



PERSPECTIVES

Understanding Social Security Benefits

Brian B. Murphy, FSA, EA, FCA, MAAA, PhD

Background

On August 14, 1935, President Franklin D. Roosevelt signed the Social Security Act into law (Public Law 74-271). The new Act created a social insurance program designed to pay continuing income after retirement to retired workers age 65 and older. It has been described as a watershed achievement of social welfare reform in American history. For the first time, workers were guaranteed a basic floor of protection against the hardships of poverty in old age.¹

The first taxes were collected in 1937 and the first lump sum payment was made the same month in the amount of \$0.17. In January 1940, regular ongoing monthly benefit payments began with the first monthly check for \$22.54. The first recipient had paid a total of \$24.75 in Social Security contributions and lived to collect \$22,888.92 in benefits, close to 1,000 times the amount the individual had paid into the program.

In its original form, Social Security only paid retirement benefits to the primary worker. Survivor benefits, disability benefits and benefits for spouses and children were added later. The original contribution rate was 1% of the first \$3,000 of compensation for both the employer and the employee.

Social Security, as we understand it today, consists of the Old Age and Survivors Insurance Fund (OASI), and the Disability Insurance Fund (DI). The combination is

sometimes called “OASDI.” Social Security covers virtually all private sector employees and 72% of public employees.² Consequently, it is an important part of retirement planning for almost all Americans. It is also an enormous federal program. In 2019, it paid out \$1,059.3 billion in benefits and expenses and received \$1,061.8 billion in income. Income consisted of \$944.5 billion from the 12.4% payroll tax, \$80.8 billion in interest and \$36.5 billion from taxation of benefits. At the time of this writing, 64 million individuals are receiving \$88 billion per month in benefits.

In 2021, the Social Security contribution rate is 6.2% for both the employer and the employee on the first \$142,800 of earned income. The figure of \$142,800 is called the “Taxable Wage Base.”³ This limit is adjusted annually for increases in average wages. There is a 1.45% tax on *all* earned income for both employers and employees for Medicare, so that the total tax on the first \$142,800 of earnings is 15.3% (= 6.2% + 6.2% + 1.45% + 1.45%). High earners and people with investment income are subject to additional Medicare taxes that are not covered in this *GRS Perspectives*. The total tax is called the Federal Insurance Contributions Act or “FICA” tax.⁴ It can be argued that the FICA tax is not a true tax because it is an insurance contribution that is directly linked to benefits. Arguing against that concept is the fact that Social Security benefits are not guaranteed, have been reduced in the past, and very likely will be reduced or changed in some way in the future.

¹ Robert J. Meyers, one of the original designers of the Social Security program who served as Chief Actuary from 1947 to 1970, has been quoted as saying, “I have always believed that social security should be a floor of protection, and I think that it has well served this purpose and is now doing so.” Transactions of the Society of Actuaries 1970 Vol 22 PT. 2 No. 63,

<https://www.soa.org/globalassets/assets/library/research/transactions-of-society-of-actuaries/1970/january/tsa70v22pt2dn635.pdf>

² Federal State Reference Guide, Publication 963 (Rev. 7-2020), Page 1.

³ Actual annual increases to the wage base are announced each year in October and apply to the following calendar year.

⁴ 26 USC, Subtitle C, Chapter 21.



Social Security Old Age (Retirement) Benefits

Social Security is a type of career average indexed retirement plan. The Social Security Administration (SSA) maintains a record of each person’s taxable earnings by year throughout the person’s career. The SSA also maintains a record of the National Average Wage for each calendar year and creates the “Average Wage Index” (AWI). The average wage index⁵ is based on compensation (wages, tips, etc.) subject to Federal income taxes, as reported by employers on Form W-2. Due to lags in reporting, the Average Wage Indexing series is, in a sense, one year behind. For example, in 2021, the National Average Wage for 2019 is the last figure known.

