

A PRIMER ON THE LABOR FORCE PARTICIPATION RATE IN MISSISSIPPI



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A Primer on the Labor Force Participation Rate in Mississippi

The labor force participation rate is defined by the U.S. Bureau of Labor Statistics (BLS) as “the percentage of the civilian noninstitutional population sixteen years and older that is working or actively looking for work.” Economists and others are interested in the rate because it represents a measure of labor force utilization and can provide information about the overall condition of an economy. The rate has intuitive appeal because, in general, a higher labor force participation rate implies a more productive work force and a more robust economy. In fact, a 2018 Congressional Budget Office (CBO) report states, “Greater labor force participation is associated with higher tax revenues because the number of employed people, and therefore the number of people paying income and payroll taxes, tends to rise.” The same report notes, conversely, that a lower labor force participation rate “is associated with lower gross domestic product (GDP) and lower tax revenues,” and “larger federal outlays, because people who are not in the labor force are more likely to enroll in certain federal benefit programs.” Therefore, given the importance of the labor force participation rate to an area’s overall economy, this report discusses how the rate is determined, why the rate in Mississippi is relatively low, and how Mississippi could potentially increase labor force participation.

Calculating the Rate

Before discussing the implications of the labor force participation rate for an economy, it is important to understand the details behind how the rate is computed. BLS calculates the labor force participation rate on a monthly and annual basis for the U.S., states, and selected cities. The rate is calculated as simply the sum of the employed and unemployed in a state divided by the civilian noninstitutional population, as seen below:

$$\text{labor force participation rate} = \frac{(\text{employment} + \text{unemployment})}{\text{civilian noninstitutional population}}$$

The data BLS uses in the calculation of the labor force participation rate are obtained primarily from a survey of households, sometimes referred to as the residence-based employment survey. These data are different from the payroll employment data, which are obtained from a separate survey of employers, sometimes referred to as the establishment-based survey. Additionally, unlike some countries the U.S. imposes no upper age limit on the civilian noninstitutional population used in the calculation. Thus, any individual who is employed or seeking employment, who is not housed in an institution, is not on active duty in the Armed Forces, and is at least sixteen years of age is counted in the labor force.

The simple example below illustrates the calculation of the rate. Suppose in a particular month the civilian noninstitutional population consists of 1,000 residents. Out of this population of 1,000 people, 100 are employed and 400 are unemployed, which means 500 people are currently working or are looking for work. The other 500 people in the population are neither employed nor unemployed, which means they are not currently working nor are they looking for work. The labor force participation rate is therefore 50.0 percent as seen below:

$$\text{labor force participation rate} = \frac{(100 + 400)}{1,000} = \frac{500}{1,000} = 50.0\%$$

While the calculation of the rate is relatively straightforward, understanding what does and does not affect the rate is important. For example, suppose in the following month the civilian noninstitutional population remains 1,000 residents. Further suppose 300 of the 400 individuals who were unemployed find a job with no other changes to the labor force. Therefore, the number employed is now 400 and the number unemployed is 100. The calculation of the labor force participation rate becomes:

$$\text{labor force participation rate} = \frac{(400 + 100)}{1,000} = \frac{500}{1,000} = 50.0\%$$

The rate remains 50 percent because the total number of people employed and unemployed—the total labor force—still equals 500. Thus, the movement of individuals from employed to unemployed, or vice versa, with no other changes will not affect the labor force participation rate. In order for the rate to increase, the total number of people in the labor force, or the sum of the employed and unemployed, must increase, assuming no other changes. Continuing the previous example, suppose 100 people who were not in the labor force the previous month decide to seek employment. For the purpose of calculating the labor force participation rate, whether or not these individuals actually become employed does not matter; all that matters is they at least seek employment during the particular month. Therefore, the total number of individuals in the labor force increases to 600 and the labor force participation rate rises to 60 percent ($600 \div 1,000 = 60\%$).

