Women without a College Degree, Especially Minority Mothers, Face a Steeper Road to Recovery

By Didem Tüzemen

The labor force participation of prime-age individuals (age 25 to 54) in the United States declined dramatically at the onset of the pandemic as temporary shutdown orders and social distancing measures to fight the COVID-19 outbreak caused substantial job losses and limited job search activities. In February 2020, 83.1 percent of prime-age individuals participated in the labor force, meaning they were either working or actively looking for work. By April 2020, this rate had fallen to 79.8 percent, a decline of roughly 4 million people. Although some prime-age individuals have returned to the labor force since then, as of June 2021, the prime-age labor force participation rate remains well below its pre-pandemic level.

Prime-age individuals are in their most productive working years, and a persistent decline in their labor force participation has important implications for the future of the labor market and economic growth. However, understanding the decline requires detailed analysis; aggregate statistics on labor force participation may mask differences in labor market outcomes by sex, educational attainment, and race and ethnicity. Identifying these differences is crucial to both

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evaluating potential labor market implications and designing targeted policies to encourage labor force participation.

In this article, I use data from the U.S. Census Bureau's Current Population Survey (CPS) to document changes in the labor force participation rates of prime-age individuals across sex, education level, and race and ethnicity during the pandemic-induced downturn and subsequent recovery. My analysis yields three key findings. First, prime-age women without a bachelor's degree experienced greater deteriorations in their labor force participation and employment during the recession than all other prime-age individuals. Their labor force participation and employment rates are still well below pre-pandemic levels, likely due to the incomplete but continuing recovery of jobs in contact-sensitive sectors. Second, Hispanic prime-age women without a bachelor's degree have seen a larger decline and a slower recovery in their employment and labor force participation rates compared with non-Hispanic white and non-Hispanic Black women. Third, the presence of young children seems to have weighed on the labor market outcomes of less-educated women in general and minority women in particular, suggesting these women may have faced challenges juggling work and childcare during pandemic-related school and day care closures.

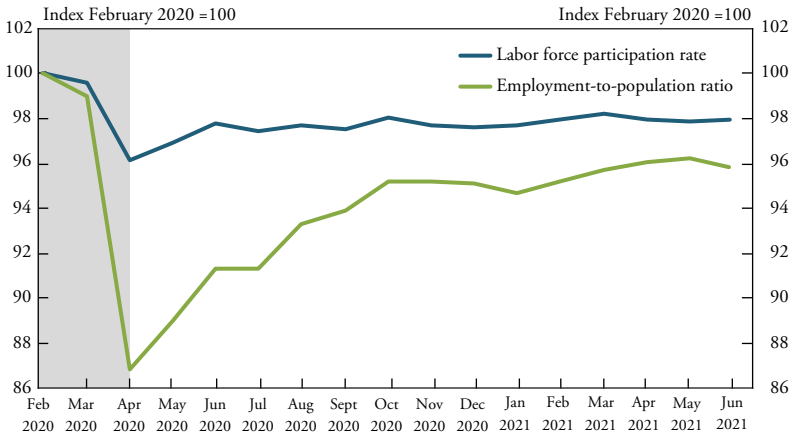
Section I documents the sharp decline and subsequent recovery in the prime-age labor force participation rate during the pandemic, revealing stark differences in the labor market outcomes of prime-age individuals by sex and education level. Section II shows that the employment and labor force participation patterns of non-college women differ across racial and ethnic groups as well as by parental status.

I. Patterns in the Prime-Age Labor Force Participation Rate during the Pandemic-Induced Downturn and Recovery

From February to April 2020, prime-age labor force participation and employment declined dramatically due to the temporary shutdown orders and social distancing measures taken to fight the COVID-19 pandemic. Chart 1 uses data from the CPS to plot the prime-age labor force participation rate alongside the prime-age employment-to-population ratio (hereafter, "employment rate"),

Chart 1

Prime-Age Labor Force Participation Rate and Employment-to-Population Ratio



Note: Gray bar denotes National Bureau of Economic Research (NBER)-defined recession.
Sources: U.S. Census Bureau, NBER, and author's calculations.

both indexed to their February 2020 levels.[1] Both rates show a similar pattern at the onset of the pandemic, declining steeply from February to April 2020.