The earliest age at which a (non-disabled) person can receive a Social Security retirement benefit is age 62. For example, suppose that Jane was born in 1955 and applies for benefits in 2021. Jane turned age 62 and became eligible for reduced Social Security benefits in 2017. She decided to delay retirement until she reached her Full Retirement Age (FRA). For a person born in 1955, the FRA is age 66 and two months.⁶ The first step in the calculation is to index her taxable earnings (earnings up to but not exceeding the Taxable Wage Base (TWB) in each year of her career) in accordance with the Average Wage Index. The indexing is done initially as though she had applied for benefits at age 62, regardless of when she actually applies. She turned 62 in 2017, and at that time the last figure in the AWI series was the 2015 National Average Wage, which was \$48,098.63. Jane’s earnings in each prior year are then indexed to 2015, the year she turned age 60. For example, suppose that in 1985 (a year in which the National Average Wage was \$16,822.51) Jane had earned \$15,150. Her earnings for 1985 would then be indexed to 2015 as follows:

$$\frac{\$48,098.63}{\$16,822.51} \times \$15,150 = \$43,316.62$$

If Jane’s actual earnings in any year exceed the Taxable Wage Base for that year, only earnings up to the Taxable Wage Base would be used in the computation. This calculation is done for each year that Jane had taxable

earnings, up to and including the year that she turned age 60. For years after she turned age 60, the indexed earnings are considered to be the actual nominal earnings (up to but not exceeding the Taxable Wage base for the year in question). After these calculations are completed, the 35 highest years of indexed earnings are selected and all other years are dropped from the calculation. If Jane did not have 35 years of taxable earnings, then the 35 highest years will contain some zeros, and the zeros will be included in the averaging process. (This point can be misunderstood by individuals who retire from public or private sector employment at relatively young ages and expect to draw a full Social Security benefit later.) The average of the 35 highest years is then calculated and the result, after division by twelve, is called the Average Indexed Monthly Earnings (AIME). Let us suppose that Jane’s AIME is \$8,574.

The next part of the calculation produces Jane’s Primary Insurance Amount (PIA). The PIA is the amount that Jane would get if she retired at her Full Retirement Age (FRA). Recall that since she was born in 1955, her FRA is age 66 and two months. For the first part of the PIA calculation, Jane’s AIME is divided into three bands. The points at which the divisions occur are called “Bend Points.” The Bend Points change each year in accordance with the national average wage index. In 2017, the year Jane turned age 62, the bend points were \$885 and \$5,336, respectively. This part of Jane’s calculation proceeds as follows:

AIME					
Bend Point	Multiplier	Times	From	To	Result
\$ 885	90%	x	\$ 0	\$ 885	\$ 796.50
\$5,336	32%	x	\$ 885	\$5,336	\$ 1,424.32
	15%	x	\$5,336	\$8,574	\$ 485.70
Result After Truncation to \$0.10					\$2,706.50
% of AIME Replaced					32%

Jane did not retire at age 62. However, if she had done so, she would have received cost-of-living adjustments (COLAs) for each year from 2017 through 2020. Delaying retirement does not cause her to lose the COLAs. For

⁵ <https://www.ssa.gov/OACT/COLA/AWI.html>.

⁶ The FRA increases by two months per year for individuals born after 1954 until the FRA becomes age 67 for those born in 1960 and later.



those years, the COLAs were 2.0%, 2.8%, 1.6%, and 1.3%, respectively. After adding the COLAs (and again truncating each year to \$0.10), **the PIA becomes \$2,920.60.**

In 2021, if Jane retires at exact age 66 and two months, her monthly benefit would be \$2,929 (fractions of a dollar are dropped). If she retires in 2021 at an age other than exact age 66 and two months, either an early retirement reduction or a late retirement increase would be applied.

