

2012

Labor Force Participation in Mississippi and Other Southern States: Summary Report

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Upjohn Institute Technical Report No. 12-026

Citation

Lachowska, Marta, and Stephen A. Woodbury with the assistance of Jing Cai, Francesca Fazio, Brian Pittelko. 2012. "Labor Force Participation in Mississippi and other Southern States: Summary Report." Upjohn Institute Technical Report No. 12-026. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. <http://dx.doi.org/10.17848/tr12-026>

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Labor Force Participation in Mississippi and Other Southern States

Summary Report

Upjohn Institute Technical Report No. 12-026

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Final, March 2012

1. Introduction

Labor force participation is a key social indicator because the economic performance of a state and the well-being of its residents are closely tied to labor force outcomes. Together, the labor force participation rate (**LFPR**) and the unemployment rate are of paramount concern to state governments because work and earnings from employment are central determinants of living standards.

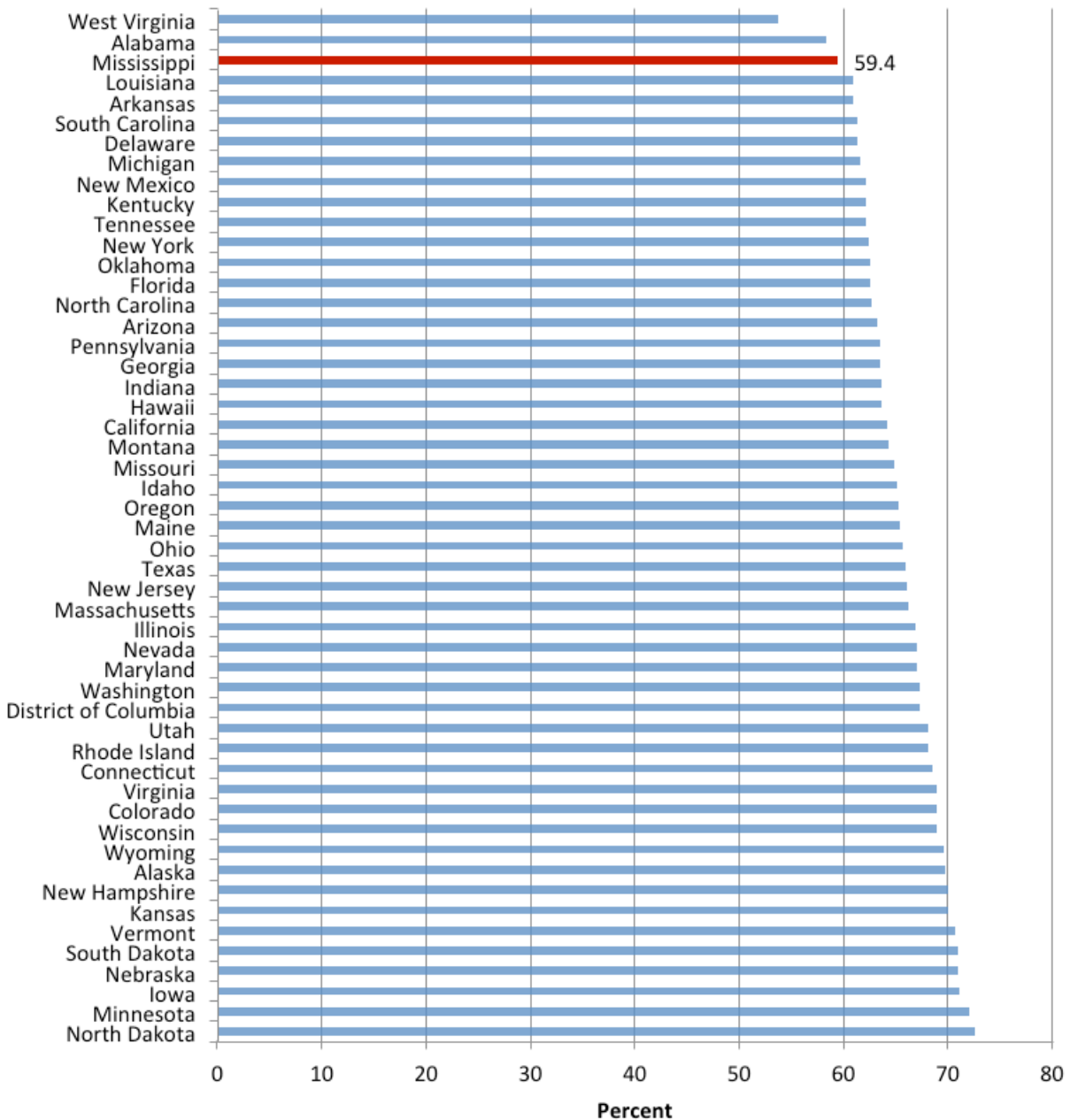
The State of Mississippi has historically had one of the lowest LFPRs in the United States. As Figure 1 shows, in 2010, Mississippi had the third lowest LFPR in the United States.

The LFPR gap between Mississippi and other states is longstanding. Figure 2 shows time series of the the LFPRs of Mississippi and two groups of comparison states:

- **Neighboring States:** The four states contiguous with Mississippi — Louisiana, Arkansas, Tennessee, and Alabama
- **Blueprint States:** The Neighboring States plus Texas, Oklahoma, North Carolina, South Carolina, Kentucky, Georgia, and Florida (the 12 states chosen by the State of Mississippi in crafting its “Blueprint Mississippi”)

Figure 2 shows that LFPRs in Mississippi, the Neighboring States, and the Blueprint States all trended upward from the mid 1970s until the mid 1990s, following a broad national trend (Juhn and Potter 2006; DiCecio, Engemann, Owyang, and Wheeler 2008). Since the mid 1990s the LFPRs in Mississippi and the comparison states have all fallen—a trend that started even before the recession of 2001.

Figure 1: Labor Force Participation Rates for the 50 States and D.C., 2010



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS).

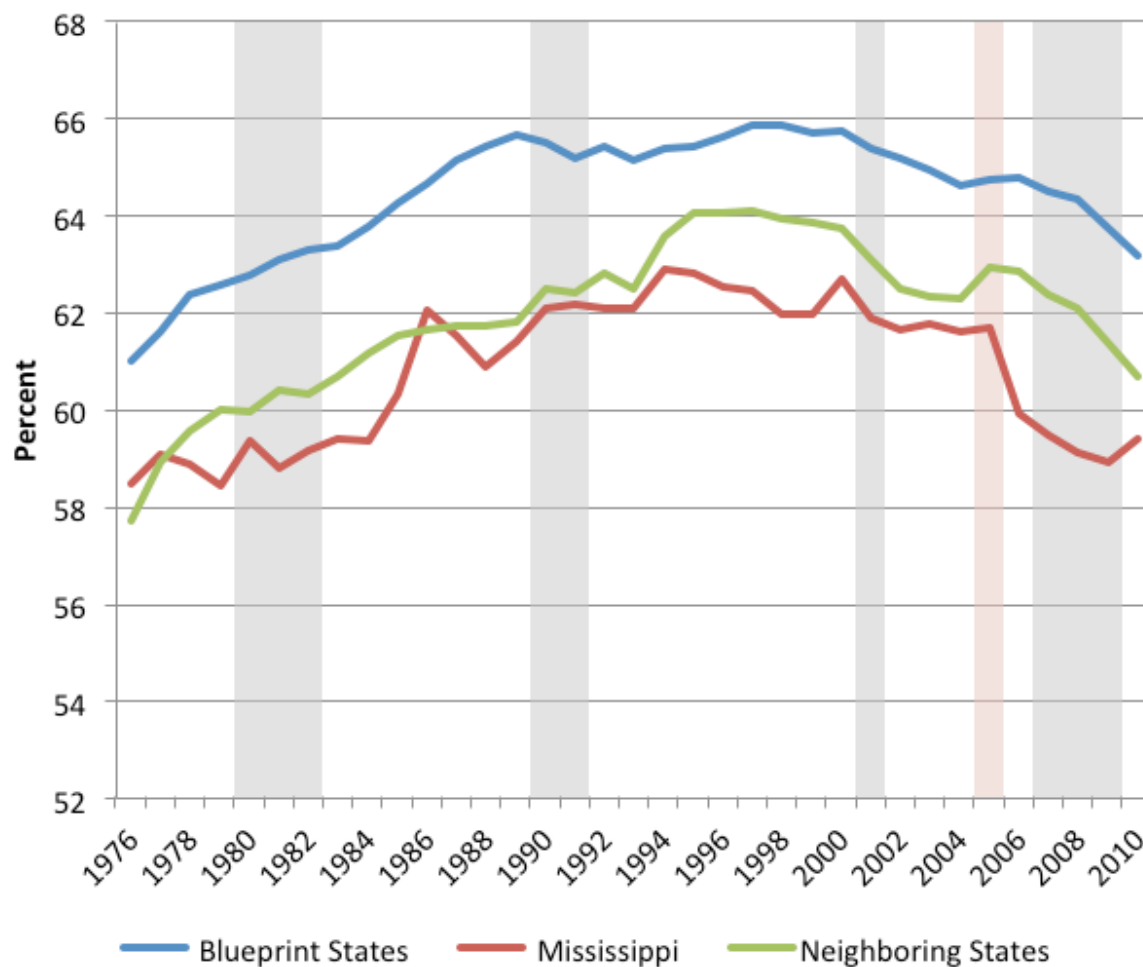
Two differences between Mississippi and the comparison states stand out:

- Throughout this time period, Mississippi's LFPR has been 1–2 percentage points below the LFPR of the Neighboring States, and 3–4 percentage points below the LFPR of the Blueprint States.
- Mississippi's LFPR dropped by nearly 2 percentage points following Hurricane Katrina in August 2005, creating an even larger-than-usual gap between Mississippi and the comparison states.¹

Only in 2010 did Mississippi's LFPR recover to its “usual” level in relation to the comparison states—about 1 percentage point below the Neighboring States, and about 4 percentage points below the Blueprint States.