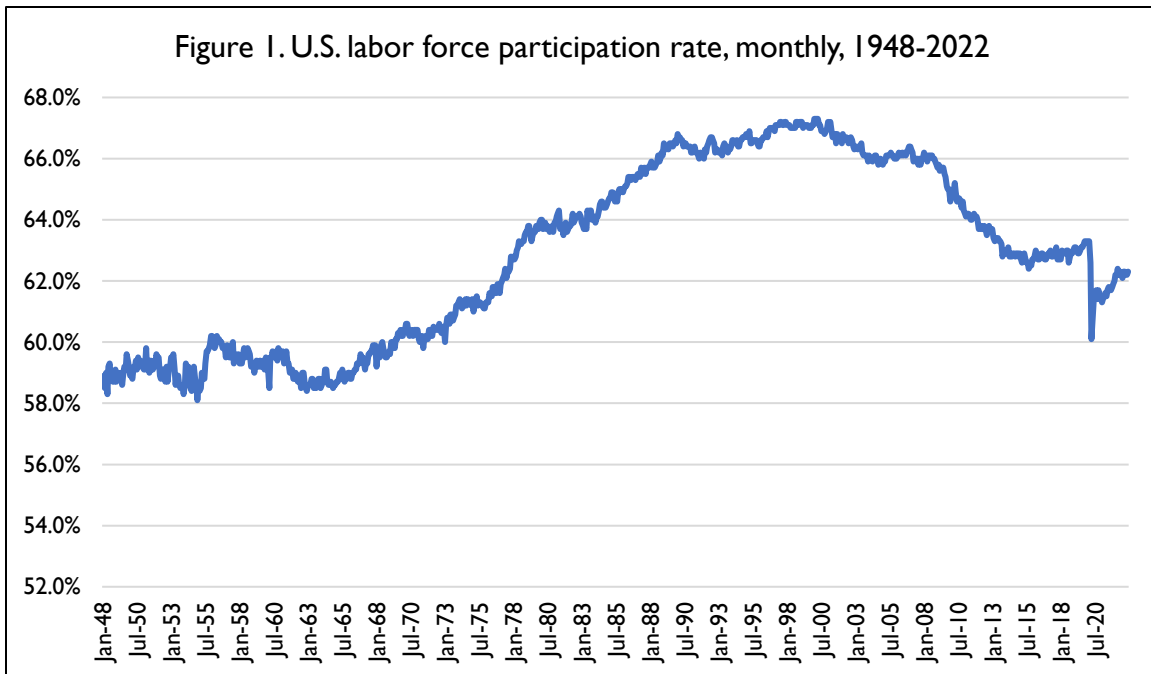
The only other way the rate can change is through a change in the civilian noninstitutional population. A change in population will typically impact the labor force, as some portion of the group that moves into or out of the economy also will either enter or leave the labor force. Suppose in the first example 100 people move into the economy and that 80 of these individuals enter the labor force. The result is an increase in the labor force participation rate because the change in the labor force is proportionally larger than the change in the population, as seen below:

$$\text{labor force participation rate} = \frac{(500 + 80)}{(1,000 + 100)} = \frac{580}{1,100} = 52.7\%$$

An increase in the population therefore will result in an *increase* in the labor force participation rate if the rate of the additional population is higher than the rate of the current population. An increase in the population will result in a *decrease* in the labor force participation rate if the rate of the additional population is lower than the rate of the current population. For example, suppose 100 people move into the economy and only 40 of these individuals are in the labor force. In this case the rate would decrease to 49.1 percent ($540 \div 1,100 = 49.1\%$). A decrease in the population will have similar results on the labor force participation rate, but in the opposite direction.

History of Labor Force Participation

BLS has calculated the rate monthly since 1948. Figure 1 depicts the monthly values of the rate from 1948 through 2022. While the rate clearly ebbs and flows with changes in the economy, Figure 1 primarily tells a story of demographics. In the post-war period, the rate remained in a relatively narrow range of 58 to 60 percent until the late 1960s. By the beginning of the 1970s, the oldest members of the Baby Boom generation began entering the labor force, including an unprecedented number of women compared to previous decades. As a result, the U.S. labor force participation rate trended up until the late 1990s and reached a peak of 67.3 percent during the first four months of 2000. The rate then trended down as members of the Baby Boom cohort began to reach retirement age. The decline accelerated with the onset of the Great Recession in late 2007 and the rate fell to 62.4 percent in September 2015. Over the next three years the rate slowly rose and peaked at 63.3 percent in late 2019 and early 2020. The onset of the COVID-19 pandemic caused the rate to tumble to 60.1 percent in April 2020, the lowest monthly level since January 1973. The rate slowly moved up over the next three years and by December 2022 reached 62.3 percent, still a full percentage point below the rate prior to the COVID-19 pandemic.



