

# Underemployment, Recessions, and Poverty

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#### **SUMMARY**

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Joseph Dalaker Analyst in Social Policy

# **Underemployment, Recessions, and Poverty**

Having a job greatly reduces the likelihood of being in poverty: 5.0% of workers in the United States aged 18 to 64 were poor in 2020 compared with 28.8% of nonworkers. But having a job does not completely eliminate the likelihood of being in poverty. In particular, workers who want a full-time job but can only find part-time work (called *underemployed* in this report) have a higher poverty rate than other part-time workers: 18.1% of underemployed workers aged 18 to 64 were in poverty compared with 4.4% of other part-time workers.

The *poverty rate*—the percentage of the population that lives in poverty—fluctuates over the business cycle: it rises during recessions when work becomes scarce and falls during expansions when work becomes more plentiful. The percentage of the population that is underemployed follows the same pattern as both the poverty rate and the percentage unemployed, which suggests a link among these trends.

Thus, while nonworkers constitute a large component of the U.S. poverty population, the absence of work does not provide the complete picture. This report focuses on a smaller part of the population living in poverty—those who are underemployed. Policymakers who want to address poverty may be interested in this underemployed population for the following reasons:

- these underemployed are employed, demonstrating that employment status is not the sole determinant of poverty status,
- they have higher poverty rates than other part-time workers,
- there is a possible link between underemployment, unemployment, and poverty over the course of the business cycle, and
- a person's work status affects not only the person's own poverty status but also that of any other family members present by affecting the total amount of income brought into the family.

When a person is available and willing to work more hours but cannot do so, both they and their family members do not receive as much income as they would had a full-time job been obtained. This influences where they stand relative to their *poverty threshold*—a dollar amount that represents a modest level of need.

By definition, the underemployed are part-time workers, meaning they work less than 35 hours per week. Assuming the part-time job was the only source of income, and the underemployed individual worked for 52 weeks at 22 hours per week in 2020 (the average weekly hours for the underemployed in that year), a single person under age 65 would have needed to earn at least \$11.77 per hour to stay above poverty. For an adult couple under 65 (with one earner), this figure was \$15.15; for a single parent with one child, \$15.59; for a single parent with two children, \$18.23; and for two adults (with one earner) and two children, \$22.94. Part-time workers in these family arrangements earning less than these hourly wages would have needed income earned by other family members or received from other sources to be classified as living above poverty.

Over the past 45 years, between 6% and 15% of the population below poverty either was underemployed themselves or lived with an underemployed family member. Because poverty is measured at the family level (for those who live in families), underemployment is associated with a vulnerability to poverty not only for the workers but also for their families.

Underemployment's relevance to poverty may be interpreted in several ways. The underemployed population, and their family members, have lower poverty rates than those with no job at all—and nonworkers constitute the greatest share of the poverty population old enough to work (13.0 million persons in poverty aged 18 to 64 in 2020 were nonworkers, compared with 1.2 million underemployed workers). Those who are underemployed and still below poverty are less likely to be in *deep poverty* (i.e., to have incomes below 50% of their poverty threshold) compared with those without jobs. However, if the expectation is that having a job, even part-time, is enough to protect people and their families from poverty, historically that expectation has not been met. Because the similar up-and-down patterns of unemployment rates, underemployment rates, and poverty rates over the course of business cycles suggest a connection between these trends, policymakers who want to alleviate poverty may be interested in the connection between the availability of jobs and the types of jobs available over the course of the business cycle.

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#### Introduction

*Poverty*—economic hardship characterized by low income—increases and decreases over the course of the business cycle.<sup>1</sup> The *business cycle* is the period from the beginning of one recession (the business cycle *peak*), through the recession and following expansion, to the beginning of the next recession.<sup>2</sup> The *poverty rate*—the percentage of the population that lives in poverty—rises during recessions, when work becomes scarce, and falls during expansions, when work becomes more plentiful.

Having a job greatly reduces the likelihood of being in poverty: 5.0% of persons aged 18 to 64 who worked at any time during the year were poor in 2020 compared with 28.8% of nonworkers in the same age range. But having a job does not completely eliminate the likelihood of being in poverty. In particular, workers who want a full-time job but can only find part-time work<sup>3</sup> (called *underemployed* in this report) have a higher poverty rate than other part-time workers: 18.1% of underemployed workers aged 18 to 64 were in poverty compared with 4.4% of other part-time workers in the same age range.<sup>4</sup>

Thus, while nonworkers constitute a large component of the poverty population in the United States, the absence of work is not the full picture. This report focuses on a smaller part of the population living in poverty—those who are underemployed. Policymakers who want to address poverty may be interested in the underemployed population for the following reasons:

- the underemployed are employed, demonstrating that employment status is not the sole determinant of poverty status,
- the underemployed have higher poverty rates than other part-time workers,

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<sup>&</sup>lt;sup>1</sup> The poverty definition used in this report is the official poverty measure, computed by the Census Bureau. For details about how it is defined and how it differs from other measures, see CRS Report R44780, An Introduction to Poverty Measurement, by Joseph Dalaker. The poverty and labor force data used in this report are estimates based on the Current Population Survey (CPS), collected by the Census Bureau and analyzed by the Census Bureau and the Bureau of Labor Statistics. Like all survey-based estimates, CPS estimates have some error due to sampling, and some nonsampling error (such as errors from respondents failing to report or misreporting information, or errors that take place during data processing). The Census Bureau attempts to minimize nonsampling error by testing the questionnaires for clarity, training the interviewers, and using data quality checks during survey processing. The poverty estimates for both 2019 and 2020, which were based on interviews conducted between February and April of the following year, were affected by changes in survey collection because of the COVID-19 pandemic. Any interviews that would have been conducted in person needed to be conducted by telephone. As a result, response rates fell, particularly among the lower-income population, causing estimates of poverty to appear lower than they would have otherwise. For a discussion, see Jonathan Rothbaum and Adam Bee, Coronavirus Infects Surveys, Too: Nonresponse Bias During the Pandemic in the CPS ASEC, U.S. Census Bureau, September 15, 2020, https://www.census.gov/ content/dam/Census/library/working-papers/2020/demo/sehsd-wp2020-10.pdf. A succinct and less technical explanation by Jonathan Rothbaum is available on the Census Bureau's "Research Matters" blog at https://www.census.gov/newsroom/blogs/research-matters/2020/09/pandemic-affect-survey-response.html.