¹ On the labor market effects of Hurricane Katrina, see Groen and Polivka (2008).

Figure 2: Labor Force Participation Rates in Mississippi, Neighboring States, and Blueprint States, 1976–2010



Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics.
Note: Gray bars indicate recessions as defined by the National Bureau of Economic Research (NBER).
Pink bar indicates 2005, the year of Hurricane Katrina.

2. Labor Force Participation Rates of Population Subgroups

We follow a long tradition in the analysis of labor force participation and examine five subgroups of the civilian non-institutional population:

- Men, ages 25–54
- Married Women, ages 25–54
- Single Women (never married, divorced, and widowed), ages 25–54
- Older Persons, ages 55 and older
- Younger Persons, ages 16–24

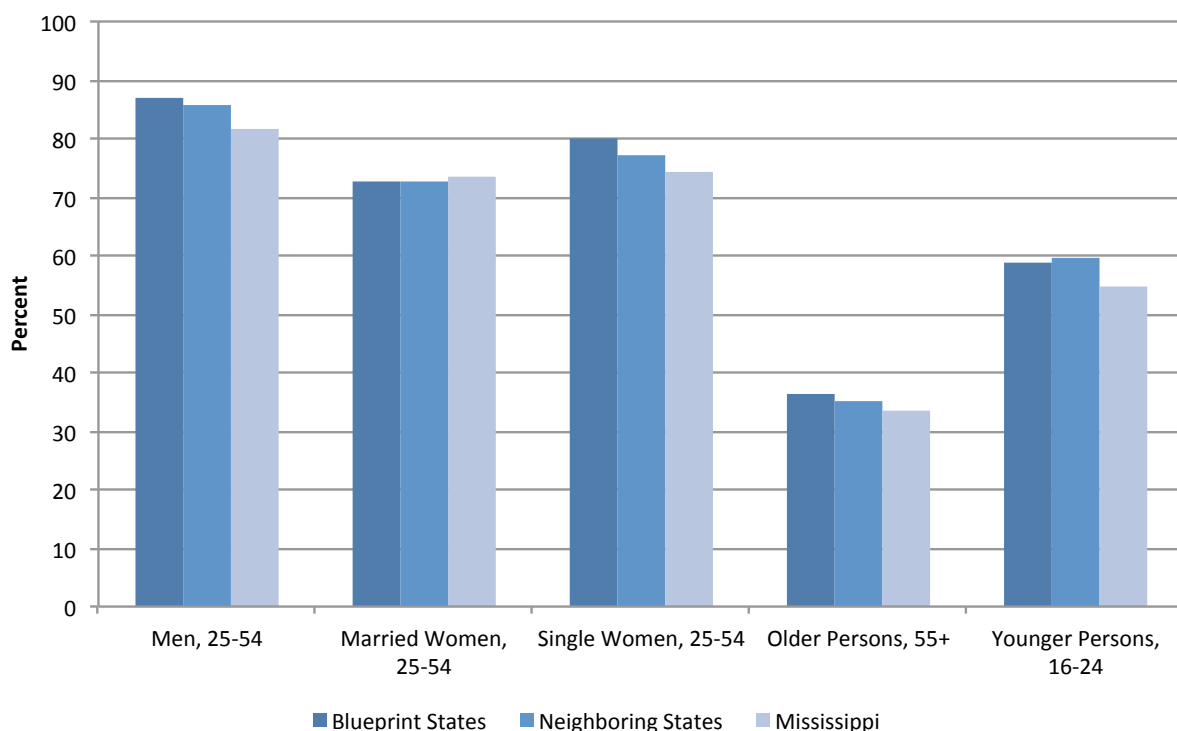
This is a natural division of the population for analyzing labor force participation because each of the five groups has shown substantially different labor force behavior, as Figure 3 shows.²

- Men 25–54, sometimes called “prime-age males,” have traditionally been the most active labor force participants, with LFPRs approaching 90 percent in some years.
- Married Women 25–54 showed dramatic growth in labor force participation in the years following World War II, as they substituted work in the labor market for work at home. Their LFPRs are now within 10–15 percentage points of prime-age males.
- Single Women 25–45 have long had LFPRs approaching those of prime-age men.
- Older Persons have the lowest LFPRs of the five groups because they are prone to retirement.

² This division of the population originates with Bowen and Finegan (1969).

- Younger Persons have lower LFPRs than people aged 25–54 partly because they are still in school (or other training), and partly because they have less human capital and earnings capacity than older people and have limited opportunities in the labor market.

Figure 3: Labor Force Participation Rates of Population Subgroups in Mississippi, Neighboring States, and Blueprint States, 2009



Source: Authors' calculations from the 2009 ACS-IPUMS.

Figure 3 shows that, except in the case of married women, the LFPRs of the Mississippi population are lower than those in the comparison states. Specifically, the LFPR gap between Mississippi and the comparison states are:

- 4–5 percentage points for Men 25–54
- 2.75–5.5 percentage point for Single Women 25–54

- 1.5–3 percentage points for Older Persons
- 4–5 percentage points for Younger Persons

Married Women in Mississippi are the exception here — their LFPR is on a par with the Blueprint States, and nearly 1 percentage point higher than the Neighboring States. The remainder of this summary examines the reasons for these differences between Mississippi and the comparison states.

3. Key Differences Between Mississippi and the Comparison States

The LFPR differences between residents of Mississippi and the comparison states may be attributable to a range of factors, some measurable, others difficult to quantify. This section highlights some key measurable differences between Mississippi and the comparison states — differences that our subsequent analysis suggest contribute to Mississippi's lower LFPR.

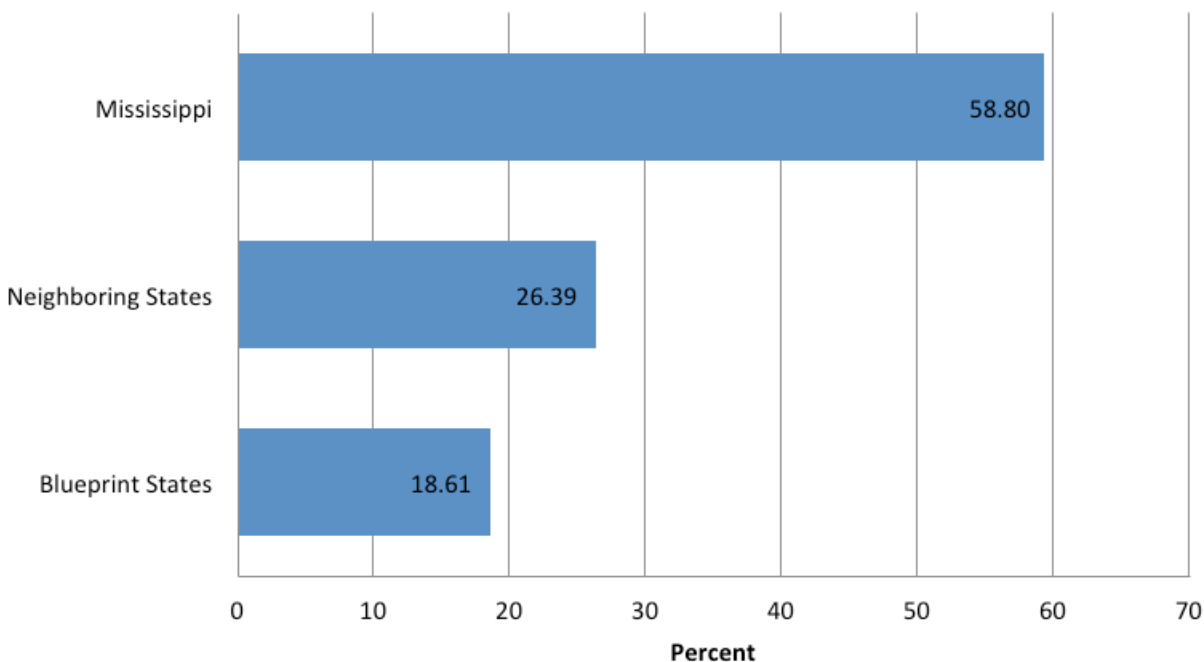
Non-Metropolitan Residence

The most dramatic difference between Mississippi and the comparison states is that a far larger percentage of Mississippi's residents live in Non-Metropolitan areas:

- Nearly 60 percent of Mississippi's residents lived in Non-Metropolitan areas in 2009, compared with 26 percent in Neighboring States, and 19 percent in the Blueprint States — see Figure 4A.