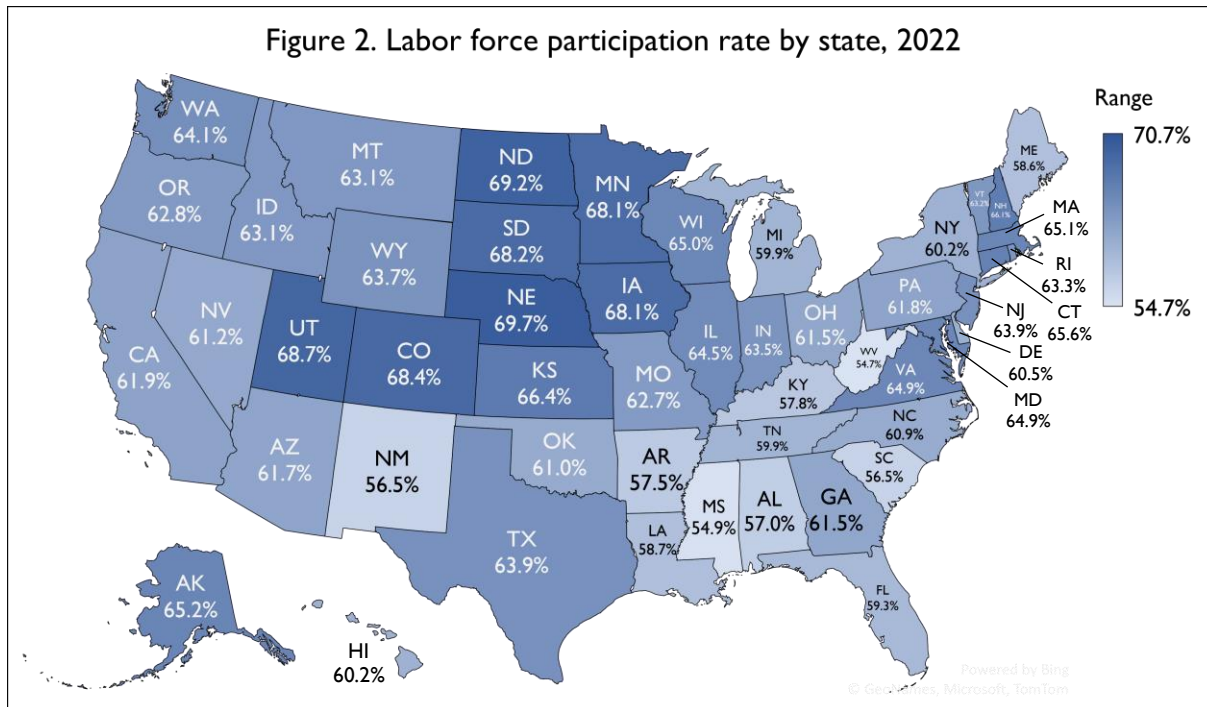
Source: U.S. Bureau of Labor Statistics.

As noted above, the aging of the labor force contributed to the fall in the labor force participation rate since 2000 as older individuals are less likely to be employed or seek employment. According to the Census Bureau the share of the U.S. population age sixty-five and older increased from 13.1 percent in 2010 to 16.5 percent in 2019 and increases occurred in all fifty states. This trend is expected to continue, as the Census Bureau projects that by 2030 the share of the U.S. population aged sixty-five and older will reach 20 percent. However, the aging of the labor force is not the only factor contributing to the decline in labor force participation in the twenty-first century. The U.S. birth rate continues a decades-long decline. In 2022 the U.S. birth rate was 11 births per 1,000 people according to United Nations data, down from about 14.5 births per 1,000 people in 2000. The United Nations projects the U.S. birth rate will continue to decline, falling below 10 births per 1,000 people by 2050. These two factors combined result in growth of the working age population, ages eighteen to sixty-four, that is only slightly positive.