<sup>&</sup>lt;sup>2</sup> Alternatively, it can be measured from the beginning of an expansion (or *trough*), through the expansion and following recession, to the subsequent trough. For a basic explanation of the business cycle, see CRS In Focus IF10411, *Introduction to U.S. Economy: The Business Cycle and Growth*, by Lida R. Weinstock.

<sup>&</sup>lt;sup>3</sup> *Full-time work* is defined as 35 or more hours per week, whether from a single job or multiple jobs; *part-time work* is defined as at least 1 hour but fewer than 35 hours per week.

<sup>&</sup>lt;sup>4</sup> The term *underemployed* may also refer to persons whose skills or credentials qualify them to work at a different higher-paying or higher-skilled job than the job(s) they currently hold. This report does not examine that situation. What this report calls *underemployment* is referred to in the economics literature as *working part-time for economic reasons* or *involuntary part-time work*, although some non-economic reasons for part-time work, such as illness or a lack of available full-time child care, may not be considered voluntary in a practical sense.

- underemployment rises and falls over the course of the business cycle in the same pattern as unemployment and poverty, suggesting there may be a link between these phenomena, and
- a person's work status affects not only the person's own poverty status but also that of any other family members present, by affecting the total amount of income brought into the family.

When a person is available and willing to work more hours but cannot do so, both they and their family members do not receive as much income as they would had a full-time job been obtained. This in turn influences where they stand relative to their *poverty threshold*—a dollar amount that represents a modest level of need.

This report will first briefly describe the scope of the underemployed population, and then it will illustrate how the percentages of underemployed persons, unemployed persons, and persons below poverty have risen and fallen over the course of previous business cycles. Next, the report will describe the wage rates by family size for which part-time jobs (such as those held by underemployed workers) are sufficient for staying out of poverty, and when they fall short. The last portion of the report will examine the connection between underemployment and poverty using three types of comparisons:

- examining workers and nonworkers aged 18 to 64 by *depth of poverty*—how far above or below the poverty threshold one's income is—focusing on the poverty status of the individual workers or nonworkers themselves;
- examining poverty status by types of workers in a given family, to capture the
  potential for family members' work statuses to affect the poverty status of all
  family members; and
- comparing poverty rates by both the number and type of workers present in the family.<sup>5</sup>

# Scope of the Underemployed Population

In 2020, approximately 6.6 million workers ages 18 to 64 were underemployed, and of those, 1.2 million (18.1%) lived in poverty (see **Table 1**).<sup>6</sup> In contrast, approximately 19.0 million people were working *part-time for non-economic reasons*, meaning for reasons other than an inability to find full-time work, and roughly 0.8 million (4.4%) of them were living in poverty.<sup>7</sup> Among the roughly 126.6 million full-time workers, just under 4.2 million (3.3%) were living in poverty.

<sup>&</sup>lt;sup>5</sup> This analysis treats unrelated individuals as one-person families.

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<sup>&</sup>lt;sup>6</sup> The COVID-19 pandemic affected both the respondents' economic behavior and the methods used to collect information on that behavior by temporarily stopping all in-person interviewing and relying on telephone interviews only. This change in survey methods lowered the response rate to the survey, and in turn poverty rates were measured to be lower than they would have been using the previous year's methods. For a discussion, see Jonathan Rothbaum and Adam Bee, *Coronavirus Infects Surveys, Too: Nonresponse Bias During the Pandemic in the CPS ASEC*, U.S. Census Bureau, September 15, 2020, https://www.census.gov/content/dam/Census/library/working-papers/2020/demo/sehsd-wp2020-10.pdf. A succinct and less technical explanation by Jonathan Rothbaum is available on the Census Bureau's "Research Matters" blog at https://www.census.gov/newsroom/blogs/research-matters/2020/09/pandemic-affect-survey-response.html.

<sup>&</sup>lt;sup>7</sup> Examples of non-economic reasons for working part-time include health reasons, going to school, and taking care of family members, as well as a preference to work part-time instead of full-time.

Thus, among workers, the underemployed constituted the smallest group overall but they had the highest poverty rate.<sup>8</sup>

More underemployed workers lived with family members (just over 5.1 million) than as *unrelated individuals*—persons who lived alone or with nonfamily members only (approximately 1.5 million). However, poverty was more prevalent among underemployed unrelated individuals (30.2%, or roughly 0.5 million persons) than among underemployed workers living with family (14.5%, or approximately 0.7 million), because families (unlike unrelated individuals) can pool income from multiple earners.

Table I. Persons Aged 18 to 64 by Work Status in 2020

(Numbers in thousands)

	Below			
Characteristic	Number	Percentage	— All Income Levels, Number	
Underemployed workers	1,203	18.1%	6,644	
In families <sup>a</sup>	740	14.5%	5,110	
Unrelated individuals	463	30.2%	1,534	
Working part-time for non-economic reasons	834	4.4%	18,968	
Full-time workers	4,198	3.3%	126,634	
Nonworkers	13,047	28.8%	45,336	
Total, aged 18 to 64	20,640	10.5%	197,582	

**Source:** Congressional Research Service tabulation of data from the U.S. Census Bureau, Current Population Survey (CPS), 2021 Annual Social and Economic Supplement (ASEC).