Mississippi's high percentage of Non-Metropolitan residents reflects its agricultural and rural history, although it is perhaps surprising that the differences between Mississippi and other states are so sharp given that many of those states also have rural and agricultural origins.

Figure 4A: Differences Between Mississippi, Neighboring States, and Blueprint States in the Fraction of Residents Living Outside of Metropolitan Areas, 2009



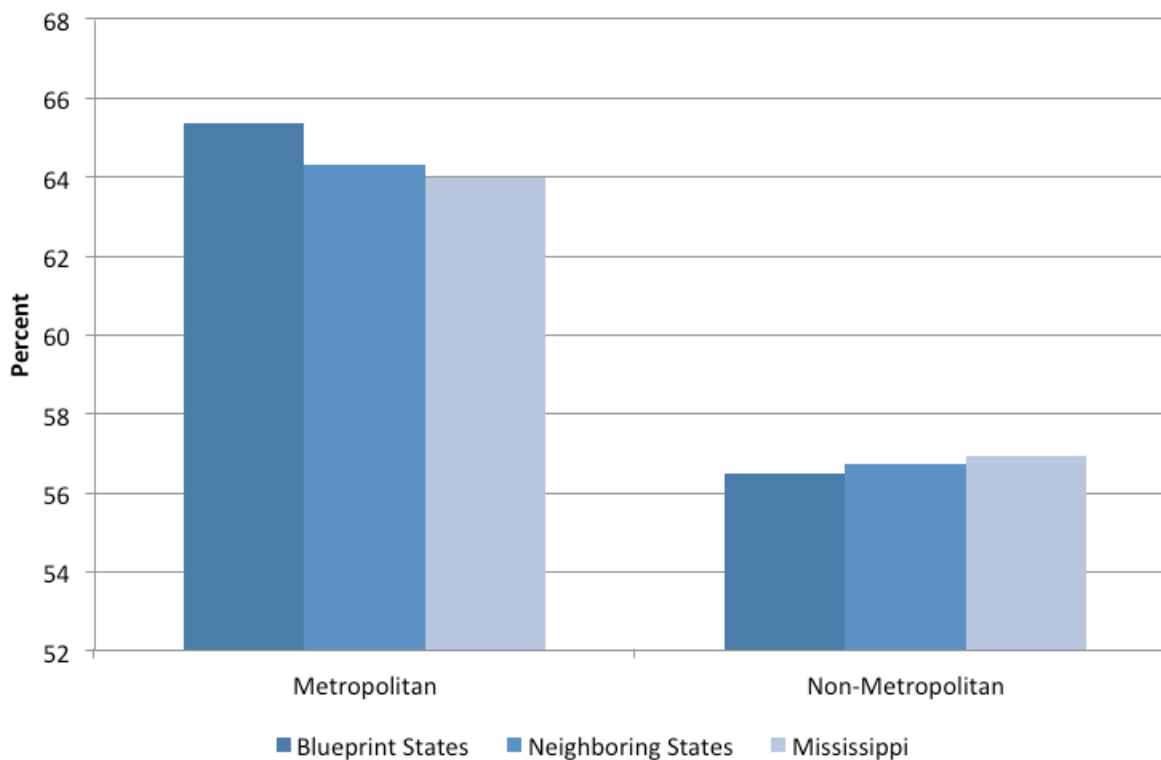
Source: Authors' calculations from the 2009 ACS-IPUMS.

These differences matter because residents of Non-Metropolitan areas have significantly lower LFPRs than do residents of Metropolitan areas, as Figure 4B shows:

- The LFPRs of Metropolitan residents are 64–66 percent, whereas the LFPRs of Non-Metropolitan residents are 56–57 percent.

Accordingly, Mississippi's mix of Metropolitan and Non-Metropolitan residents — which is skewed toward Non-Metropolitan residents — is one likely explanation of the LFPR gap between Mississippi and the comparison states.

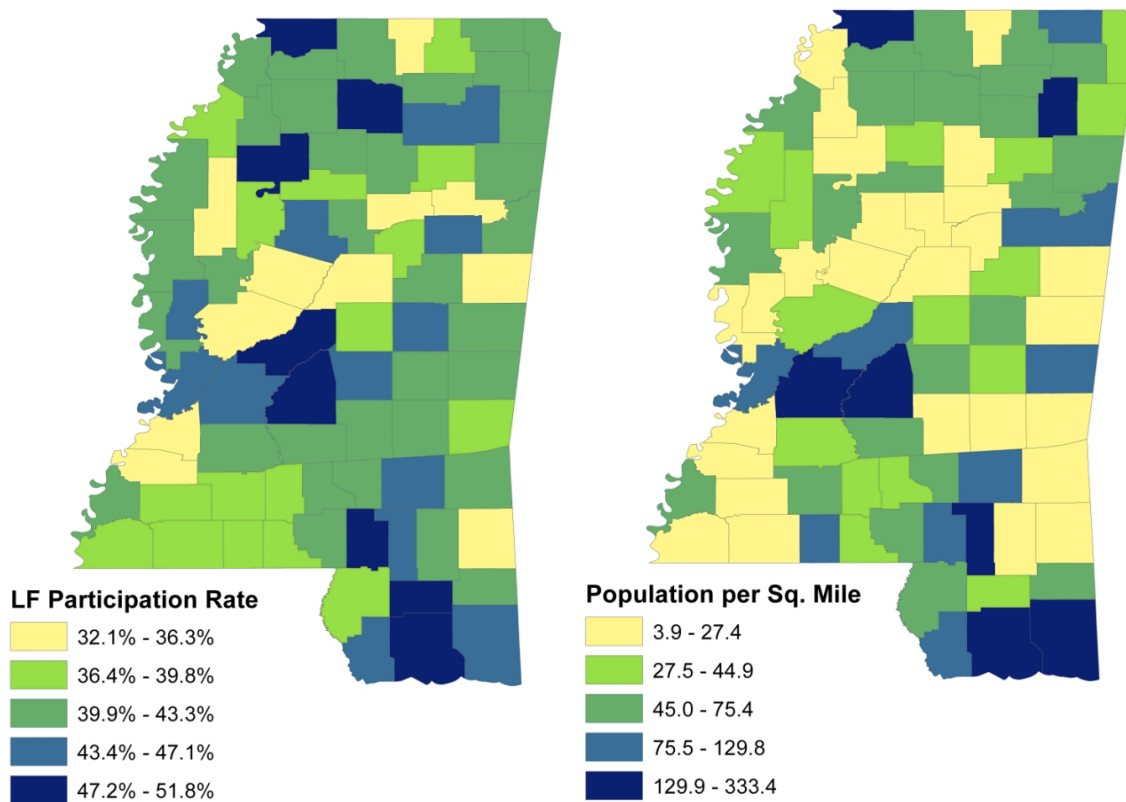
Figure 4B: Labor Force Participation Rates in Metropolitan and Non-Metropolitan Areas of Mississippi, Neighboring States, and Blueprint States, 2009



Source: Authors' calculations from the 2009 ACS-IPUMS.

Figure 4C gives further evidence of the relationship between Non-Metropolitan residence and labor force participation. The map on the left shows the LFPR of each Mississippi county, and the map on the right shows the population density of each county. The correlation between counties with a low LFPR (tan and bright green) and counties with low population density (again, tan and bright green) is evident. Similarly, counties with a high LFPR (blue and dark blue) tend to have high population density (again, blue and dark blue).

