

Where Are They Now? Workers with Young Children during COVID-19

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Summary:

Employment levels for prime-age workers have been greatly reduced during the COVID-19 pandemic. The decline has fallen disproportionately on females, especially compared to past recessions, and the presence of young children is a driving factor in this differential response. This article identifies the impact of gender, young children, and the presence of a spouse on the attachment to employment for individuals who were employed immediately prior to the pandemic. Compared to the Great Recession and the most recent expansionary period in 2019, women with young children have a relatively lower level of attachment to employment in the pandemic than men and females without children. In addition, women with very young children, who accounted for 10 percent of the prepandemic workforce, accounted for almost a quarter of the unanticipated, or COVID-related, decline in employment. Taken together, these results suggest that children—and perhaps the ability to access quality childcare—are playing a different, and more significant, role than in past recessions and recoveries.

Key findings:

1. Women with children under age 6, who made up 10 percent of the prepandemic workforce, account for almost a quarter of the unanticipated employment loss related to COVID-19.
2. This research, along with supporting evidence, suggests that daycare limitations, rather than school closings, appear to be a constraining factor on the availability of workers to fill open positions in the current economy.

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JEL classification: J13, J16, J22

Key words: employment, COVID-19, childcare

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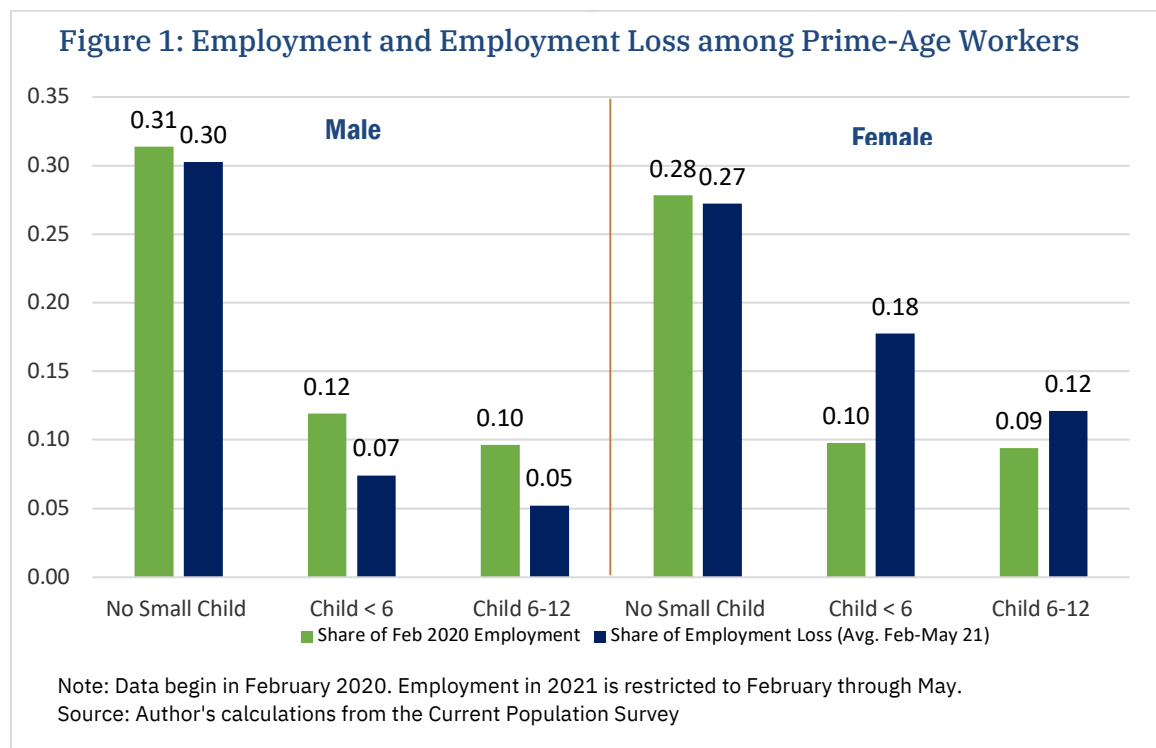
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Introduction