**Notes:** Underemployed refers to working part-time for economic reasons: persons who want to and are available to work full-time but cannot find full-time work, or are working part-time due to slack work (a reduction in hours in response to unfavorable business conditions) or seasonal work. All other part-time workers are categorized as part-time for non-economic reasons. Full-time work is defined as 35 or more hours per week and may reflect hours from a single job or multiple jobs; part-time work consists of 1 to 34 hours per week. Nonworkers are those who did not work at least one week in 2020. Details may not sum to totals because of rounding.

a. Includes persons in *unrelated subfamilies*—persons related to each other but not to the householder (the person in whose name the home is owned or rented).

smallest group overall with the highest poverty rate; full-time workers remained the largest group with the lowest poverty rate; and those working part-time for non-economic reasons were second-highest both in population size and poverty rate.

<sup>8</sup> While the COVID-19 pandemic did cause both unemployment and underemployment to spike in 2020, the

comparative population sizes and poverty rates of full-time workers, the underemployed, and persons working part-time for non-economic reasons ranked relative to each other the same as they did in 2019. In 2019, 5.2 million workers aged 18 to 64 were underemployed, and of those 1.0 million (19.6%) lived in poverty. That same year, 20.5 million worked part-time for non-economic reasons, and 2.3 million (11.1%) lived in poverty, while 128.9 million persons 18 to 64 worked full-time, of which 4.0 million (3.1%) lived in poverty. Thus, while the overall levels shifted between 2019 and 2020 for all three types of workers, their comparative rankings did not: the underemployed remained the smallest group overall with the highest poverty rate; full-time workers remained the largest group with the lowest

# What Do Underemployment, Unemployment, and Poverty Trends Look Like Over Past Business Cycles?

Poverty rates, the percentage of the population age 16 and over who were unemployed, and the percentage underemployed responded faster and more markedly to changing economic conditions over the past 50 years than did the percentage working part-time for non-economic reasons. **Figure 1** illustrates the percentage of the civilian noninstitutional population age 16 and older that was below poverty from 1967 to 2020, and the percentages of the same population that were unemployed and underemployed from January 1967 to August 2021, with recessions indicated as shaded bars. These monthly data include persons aged 16-18 and persons 65 and over, whose poverty status and work status differ from the 18-64 population shown in **Table 1**. Poverty rates are available on an annual basis only, while the beginning and ending dates of recessions, and the percentages of unemployed and part-time workers, are available on a monthly basis. Monthly data, when available, have been shown to better pinpoint when the trends changed direction, relative to the starting and ending dates of recessions.

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<sup>&</sup>lt;sup>9</sup> The percentage of the population that is unemployed is not the unemployment rate, which describes the percentage of the *labor force* that is unemployed. The monthly trends in **Figure 1** are based on published data from the Bureau of Labor Statistics (series LNU00000000, LNS13000000, LNS12032197, and LNS12032200).

<sup>&</sup>lt;sup>10</sup> For further discussion on how the 18-to-64 age group differs from younger and older populations by poverty and work status, see CRS Report R46294, *Demographic and Social Characteristics of Persons in Poverty: 2018*, by Joseph Dalaker.

<sup>&</sup>lt;sup>11</sup> For a clearer view of the monthly percentages that were unemployed, underemployed, and working part-time for non-economic reasons immediately before, during, and after the 2020 recession, see the **Appendix**.

seasonally adjusted. Part-time work categories shown include only non-agricultural industries.

% Civilian Noninstitutional Population, age 16+

Below poverty

Part-time employed, non-economic reasons

5%

Unemployed

Figure 1. Percentage of the Civilian Noninstitutional Population Age 16 and Older by Work Status and Poverty Status Since 1967

Poverty estimates are available only on an annual basis, from 1967 to 2020. Labor force estimates are

0% Underemployed
1967 1973 1979 1985 1991 1997 2003 2009 2015 2021
Population data are monthly: January 1967-August 2021. Poverty rates are annual: 1967-2020.

**Source:** Congressional Research Service, using Current Population Survey (CPS) data from the U.S. Census Bureau, 1968-2021 Annual Social and Economic Supplements (ASEC), and the Bureau of Labor Statistics (Basic Monthly Survey, 1967-2021, series LNU00000000, LNS13000000, LNS12032197, and LNS12032200). Recession

dates from the National Bureau of Economic Research (NBER), at https://www.nber.org/cycles.html.

Notes: Underemployed refers to persons working part-time for economic reasons (i.e., persons who want and are able to work full-time but cannot find full-time work), or are working part-time temporarily because of slack work (a reduction in hours in response to unfavorable business conditions) or seasonal work. Monthly data are based on responses to work status in the week prior to the CPS interview; poverty rates are based on income in the full calendar year. For a closer view of the monthly data series during and since the latest recession in February-April 2020, see the Appendix. The CPS was redesigned in 1994; among other things, this involved switching from pencil-and-paper to computer-assisted interviewing, and the questionnaire was revised to ask

respondents directly whether they were available and willing to work full-time. For details, see Anne E. Polivka and Stephen M. Miller, "The CPS After the Redesign: Refocusing the Economic Lens," Chapter 7 of Haltiwanger,

Three of the trends shown—the poverty rate, the percentage that is unemployed, and the percentage that is underemployed—follow a similar up-and-down pattern with respect to recessions and expansions. Increases in these percentages are associated with recessions and decreases in these percentages occur during economic expansions, although sometimes the decrease does not occur until several years into the expansion (notably, this was the case for the

Manser, and Topel, eds., Labor Statistics Measurement Issues, University of Chicago Press, 1998.