Labor market conditions began to recover in May 2020, and both the employment and labor force participation rates of prime-age individuals have improved. However, the momentum appears to have stalled more recently. In 2021, both rates showed only slight improvements and have yet to return to their pre-pandemic levels.

Changes in prime-age labor force participation rates by sex and education

Changes in aggregate labor force participation rates may mask large differences across different demographic groups. Women have historically had lower participation rates than men, and individuals with lower educational attainment have had lower participation rates than their more-educated counterparts. Moreover, the labor force participation rates of less-educated individuals have historically declined more during economic downturns than their more-educated counterparts. To assess these differences, I compare changes in labor market outcomes across sexes and education levels. To facilitate comparison, I group prime-age individuals into one of four groups:

men with less than a bachelor's degree ("non-college men"), men with a bachelor's degree or higher ("college men"), women with less than a bachelor's degree ("non-college women"), and women with a bachelor's degree or higher ("college women").

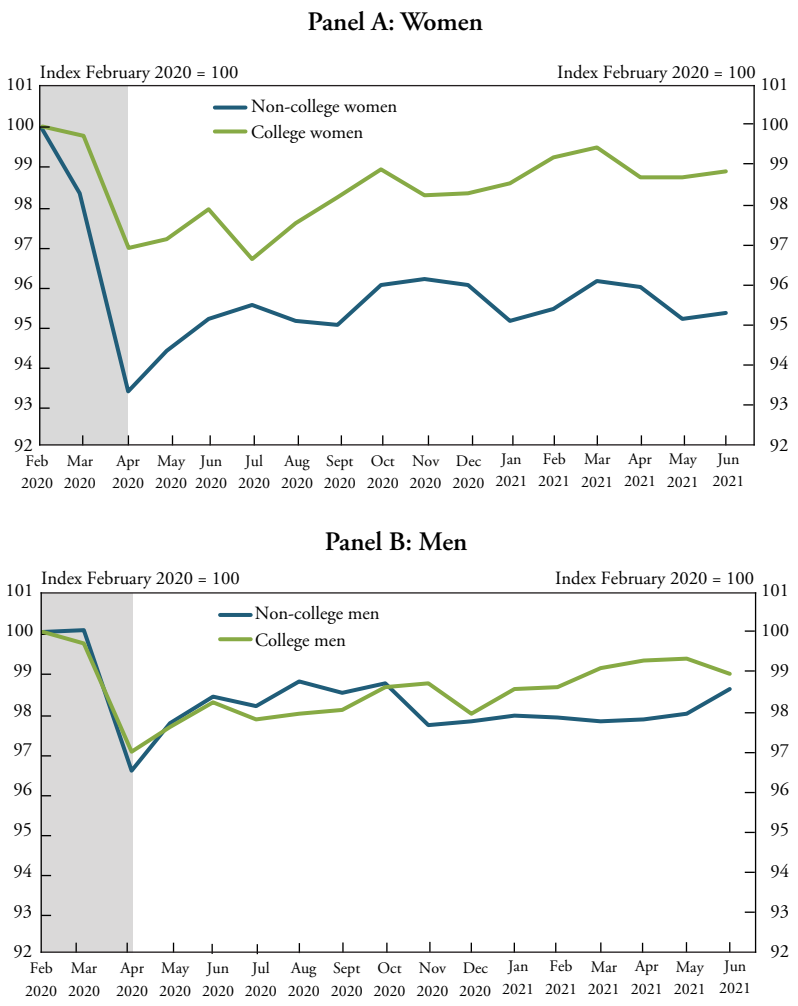
Chart 2 shows the labor force participation rates over time for all four groups. The chart illustrates two striking results. First, the labor force participation rate has declined the most for prime-age women without a bachelor's degree (blue line in Panel A). This pattern was also observed during and after the 2007–09 financial crisis (Tüzemen and Tran 2019). The patterns for the college-educated group were somewhat different from the previous recession. During the Great Recession, college-educated men and women experienced very modest declines in their labor force participation rates. During the pandemic recession, they experienced large declines in their labor force participation rates followed by quick recoveries to near pre-pandemic levels.