Figure 4C: Labor Force Participation Rates and Population Densities in Mississippi Counties, 2009



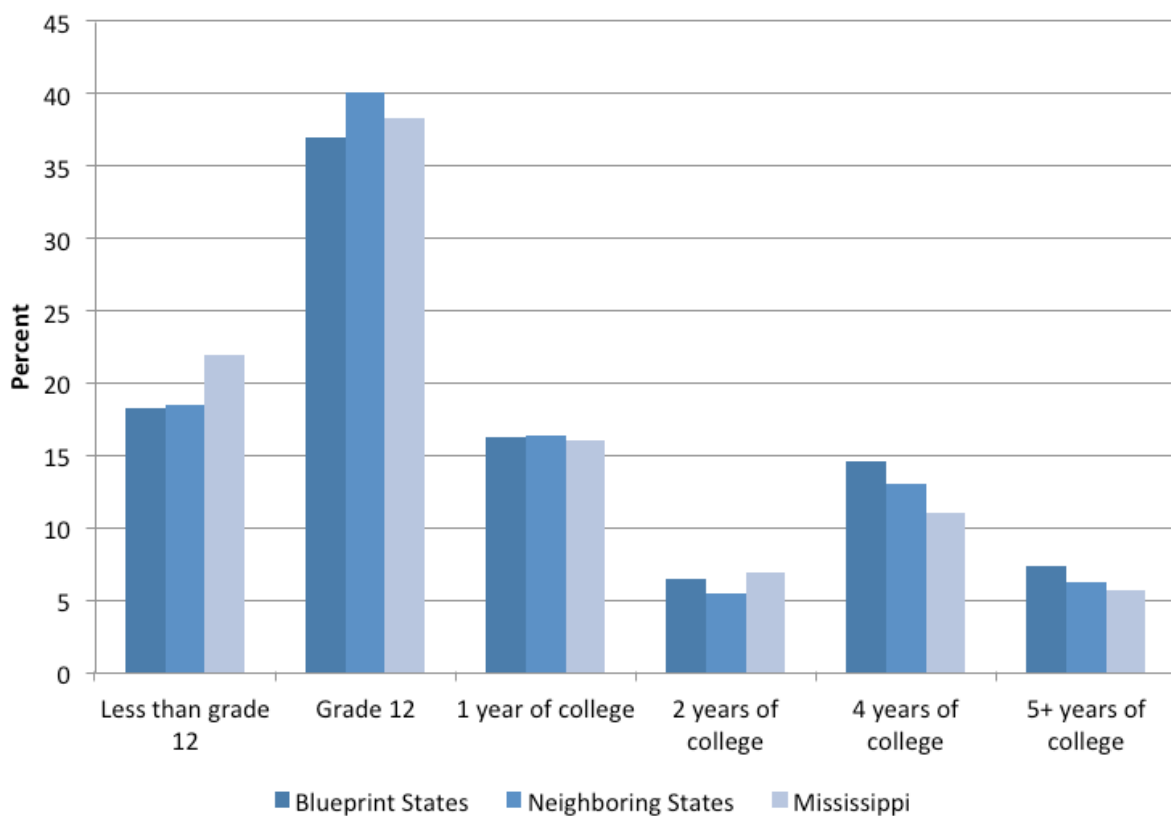
Source: Labor force data from Bureau of Labor Statistics, Local Area Unemployment Statistics (<http://www.bls.gov/lau/>). Population data from the U.S. Census Bureau's Population Estimates program (<http://www.census.gov/popest/estimates.html>).

Educational Attainment

A second important difference between Mississippi and the comparison states is the educational attainment of their residents, as Figure 5A shows:

- Compared with the Neighboring States and the Blueprint States, a higher percentage of Mississippi residents had not completed high school, and a lower percentage who were college graduates (or had more than a college education).

Figure 5A: Educational Attainment in Mississippi, Neighboring States, and Blueprint States, 2009

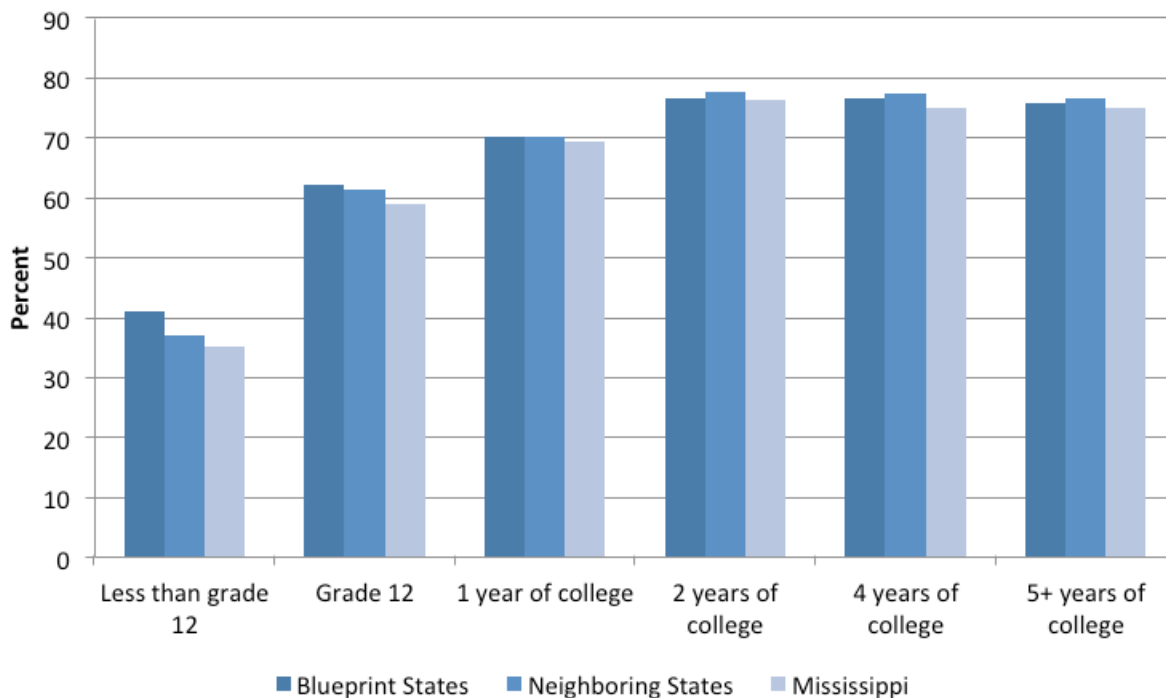


Source: Authors' calculations from the 2009 ACS-IPUMS.

This is another set of important differences because labor force participation tends to increase with higher educational attainment, as Figure 5B shows:

- The LFPRs of individuals with less than a high school diploma or only a high school diploma are substantially lower than the LFPRs of individuals with higher educational attainment.

Figure 5B: Labor Force Participation Rates by Educational Attainment in Mississippi, Neighboring States, and Blueprint States, 2009



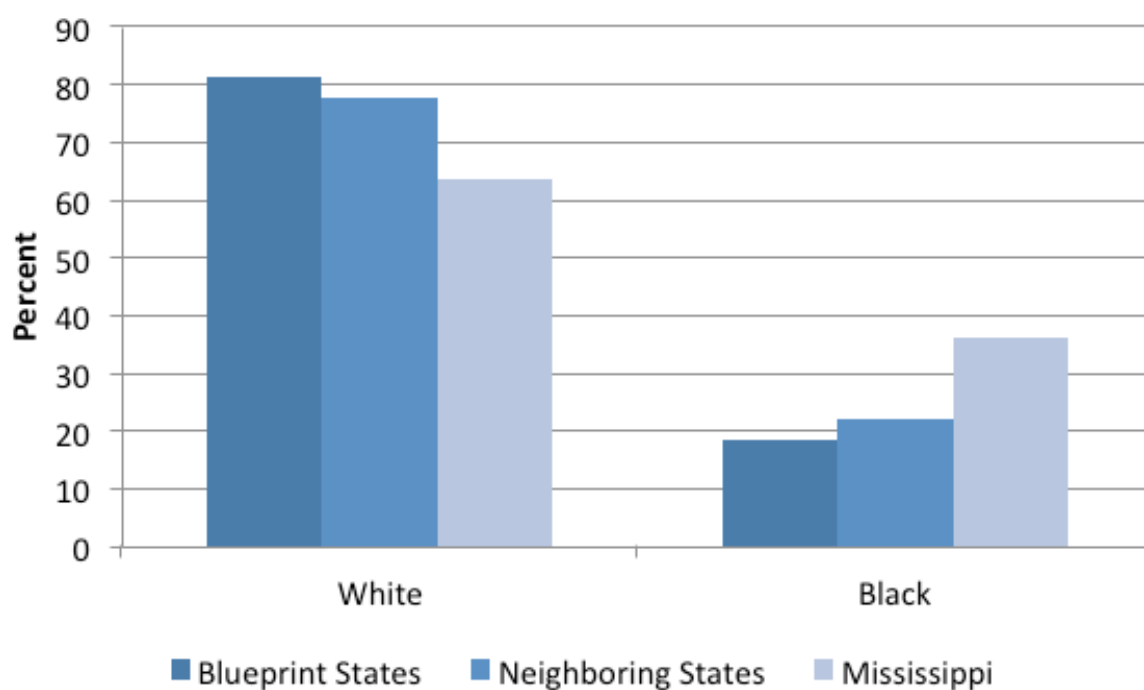
Source: Authors' calculations from the 2009 ACS-IPUMS.