The percentage working part-time for non-economic reasons does not follow the same pattern as the other three measures. During expansions, the percentage working part-time for non-economic reasons tends to stay flat or rise, while the other three percentages tend to fall. Similarly, during recessions the percentage working part-time for non-economic reasons tends to stay flat or fall, in

three expansions prior to the current one). 12

<sup>&</sup>lt;sup>12</sup> For further discussion and illustration of the poverty rate's trend with respect to recessions and expansions, see CRS Report R45854, *Trends in the U.S. Poverty Rate after Recessions*, by Joseph Dalaker.

contrast with the other three percentages, which rise. Except during the onset of the pandemic in 2020, which in a very short period affected people's labor force choices and opportunities, and during a methodological change to the survey in 1994, the percentage working part-time for non-economic reasons tended not to rise or fall abruptly, unlike the other three groups shown.<sup>13</sup>

# What Hourly Wage Rate is Needed for a Part-Time Job to Keep Someone Out of Poverty?

The underemployed, by definition, are part-time workers. Whether a part-time worker is able to stay out of poverty depends on the amount of income that person brings in, how many other family members are present (if any), and the amount of income brought in by the other family members.

A person's poverty status is determined by comparing the person's income, plus that of any family members present, to a dollar amount called a *poverty threshold*, which represents a restrictive level of need, and which varies according to the number of family members present to reflect different levels of need for families of different sizes.<sup>14</sup> For example, in 2020 (the latest year for which thresholds have been computed as of the cover date of this report) a single adult under age 65 whose income was less than \$13,465 would have been considered to be living in poverty.<sup>15</sup> Poverty thresholds for selected family types (adult/child combinations) are shown in **Table 2**.

Assuming that the underemployed person's part-time job is the only source of family income (i.e., none of the other present family members work, and the family does not receive other types of income such as pensions, interest, public assistance, or rental income), then dividing the poverty threshold by the number of hours worked in a year provides the lowest wage rate needed to stay out of poverty. For example, the maximum number of hours a person can work in a week and still be considered part-time is 34. Working all 52 weeks in a year at 34 hours per week, the maximum number of hours a person can work in a year and still be considered a (full-year) part-

<sup>&</sup>lt;sup>13</sup> In 1994, the Current Population Survey underwent a major redesign of both the questionnaire and the tools used to collect the data (from pencil-and-paper to computer-assisted interviewing). This change in the survey instrument affected the data; therefore, the sudden decrease in the percentage underemployed and sudden increase in the percentage working part-time for non-economic reasons may not be attributable to changes in workers' preferences or their availability to work full-time. As noted by Polivka and Miller, "The reduction in the proportion of the employed classified as part-time for economic reasons most likely occurred because the unrevised CPS did not directly ask people if they wanted to and were available to work full-time. Rather, individuals' desire and availability to work full-time were assumed from the answers provided for why they were working part-time. In the revised CPS individuals are asked directly if they want to and are available to work full-time." For further discussion, see Anne E. Polivka and Stephen M. Miller, "The CPS After the Redesign: Refocusing the Economic Lens," Chapter 7 of Haltiwanger, Manser, and Topel, eds., *Labor Statistics Measurement Issues*, University of Chicago Press, 1998. An abrupt change in the percentage working part-time for non-economic reasons occurred during the COVID-19 pandemic and the recession that began in February 2020. These data are available in the **Appendix**.

<sup>&</sup>lt;sup>14</sup> The thresholds also vary by the ages of the family members present to reflect differences in the need levels between children and adults. The thresholds are updated annually for inflation using the Consumer Price Index, and they reflect amounts of income for the entire year. For further explanation, see CRS Report R44780, *An Introduction to Poverty Measurement*, by Joseph Dalaker.

<sup>&</sup>lt;sup>15</sup> These are the official poverty thresholds, computed by the Census Bureau and used for statistical purposes. These differ from the poverty guidelines computed by the Department of Health and Human Services, which are often used to administer assistance programs. For further discussion, see CRS Report R44780, *An Introduction to Poverty Measurement*, by Joseph Dalaker.

<sup>&</sup>lt;sup>16</sup> The poverty thresholds are based on income before taxes.

time worker is 1,768. Assuming the part-time job was the only source of income and the person worked 1,768 hours per year, a single person under age 65 would have needed to earn at least \$7.62 per hour to stay above the poverty line according to the 2020 thresholds. For an adult couple under 65, this figure was \$9.80; for a single parent with one child, \$10.09; for a single parent with two children, \$11.79; and for two adults and two children, \$14.85. Part-time workers in such family arrangements earning less than these hourly wage amounts would have needed income earned by other family members or received from other sources to be classified as living above the poverty level. <sup>17</sup>

Part-time workers do not always work 34 hours per week; the underemployed worked approximately 22 hours per week, on average, in 2020. **Table 2** displays the hourly wage rates needed to avoid poverty at different numbers of part-time hours worked per week.

Table 2. Minimum Hourly Wage Needed to Avoid Official Poverty Status, by Selected Poverty Thresholds and Weekly Part-Time Hours

Wage Rate Needed to Avoid Official Poverty Status Assuming No Other Sources of Income and 52 Weeks of Work

Family Size and Composition	Poverty Threshold in 2020 Dollars	34 Hours per Week <sup>a</sup>	30 Hours per Week	22 Hours per Week <sup>b</sup>	20 Hours per Week
I adult under age 65	\$13,465	\$7.62	\$8.63	\$11.77	\$12.95
2 adults under age 65	\$17,331	\$9.80	\$11.11	\$15.15	\$16.66
2 persons (one adult under age 65, one child)	\$17,839	\$10.09	\$11.44	\$15.59	\$17.15
3 persons (one adult of any age, two children)	\$20,852	\$11.79	\$13.37	\$18.23	\$20.05
4 persons (two adults of any age, two children)	\$26,246	\$14.85	\$16.82	\$22.94	\$25.24

**Source:** Congressional Research Service computations using poverty thresholds from U.S. Census Bureau, https://www2.census.gov/programs-surveys/cps/tables/time-series/historical-poverty-thresholds/thresh20.xls.