Second, although the labor force participation rates for all groups remain below their pre-pandemic levels, women without a bachelor's degree are furthest from a full recovery. Table 1 shows that the labor force participation rate of women without a bachelor's degree is 3.3 percentage points below its pre-pandemic level, a larger gap than for any other group. The next group furthest from a full recovery, non-college men, has a labor force participation rate 1.2 percentage points below its pre-pandemic level. Moreover, the labor force participation rate of women without a bachelor's degree declined slightly since December 2020, while the participation rates for other prime-age groups have increased in 2021.

Consequently, the large gap between the labor force participation rates of non-college men and women has widened further during the pandemic, while the gap between the participation rates of college-educated men and women has remained unchanged. Before the pandemic, non-college women had a 71.3 percent labor force participation rate, 14.5 percentage points below that of non-college men. This gap has since widened, as the labor force participation rate of non-college women has recovered more slowly than their male counterparts. As of June 2021, non-college women lagged non-college men by 16.7 percentage points.

Chart 2

Prime-Age Labor Force Participation Rates by Sex and Education Groups



Note: Gray bars denote NBER-defined recession.
Sources: U.S. Census Bureau, NBER, and author's calculations.

Table 1

Prime-Age Labor Force Participation Rates by Sex and Education Groups

Prime-age group	Feb. 2020 (percent)	Apr. 2020 (percent)	Dec. 2020 (percent)	June 2021 (percent)	Change, Feb. 2020–June 2021 (percentage point)
All	83.1	79.8	81.1	81.4	–1.7
Non-college men	85.8	82.8	83.9	84.6	–1.2
College men	94.9	92.0	92.9	93.9	–1.0
Non-college women	71.3	66.6	68.4	67.9	–3.3
College women	84.7	82.1	83.2	83.7	–1.0

Sources: U.S. Census Bureau and author's calculations.

The large deteriorations in the labor force participation rates of prime-age individuals in general—and non-college women in particular—may be explained by the severity of job losses in contact-sensitive sectors such as leisure and hospitality and retail trade, where non-college individuals are more likely to be employed. Table 2 shows that prime-age employment declined by 13.2 million between February and April 2020 and remained 4.2 million below its pre-pandemic level as of June 2021. Individuals without a bachelor's degree have been disproportionately affected by these job losses (Tüzemen and Tran 2020a). In the non-college group, about 5.6 million women and 4.8 million men lost jobs between February and April 2020. In contrast, in the college group, about 1.5 million women and 1.3 million men lost jobs over the same period. Overall, non-college individuals accounted for 56 percent of prime-age employment in February 2020 but experienced almost 80 percent of prime-age job losses between February and April 2020.

The smaller decline for the college group likely reflects that more college-educated individuals worked in teleworkable jobs, which accounted for only a small share of job losses among prime-age individuals (Tüzemen and Tran 2020b). Panel A of Chart 3 shows that the majority of job losses were in contact-sensitive sectors hit hardest by the pandemic: leisure and hospitality, education and health services, and retail trade. Jobs in these sectors are much less likely to be teleworkable. Many displaced workers in these sectors likely could not search for new jobs due to business closures across the country and fear of contracting the virus while working, resulting in a decline in their labor force participation.

Table 2

Changes in Prime-Age Employment by Sex and Education Groups

Prime-age group	Change, Feb.–Apr. 2020 (in millions)	Change, Apr.–Dec. 2020 (in millions)	Change, Jan. 2021–June 2021 (in millions)	Total change, Feb. 2020–June 2021 (in millions)
All	–13.2	8.5	0.6	–4.2
Non-college men	–4.8	2.9	1.0	–0.9
College men	–1.3	1.0	–0.4	–0.7
Non-college women	–5.6	3.5	–0.2	–2.3
College women	–1.5	1.1	0.1	–0.3

Sources: U.S. Census Bureau and author's calculations.

