* from the preliminary adjusted scaled factors such that the career-average earnings for these hypothetical workers match the selected percentages of the AWI in the year prior to entitlement (25, 45, 100 and 160 percent).

a. Calculate Preliminary Adjusted Scaled Factors from Raw Scaled Factors

The following values, based on table 2, show that there is an accelerating decline in raw factors at ages 60 and 61, followed by increases at ages 62 and 63:

Age	Raw Scaled Factor	Difference
55	0.873	---
56	0.847	-0.026
57	0.820	-0.027
58	0.791	-0.029
59	0.760	-0.031
60	0.720	-0.040
61	0.672	-0.048
62	0.847	+0.175
63	0.873	+0.026
64	0.855	-0.019

We do not have definitive information on the reasons for these changes after age 59. However, it seems reasonable to assume that some of the decline in the raw factors at ages 60 and 61 is due to the retirement (total or partial) of some workers before they became entitled to their OASDI retirement benefits at age 62. The increases in the raw factors at ages 62 and 63 may well occur because healthier, higher-wage workers, and workers who have maintained consistent employment at older ages, are more likely to delay entitlement to OASDI benefits until after age 62. Our methodology removed the earnings of many non-workers, low-wage workers, or less-healthy workers from the tabulated group starting at age 62 because they started to receive Social Security retirement benefits.

Due to the differences between the groups of workers represented in data for ages just-before versus just-after reaching age 62, we develop a smoother set of "adjusted" raw factors for ages 62-64. Here we assume that earnings for workers over age 61 will stay constant in nominal dollars, thus decreasing relative to the AWI.

The preliminary adjusted scaled factors equal the raw scaled factors for ages up to 61. Table 3 calculates factors for ages 62 and over so that earnings in nominal dollars stay constant at the level for age 61. For example, we calculate the preliminary adjusted factor for age 62 by dividing the factor for age 61 by the *ultimate* assumed annual increase in average wages under the intermediate assumptions of the 2015 Trustees Report. Table 3 shows the calculation of the preliminary adjusted scaled factors for ages 62-64.

Though it provides an imperfect approximation for all types of workers, we adopted this approach in order to avoid having different scaled factors for workers who become entitled to OASDI benefits at different ages.

Table 3.---Scaled Factor Adjustments Made for Ages After 61

Age	61	62	63	64
Raw scaled factor	0.672	0.847	0.873	0.855
Ultimate AWI increase since age 61, based on 2015 Trustees Report, Intermediate Assumptions	1.000	1.0387	$(1.0387)^2$	$(1.0387)^3$
Preliminary adjusted scaled factor (age 61 raw scaled factor) / (Ultimate AWI increase)	0.672	0.647	0.623	0.600

b. Construct the Earnings Pattern and Calculate the Career-Average Earnings for a Selected Hypothetical Scaled Worker Using the Preliminary Adjusted Scaled Factors

The selected hypothetical scaled worker (referred to as the *1960-born preliminary scaled worker*) was born on January 2, 1960, has earnings from age 21 through 64, and retires at age 65. We calculate earnings for each year by multiplying the preliminary adjusted scaled factor for that age by the AWI value for the corresponding year. This worker turns age 22 in 1982, so the age 22 preliminary adjusted factor of 0.314 is multiplied by the 1982 AWI of $14,531.34 to obtain annual earnings of $4,556.75. Table 4 shows the preliminary adjusted scaled factors, AWI amounts, and corresponding hypothetical earnings for the 1960-born preliminary scaled worker.

The last line of table 4 shows career-average earnings of $59,384 (wage indexed to 2024) for the 1960-born preliminary scaled worker. This is a slightly different calculation than the AIME because (1) earnings are indexed to the year prior to entitlement rather than to two years prior to eligibility, and (2) earnings are averaged on an annual basis instead of a monthly one. For the 1960-born preliminary scaled worker, who retires at age 65 in 2025, the indexing year used to compute career-average earnings is 2024.