Race

Mississippi and the comparison states also differ sharply in the racial composition of their populations, as Figure 6A shows:

- Compared with the Neighboring and Blueprint States, the Mississippi population has a significantly higher percentage of Black residents, and a correspondingly lower percentage of White residents. Specifically, more than one-third (36 percent) of Mississippi's population is Black, compared with 22 percent in Neighboring States and 18.5 percent in the Blueprint States.

Figure 6A: Racial Composition of the Populations of Mississippi, Neighboring States, and Blueprint States, 2009



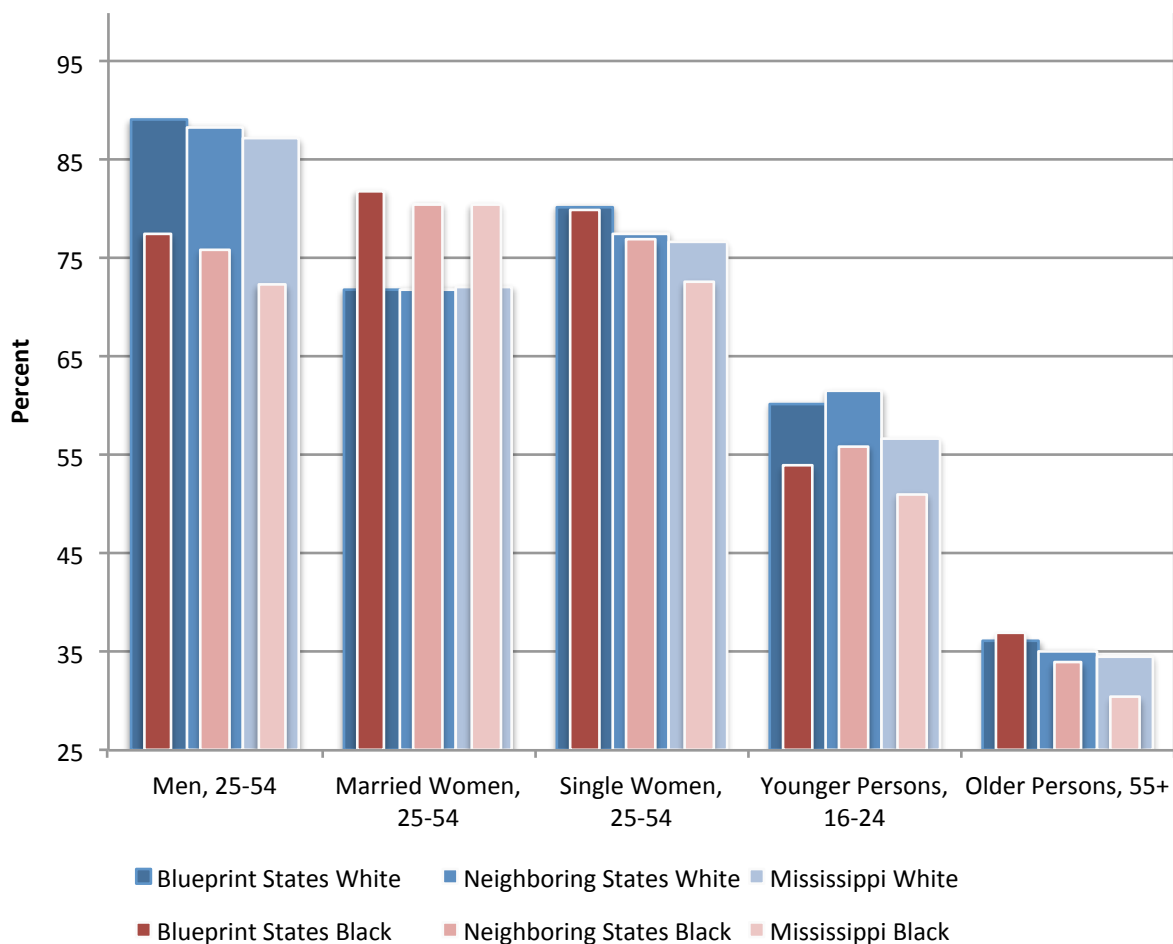
Source: Authors' calculations from the 2009 ACS-IPUMS.

This is another difference that matters because most groups of the Black population have lower labor force participation rates than their White counterparts, as Figure 6B shows:

- In both Mississippi and the comparison states, Black Men 25–54 have lower LFPRs than White Men 25–54. Moreover, the LFPR gap between Black and White Men in Mississippi is larger than in the comparison states — nearly 15 percentage points (72 percent for Blacks, 87 percent for Whites) versus 12 percentage points in the comparison states (76–77 percent for Blacks, 88–89 percent for Whites).³

³ The LFPR gap between Black and White Men has been attributed to worse labor market opportunities facing Black Men due to discrimination and less education (Cain 1976; Hotchkiss 2006).

Figure 6B: Labor Force Participation Rates by Race and Population Subgroup in Mississippi, Neighboring States, and Blueprint States, 2009



Source: Authors' calculations from the 2009 ACS-IPUMS.

- In the Neighboring and Blueprint States, Single Black Women and Single White Women have similar LFPRs. In Mississippi, however, the LFPR of Single Black Women is lower by 4 percentage points (72.6 percent versus 76.7 percent).
- In Mississippi and the comparison states, Younger Black Persons have lower LFPRs than Younger White Persons. The LFPR gap between Younger Blacks and Younger Whites in Mississippi is similar to that in the comparison states.

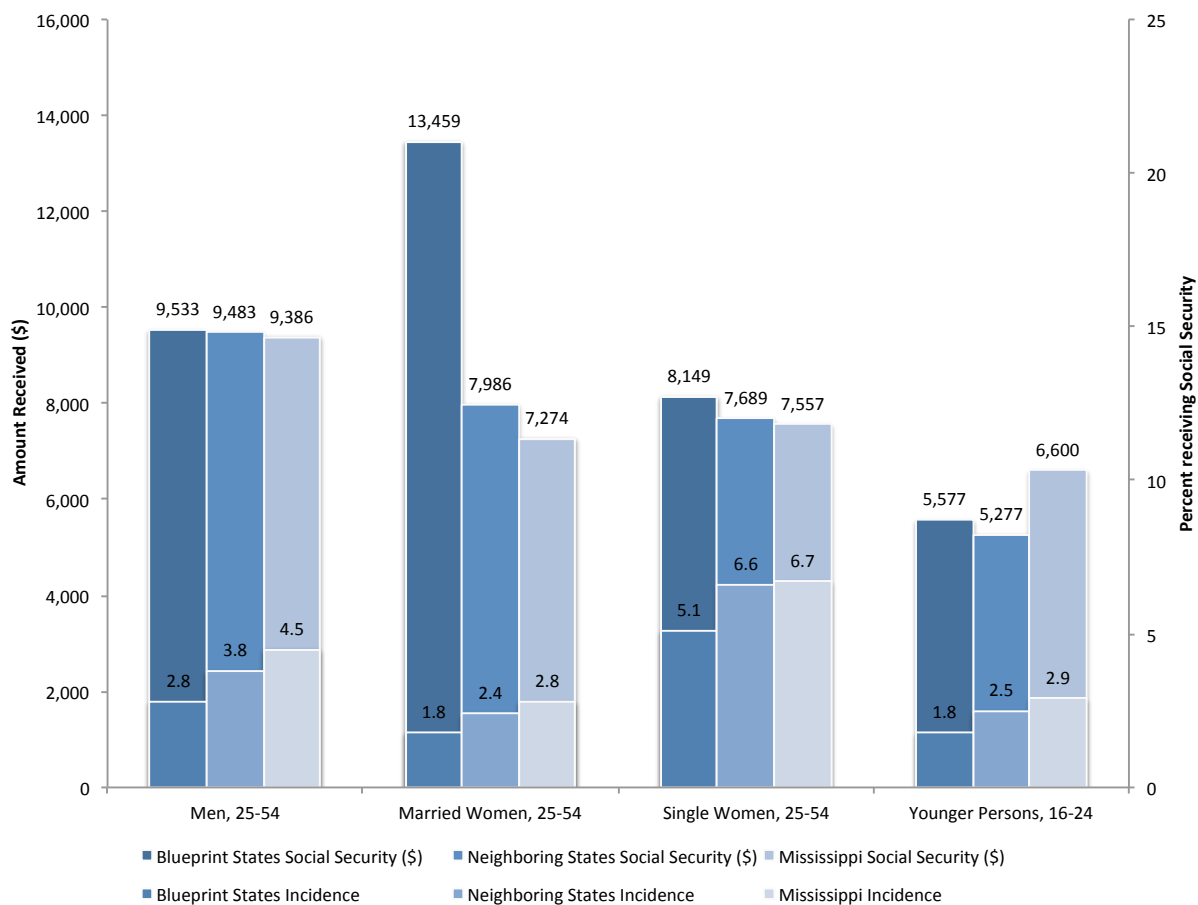
- In the comparison states, Older Black Persons and Older White Persons have similar LFPRs. But in Mississippi, the LFPR of Older Black Persons lags that of Older White Persons by more than 4 percentage points (30.4 percent versus 34.6 percent).