Chart 3

Changes in Prime-Age Employment by Industry, Sex, and Education Groups

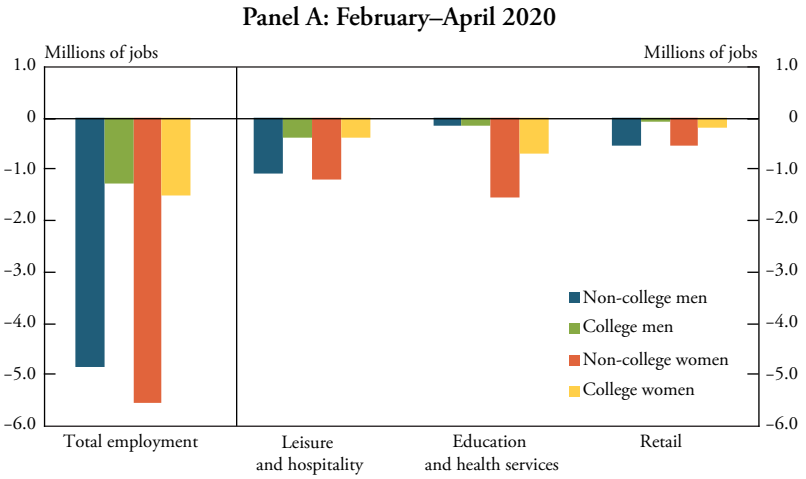
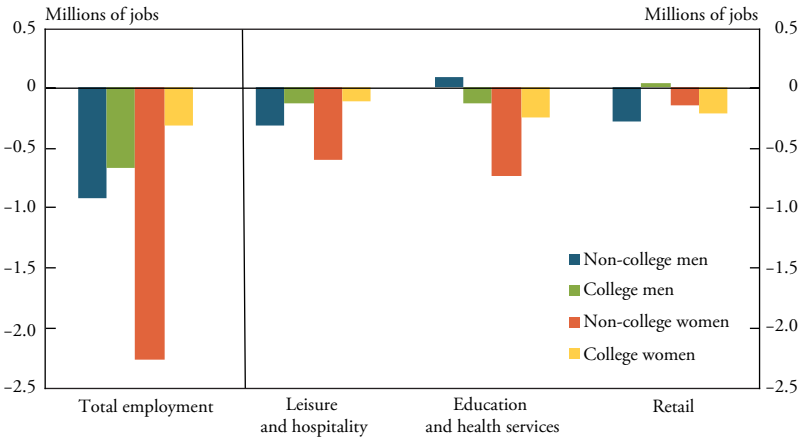


Chart 3 (continued)

Panel B: February 2020–June 2021



Sources: U.S. Census Bureau and author's calculations.

As of June 2021, employment remained 2.3 million below its pre-pandemic level for non-college women and 0.9 million below its pre-pandemic level for non-college men (Table 2). Panel B of Chart 3 shows that these job losses were concentrated in the hardest-hit industries, contributing to the slower recovery of labor force participation among prime-age individuals without a bachelor's degree, especially women.

II. Which Prime-Age, Non-college Women Have Been Most Affected by the Downturn?

The previous section showed that prime-age women without a bachelor's degree experienced the greatest deterioration in their labor force participation rate during the pandemic-induced downturn. Moreover, these women are furthest from a full recovery. To better understand how the labor market recovery has affected women within this group, I next investigate the labor force participation rates of women without a bachelor's degree by race, ethnicity, and parental status.

Changes in labor force participation rates of non-college women by race and ethnicity

Labor force participation rates have historically differed across race and ethnicity groups, and the recent decline in prime-age,

non-college women's labor force participation may also have been uneven. For example, Black women historically have had a higher participation rate than white women, and Hispanic women historically have had a lower participation rate than non-Hispanic women. Moreover, the participation rate of Hispanic women has historically declined more than non-Hispanic women during economic downturns. To account for these differences, I compare changes in the labor market outcomes of prime-age, non-college women in three race and ethnicity groups: non-Hispanic white, non-Hispanic Black, and Hispanic.