Employment levels in July 2021 are 5.4 million lower than immediately prior to the COVID-19 pandemic. Unlike recoveries from previous recessions, the problem is less about labor demand, as the level of job openings has far surpassed prepandemic levels. Instead, the challenge this time seems much more related to labor supply. More than half of the decline in employment can be attributed to a net exit from the labor force, as reflected in a labor force participation rate of 61.7 percent in July 2021, which is 1.6 percentage points below the level seen in February 2020. To help better understand this key labor market dynamic, this article looks at labor market outcomes for prime-age workers (aged 25–54) who had a job prior to the onset of the pandemic, with a particular focus on female employment.

The job loss for female workers has been more severe during the pandemic than in previous recessions. The presence of children appears to have played an oversized role in the employment decline of females who were working when the pandemic hit. Compared to the Great Recession, where females accounted for less than one-third of the employment decline, females have accounted for more than half of the decline during the pandemic for prime-age workers. And regarding the potential impact of caregiving for children during the pandemic, females with children under the age of 13 accounted for 19 percent of the prepandemic workforce, but they made up a disproportionate 30 percent of the exits from employment (see figure 1).¹ Conversely, females with no young children and males (regardless of child status) had less-than-proportional shares of exits from employment.



¹ This calculation, along with all the analysis in this article, uses matched samples from the Current Population Survey of prime-age workers (25–54), which follows the same individual for two four-month periods, separated by an eight-month break. Everyone in this analysis was employed in February 2020, and their labor market status was observed from February through May 2021.

Although we know that the employment retention rate during the pandemic for females with small children was disproportionately affected, we do not know if having a small child was the main driver, or if other characteristics were at play. Understanding the mechanisms behind the differential is important for projecting the future path of the recovery. For example, perhaps the occupations most adversely affected in terms of employment (such as the service sector) also have a higher concentration of women with small children. Thus, if the employment sector itself was the dominant force behind the disproportionate impact on females—as opposed to simply the presence of young children—the implication for policymakers is very different.