Married Women 25–54 are the exception to the above pattern of Whites tending to have higher LFPRs than Blacks: The LFPR of Married Black Women leads that of Married White Women by 8.5 percentage points in Mississippi and Neighboring States (and by 10 percentage points in the Blueprint States).

Receipt of Government Transfers

Finally, Mississippi and the comparison states differ in the percentage of individuals who receive government transfers such as Social Security and Supplemental Security Income (SSI). Figures 7A and 7B display data on receipt of these transfers in Mississippi, Neighboring States, and the Blueprint States.⁴

Figure 7A: Percent of Individuals Receiving Social Security Income and Amount Received by Demographic Group, Mississippi, Neighboring States, and Blueprint States, 2005, 2007, and 2009



Source: Authors' calculations from the 2005, 2007, and 2009 ACS-IPUMS.

⁴ Unlike other figures, the data for this and the next figure come from three years of the ACS — 2005, 2007, and 2009 — rather than 2009 alone.

Figure 7A shows both the percentage of individuals who received income from Social Security (scaled on the right vertical axis) and the average dollar amount received by those who received Social Security income (scaled on the left vertical axis), for each of the five population subgroups. The figure illustrates the following points:

- About 4.5 percent of Men 25–54 in Mississippi receive income from Social Security (presumably mainly in the form of Disability Income), compared with 3.8 in Neighboring States and 2.8 percent in the Blueprint States. These differences are substantial and suggest that the incidence of Social Security Disability receipt among prime-age males in Mississippi is 36 percent higher than in the Neighboring States, and 60 percent higher than in the Blueprint States. The differences are significant in view of the importance of Men 25–54 to the labor force.
- Among Women 25–54 (both Married and Single) and Younger Persons, the incidence of Social Security receipt is again higher in Mississippi than in the comparison states; however, for Married Women, the average amount received is lower in Mississippi than elsewhere.⁵

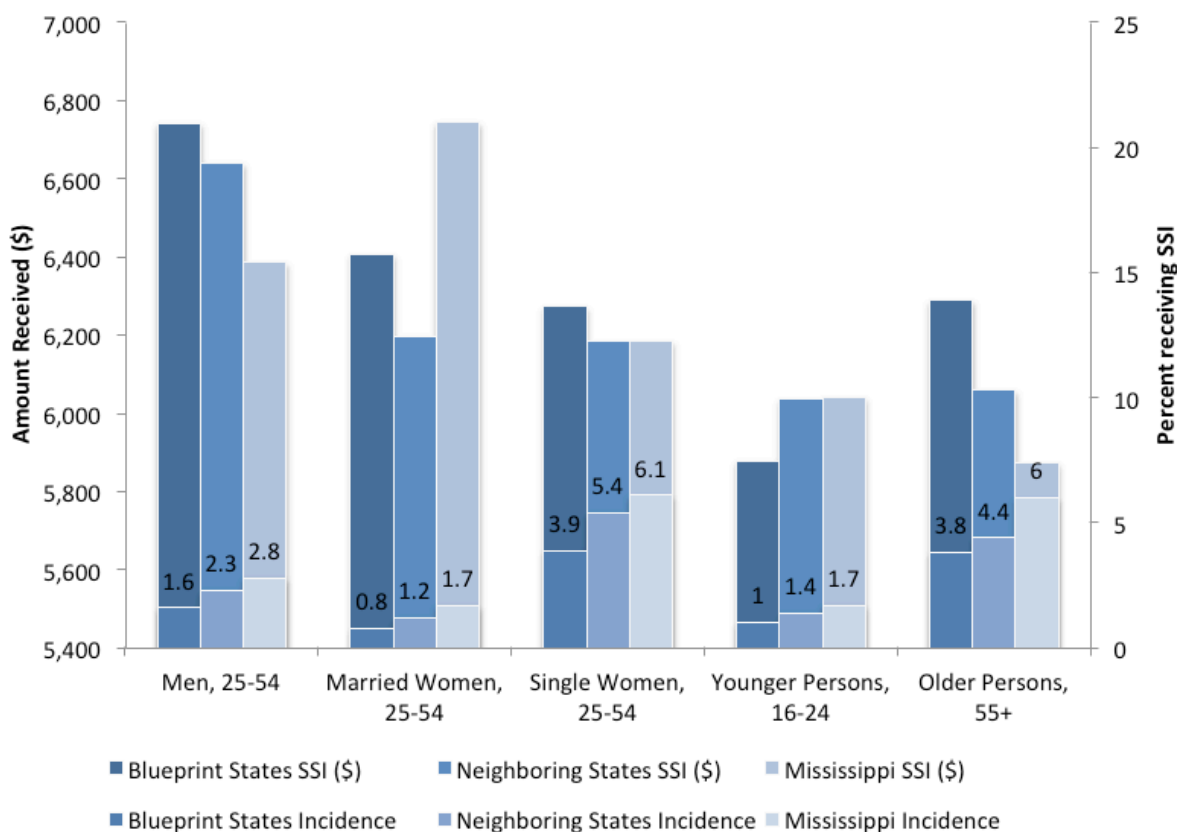
Figure 7B shows the percentage of individuals who received SSI and the average payment to SSI recipients. The pattern of SSI receipt is similar to Social Security receipt:

- For all five demographic groups, the incidence of SSI receipt is highest in Mississippi, somewhat lower in the Neighboring States, and lower still in the Blueprint States. This pattern makes sense because SSI is often received by

⁵ Figure 6A excludes Older Persons because the incidence of Social Security income is about the same in Mississippi as in the comparison states (59 percent in all cases); however, the average amount received in Mississippi (\$5,873) is somewhat less than in the Blueprint States (\$6,289) and Neighboring States (\$6,059).

households that receive Social Security benefits, but for whom Social Security benefits are inadequate to bring the household out of poverty.

Figure 7B: Receipt of Supplemental Security Income (SSI) and Amount Received by Demographic Group, Mississippi, Neighboring States, and Blueprint States, 2005, 2007, and 2009



Source: Authors' calculations from the 2005, 2007, and 2009 ACS-IPUMS.

Note: Figures are averaged over 2005, 2007, and 2009.

4. Accounting for LFPR Differences Between Mississippi and Other States

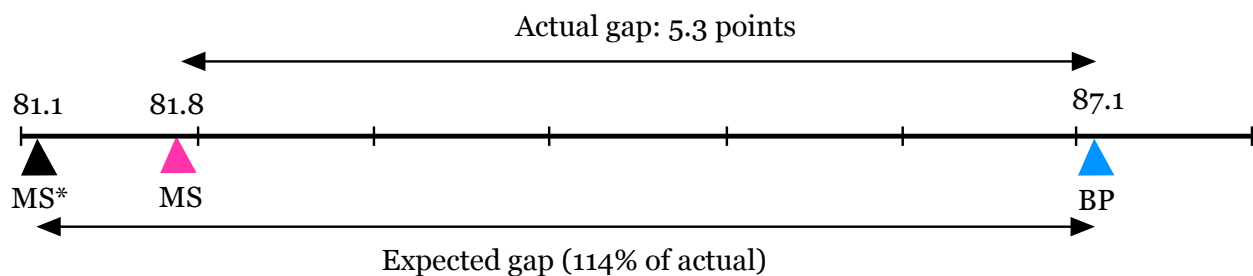
To what extent do the LFPR gaps between Mississippi and the comparison states reflect the interstate differences in Non-Metropolitan residence, educational attainment, race, and government transfers just discussed? We answer this question using the Blinder-Oaxaca technique, which compares the actual LFPR gap between Mississippi and the comparison states with the LFPR gap that is “expected” based on differences in measurable characteristics (such as Non-Metropolitan residence and transfers) between residents of Mississippi and the comparison states (Blinder 1973; Oaxaca 1973). Figures 8A through 8E summarize the findings for comparisons of Mississippi with the Blueprint States. (Comparisons of Mississippi with the Neighboring States are similar and can be found in the Final Report, along with a more complete discussion of the Blinder-Oaxaca technique.)