Notes: Weeks worked include paid vacations and paid sick leave. Analysis assumes one earner per family.

- a. Maximum whole number of hours that may be worked per week for part-time employment status. Full-time work is defined as 35 hours or more per week.
- b. The average number of hours worked per week in 2020 by the underemployed (part-time for economic reasons) was approximately 22 hours; for details, see Bureau of Labor Statistics, https://www.bls.gov/cps/cpsaat20.htm.

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<sup>&</sup>lt;sup>17</sup> While *below the poverty level* or *above the poverty level* is a binary distinction, in reality individuals' and families' economic circumstances fall across a wide spectrum. The official poverty measure was designed to measure economic hardship as opposed to economic adequacy. It was developed in the 1960s using food budgets that were designed by the U.S. Department of Agriculture for families in economic distress; the ability of those plans to meet nutritional requirements help to characterize the level of resources indicated in the food budgets, and by extension, the thresholds. According to research available at the time, roughly half of families using the food budget met two-thirds of their nutritional requirements, and roughly 1 in 10 met all their nutritional requirements (meaning that approximately 90% did not). For further discussion and references, see CRS Report R44780, *An Introduction to Poverty Measurement*, by Joseph Dalaker.

# Poverty Among the Underemployed, Other Workers, Nonworkers, and Their Family Members

Given that poverty is measured using information about the entire family (or whether a person lives in a family), understanding the effects of work status on poverty requires an understanding of how one person's income from work affects all family members, if any are present. A single comparison does not convey those effects completely. Multiple comparisons are needed because families vary along multiple characteristics that can affect their poverty status:

- the number of persons present, which affects the poverty threshold to be used;
- the number of children present, which affects both the poverty threshold to be used and the number of family members who may not be able to earn income from work (and whose poverty status is therefore dependent on income from other family members); and
- the number of adult nonworkers present, who may or may not receive income from sources other than a current job (such as from Social Security, interest, dividends, or pensions), or who may be retired, provide care for other family members, or require care themselves.

The following sections examine poverty and work, particularly underemployment, using three comparisons. The first compares the poverty status of the workers (and nonworkers) themselves by type of worker, for persons aged 18 to 64. The work status categories being compared are underemployed, working part-time for non-economic reasons, working full-time, and nonworkers. This comparison is the simplest of the three because it looks only at the individual's work status. However, it does not illustrate the impact of the person's work status on any other family members who may be present.

The second comparison examines poverty rates by type of worker, using the same work status categories as before, but this time including all family members who live with that type of worker, in addition to the workers themselves. This comparison includes persons of all ages to capture children whose poverty status depends on other family members. It also includes adults, who may have jobs of their own but not necessarily the same type as the category's focus. Including everyone living with workers of a given type provides a better sense of how farreaching an effect that type of work status has on poverty throughout the whole population. However, because people may live with more than one type of worker, the categories overlap—a person may be in more than one category.

The third comparison examines the entire population and categorizes every person once, without overlap, based on the number and type of workers in the person's family. This last comparison puts a greater emphasis on the number of workers present than on type of work status. For instance, an underemployed worker may be the only worker in the family, may be one of two or more part-time workers with no full-time workers present, or may be in a family where one or more full-time workers are present. Thus, the categories of this third comparison do not isolate the poverty rates associated with each type of work status but rather compare poverty rates when multiple workers are present (and therefore, additional sources of income for the family), compared with one or none, and examine how poverty rates differ by type of worker after first categorizing by the number of workers present.

The distinctions between these comparisons will be illustrated using an example family, which will be referred to throughout the rest of the report.

#### **Example Family for Illustrating Work Status and Poverty Status**

Calvin and Ivy, both 45 years old, live with their three children—Skylar (age 25), Frederika (age 14), and Rosie (age 11)—and Calvin's mother Olive (age 75). Their poverty threshold in 2020 was \$36,408 (six persons, two of whom were children under age 18).

Calvin is a stay-at-home father and a nonworker, while lvy works full-time and earns \$20,800 per year. Skylar wants to work full-time, but has only been able to find part-time work (she is underemployed), and earns \$10,400 per year. Olive does not want a full-time job, but has a part-time tutoring job earning \$5,000 per year. The family has no additional sources of income.

Calvin (nonworker): \$0
lvy (full-time worker): \$20,800
Skylar (underemployed worker): \$10,400
Olive (part-time, non-economic reason): \$5,000
Frederika (nonworker, under 18): \$0
Rosie (nonworker, under 18): \$0
Total: \$36,200
Poverty threshold: \$36,408

Their total income in 2020 was \$36,200, which is less than their poverty threshold, meaning they are living in poverty. Their *income-to-poverty ratio* (100 \* \$36,200 / \$36,408) was 99%, putting them below poverty but not in the deep poverty category. All family members have the same poverty status and the same ratio of income to poverty.

## Depth of Poverty Among Workers by Type of Worker

As noted previously, poverty status is based on a comparison of a family's or unrelated individual's income with their poverty threshold: those with incomes less than the relevant threshold, given the number of persons in the family and their ages, are considered to be living in poverty. That comparison can be expressed as a fraction—income divided by the threshold—called the *ratio of income to poverty* (or *income-to-poverty ratio*). Those with income-to-poverty ratios of less than 1 are in poverty; those with ratios of 1 or greater are not in poverty. The ratio of income to poverty is a measure of the depth of poverty because it indicates how far income is below or above the poverty threshold. It is often expressed as a percentage: a ratio of 1 corresponds with 100% of the poverty level, a ratio of 0.5 corresponds with 50% of the poverty level, 1.25 corresponds with 125% of the poverty level, and so on.

**Figure 2** illustrates the percentage of persons aged 18 to 64 by income-to-poverty ratio (of their family) and by their own work status. Categories shown are below 50% of the poverty threshold (hereinafter referred to as *deep poverty*), 50% to 99% of the poverty threshold, 100% to 124% of the threshold (hereinafter referred to as *near poverty*), and at or above 125% of the poverty threshold (hereinafter referred to as *above-near-poverty*).