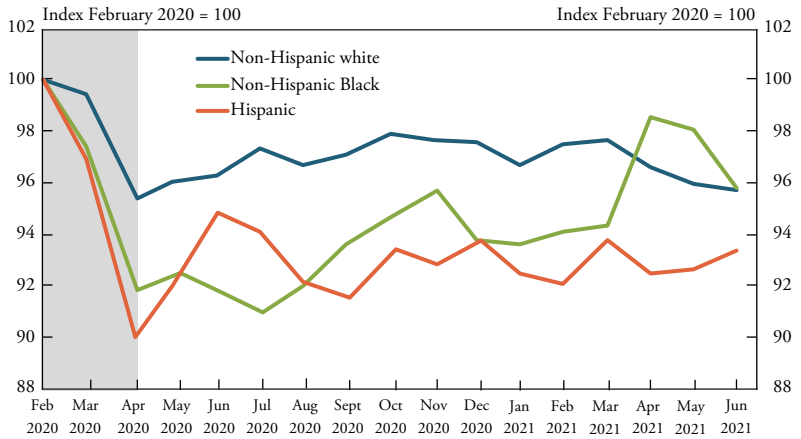
Chart 4 shows the labor force participation rates over time for all three groups. The chart illustrates two important results. First, the labor force participation rate declined the most for Hispanic women (orange line) and the least for non-Hispanic white women (blue line) at the onset of the pandemic. Second, while the labor force participation rates have been recovering for all groups, the participation rate of Hispanic women is the furthest from a full recovery. Indeed, Table 3 shows that the labor force participation rate of Hispanic women is 4.5 percentage points below its pre-pandemic level, while the labor force participation rates of non-Hispanic white and non-Hispanic Black women are 3.1 and 3.2 percentage points below their pre-pandemic levels, respectively. Among the three groups, only non-Hispanic Black women had a higher labor force participation rate in June 2021 than in December 2020.

Table 3 also highlights that historical patterns in labor force participation have intensified. Before the pandemic, Hispanic women had the lowest labor force participation rate among prime-age, non-college women at 67.2 percent; as of June 2021, their participation rate remained the lowest of the three groups at 62.8 percent. Similarly, non-Hispanic Black women had the highest pre-pandemic participation rate among prime-age, non-college women at 75.1 percent; as of June 2021, their participation remained the highest of the three groups at 71.9 percent.

The deteriorations in the labor force participation rates of prime-age, non-college women have been driven by large job losses during the pandemic. Table 4 shows that more than half of the 5 million jobs lost by the three groups of non-college women between February and April 2020 were in the education and health services (1.4

Chart 4

Labor Force Participation Rates of Prime-Age, Non-college Women by Race and Ethnicity



Note: Gray bar denotes NBER-defined recession.
Sources: U.S. Census Bureau, NBER, and author's calculations.

Table 3

Labor Force Participation Rates of Prime-Age, Non-college Women by Race and Ethnicity

Race and ethnicity	Feb. 2020 (percent)	Apr. 2020 (percent)	Dec. 2020 (percent)	June 2021 (percent)	Total change, Feb. 2020–June 2021 (percentage point)
Non-Hispanic white	72.6	69.3	70.8	69.5	–3.1
Non-Hispanic Black	75.1	69.0	70.4	71.9	–3.2
Hispanic	67.2	60.4	63.0	62.8	–4.5

Sources: U.S. Census Bureau and author's calculations.

Table 4

Changes in Employment of Prime-Age, Non-college Women by Industry, Race, and Ethnicity

Prime-age group	Non-Hispanic white (in millions)	Non-Hispanic Black (in millions)	Hispanic (in millions)	Total for three groups (in millions)
All industries				
Employment, Feb. 2020	12.9	3.9	6.1	22.9
Change, Feb.–Apr. 2020	–2.6	–0.8	–1.6	–5.0
Total change, Feb. 2020–June 2021	–1.2	–0.3	–0.6	–2.1
Ratio total change / employment (percent)	–9.0	–8.3	–9.4	–9.0
Education and health services				
Change, Feb.–Apr. 2020	–0.8	–0.2	–0.4	–1.4
Total change, Feb. 2020–June 2021	–0.3	–0.1	–0.2	–0.7
Leisure and hospitality				
Change, Feb.–Apr. 2020	–0.6	–0.2	–0.3	–1.0
Total change, Feb. 2020–June 2021	–0.2	–0.2	–0.1	–0.5
Retail trade				
Change, Feb.–Apr. 2020	–0.4	0.001	–0.1	–0.5
Total change, Feb. 2020–June 2021	–0.1	0.07	–0.03	–0.1