Men 25–54

Figure 8A shows that, for Men 25–54, the actual LFPR gap between Mississippi and the Blueprint States was 5.3 percentage points in 2009 (81.8 percent in Mississippi versus 87.1 percent in the Blueprint States). But if the labor force behavior of Mississippi Men 25–54 were the same as the labor force behavior of Men in the Blueprint States, Mississippi Men would be expected to have a somewhat *lower* LFPR — 81.1 percent (denoted by the black triangle labeled MS*).⁶ As a result, the *expected* LFPR gap between Men in Mississippi and in the Blueprint States was greater than the actual LFPR gap.

⁶ Alternatively, MS* could be thought of as the expected LFPR of Men in the Blueprint States if those Men had the characteristics of Mississippi Men.

Figure 8A: Actual and Expected LFPR Gap for Men 25–54, Mississippi (MS) Compared with the Blueprint States (BP), 2009



Source: Authors' calculations from the 2009 ACS-IPUMS.

What do these findings imply? First, for Men 25–54, the LFPR gap between Mississippi and the Blueprint States is expected — that is, it can be fully explained by interstate differences in residents' characteristics. In particular, the findings reported in Table A6.1 (see the Appendix of the Final Report) suggest that four measurable differences between Men in Mississippi and the Blueprint States explain most of the LFPR gap:

- Mississippi has a higher concentration of Men in Non-Metropolitan areas, and this reduces the LFPR of Mississippi Men by 2.1 percentage points.
- A higher percentage of Mississippi Men are Black (nearly 35 percent in Mississippi versus 22 percent in the Blueprint States), and this reduces the LFPR of Mississippi Men by 1.2 percentage points.
- Mississippi Men have a higher incidence of health problems, which reduces their LFPR by 1.0 percentage point.
- A higher percentage of Mississippi Men receive food stamps and income from Social Security and SSI, which reduces their LFPR by 0.9 percentage point.

Second, based on their measurable characteristics, Mississippi Men 25–54 have a somewhat higher-than-expected LFPR (the actual 81.8 percent, rather than the expected 81.1 percent). Why was the LFPR of Mississippi Men higher than expected? Apparently, the labor force behavior of Mississippi Men differs somewhat from that of men in the Blueprint States due to factors that are difficult to observe or measure. We can only speculate as to what these intangibles might be, but culture or institutions are possibilities, and they appear to favor somewhat the labor force participation of Men.

Based on Figure 8A, we have the following conclusions for Men 25–54:

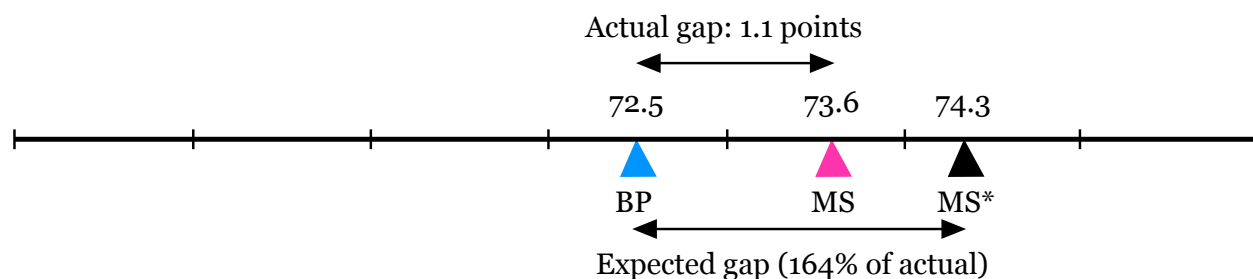
- The LFPR gap between Mississippi and the Blueprint States can be attributed to the differences in observable characteristics between Men in Mississippi and the Blueprint States. The most important differences leading to the LFPR gap are the relatively high concentration of Mississippi’s residents in Non-Metropolitan areas, Mississippi’s higher concentration of Black residents, its higher incidence of health problems, and its higher incidence of income from Social Security and SSI.
- Based on their measurable characteristics, Mississippi Men 25–54 have a slightly higher-than-expected LFPR, suggesting that intangible factors in Mississippi are favorable to labor force participation of Men 25–54.

Married Women 25–54

Figure 8B compares the LFPR of Married Women 25–54 in Mississippi with the LFPR of Married Women in the Blueprint States.

- The actual LFPR of Married Women in Mississippi is greater than in the Blueprint States by more than 1 percentage point (73.6 percent in Mississippi versus 72.5 percent in the Blueprint States).
- However, the LFPR of Mississippi’s Married Women is expected to be even *higher* than it was in fact — 74.3 percent — compared with the Blueprint States.

Figure 8B: Actual and Expected LFPR Gap for Married Women 25–54, Mississippi (MS) Compared with the Blueprint States (BP), 2009



Source: Authors’ calculations from the 2009 ACS-IPUMS.

Mississippi Married Women have a higher LFPR than Married Women in the Blueprint States for two main reasons (see Table A6.2 in the Final Report): First, a higher percentage of Married Women in Mississippi are Black than in the Blueprint States, and Black Women generally have higher LFPRs than do White Women (see Figure 6B). The higher percentage of Blacks among Mississippi’s Married Women raises their LFPR by 1.2 percentage points. Second, Married Women in Mississippi are more likely to have 1 or 2 years of post-secondary education, which also raises their LFPR. Other observable differences between Married Women in Mississippi and the Blueprint

States tend to reduce labor force participation of Married Women⁷; however, these factors are outweighed by the positive influence of Black Married Women on Mississippi's LFPR. In fact, the positive influence of Black Married Women on the LFPR leads to the expectation that Mississippi Married Women will have an even higher LFPR than they do. Intangible factors appear to hold back the LFPR of Mississippi's Married Women.

Figure 8C leads to the following conclusions about Married Women 25–54:

- Married Women in Mississippi have a higher LFPR than Married Women in the Blueprint States, mainly because a higher percentage of Mississippi's Married Women are Black, and a higher percentage of Mississippi's Married Women have 1 or 2 years of post-secondary education.
- Nonetheless, based on their observable characteristics, we would expect the LFPR of Mississippi's Married Women to be even higher than it is in fact.

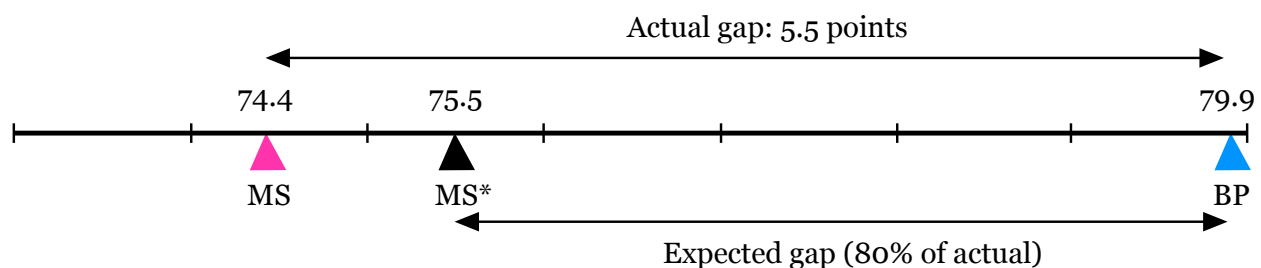
⁷ Mississippi's Married Women have a higher incidence of health problems and receipt of income from Social Security and SSI than Married Women in the Blueprint States.

Single Women 25–54

Figure 8C compares the LFPR of Single Women 25–54 in Mississippi with the LFPR of Single Women in the Blueprint States. The figure illustrates two points:

- Single Women in Mississippi have a substantially lower LFPR than Single Women in the Blueprint States.
- Four-fifths of the LFPR gap between Mississippi and the Blueprint States can be attributed to observable differences between Single Women in Mississippi and the Blueprint States.

Figure 8C: Actual and Expected LFPR Gap for Single Women 25–54, Mississippi (MS) Compared with the Blueprint States (BP), 2009



Source: Authors' calculations from the 2009 ACS-IPUMS.

Three specific differences between Mississippi and the Blueprint States explain much of the LFPR gap for Single Women (see Table A6.3 of the Final Report):

- The higher concentration of Mississippi's Single Women in Non-Metropolitan areas reduces their LFPR by 1.7 percentage points.
- The higher incidence of food stamp receipt and income from SSI among Mississippi's Single Women reduces their LFPR by 1.5 percentage points.
- The higher incidence of health problems among Mississippi Married Women reduces their LFPR by 0.8 percentage point.