More recently, the COVID-19 pandemic suppressed U.S. labor force participation. As noted above, the U.S. labor force participation rate fell to 60.1 percent in April 2020, its lowest level in almost fifty years, and only recovered to 62.3 percent by the end of 2022. While the rate would likely be below its pre-pandemic level even in the absence of COVID-19 because of the demographic trends described previously, the rate remains below the level suggested by pre-COVID-19 trends. The retirement of workers was accelerated by the pandemic, which explains a portion of the reduction in the labor force participation rate. The Conference Board notes these retirements occurred not only among those aged sixty-five and older, but among the fifty-five- to sixty-four-year-old age group as well. The Conference Board notes women were disproportionately impacted by the pandemic as well. Jobs in the service sectors were most affected by the pandemic and more women work in these jobs than in other sectors. Women tend to be the primary caregivers in families and more women left the work force to care for children or other family members during the pandemic. The return of these women to the labor force has been a slow process. However, The Conference Board also finds that the labor force participation of working-age women with bachelor's degrees or higher changed little following the pandemic. The labor force participation of working-age women with less education, on the other hand, remained below

its pre-pandemic level through 2021. The decrease in immigration during the pandemic also contributed to the decrease in labor force participation. Restrictions imposed following the onset of the pandemic caused net migration numbers to drop greatly in 2020 and 2021. Immigration numbers have increased as restrictions have eased, but labor force participation is still affected by the decline in net migration during the pandemic.

The trends in U.S. labor force participation are largely reflected at a state level as well. However, rates across individual states vary considerably. Figure 2 below depicts the labor force participation rate for each state for all of 2022. Some patterns are evident in Figure 2.

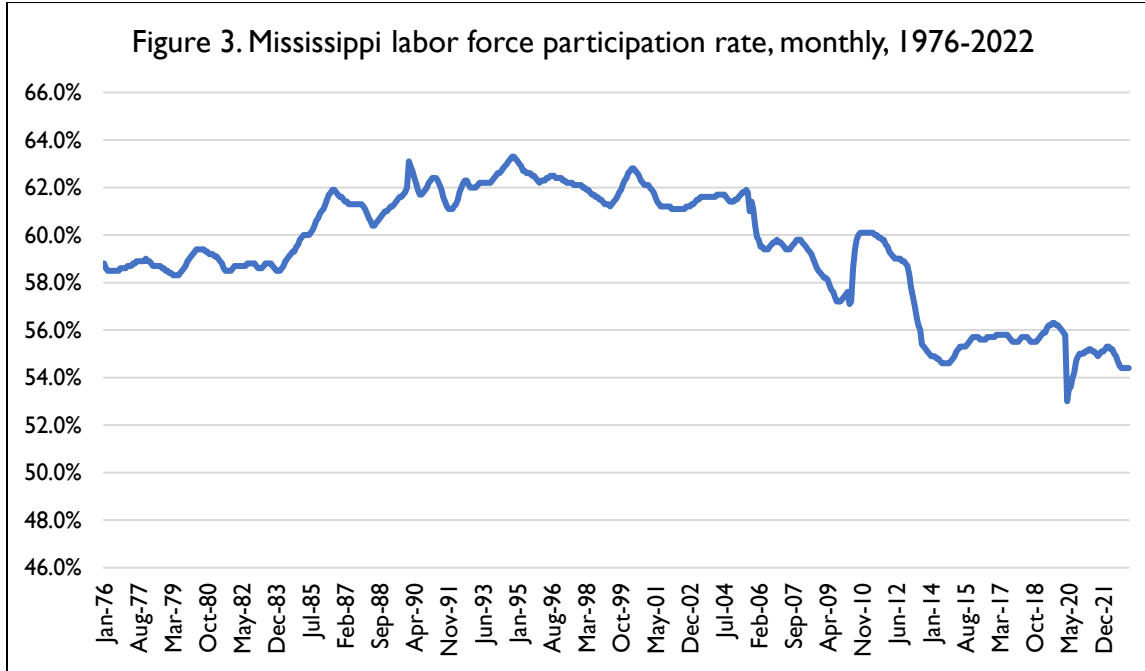


Source: U.S. Bureau of Labor Statistics.