Some key items to note from this calculation and the related discussion include:

1. The OASDI portion of the FICA tax is regressive. In 2021, a person whose income is \$200,000 will pay \$8,853.60 or 4.43% of income in OASDI tax, whereas a person who earns \$35,000 will pay 6.2% of income in OASDI tax. However, the “Earned Income Credit” refunds all or part of the FICA tax for very low-income people via the person’s federal income tax return.
2. The benefits are progressive. Low wage earners receive a higher percentage of their AIME in the form of Social Security benefits than high wage earners. This can be seen from Jane’s calculation above. If her AIME had been only \$885, her PIA would have been \$796.50 (before application of COLA’s), which is 90% of her AIME. If it had been \$5,336, her PIA would have been \$2,220.80 or 42% of her AIME. As it stands, she is a relatively high earner so her PIA is only 32% of her AIME. In addition, because a portion of the benefits are subject to federal income tax and the income tax system is progressive, high income individuals will lose a greater proportion of their Social Security benefits to federal taxes than low income individuals (which effectively adds to the progressivity of the benefit formula).
3. Because 35 years of earnings must be counted in the formula, individuals who have a working career less than 35 years are disadvantaged (i.e., those who interrupt a career for child-rearing or elder care, “30 & out” retirees from public or private employment, etc.). However, the progressivity of the formula somewhat offsets that disadvantage.
4. Earnings above the taxable wage base, unearned

income (interest, dividends, capital gains, etc.) and earnings from employment that is not covered by Social Security are not entered into the formula.

5. Individuals who have worked for part of their career in employment that is not covered by Social Security may appear to be low wage earners in the mathematical formulas because they will have zeros for some years in the AIME formula. Essentially, such individuals would be advantaged by the formula (assuming there is some type of pension from non-covered employment) if no adjustments were made. The “Windfall Elimination Provision” (WEP) was designed to mitigate this advantage.⁷



The Windfall Elimination Provision (WEP)

Consider the case of a person who works for 20 years in private sector employment that is covered by Social Security and another 20 years for a state or local government in a position that is not covered by Social Security. The earnings from covered employment would be entered into the formula and would be indexed as discussed above. The non-covered earnings would be treated as zeros. The total of the indexed earnings would be divided by 35 years instead of 20 years, making the AIME much lower than it would be if the divisor had been 20 years. The person would appear to be a low-income person who should benefit from the progressivity of the Social Security benefit formula. In fact, the person might be a high-income person with a significant pension from state or local government employment who some would say should not be particularly advantaged by the progressivity of the formula.

To deal with this situation, the WEP provides that the first step in the PIA formula will be 40% instead of 90% for those with 20 or fewer years of “substantial earnings” that are covered by Social Security. (In 2020, “substantial earnings” were \$25,575.) For individuals with more than

⁷ Further information can be found at: <https://www.ssa.gov/pubs/EN-05-10045.pdf>



20 years of substantial earnings, the 40% factor is increased. It becomes 90% for those with 30 years of substantial earnings. At that point, the effect of the WEP is eliminated. (Of course, zeros in the earnings record, if any, still affect the OASDI benefit.) The reduction in PIA due the WEP is not permitted to exceed half of the pension paid from non-covered employment.

Early and Late Retirement Benefits

The Full Retirement Age (FRA) is the age at which a person’s benefit is 100% of the PIA. In the previous example, Jane’s FRA was 66 years and two months. In general, the FRA depends on the year of birth as follows:

Year of Birth	Full Retirement Age
1943-1954	66 years
1955	66 years 2 months
1956	66 years 4 months
1957	66 years 6 months
1958	66 years 8 months
1959	66 years 10 months
1960 and later	67 years

For most people in the workforce today, the full retirement age is 67. The reduction for early retirement is $5/9^{\text{th}}$ of 1% for the first 36 months by which retirement precedes the FRA and $5/12^{\text{th}}$ of 1% for remaining months. So, the benefit of a person whose FRA is 67 and who retires at age 62 will be 70% of the PIA. On the other side of the coin, people who retire after their FRA get a late retirement credit. The credit is 8% per year for people born in 1943 or later. So, if a person whose FRA is 67 works until age 70, the Social Security benefit will be 124% of PIA. There is no additional late retirement credit given for workers who work beyond age 70, and no earned income offset to benefits for working beyond FRA, so almost everyone will begin drawing benefits on or before age 70.