Table 4.---Computation of the Earnings Record and the Career-Average Earnings for the 1960-Born Preliminary Scaled Worker Based on the Preliminary Adjusted Scaled Factors and the AWI Series

Year	Age	Preliminary adjusted scaled factors (1)	AWI for current year (2)	Estimated earnings for current year (1)*(2) (3)	Earnings wage indexed to 2024 (4)
1981	21	0.261	$13,773.10	$3,595.69	$18,647.89
1982	22	0.314	14,531.34	4,556.75	22,399.01
1983	23	0.390	15,239.24	5,943.84	27,860.12
1984	24	0.460	16,135.07	7,429.62	32,890.84
1985	25	0.518	16,822.51	8,709.52	36,981.34
1986	26	0.568	17,321.82	9,833.53	40,550.40
1987	27	0.613	18,426.51	11,290.35	43,766.68
1988	28	0.653	19,334.04	12,626.56	46,648.93
1989	29	0.687	20,099.55	13,815.04	49,095.88
1990	30	0.718	21,027.98	15,092.81	51,268.64
1991	31	0.744	21,811.60	16,223.64	53,130.03
1992	32	0.767	22,935.42	17,587.57	54,774.50
1993	33	0.787	23,132.67	18,195.83	56,185.64
1994	34	0.804	23,753.53	19,107.03	57,457.18
1995	35	0.820	24,705.66	20,253.75	58,558.27
1996	36	0.833	25,913.90	21,593.17	59,519.99
1997	37	0.846	27,426.00	23,202.18	60,429.02
1998	38	0.857	28,861.44	24,738.58	61,226.02
1999	39	0.868	30,469.84	26,433.56	61,967.61
2000	40	0.877	32,154.82	28,189.84	62,621.83
2001	41	0.886	32,921.92	29,156.05	63,259.07
2002	42	0.893	33,252.09	29,684.81	63,766.79
2003	43	0.900	34,064.95	30,643.53	64,255.50
2004	44	0.906	35,648.55	32,299.19	64,718.58
2005	45	0.912	36,952.94	33,700.75	65,143.31
2006	46	0.917	38,651.41	35,442.03	65,498.67
2007	47	0.920	40,405.48	37,169.81	65,709.68
2008	48	0.921	41,334.97	38,062.07	65,773.97
2009	49	0.921	40,711.61	37,495.15	65,786.39
2010	50	0.920	41,673.83	38,345.30	65,724.60
2011	51	0.916	42,979.61	39,380.37	65,448.03
2012	52	0.909	44,321.67	40,289.95	64,932.16
2013	53	0.900	44,888.16	40,382.96	64,260.72
2014	54	0.889	46,289.41	41,138.14	63,480.78
2015	55	0.873	47,820.21	41,726.29	62,327.19
2016	56	0.847	50,388.16	42,657.71	60,471.16
2017	57	0.820	52,937.78	43,409.03	58,572.48
2018	58	0.791	55,517.91	43,923.77	56,512.66
2019	59	0.760	58,106.90	44,151.77	54,274.98
2020	60	0.720	60,681.31	43,704.01	51,445.29
2021	61	0.672	63,345.67	42,564.11	47,996.09
2022	62	0.647	66,028.98	42,713.96	46,207.72
2023	63	0.623	68,727.50	42,803.02	44,485.98
2024	64	0.600	71,429.77	42,828.39	42,828.39
Career-Average Earnings……					$59,384.00

Note: We base career-average earnings on the highest 35 years of indexed earnings (column 4). Years 1981-87 and 2023-24 are excluded because they are not among the highest 35 years of indexed earnings.

c. Calculate Very Low, Low, Medium, and High Final Scaled Factors from the Preliminary Adjusted Scaled Factors such that Selected Hypothetical Scaled Workers with Earnings Based on These Factors Would Have Career-Average Earnings Equal to Selected Percentages of the AWI in the Year Prior to Entitlement