Sources: U.S. Census Bureau and author's calculations.

million jobs), leisure and hospitality (1 million jobs), and retail trade (0.5 million jobs) industries—the industries hardest hit by the pandemic. One difference the breakdown by race and ethnicity reveals is that non-Hispanic Black women gained jobs in the retail industry during this period; however, the gains were modest compared with the significant losses these women faced in the other two industries. Although all three industries have seen some job gains since April 2020, employment of non-Hispanic white, non-Hispanic Black, and Hispanic non-college women in these industries remained around 1.3 million jobs below its pre-pandemic level in June 2021.

The pandemic-related job losses and the slow recovery of jobs in the hardest-hit sectors have disproportionately affected Hispanic women without a bachelor's degree. Table 5 shows how the employment shares of each race and ethnicity group in the education and health services, leisure and hospitality, and retail trade industries evolved over the course of the pandemic. Although Hispanic women accounted for

Table 5

Employment Shares of Prime-Age, Non-college Women by Race and Ethnicity

Industry	Non-Hispanic white (percent)	Non-Hispanic Black (percent)	Hispanic (percent)
All industries			
Employment, Feb. 2020	56.3	17.2	26.5
Change, Feb.–Apr. 2020	51.5	16.0	32.5
Change, Apr. 2020–June 2021	47.9	16.2	35.9
Education and health services			
Employment, Feb. 2020	57.2	20.0	22.9
Change, Feb.–Apr. 2020	56.3	14.9	28.8
Change, Apr. 2020–June 2021	63.4	10.7	25.8
Leisure and hospitality			
Employment, Feb. 2020	51.4	16.5	32.1
Change, Feb.–Apr. 2020	54.0	16.3	29.8
Change, Apr. 2020–June 2021	60.5	2.5	37.0
Retail trade			
Employment, Feb. 2020	62.6	12.4	25.0
Change, Feb.–Apr. 2020	75.0	–0.2	25.2
Change, Apr. 2020–June 2021	59.0	17.8	23.2

Note: These shares are calculated only for the selected race and ethnicity groups so that each row adds up to 100 percent.
Sources: U.S. Census Bureau and author's calculations.

22.9 percent of non-college women's employment in the education and health-care industry in February 2020, they experienced 28.8 percent of the job losses from February to April. Furthermore, Hispanic women not only lost disproportionately more jobs in the retail trade industry from February to April, but also gained disproportionately fewer jobs in retail trade as the economy recovered. Overall, their employment remains 9.4 percent below the pre-pandemic level, furthest from a full recovery (Table 4).

Changes in labor force participation rates of prime-age, non-college women by presence of young children

School and day care closures during the pandemic created challenges to work for many parents, but especially those of young children. A lack of access to childcare, the demands of home and virtual

schooling, and health concerns may have kept women with young children—which I define as age 13 and younger—out of the labor force. To account for this possibility, I compare the labor force participation rates of prime-age women with and without young children (I use "young children" to indicate the presence of at least one child age 13 or younger).