Working After Retirement

For people under their Full Retirement Age who work and draw Social Security retirement benefits, benefits are reduced \$1 for every \$2 earned above a certain threshold. In 2021, the threshold is \$18,960 per year. A special rule

applies in the year a person attains the FRA. After attainment of the FRA, there is no reduction for working after retirement.

Family Benefits

Social Security may also pay benefits to a worker’s family. Family benefits are quite complicated. Consider the most common situation of a retired worker with a spouse. First of all, spouse benefits are not affected by the worker’s early retirement reduction or late retirement credits. For a spouse who is of Full Retirement Age, the spouse benefit is 50% of the worker’s PIA. However, if the spouse is below the FRA, the spouse benefit will be subject to an early retirement reduction that is actually steeper than the reduction that would apply to a retiring worker’s benefit. The reduction is $25/36^{\text{ths}}$ of 1% for the first 36 months and $5/12^{\text{ths}}$ of 1% for additional months. If the spouse is eligible for a Social Security old age benefit in his or her own right, that benefit (which is adjusted for early retirement reduction or late retirement credit whichever may be the case) is paid first from the spouse’s earnings record. The additional amount, if any, that is necessary to bring the total up to 50% of the worker’s PIA is then paid from the worker’s earnings record. While it normally does not affect the total benefit that the spouse receives, the split of the benefit between earnings records can sometimes matter.

Dependent children can get a benefit of up to 50% of the worker’s PIA. It is also possible for the dependent grandchildren and even dependent parents of a worker to get a benefit based on the worker’s earnings record.

There is a maximum family benefit that limits the amount that can be paid based upon a single worker’s earnings record. The limit depends on the amount of the PIA and ranges from 150% to about 190% of PIA. As an example, suppose a worker retires at FRA with a spouse the same age and a dependent child. The total benefit, before application of the family maximum, would be 200% of PIA (100% for the worker and 50% each for the spouse and dependent child). The family maximum would limit the amount payable to an amount between 150% and 190% of PIA. If the limitation is equal to 175% of PIA, it would appear initially that the spouse and dependent child would split the 75% with each then getting 37.5% of the worker’s PIA. However, the maximum family benefit applies to the benefits payable from the *worker’s* earnings record.



If part of the spouse benefit is payable from the *spouse's* own earnings record, the calculation would be different. In that case, depending on circumstance, it could be possible that both the spouse and dependent child could get a benefit equal to 50% of the worker's PIA. When the worker dies, the spouse becomes eligible for a widow/widower benefit which is 100% of the benefit the worker was receiving (including possibly the late retirement adjustment, for example). A reduction applies if the widow/widower is below Full Retirement Age when the worker dies. Dependent children's benefits become 75% of the worker's benefit upon death of the retired worker. Finally, divorced spouses are eligible for benefits on the same basis as spouses provided that the marriage lasted ten years. However, divorced spouse benefits are not figured into the family maximum benefit calculation.

The Government Pension Offset (GPO)

The Government Pension Offset is easily confused with the Windfall Elimination Provision but, in fact, it is quite different. The GPO affects spouse benefits, whereas the WEP affects worker benefits. The GPO comes into play when the spouse of a retired worker has a pension in his or her own right from non-covered employment.

In order to understand the operation of the GPO, consider the case of the Smiths. Mary Smith retired in 2021 at her Full Retirement Age from a Fortune 500 company where she was the CFO. Her OASDI benefit is \$2,800 per month. Her spouse, Bill, was a public-school teacher for his entire working career and was not covered by Social Security. (Teachers in many localities are covered by Social Security, but not in the particular locality where Bill taught.) He is also of full retirement age and is retiring in 2021. Bill will get a pension from the Teacher Retirement System of \$1,200 per month. Bill expects his total retirement income to be \$2,600 per month consisting of a \$1,400 spouse benefit (half of Mary's PIA) and his own \$1,200 per month teacher pension. Unfortunately, that is not true for Bill. In the case of a two-earner couple, Social Security is designed so that part of the spouse benefit is paid from the spouse's own earnings record. Since Bill does not have a Social Security earnings record, Social Security treats $2/3^{\text{rds}}$ of Bill's teacher pension as the