The selected career-average earnings level for the medium scaled worker is the AWI in the year prior to entitlement. Similarly, the selected career-average earnings levels for the very low, low, and high scaled workers are 25 percent, 45 percent and 160 percent of the AWI in the year prior to entitlement, respectively. As noted earlier, the career-average earnings for the 1960-born preliminary scaled worker equals $59,384, wage indexed to 2024 (see table 4). By comparison, the average wage index for 2024 is $71,429.77.[7] Corresponding career-average earnings levels for a very low, low, and high earner are $17,857, $32,143, and $114,288, respectively. Table 5 summarizes this information, and provides the ratio of the selected career-average earnings levels to the career-average earnings for the 1960-born preliminary scaled worker.

Two primary reasons for choosing the year prior to entitlement as the indexing year in computing the career-average earnings are:

- To maintain consistency with prior hypothetical steady workers[8] while simplifying calculations, and
- To make the calculation of the hypothetical scaled worker factors independent of the prior hypothetical steady worker calculation.

Furthermore, career-average earnings provide a reasonable denominator for replacement rate calculations that allow hypothetical scaled worker replacement rates to maintain consistency with the prior hypothetical steady worker replacement rates.

[7] The projected AWI value for 2024 appears in the 2015 Trustees Report. See http://www.socialsecurity.gov/OACT/TR/2015/lr6g6.html.

[8] Prior to 2001, the hypothetical workers used were all "steady" workers. Today, we retain only the "steady maximum" worker. "Steady" workers were assumed to work beginning at age 22 until retirement, death, or disability, and to have a steady amount of earnings relative to the AWI each year. For example, the "steady average" worker earns the AWI for every working year. Similarly, the "steady low" worker earns 45 percent of the AWI for every working year, and the "steady high" worker earns 160 percent of the AWI for every working year.

Table 5.---Table of Key Ratios Used to Finalize Scaled Worker Calculations

Case	Selected career-average earnings levels for hypothetical scaled workers (1)	Career-average earnings of the 1960-born preliminary selected scaled worker (2)	Ratio (1) / (2) (3)
Very low earner ……..	$17,857	$59,384	0.301
Low earner ……..	32,143	59,384	0.541
Medium earner ……	71,430	59,384	1.203
High earner …….	114,288	59,384	1.925

The last step is to apply the ratios from table 5 to the preliminary adjusted scaled factors. This step requires four separate calculations, one each for the very low, low, medium, and high scaled worker cases. For example, we determine the scaled factors for the hypothetical medium scaled worker by multiplying:

- The preliminary adjusted scaled factors for ages 21 through 64, by
- The ratio of 1.203 shown in tables 5 and 6.

Table 6 shows the calculation of the final scaled factors, combining the preliminary adjusted scaled factors with the adjustment factors.

Table 6.---Calculation of Final Scaled Factors

		Final Scaled Factors by Earnings Level			
Adjustment Factors…….		Very low	Low	Medium	High
Age	Preliminary adjusted scaled factors	0.301	0.541	1.203	1.925
21	0.261	0.079	0.141	0.314	0.502
22	0.314	0.094	0.170	0.377	0.604
23	0.390	0.117	0.211	0.469	0.751
24	0.460	0.138	0.249	0.554	0.886
25	0.518	0.156	0.280	0.623	0.996
26	0.568	0.171	0.307	0.683	1.093
27	0.613	0.184	0.332	0.737	1.179
28	0.653	0.196	0.353	0.786	1.257
29	0.687	0.207	0.372	0.827	1.323
30	0.718	0.216	0.389	0.863	1.381
31	0.744	0.224	0.403	0.895	1.431
32	0.767	0.231	0.415	0.922	1.476
33	0.787	0.237	0.426	0.946	1.514
34	0.804	0.242	0.435	0.968	1.548
35	0.820	0.247	0.444	0.986	1.578
36	0.833	0.251	0.451	1.002	1.604
37	0.846	0.254	0.458	1.018	1.628
38	0.857	0.258	0.464	1.031	1.650
39	0.868	0.261	0.470	1.044	1.670
40	0.877	0.264	0.475	1.055	1.687
41	0.886	0.266	0.479	1.065	1.704
42	0.893	0.268	0.483	1.074	1.718
43	0.900	0.271	0.487	1.082	1.731
44	0.906	0.272	0.490	1.090	1.744
45	0.912	0.274	0.494	1.097	1.755
46	0.917	0.276	0.496	1.103	1.765
47	0.920	0.277	0.498	1.107	1.770
48	0.921	0.277	0.498	1.108	1.772
49	0.921	0.277	0.499	1.108	1.773