First, the highest labor force participation rates are found in the upper Midwest states. While the District of Columbia had the highest labor force participation rate in 2022 of 70.7 percent, the highest rate among the fifty states was the 69.7 percent rate in Nebraska. The next highest rate was the 69.2 percent rate in North Dakota. The Western states of Utah and Colorado had the next highest labor force participation rates of 68.7 percent and 68.4 percent, respectively. The states of South Dakota, Iowa, and Minnesota had the next highest rates, all just over 68 percent. Second, the states with the lowest labor force participation rates generally are found in the Southeast. The state with the lowest rate in 2022 was West Virginia at 54.7 percent; Mississippi closely followed with a rate of 54.9 percent. Furthermore, the states of Alabama, Arkansas, Florida, Kentucky, Louisiana, South Carolina, and Tennessee all had labor force participation rates in 2022 that were less than 60.0 percent, although the rate in Tennessee was only slightly less at 59.9 percent. In fact, the only states outside this region with rates below 60.0 percent were Maine, Michigan, and New Mexico, and the rate in Michigan was just under 60.0 percent at 59.9 percent. On an annual basis the labor force participation rate in 2022 exceeded the rate in 2019 in four states: Alaska, New Jersey, Oregon, and Utah. The 2022 rate equaled the 2019 rate in Louisiana, Oklahoma, Texas, and West Virginia. Thus, through 2022 labor force participation in most states had not recovered to its 2019 level. Through February 2023, payroll employment equaled or exceeded the pre-pandemic level in thirty-four states. Labor force participation,

therefore, is not likely to exceed its pre-pandemic level in the foreseeable future in many states given that the demographic trends outlined above are expected to continue.

BLS has calculated the labor force participation rate for individual states since 1976. Figure 3 below depicts the monthly rate for Mississippi from 1976 through 2022.



Source: U.S. Bureau of Labor Statistics.

The labor force participation rate in Mississippi follows the general pattern of the U.S. rate since 1976—albeit at a much lower level—with some notable differences. First, the rate reached a peak value of 63.3 percent in November 1994, more than five years before the U.S. rate reached its peak. Notably, the peak rate for Mississippi coincided with some of the largest growth in the state’s economy as measured by gross domestic product, which expanded by 6.8 percent in 1994, which equaled the highest rate of expansion for the state since 1976. Second, following this peak the rate began a downward trend at a faster pace than the decline in the U.S. rate until mid-2010. At this point the rate quickly rose from 57.2 percent in May 2010 to 60.1 percent by October 2010, where it held steady until August 2011. The rate slowly decreased to 58.7 percent by December 2012. The decline in the rate then accelerated, as the rate fell to 54.6 percent by November 2014, which was the lowest recorded rate up to that point. This volatility resulted in a noticeable “bump” in the line in Figure 3 from approximately 2010 through 2013. This bump roughly coincides with the temporary increase in food stamp benefits of 13.6 percent that occurred from 2009 through 2013 as part of the American Recovery and Reinvestment Act of 2009. The provisions included work requirements for adult recipients that likely resulted in more individuals counted as part of the labor force, which caused the temporary increase in labor force participation in Mississippi as the state had and continues to have a disproportionately large number of recipients. Beginning in December 2014 the rate behaved much like the U.S. rate and slowly increased until it reached a peak of 56.3 percent in September 2019, the highest level since May 2013. The rate then declined as the pandemic took hold in 2020 and it fell to an all-time low of 53.0 percent in April 2020. Like the U.S. labor force participation rate, Mississippi’s rate quickly rebounded and over the last two years moved up and down. At the end of 2022 the rate stood at 54.4 percent, almost 2.0 percentage points below the pre-pandemic peak.

Factors Impacting Labor Force Participation in Mississippi

Why is the labor force participation rate for Mississippi persistently lower than for most of the U.S.? This question cannot be answered directly, because in its surveys BLS does not ask any respondents why they are not in the labor force. The agency only asks an individual if he or she is employed or is looking for work. Nevertheless, other surveys and research can help provide insight into this question.

The CBO report referenced previously lists numerous factors that can reduce the labor force participation rate, and several of these factors apply to Mississippi. One of these factors is education, as higher rates of educational attainment tend to be associated with higher labor force participation. The report notes that in 2017, the labor force participation rate for men aged twenty-five to fifty-four with a bachelor's degree or higher was 9 percentage points higher than for men in the same age group without a college degree. The labor force participation rate for women of the same age group with at least a bachelor's degree was 13 percentage points higher than for women in the same group without a college degree. Educational attainment in Mississippi is lower than for the U.S., as the share of the state's population aged twenty-five and older with at least a high school diploma in 2021 was 2.9 percentage points below the U.S. share. Moreover, only about twenty-five percent of Mississippians aged twenty-five and older held at least a bachelor's degree in 2021, compared to about thirty-five percent of the comparable U.S. population.