portion of the Social Security spouse benefit that is payable from his earnings record. Only the remainder is then paid from Mary's record. Therefore, Bill's spouse benefit is \$600 per month ($\$1,400 - 2/3^{\text{rds}}$ of \$1,200), and his total retirement income will be \$1,800 per month. Of course, Mary's benefit is not affected by the GPO. She gets the full \$2,800 per month.

Cost-of-Living Increases

Social Security provides annual cost-of-living increases (COLAs) in order to preserve purchasing power in retirement. This is a very important feature of the program, particularly for those who live to advanced ages and for women who generally have longer life expectancies than men and possibly lesser benefits as well. The Social Security COLA is based on the year-to-year change in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Specifically, each year the average of the third quarter CPI-W is calculated and compared with the corresponding figure from the prior year. If the percentage change in the average is an increase of at least 0.1%, a COLA is granted. (If it is a decrease, no change is made). The COLA affects the December benefit, which is paid the following January.⁸ The Medicare Part B premium is usually deducted from the Social Security benefit before people receive it. The Medicare Part B premium is also adjusted each year in January, but in a manner unrelated to the CPI-W.⁹ Therefore, Social Security recipients may not see the full COLA in the amount they actually receive each month.

Conclusion

During 2019, the Social Security program covered 178 million workers and 64 million retirees and beneficiaries. In a system that covers that many people, almost any situation that can be imagined either has already happened or is likely to happen at some point in the future. A full understanding of the operation of the system would, therefore, require years of study. This *GRS Perspectives* is intended to give a general understanding of a few of the common situations. It is not intended, and should not be used, to give advice to any individual in any

⁸ <https://www.ssa.gov/cola/>

⁹ Annual information about Medicare Part B premium changes is available at: <http://www.medicare.gov>.



particular situation. While great care has been taken to ensure the accuracy of this article, readers must recognize that it could contain errors.

Social Security is the foundation of retirement security for most people, but it is not the whole structure. As Robert J. Meyers stated, "...social security should be a floor of protection ..." against poverty in old age. Ideally, a complete retirement program would consist of Social Security, an employer-sponsored pension, and personal savings. As the number of employer-sponsored pensions continues to drop, and as low wages and the high cost of living make personal savings increasingly difficult, the Social Security program is becoming increasingly important. It is well known that the Social Security program is facing financial challenges. The author encourages people to learn as much as they can about the Social Security program and to advocate for its preservation.

Social Security Administration Resources

The Social Security Administration website (www.ssa.gov) is an excellent source of information on the Social Security program. Individuals can set up a "MySocialSecurity" account on the site and see certain information specific to their situation, including the earnings record, benefit estimates, etc. People can also apply for benefits through the site. Those without access to the internet, can contact Social Security by telephone at **1-800-772-1213**. A TTY number is available for people who are deaf or hard of hearing at **1-800-325-0778**. Calls can be answered from 8:00 a.m. to 7:00 p.m., Monday through Friday. Automated services are available 24 hours per day. Finally, the Social Security Administration has branch offices around the country staffed with highly qualified people that can provide information tailored to the specific situations of individuals.

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About the Author

BRIAN B. MURPHY, FSA, EA, FCA, MAAA, PhD is a Senior Consultant & Actuary who has more than 40 years of public sector actuarial and consulting experience. Brian's consulting experience with statewide pension plans includes systems in Arizona, Arkansas, Colorado, Illinois, Iowa, Maryland, Mississippi, Missouri, Ohio, Tennessee and Wisconsin. His local government experience covers plans in Florida, Michigan and Virginia.



Contact Brian at: brian.murphy@grsconsulting.com

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