Table 6.---Calculation of Final Scaled Factors (Cont.)

Adjustment Factors…….		Final Scaled Factors by Earnings Level			
		Very low	Low	Medium	High
Age	Preliminary adjusted scaled factors	0.301	0.541	1.203	1.925
50	0.920	0.277	0.498	1.107	1.771
51	0.916	0.276	0.496	1.102	1.763
52	0.909	0.273	0.492	1.093	1.749
53	0.900	0.271	0.487	1.082	1.731
54	0.889	0.267	0.481	1.069	1.710
55	0.873	0.262	0.472	1.050	1.679
56	0.847	0.255	0.458	1.018	1.629
57	0.820	0.247	0.444	0.986	1.578
58	0.791	0.238	0.428	0.952	1.523
59	0.760	0.228	0.411	0.914	1.462
60	0.720	0.217	0.390	0.866	1.386
61	0.672	0.202	0.364	0.808	1.293
62	0.647	0.195	0.350	0.778	1.245
63	0.623	0.187	0.337	0.749	1.199
64	0.600	0.180	0.325	0.721	1.154

4. Developing Hypothetical Worker Earnings from Factors

Given a year of birth, and an earnings level for scaled workers, classified as either very low, low, medium, or high, one can obtain annual earnings by multiplying the relevant set of scaled factors by the AWIs in the corresponding years. Consider as an example a low earnings worker born in 1970. To determine earnings for this worker at age 22, multiply the scaled factor for the low scaled worker at age 22 by the AWI in 1992, the year in which the worker turns 22. Because the hypothetical workers are born in January, a year of age corresponds to a calendar year. Therefore, a worker born on January 2, 1970 would be age 22 throughout 1992. In this way, one can develop a series of very low, low, medium, and high scaled earnings for any age and hypothetical year of birth. Table 7 carries out the calculation of hypothetical scaled worker earnings for high earnings workers for the selected years of birth 1930, 1949, and 1997.

Table 7.---Example: Developing Earnings for the Hypothetical High Earners Born in 1930, 1949, and 1997