The underemployed are more likely to be in deep poverty than are persons working part-time for non-economic reasons (7.2% compared with 4.3%), but they are less likely to be in deep poverty than are nonworkers (17.0%). The underemployed are also more likely to be near poverty (just above the poverty threshold) than are nonworkers: 6.8% compared with 6.1%. Full-time workers were the least likely to be in poverty (3.3%).

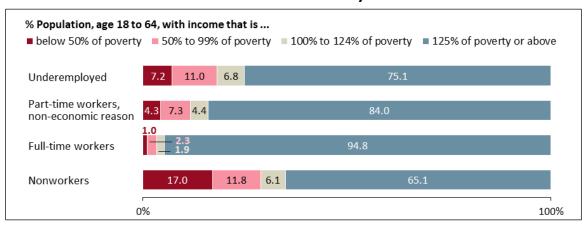


Figure 2. Percentage of Workers and Nonworkers Aged 18 to 64 by Ratio of Income to Poverty: 2020

**Source:** Congressional Research Service tabulations using data from U.S. Census Bureau, Current Population Survey (CPS), 2020 Annual Social and Economic Supplement (ASEC).

**Notes:** Underemployed refers to persons working part-time for economic reasons (i.e., persons who want and are able to work full-time but cannot find full-time work), or are working part-time temporarily because of slack work (a reduction in hours in response to unfavorable business conditions) or seasonal work.

#### **Example Family's Depiction in Figure 2**

- Skylar is included in the top bar, for underemployed, in the pink region (50% to 99% of poverty).
- Ivy appears in the third bar, for full-time workers, in the pink region (50% to 99% of poverty).
- Calvin is included in the fourth bar, for nonworkers, in the pink region.
- Olive, Rosie, and Frederika do not appear in Figure 2 because they are not in the 18 to 64 age range.

### Poverty Status by Type of Worker, Including All Other Family Members Present

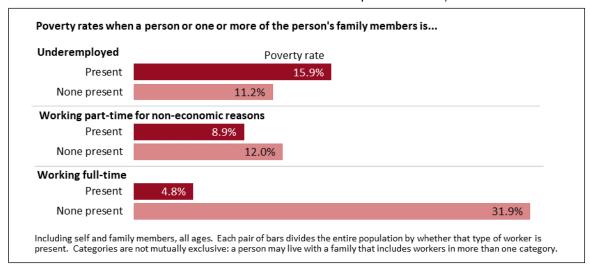
**Figure 3** uses a different approach: the categories shown are based not only on the person's own work status but also on that of their family members, to illustrate the relationship between work status and poverty so as to include all persons whose poverty status may potentially be affected by the person's work status. The categories are not mutually exclusive: a person may live simultaneously with a full-time worker, a nonworker, an underemployed worker, and a person working part-time for non-economic reasons. All persons are included in **Figure 3**, including children below working age and persons aged 65 and older who are more likely to be retired than younger persons. These groups are included because their poverty status may be affected by the work status of their family members.

Looking at all persons who were either underemployed themselves or who lived with an underemployed family member, 15.9% were in poverty, compared to 11.2% of those with no underemployed persons present. When the population is grouped differently, to pool together those who lived with someone who worked part-time for non-economic reasons compared with those who did not, the pattern is the reverse: 8.9% of those living with such a part-time worker

were below poverty, compared to 12.0% of those who did not. This difference reflects the difference in economic circumstances between the two types of part-time workers, and that, of these two types of part-time work, underemployment is more closely associated with poverty. The starkest difference in poverty rates is seen between those who lived with a full-time worker versus those who did not: 4.8% of those who lived with such a worker were in poverty, compared to 31.9% of those who did not.

Figure 3. Poverty Rates of Persons by Type of Worker(s) Present in the Family: 2020

(Poverty rates in percentages. Includes persons of all ages. Unrelated individuals are treated as one-person families.)



**Source:** Congressional Research Service tabulations using data from U.S. Census Bureau, Current Population Survey (CPS), 2020 Annual Social and Economic Supplement (ASEC).

**Notes:** *Present* indicates persons who are either the worker themselves or live with a family member who is that type of worker. *Not present* indicates persons who are not that type of worker and do not live with any family members who are that type of worker. Categories are not mutually exclusive: a person may live in a family with a member who is underemployed, another member working part-time for non-economic reasons, and another member working full-time.

#### **Example Family's Depiction in Figure 3**

This figure examines the relationship between type of work status and poverty, looking at one type of work status at a time, and looking at the type of work's effect on poverty throughout the whole population. The whole population is included because one family member's work status affects the poverty status of all other family members present. All six family members are eligible to be included in Figure 3 because the population measured includes all ages.

Each red bar answers the question, "if you or a family member are [type of worker], how likely are you to be in poverty?"

Each pink bar answers the question, "if neither you nor any of your family members were [type of worker], how likely are you to be in poverty?"

- All six family members appear in the top red bar in Figure 3, because Skylar is underemployed (meaning that
  for the rest of the family members, an underemployed family member is present), and the family is in poverty.
- All six family members also appear in the middle red bar in Figure 3 because Olive is a part-time worker for non-economic reasons, meaning that for the rest of the family, a part-time worker for non-economic reasons is present, and they all are in poverty.
- All six family members also appear in the bottom red bar in Figure 3 because they are in poverty and because
  lvy works full-time.