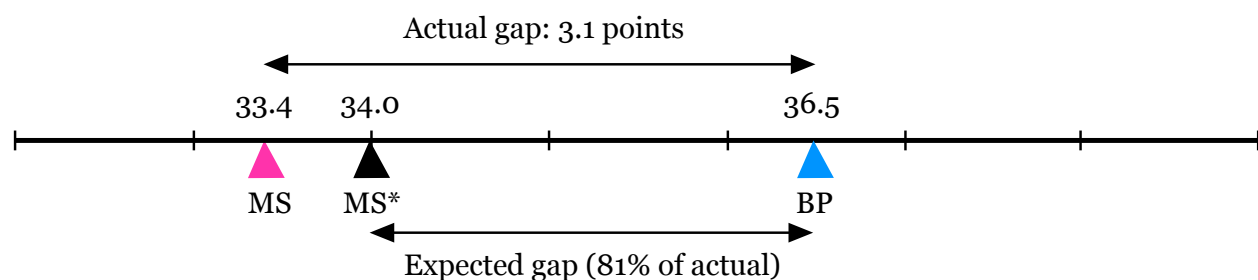
Although much of the LFPR gap between Mississippi and the comparison states is due to the above observable factors, part of the gap remains unexplained and must be attributed to intangibles like culture and institutions.

Older Persons

Figure 8D displays the LFPR gap between Mississippi and the Blueprint States for Older Persons. The figure illustrates two points:

- The LFPR of Older Persons in Mississippi is more than 3 percentage points lower than the LFPR of Older Persons in the Blueprint States.
- Four-fifths of the LFPR gap between Mississippi and the Blueprint States is explained by interstate differences in Older Persons' characteristics.

Figure 8D: Actual and Expected LFPR Gap for Older Persons, Mississippi (MS) Compared with the Blueprint States (BP), 2009



Source: Authors' calculations from the 2009 ACS-IPUMS.

Three factors are responsible for much of the LFPR gap for Older Persons (see Table A6.4 of the Final Report):

- The higher concentration of Mississippi's Older Persons in Non-Metropolitan areas reduces their LFPR by 1.2 percentage points.
- The higher incidence of health problems among Mississippi's Older Persons reduces their LFPR by 1.1 percentage points.

- The lower educational attainment of Mississippi's Older Persons (particularly the lower likelihood of having completed 4 or more years of college) reduces their LFPR by 0.7 percentage point.

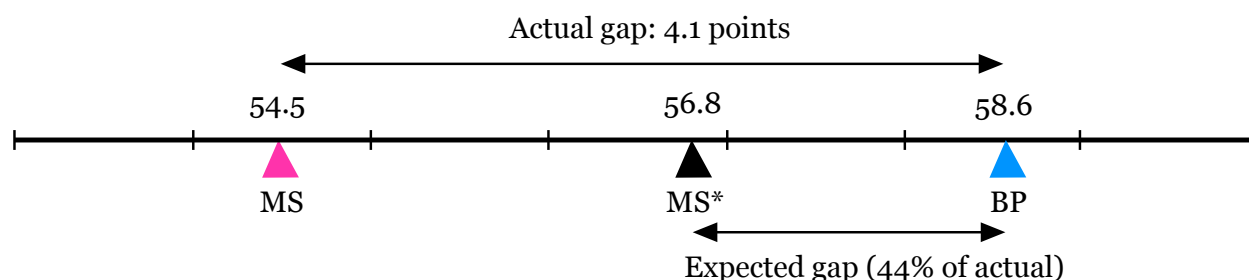
For Older Persons, as for Single Women, most of the LFPR gap between Mississippi and the Blueprint States is due to observable factors, but part of the LFPR gap cannot be explained by interstate differences that are easily measured.

Younger Persons

The LFPR gap for Younger Persons, shown in Figure 8E, differs from the earlier LFPR gaps because a relatively small percentage of that gap can be explained by observable differences between Mississippi and the Blueprint States:

- The LFPR of Younger Persons in Mississippi is 4.1 percentage points lower than the LFPR of Younger Persons in the Blueprint States.
- Less than one-half of the LFPR gap between Mississippi and the Blueprint States can be explained by interstate differences in Young Persons' characteristics.

Figure 8E: Actual and Expected LFPR Gap for Younger Persons, Mississippi (MS) Compared with the Blueprint States (BP), 2009



The *expected* portion of the LFPR gap for Younger Persons can be explained mainly by three factors (see Table A6.5 in the Final Report):

- A higher percentage of Mississippi's Younger Persons are Black (nearly 45 percent in Mississippi versus 22 percent in the Blueprint States), and this reduces the LFPR of Mississippi's Younger Persons by about 1 percentage point.
- A higher percentage of Mississippi's Younger Persons are concentrated in Non-Metropolitan areas, and this also reduces their LFPR by 1.0 percentage point.

- Younger Persons in Mississippi have lower educational attainment than Younger Persons in the Blueprint States, and this reduces the LFPR of Mississippi's Younger Persons by about 0.5 percentage point.

Still, these observable differences between Younger Persons in Mississippi and the Blueprint States are less important than are intangible differences that are not easily measured. We have referred to these intangibles as culture and institutions, but the concern is that longstanding factors that are difficult to change — the legacy of racial discrimination or the rural history of the state — play a role in labor force behavior, particularly in the case of Younger Persons.

5. Summary and Implications

Mississippi historically has had one of the lowest LFPRs in the United States. This report has analyzed the labor force behavior of five population groups to draw conclusions about the reasons for the LFPR gap between Mississippi and other Southern states. Table 1 summarizes the main findings, showing the percentage point difference in the LFPR for which each of five key differences between Mississippi and the Blueprint States is responsible.

Table 1: Percentage Point Changes in the LFPR Resulting from Five Main Measurable Differences Between Mississippi and the Blueprint States, by Population Subgroup

Demographic Group	Total LFPR Gap	Percentage Points Attributable to Differences in:				
		Non-Metropolitan Residence	Percentage Black	Health Problems	Government Transfer Receipt	Educational Attainment
Men 25–54	–5.3	–2.1	–1.2	–1.0	–0.9	—
Married Women 25–54	+1.1	—	+1.2*	–0.7	—	+0.3
Single Women 25–54	–5.5	–1.7	—	–0.8	–1.6	–0.9
Older Persons	–3.1	–1.2	—	–1.1	—	–0.7
Younger Persons	–4.1	–0.8	–1.2	—	—	–0.4

Note: Compared with the Blueprint States, a higher percentage of Mississippi residents live in a Non-Metropolitan area, are Black, report health problems, and receive government transfers. The educational attainment of Mississippi residents is on average lower than in the Blueprint States.

*Mississippi's higher percentage of Blacks among Married Women increases the LFPR of Mississippi's Married Women because the LFPR of Black Married Women is higher than the LFPR of White Married Women (see Figure 6B).

The main reasons for Mississippi's LFPR gap differ among the five population groups:

- The relatively high concentration of Mississippi residents in Non-Metropolitan areas is the most consistent reason for Mississippi's lower LFPR, reducing the LFPR of Mississippi's Men, Single Women, Older Persons, and Younger Persons.

- Mississippi's relatively high percentage of Black residents has a mixed impact on its LFPR. For Men and Younger Persons, it tends to reduce the LFPR. For Married Women, it raises the LFPR because the LFPR of Black Married Women exceeds that of White Married Women.
- Higher incidence of health problems helps explain the lower LFPR of Mississippi's Men, Married Women, Single Women, and Older Persons.
- Higher incidence of government transfer receipt helps explain the lower LFPR of Mississippi's Men and Single Women.
- Lower educational attainment reduces the LFPR of Mississippi's Single Women, Older Persons, and (to a lesser extent) Younger Persons.

For all but Younger Persons, the five key measurable differences between Mississippi and the Blueprint States account for (or “explain”) most of the gap between Mississippi and the Blueprint States. However, for Younger Persons more than half of the gap must be attributed to cultural, historical, and institutional factors that are difficult to measure and quantify. The legacy of racial discrimination, the connection of Mississippi residents to rural communities, and an agricultural sector that is in long-term decline are all possible contributors.

The findings may have the following implications for policy:

- The connection between low LFPRs and Non-Metropolitan residence provides a rationale for targeting regional economic development toward Non-Metropolitan areas of Mississippi (see also Range 2011). Such efforts at regional development could be augmented with efforts to connect workers in Non-

Metropolitan areas with job opportunities in urban areas that are relatively nearby, for example, through inexpensive and accessible transportation.

- The connection between educational attainment and labor force participation provides a rationale for improving the quality of education generally and, more specifically, for creating opportunities for vocational and technical training in occupation-specific skills that employers indicate they demand (Parisi 2011).
- The findings in Section 4 suggest that, of the five demographic groups studied, Young Persons are the group for whom culture and institutions play the largest role in explaining the LFPR gap between Mississippi and other states. This finding suggests that special efforts may be needed to create employment opportunities for high school students in Mississippi, so that young people see the relevance of schooling to job opportunities and to gaining a foothold in the labor market. Policies that could be helpful include cooperative programs connecting school to work, and direct employer subsidies to encourage the hiring of young people.

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