Year of birth…….		1930		1949		1997	
Age	Final scaled factors for high earner (1)	AWI (2)	Age-scaled earnings (1)*(2) (3)	AWI (4)	Age-scaled earnings (1)*(4) (5)	AWI (6)	Age-scaled earnings (1)*(6) (7)
21	0.502	$2,799.16	$1,406.40	$6,186.24	$3,108.19	$55,517.91	$27,894.16
22	0.604	2,973.32	1,794.41	6,497.08	3,921.01	58,106.90	35,067.70
23	0.751	3,139.44	2,356.60	7,133.80	5,354.94	60,681.31	45,549.99
24	0.886	3,155.64	2,796.49	7,580.16	6,717.44	63,345.67	56,136.12
25	0.996	3,301.44	3,289.55	8,030.76	8,001.84	66,028.98	65,791.18
26	1.093	3,532.36	3,859.32	8,630.92	9,429.81	68,727.50	75,088.97
27	1.179	3,641.72	4,294.38	9,226.48	10,880.03	71,429.77	84,231.25
28	1.257	3,673.80	4,617.51	9,779.44	12,291.54	74,191.44	93,249.39
29	1.323	3,855.80	5,100.47	10,556.03	13,963.57	77,054.44	101,927.97
30	1.381	4,007.12	5,535.22	11,479.46	15,857.10	80,059.70	110,590.12
31	1.431	4,086.76	5,850.19	12,513.46	17,912.99	83,211.45	119,116.99
32	1.476	4,291.40	6,333.27	13,773.10	20,326.41	86,488.36	127,639.93
33	1.514	4,396.64	6,655.75	14,531.34	21,997.92	89,887.89	136,074.64
34	1.548	4,576.32	7,084.53	15,239.24	23,591.64	93,419.77	144,621.75
35	1.578	4,658.72	7,350.31	16,135.07	25,457.14	97,088.26	153,181.20
36	1.604	4,938.36	7,919.47	16,822.51	26,977.66	100,893.81	161,799.80
37	1.628	5,213.44	8,488.29	17,321.82	28,202.63	104,831.73	170,682.42
38	1.650	5,571.76	9,191.34	18,426.51	30,396.93	108,900.00	179,644.74
39	1.670	5,893.76	9,840.29	19,334.04	32,280.33	113,126.11	188,876.59
40	1.687	6,186.24	10,437.66	20,099.55	33,912.72	117,522.68	198,288.73
41	1.704	6,497.08	11,073.67	21,027.98	35,840.23	122,086.04	208,084.29
42	1.718	7,133.80	12,256.49	21,811.60	37,474.22	126,832.66	217,909.49
43	1.731	7,580.16	13,123.19	22,935.42	39,707.05	131,777.87	228,141.02
44	1.744	8,030.76	14,003.49	23,132.67	40,337.16	136,928.17	238,765.93
45	1.755	8,630.92	15,148.77	23,753.53	41,691.59	142,299.40	249,760.30
46	1.765	9,226.48	16,282.42	24,705.66	43,599.30	147,894.55	260,996.80
47	1.770	9,779.44	17,313.86	25,913.90	45,878.86	153,711.08	272,135.39
48	1.772	10,556.03	18,707.04	27,426.00	48,603.44	159,757.58	283,117.04
49	1.773	11,479.46	20,347.36	28,861.44	51,156.94	166,023.57	294,277.01
50	1.771	12,513.46	22,159.29	30,469.84	53,957.11	172,540.05	305,540.25
51	1.763	13,773.10	24,287.28	32,154.82	56,701.32	179,312.41	316,196.78
52	1.749	14,531.34	25,422.37	32,921.92	57,596.43	186,351.15	326,018.67
53	1.731	15,239.24	26,385.14	33,252.09	57,572.50	193,633.81	335,256.59
54	1.710	16,135.07	27,597.11	34,064.95	58,264.03	201,184.66	344,102.36
55	1.679	16,822.51	28,250.03	35,648.55	59,864.58	209,025.64	351,016.58
56	1.629	17,321.82	28,222.30	36,952.94	60,207.11	217,160.77	353,818.22
57	1.578	18,426.51	29,079.52	38,651.41	60,997.15	225,586.33	356,005.70
58	1.523	19,334.04	29,438.72	40,405.48	61,522.87	234,316.22	356,778.49
59	1.462	20,099.55	29,392.50	41,334.97	60,446.04	243,370.69	355,892.22
60	1.386	21,027.98	29,146.99	40,711.61	56,430.57	252,783.62	350,384.67
61	1.293	21,811.60	28,206.16	41,673.83	53,891.44	262,551.42	339,524.23
62	1.245	22,935.42	28,554.31	42,979.61	53,509.08	272,704.48	339,513.69
63	1.199	23,132.67	27,726.78	44,321.67	53,123.88	283,240.49	339,491.55
64	1.154	23,753.53	27,410.09	44,888.16	51,798.13	294,181.95	339,467.55