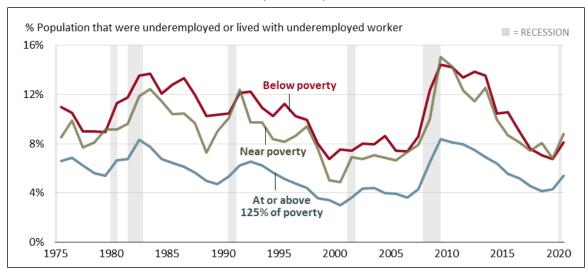
**Figure 4** focuses on patterns over six business cycles by showing percentages of the poverty, near poverty, and above-near-poverty populations that were composed of persons who were underemployed or who lived with an underemployed family member. Over the time period shown, between 6% and 15% of the population below poverty were underemployed themselves or lived with a family member who was underemployed. This percentage fluctuated over the courses of past business cycles in a pattern similar to that shown in **Figure 1** for the underemployed workers themselves. These percentages help to characterize the share of the poverty population affected in some way by underemployment: it is a lower percentage than those affected by unemployment, <sup>18</sup> but underemployment's cyclicality may be relevant for policymakers interested in alleviating poverty, especially during and immediately following recessions, when the share of the poverty population that lived with an underemployed worker also tended to spike.

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<sup>&</sup>lt;sup>18</sup> Between 1987 and 2020, between 15% and 30% of the population below poverty was *unemployed* at some time during the year (i.e., wanted and looked for a job and did not obtain one) or lived with a family member who was unemployed; Congressional Research Service tabulation using data from the U.S. Census Bureau, Current Population Survey, 1988-2021 Annual Social and Economic Supplements.

Figure 4. Percentages of the Population Below Poverty, Near Poverty, and At or Above 125% of Poverty, that Were Underemployed or Lived With an Underemployed Worker

(1975-2020)



**Source:** Congressional Research Service tabulations using data from the U.S. Census Bureau, Current Population Survey (CPS), 1976-2021 Annual Social and Economic Supplements (ASECs). Recession dates are from the National Bureau of Economic Research (NBER), at https://www.nber.org/cycles.html.

**Notes:** Underemployed refers to working part-time for economic reasons: persons who want to and are available to work full-time but cannot find full-time work, or are working part-time due to slack work (a reduction in hours in response to unfavorable business conditions) or seasonal work. Below poverty reflects income below 100% of the poverty threshold; near poverty reflects income from 100% to below 125% of the poverty threshold.

#### **Example Family's Depiction in Figure 4**

The dark red line (below poverty) is similar to the top red bar of Figure 3—below poverty, with at least one underemployed worker present (either themselves or a family member). Like Figure 3, this includes persons of all ages. The example family is included in the dark red line, in the data point for 2020, but it is not known what their poverty status was in previous years.

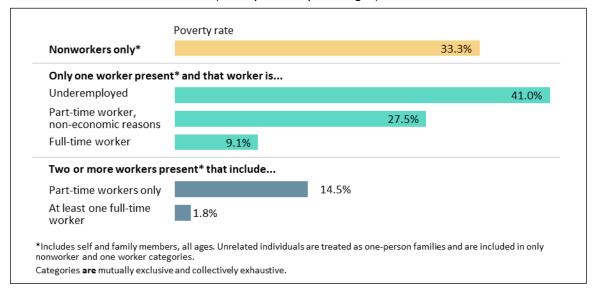
The beige and blue lines also show persons with an underemployed worker present (which includes underemployed individuals not living with family members, and entire families with one or more underemployed members). The beige line includes those who are in near poverty, and the blue line those at or above near poverty.

### Poverty Status by Number and Type of Workers Present

**Figure 5**, unlike **Figure 3**, divides the entire population into mutually exclusive groups. While **Figure 3** focuses on the broadest reach of a person's work status on their own and others' poverty status, **Figure 5** focuses on the composition of the U.S. population by the number and type of workers present. As noted previously, the focus is to illustrate the poverty status of the entire population as it relates to the number and type of workers present, so children and retirees are included.

As is shown in **Figure 3**, persons working full-time, or families with a full-time worker present, have the lowest poverty rates. Furthermore, families with multiple part-time workers have poverty rates that are higher than those with one full-time worker and no other workers.<sup>19</sup>

Figure 5. Poverty Rates by Number and Type of Workers Present in the Family: 2020 (Poverty rates in percentages.)



**Source:** Congressional Research Service tabulations using data from the U.S. Census Bureau, Current Population Survey, 2021 Annual Social and Economic Supplement.

**Notes:** The categories shown include persons of all ages, including those not of working age, by the number and type of workers in the family (if any family members are present). Unrelated individuals are treated as one-person families, and are included in the "nonworkers only" category and the "one worker present" categories, but not in families with "two or more workers present." In families with two or more workers, part-time workers include both those working part-time for non-economic reasons and underemployed workers.

#### **Example Family's Depiction in Figure 5**

This figure divides the population into mutually exclusive and collectively exhaustive categories. Every person in poverty is represented in one of the bars shown. All family members are tallied into the same bar.

In the example family, three workers are present: Ivy, Skylar, and Olive. Because at least one of the workers (Ivy) is a full-time worker, all of the family members, including Calvin, Frederika, and Rosie, are tallied into the bottommost bar.

Looking at persons who lived with one worker only, one who was a part-time worker, those who lived with an underemployed worker had a poverty rate almost one-and-a-half times higher than those who lived with someone who was working part-time for non-economic reasons: 41.0% versus 27.5%. Again, whether the part-time work is for economic or non-economic reasons affects the economic circumstances of the person and the person's family.

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<sup>&</sup>lt;sup>19</sup> By definition, unrelated individuals do not live with any family members, and as a result cannot have two or more workers present—only one (themselves) or none.

Those in the nonworkers only category also had a high poverty rate (33.3%). This is lower than the rate for those who were underemployed themselves or living with a single underemployed worker, but recall that the nonworkers only category includes persons who may have been retired and may have had sources of income other than a currently held job.

