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Social Security: The Average Wage Index

Background

Recent news articles suggest a possible decrease in national average wages due to the recent recession caused by the Coronavirus Disease 2019 (COVID-19) pandemic. Such a decrease would have a negative impact on the Social Security benefits of individuals who reached age 60 in 2020. Social Security benefits are tied to a worker's earnings record but are also affected by changes in national wage levels, price levels, and claiming age.

Congressional interest in this issue may be high because of the large number of potential beneficiaries for whom benefits would be affected by a decrease in average wages as measured by the Social Security Administration's (SSA's) average wage index (AWI). Many other parameters used by the SSA are adjusted automatically (typically on an annual basis) based on changes in national average wages.

Projections for 2020

In July 2021, the Congressional Budget Office released its updated baseline projections, which included several projections for Social Security parameters. It estimates the 2020 AWI will be $54,036.00. This would represent a decrease of about 0.0012% from the 2019 AWI of $54,099.99. In August 2021, the Social Security Board of Trustees released its 2020 Annual Report. Under its intermediate assumptions—the best guess of future experience—the 2020 AWI will be $55,576.94. This would represent an increase of about 2.73%. In 2009, the only year in which AWI decreased, the index declined by 1.51%.

Overview of AWI

Some Social Security parameters are adjusted annually using the AWI. This adjustment ensures that the program parameters reflect changes in the national wage levels.

The AWI is a dollar amount defined as "the average of the total wages for such particular calendar year" and is subject to regulations as prescribed by SSA's commissioner (42 U.S.C. §409(k)). Under current law, the commissioner is required to compute the "average of total wages" based on the amounts of wages reported by the Secretary of the Treasury, including wages above the contribution and benefit base (CBB). Wages above the CBB are not subject to the Social Security payroll tax and are not included in Social Security benefit computation. The AWI also includes certain deferred compensations (20 C.F.R. §404.211(c)(3)).

History of AWI

Among other things, the Social Security Amendments of 1972 (P.L. 92-603) and the Social Security Amendments of 1977 (P.L. 95-216) amended federal law to provide a wage-indexed benefit formula for initial benefits (i.e., benefits payable at the earliest eligibility age, or 62) and to provide for wage-indexed program parameters. All persons eligible for benefits after 1978 would have their benefits calculated under this new procedure. (AWIs for earlier years—1951 through 1977—were retroactively calculated.)

The 1972 and 1977 amendments and implementation of the current wage reporting system in 1978 caused SSA to adopt a different computation method for future years. Under the new method, the amounts from an earlier year is a base to which percentage changes from the new raw earnings data are applied. Since this change was implemented, the AWI value for a given year has usually been greater than the raw earnings data. (In 2019 the average raw earnings were $51,916.27 per worker, but the AWI was $54,099.99.)

Calculation of AWI

Under current law, a given year's AWI is computed using a three-step process. The first step uses the SSA raw earnings data. A year's aggregate net compensation—compensation *plus* contributions to deferred compensation plans *less* certain distributions that were included in reported compensation subject to income taxes—is divided by the number of workers for that year. In the second step, the raw earnings data for a given year is compared to the value from the prior year to determine the year-over-year percentage change in raw earnings data. In the third step, a given year's AWI is determined by applying the percentage change in the raw earnings data to the prior year's AWI dollar value.

For example, in 2019 the aggregate net compensation ($8,790,916,517,299.29) was divided by the number of workers (169,328,746) to produce the per capita value of raw earnings data of $51,916.27. The 2019 raw earnings data was then divided by the 2018 raw earnings data ($50,040.96) to determine the percentage change in raw earnings: 3.75%. Lastly, this percentage change was applied to the 2018 AWI value of $52,145.80, which yielded the 2019 AWI value of $54,099.99.

SSA annually publishes this calculation in the *Federal Register*. Typically, it takes about three quarters for SSA to collect the wage data and perform the necessary AWI calculations. The AWI calculations for 2019 were published in the *Federal Register* on October 22, 2020 (85 *Federal Register* 67413).

Typically, overall economy-wide earnings increase over time. This results in a generally increasing AWI. In its 69-year history, the AWI has increased in all but one year (2009) and exhibited an average annual growth rate of 4.5%. For newly eligible workers, this leads to year-over-year increases in initial benefits and stable replacement rates (i.e., the portion of earnings that initial benefits replace). Program parameters that are indexed to AWI generally increase as well. For some newly eligible beneficiaries, a decrease in wage growth, or AWI, would result in lower initial benefits.

The AWI and Social Security Benefits

Initial benefit amounts are based on a worker's past Social Security–taxable earnings (i.e., covered earnings at or below the CBB) and can be affected by program parameters that are indexed to growth in wages, or AWI. The benefit formula is applied in three main steps: (1) computing the average indexed monthly earnings (AIME), which are earnings that are wage indexed using the AWI, (2) converting these indexed earnings into the primary insurance amount (PIA), using the Social Security benefit computation formula that uses parameters indexed to the AWI, and (3) applying adjustments based on claiming age.