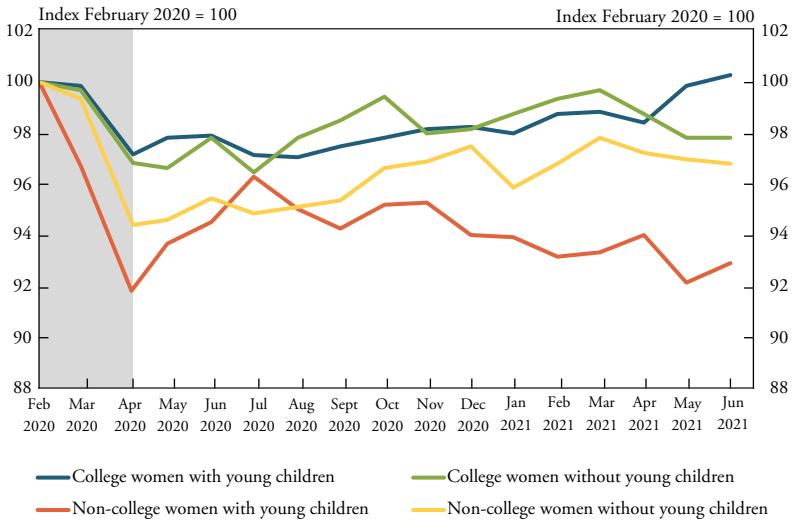
Because the presence of young children may have affected women of all education levels, I first compare the changes in labor force participation of college and non-college women before focusing on groups of non-college women. Chart 5 shows that the labor force participation rates look very similar for college-educated women with young children (blue line) and without young children (green line) during the downturn and the recovery. In fact, the labor force participation rate of college-educated women with young children has fully recovered to its pre-pandemic level, and the participation rate of college-educated women without young children was close to a full recovery as of June 2021.

In contrast, the labor force participation patterns for non-college women differ based on the presence of young children. At the onset of the pandemic, non-college women with young children (orange line) experienced a larger decline in their labor force participation rate than non-college women without young children (yellow line). The participation patterns for the two groups diverged starting in the summer of 2020. Although the labor force participation rate for non-college women without young children continued to recover from July to December 2020, the participation rate fell for non-college women with young children over the same period and has continued to fall in 2021.

Next, I compare the differences in participation patterns by presence of young children for each race and ethnicity group of prime-age, non-college women. Panel A of Chart 6 shows that the presence of young children does not seem to have materially influenced the participation rates of non-college, non-Hispanic white women during the pandemic. Differently, Panel B shows that the labor force participation rate fell more for Hispanic women with young children (blue line) than for Hispanic women without young children (green line). Although some Hispanic women with young children

Chart 5

Labor Force Participation Rates of Prime-Age Women by Education and Presence of Young Children



Note: Gray bar denotes NBER-defined recession.
Sources: U.S. Census Bureau, NBER, and author's calculations.

Chart 6

Labor Force Participation Rates of Prime-Age, Non-college Women by Race and Presence of Young Children

Panel A: Non-college, non-Hispanic white women

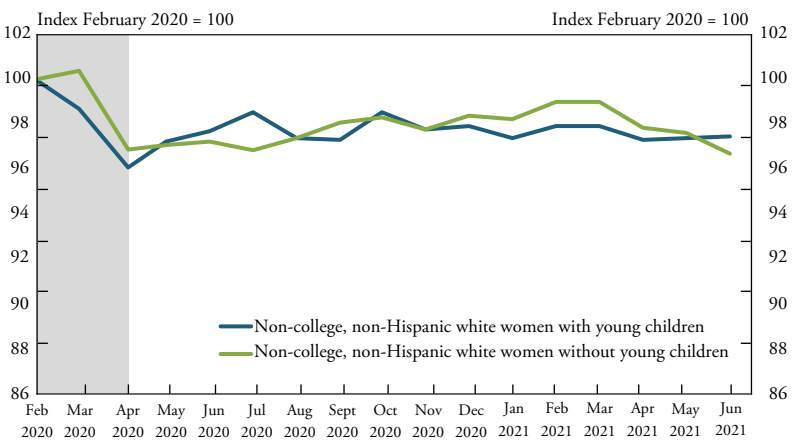
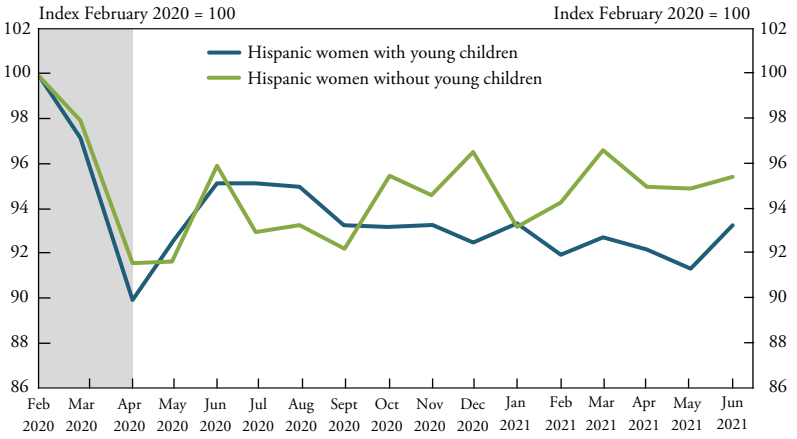
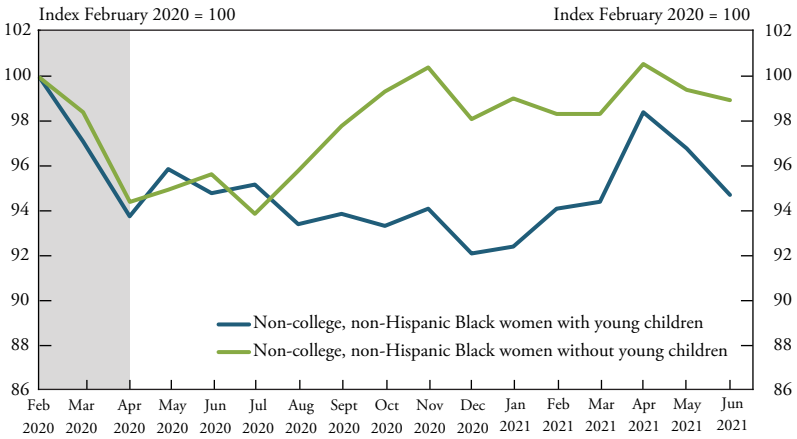