Disability is another important factor noted by CBO that reduces labor force participation and likely substantially affects the rate in Mississippi. According to the Census Bureau the share of the civilian noninstitutionalized population in Mississippi aged sixteen to sixty-four with a disability was 16.4 percent in 2021, compared to 10.7 percent for the same population in the U.S. The CBO report states that in 2017 the most common reason men aged twenty-five to fifty-four gave for not participating in the labor force was illness or disability.

Race also impacts labor force participation rates according to data from BLS. In 2021, the highest labor force participation rate among the twenty-five to fifty-four age group of the civilian noninstitutional population was for whites at 82.3 percent, closely followed by Asians at 81.0 percent. The rate for blacks or African-Americans as well as individuals of Hispanic or Latino ethnicity was 78.8 percent. Blacks aged twenty-five to fifty-four made up 4.9 percent of the U.S. population in 2021, compared to 14.0 percent of the Mississippi population. Thus, the larger share of blacks in the prime age working population of Mississippi compared to that of the U.S. likely explains part of the state's lower labor force participation rate. Notably, the CBO report mentions differences in labor force participation rates across racial groups but does not offer any potential reasons for why these differences exist.

As discussed previously, the aging of the U.S. population weighs on the nation's labor force participation rate and affects the state's rate as well. However, this particular factor likely impacts Mississippi less than the nation, as the state's population is on average slightly younger than the U.S. population as a whole. In 2022, according to the Census Bureau 23.5 percent of the state's population was under age eighteen, compared to 22.5 percent of the U.S. population.

The number of incarcerated individuals in Mississippi, while not a part of the state's civilian noninstitutionalized population and therefore not a part of the calculation of labor force participation, likely still impacts the rate. The CBO report notes, "Increases in incarceration push down the labor force participation rate because people who have been incarcerated are less likely than others to be employed in the future . . ." Two reasons are cited in the report for why formerly incarcerated individuals are less likely to be employed. One, employers are less likely to hire someone with a criminal record. Two, employers are more likely to pay lower wages to an employee who was incarcerated

compared to other workers. Both factors reduce the likelihood formerly incarcerated individuals will participate in the labor force. According to the National Institute of Corrections, in 2020 the rate of incarceration in Mississippi was 584 individuals per 100,000 people. This rate ranked sixth among all states and compared to the rate for the U.S. in 2020 of 359 individuals per 100,000 people. The relatively high rate of incarceration in Mississippi therefore likely negatively impacts labor force participation in the state.

Increasing Labor Force Participation in Mississippi

How can the labor force participation rate in Mississippi increase? The answer to this question is complex and no single solution likely exists to significantly improve the rate. Moreover, Mississippi faces the same demographic headwinds encountered by essentially all states as more workers retire and the birth rate remains relatively flat. The most obvious influences to address are the major factors outlined above: educational attainment, disability, racial disparity, and incarceration rates. However, these factors represent long-standing, systemic issues for Mississippi with implications beyond labor force participation. Some of these factors, such as how race impacts the labor force participation rate, may not be well understood. Given their deep-rooted nature, the solutions to this set of problems are complex and beyond the scope of this report. Nevertheless, there are policy-related actions the state could take to increase or promote labor force participation.

The Conference Board recently released two reports that discuss how the U.S. can improve its labor force. Some of these recommendations, such as immigration reform, largely are not applicable at a state level. However, others have the potential to effectively lift the labor force participation rate in Mississippi. One such recommendation includes public-private partnerships to increase the level of job training in the economy. These partnerships include consortiums between employers and post-secondary institutions, principally community colleges. Through these consortiums, employees can obtain newer skills sought by their employers and upgrade their marketability. Prospective employees can acquire the skills in demand by potential employers, thereby increasing the likelihood these prospective employees become part of the state's labor force. Mississippi's current workforce development agency, AccelerateMS, is already performing many of these functions through its district-based offices.

Reforming occupational licensing requirements is another recommendation. The reports contend that regulations and licensing requirements that inhibit prospective employees from going into certain jobs, or inhibit current employees from maintaining certain jobs, should be reviewed and reformed. Mississippi has moved in the direction of occupational licensing reform in recent years. For example, a new 2020 law gave the state's Occupational Licensing Review Commission the authority to review existing regulations to determine if these regulations comply with state policy. A new law enacted in 2021 allows new residents with occupational licenses from other states to transfer those licenses to Mississippi. In addition, the office of Secretary of State in Mississippi created a "Tackle the Tape" program to reform or remove additional occupational licensing requirements. As these actions are relatively recent, their impacts on the labor force participation rate in Mississippi likely will not be observed for some time.