## Conclusion

This report examines the underemployed population—those who were available to work and wanted to work full-time but could not for economic reasons: either they could not find full-time work or their current job had reduced their hours to part-time status because not enough work was available. The underemployed population has historically had higher poverty rates than those working part-time for non-economic reasons, as well as the population working full-time. Underemployment follows patterns over the business cycle that are similar to those of both poverty and unemployment: rising during and immediately following recessions, and falling during expansions, which suggests there may be a connection among these trends. Over the past 45 years, between 6% and 15% of the population below poverty either was underemployed themselves or lived with an underemployed family member. Because poverty is measured at the family level (for those who live in families), underemployment is associated with a vulnerability to poverty not only among the workers themselves but also their family members.

Underemployment's relevance to poverty may be interpreted several ways. The underemployed population, and their family members, have lower poverty rates than those with no job at all—and nonworkers constitute the greatest share of the poverty population old enough to work. Those who are underemployed and are still below poverty are less likely to have incomes below 50% of their poverty threshold (deep poverty) compared with those without jobs. However, if the expectation is that having a job, even a part-time job, is enough to protect people and their families from poverty, historically that expectation has not been met. Because the similar up-and-down patterns of unemployment rates, underemployment rates, and poverty rates over the course of business cycles suggest there may be a connection between these trends, policymakers who want to alleviate poverty may be interested in the connection between the availability of jobs and the types of jobs available over the course of the business cycle.

# **Appendix. Monthly Estimates Since 2019**

The official poverty measure is available on an annual basis only (it is released every September). Except for the poverty rate, **Table A-1** below shows the same categories that were displayed in **Figure 1**: percentages of the civilian noninstitutional population age 16 and older that were unemployed, underemployed, and working part-time for non-economic reasons. These same data are plotted in **Figure A-1** for a clearer view of these monthly data.

Table A-I. Percentage of the Civilian Noninstitutional Population Age 16 and Older by Work Status

Month and Year	Unemployed	Underemployed	Part-Time for Non-economic Reasons
January 2019	2.5	2.0	7.9
February 2019	2.4	1.7	8.0
March 2019	2.4	1.7	8.1
April 2019	2.3	1.8	8.1
May 2019	2.3	1.7	8.2
June 2019	2.3	1.6	8.1
July 2019	2.3	1.5	8.1
August 2019	2.3	1.7	8.2
September 2019	2.2	1.6	8.2
October 2019	2.3	1.6	8.2
November 2019	2.3	1.6	8.2
December 2019	2.2	1.6	8.2
January 2020	2.2	1.6	8.4
February 2020a	2.2	1.7	8.4
March 2020a	2.8	2.2	7.7
April 2020a	8.9	4.1	4.6
May 2020	8.1	4.0	5.4
June 2020	6.8	3.4	6.4
July 2020	6.3	3.2	6.7
August 2020	5.2	2.9	7.0
September 2020	4.8	2.4	7.1
October 2020	4.2	2.5	7.3
November 2020	4.1	2.5	7.0
December 2020	4.1	2.3	6.8
January 2021	3.9	2.2	6.9
February 2021	3.8	2.3	6.9
March 2021	3.7	2.2	7.2
April 2021	3.8	2.0	7.2

Month and Year	Unemployed	Underemployed	Part-Time for Non-economic Reasons
May 2021	3.6	2.0	7.2
June 2021	3.6	1.7	7.6
July 2021	3.3	1.7	7.5
August 2021	3.2	1.7	7.7

**Source:** Congressional Research Service, using data from the Bureau of Labor Statistics, Current Population Survey (CPS), dataset series LNU00000000 (civilian noninstitutional population age 16 and older), LNS13000000 (unemployed population, seasonally adjusted), LNS12032197 (working part-time for economic reasons, in non-agricultural industries, seasonally adjusted), and LNS12032200 (working part-time for non-economic reasons, in non-agricultural industries, seasonally adjusted). Recession date obtained from the National Bureau of Economic Research (NBER), http://www2.nber.org/cycles/.

**Notes:** Underemployed reflects part-time work for economic reasons: working fewer than full-time hours (35 hours per week) because full-time work was not available or because of slack work (a reduction in hours in response to unfavorable business conditions) or seasonal work. For a glossary of other terms, see https://www.bls.gov/bls/glossary.htm.

a. NBER determined that a recession began in February 2020 and ended in April 2020.

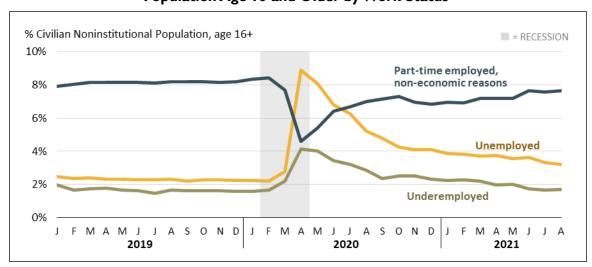


Figure A-1. Percentage of the Civilian Noninstitutional Population Age 16 and Older by Work Status

**Source:** Congressional Research Service, using data from the Bureau of Labor Statistics, Current Population Survey (CPS), dataset series LNU00000000 (civilian noninstitutional population age 16 and older), LNS13000000 (unemployed population, seasonally adjusted), LNS12032197 (working part-time for economic reasons, in non-agricultural industries, seasonally adjusted), and LNS12032200 (working part-time for non-economic reasons, in non-agricultural industries, seasonally adjusted). Recession dates obtained from the National Bureau of Economic Research (NBER), http://www2.nber.org/cycles/.

**Notes:** Underemployed reflects part-time work for economic reasons: working fewer than full-time hours (35 hours per week) because full-time work was not available or because of slack work (a reduction in hours in response to unfavorable business conditions) or seasonal work. For a glossary of other terms, see https://www.bls.gov/bls/glossary.htm. NBER determined that a recession began in February 2020 and ended in April 2020.

#### **Author Information**

Joseph Dalaker Analyst in Social Policy

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