Chart 6 (continued)

Panel B: Non-college Hispanic women



Panel C: Non-college, non-Hispanic Black women



Note: Gray bars denote NBER-defined recession.
Sources: U.S. Census Bureau, NBER, and author's calculations.

re-entered the labor force during the spring of 2020, their participation rate has since declined. Interestingly, the presence of young children seems to have made the biggest difference among non-Hispanic Black women. Panel C of Chart 6 shows that the labor force participation rates of non-Hispanic Black women with and without young children declined at a similar pace at the onset of the pandemic. However, the patterns for the two groups diverged as the economy began to recover. Starting in the summer of 2020, the labor force participation rate increased rapidly for non-Hispanic Black women without young children (green line), almost reaching its pre-pandemic level. In contrast, the labor force participation rate fell for non-Hispanic Black women with young children (blue line) until the end of 2020. Although this rate has since increased, it remained below that of non-Hispanic Black women without young children as of June 2021.

To summarize, the labor force participation rates have recovered less for non-college, non-Hispanic Black and Hispanic women with young children compared with those without young children. As in-person schooling and day care resume, some of these women with young children may re-enter the labor force.

Conclusion

During the pandemic-induced recession, temporary shutdown orders and social distancing measures caused a sharp decline in the employment of prime-age individuals and an associated decline in their labor force participation rate, as many displaced workers were unable to return to work or could not search for new jobs during the pandemic. Although the prime-age labor force participation rate has been slowly recovering since April 2020, it remains below its pre-pandemic level. I break down the prime-age labor force participation rate by sex and education level and show that women without a bachelor's degree have experienced the largest decline and the slowest recovery in their labor force participation rate.

Moreover, I also find large differences in labor market recovery among non-college women from different race and ethnicity groups. Hispanic women without a bachelor's degree have been hit the hardest by job losses in contact-sensitive sectors and are furthest from recovery compared with non-Hispanic white and non-Hispanic Black women.

Lastly, the presence of young children seems to be weighing on the labor force participation of non-college women from minority groups. Policymakers and employers may have the scope to address this obstacle by providing support for or access to family care, which may encourage higher labor force participation among prime-age women with young children.

Endnote

[1]The CPS is the primary source of labor force statistics and demographic data for the U.S. population. The U.S. Census Bureau collects survey data for the Bureau of Labor Statistics at a monthly frequency from approximately 60,000 households.

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