The Conference Board recommends employers offer flexible working arrangements to assist employees or potential employees who need to care for children or other family members. In a February 2022 survey by Indeed Hiring Lab, 35 percent of female respondents and 18 percent of male respondents aged twenty-five to fifty-four cited childcare responsibilities as a reason they had not "urgently" searched for a job that month. This response rate reflects the importance of childcare options to prime working age adults. In addition to flexibility, more options to provide for the care of children and other family members likely would increase the probability prime working age adults enter

or remain in the labor force, which would raise the participation rate. Another related recommendation calls on employers to create programs that will allow women who exited the labor force to continue training and maintain a relationship with firms.

Similarly, flexible work arrangements might help firms retain older workers as well. As mentioned, a number of workers chose retirement after the onset of the pandemic and have not returned to the labor force. These retirees, some of whom were early retirees, are one of the reasons the labor force participation rates in the U.S. and most states remain lower than the rates prior to the pandemic. The Conference Board recommends firms allow older employees to use nonwage benefits that in most instances only full-time employees can utilize. Other recommendations that could encourage older workers to remain in the labor force, such as Social Security reforms, would require action at a federal level.

Another recommendation from The Conference Board is to encourage employers to hire based on skills as opposed to credentials. The Board describes this as “competency-based” employment and recommends the practice for promotion as well.

Estimating the Economic Impact of Higher Labor Force Participation

Some relatively basic calculations will result in a rough approximation of the impacts of higher labor force participation on the Mississippi economy. As noted earlier, the labor force participation rate in Mississippi in 2022 was 54.9 percent; the U.S. rate was 62.2 percent. If Mississippi had a labor force participation rate equal to the U.S. rate in 2022, then the state’s labor force would have been larger by about 167,000 individuals (civilian noninstitutionalized population of 2,279,804 × 62.2%). Assuming the same unemployment rate in Mississippi in 2022 of 3.9 percent, the number of employed in the state would have been higher by approximately 160,500 individuals, about a 13.4 percent increase. Under the assumption all of these individuals worked in 2022, it is possible to estimate their impact on the size of the Mississippi economy. The Bureau of Economic Analysis (BEA) derives GDP for states from incomes earned and costs of production. Personal income in Mississippi in 2022 was almost \$136 billion. Adjusting this value for inflation results in real personal income of \$106.7 billion, a number similar to the real GDP value for the state in 2022 of \$104.5 billion. Subtracting the inflation-adjusted value for transfer payments results in a real income earned value in 2022 of about \$78.5 billion. Dividing this value by the number employed in the state in 2022 of 1,201,880 results in a real income earned per employed individual of about \$65,300. Finally, multiplying this real income per employed individual by the additional number of employed estimated above of 160,500 results in additional real income earned in Mississippi of almost \$10.5 billion. Since this income value is analogous to GDP, the estimate of the increase to real GDP in Mississippi in 2022 from a labor force participation rate equal to the U.S. rate also would have been about \$10.5 billion, a 10.0 percent increase.

Summary and Conclusions

The labor force participation rate is an important economic statistic but one that is also not well understood by the general public. The rate can reveal much about the overall strength of an economy from a labor market perspective, as higher labor force participation rates are generally associated with higher GDP and tax revenues. This report discusses the calculations behind the rate, why the rate in Mississippi is relatively low compared to most states and the U.S., and potential ways Mississippi could increase labor force participation. Mississippi’s labor force participation rate is relatively low primarily due to the following factors: educational attainment, disability, racial disparities, and incarceration rates. Like almost all states, labor force participation in Mississippi faces downward pressure from an aging population and an essentially flat birth rate. The primary sources of low labor force participation in Mississippi represent systemic issues that will require more complex solutions than addressed by this

report. However, recent reports from The Conference Board include several recommendations with the potential to increase the labor force participation rate in the state. These include job training partnerships, occupational licensing reforms, flexible working arrangements for primary caregivers, accommodations for older workers, and “competency-based” hiring. This list of actions, while not comprehensive, represents the potential to increase participation in the labor force in Mississippi and lead to a more robust, dynamic economy.

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