Averaged Indexed Monthly Earnings (AIME)

In the first step, the benefit formula requires a worker's lifetime covered earnings to be indexed using AWI. For retirement benefits, this is done by increasing each year of a worker's taxable earnings by the growth in average earnings in the economy, as measured by the AWI, from the year of work until two years before eligibility for benefits (age 60). Given the lag time in computing the AWI, earnings at ages 60 and above are not indexed. Thus, growth in the AWI during the year in which a worker turns 60 is an important part of the benefit calculation. Once earnings are indexed, the AIME is obtained by dividing the total of the highest 35 years of indexed earnings by 420 (the total months in 35 years). A decrease in the AWI in the year a worker turns 60 would result in a lower AIME than if wage growth were to increase or remain level.

Primary Insurance Amounts (PIA)

Next, the benefit formula process computes a worker's PIA—the basic monthly benefit for a retired worker who begins to receive benefits at the full retirement age (i.e., 67 for those born in 1960 and later). Using two bend points, which are also indexed to the AWI, a worker's AIME is sectioned into three brackets of earnings. A fixed PIA factor—90%, 32%, and 15%, respectively—is applied to each bracket of an AIME. The PIA factors are set in statute. The bend points are based on the year an individual is first eligible for Social Security benefits (i.e., age 62). However, given the lag time in computing the AWI, the value from two years prior is used to determine the bend points (i.e., when the worker was age 60). A decrease in AWI would lead to lower bend points and, in turn, a lower PIA.

Age-Related Adjustments

The full retirement age (FRA) for workers born in 1960 or later is 67. Workers who claim benefits before reaching FRA are subject to a permanent reduction in monthly benefits (i.e., actuarial reduction). Workers claiming benefits after FRA receive delayed retirement credits, resulting in a permanent increase in monthly benefits.

Cost-of-Living Adjustments (COLAs)

As described, initial Social Security benefit amounts (i.e., retired worker benefit amounts that can be collected at the earliest eligibility age of 62) are indexed to the AWI. Benefit amounts collected after age 62 are price-indexed to the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) through an annual COLA.

In most years, wages and prices increase, resulting in higher initial benefits for new beneficiaries and a COLA for current beneficiaries. However, if there is a percentage decrease in the CPI-W, no COLA is payable, and current benefit amounts are not adjusted. Because Social Security COLAs cannot be less than zero, even during periods of negative price growth, in any given year there *could* be a negative change in the AWI but a zero or positive COLA.

Maximum Family Benefits

The total amount of Social Security benefits payable to a family based on a retired, disabled, or deceased worker's record is capped by a maximum family benefit. The family maximum cannot be exceeded regardless of the number of beneficiaries entitled to benefits on the worker's record. In the case of a retired or deceased worker, the total amount of benefits payable to the family is determined by using four bend points—indexed to the AWI—to section the worker's PIA into four brackets, with each bracket replaced by a set factor. In the case of a disabled worker, the total amount of benefits payable to the family ranges from 100% to 150% of the worker's PIA. A negative change in the AWI would lead to a lower maximum family amount.

Additional Program Parameters Affected by AWI

Quarter of Coverage (QC)

Workers become insured for Social Security by earning quarters of coverage (QC) for work in Social Security–covered employment. The amount needed to earn a QC is indexed annually to the AWI. In 2021, a worker earns one QC for each $1,470 of earnings, up to four per year; a worker earning $5,800 in covered employment at any point in the calendar year would be credited with the maximum number (four) of QCs for that year. Under current law, the amount needed to earn a QC cannot decrease. If a decrease in the AWI results in a QC amount lower than the previous year, then the QC amount remains unchanged.

Contribution and Benefit Base (CBB)

The CBB serves as a cap on both contributions and benefits. As a contribution base, it establishes the maximum amount of a worker's earnings that are subject to the payroll tax. As a benefit base, it establishes the maximum amount of earnings used to calculate benefits. Under current law, the CBB is indexed to the AWI and rounded to the nearest multiple of $300. If the AWI decreases, resulting in a negative change in the CBB, the CBB from the prior year is used. Also, due to the rounding rule, it is possible for the CBB to remain unchanged in years of little wage growth. Further, increases in the CBB are applied only when COLAs are payable. That is, if there is no COLA, then the CBB remains unchanged regardless of wage growth.

For more information, see CRS Report R46819, *Social Security: The Effects of Wage and Price Indexing on Benefits* and CRS Report R46658, *Social Security: Benefit Calculation*.

Barry F. Huston, Analyst in Social Policy

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