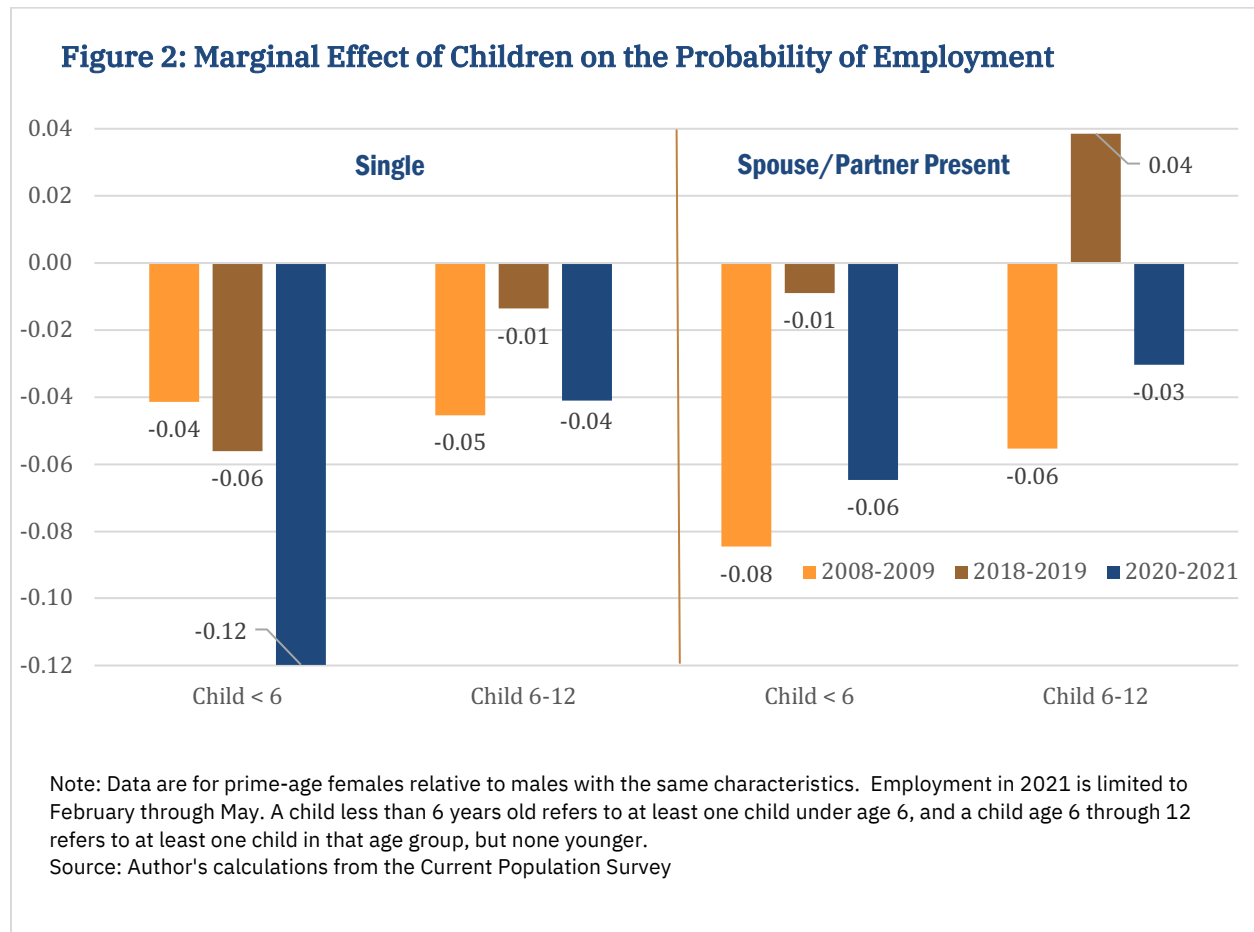
To that end, I explore the impact of children and the presence of a spouse on the probability of being employed in early 2021, after taking into account the impact of other factors such as the type of job they had prepandemic.² More precisely, I use a statistical model—one that controls for differences across age, race, education, and state as well as the prepandemic occupation and industry—to estimate the probability of being employed in early 2021 for individuals who had a job just prior to the onset of the pandemic. In particular, I explore the impact on employment of having a child(ren) under age 6 separately from the effect on employment from having a school-age child(ren). In addition, I explore whether having a spouse affects the probability of being employed. As female attachment to the labor force, especially for females with young children, is always lower than males, I use the most recent period of expansion (2018–19) and the lowest employment period during the Great Recession (2009–10) as points of comparison.³

A significant divergence in employment patterns emerged during the pandemic between males and females with children (see figure 2). Comparing the impact of children on the probability of employment for females relative to males allows us to identify the role children played in the gender differential in the response to the pandemic. These coefficients capture the unexplained differences by gender attributed to young children, and the presence of a spouse, that are driving the probability of retaining employment—after controlling for the variables mentioned above—across the three different periods. In other words, they capture the marginal impact of being female relative to male for each category.⁴ For all comparison groups shown in figure 2, females with children have a lower probability of employment retention than a similar male during the pandemic period, shown by the blue bars. However, compared to the Great Recession (the orange bars), the differential for female employment relative to males is similar, except for females with a child under age 6 and no spouse present. For this case, the differential is 8 percentage points larger than during the Great Recession, suggesting a much different impact of the pandemic relative to the Great Recession for females with a child under age 6 and no spouse present.

² I use the presence of a spouse to capture married and cohabitating couples.

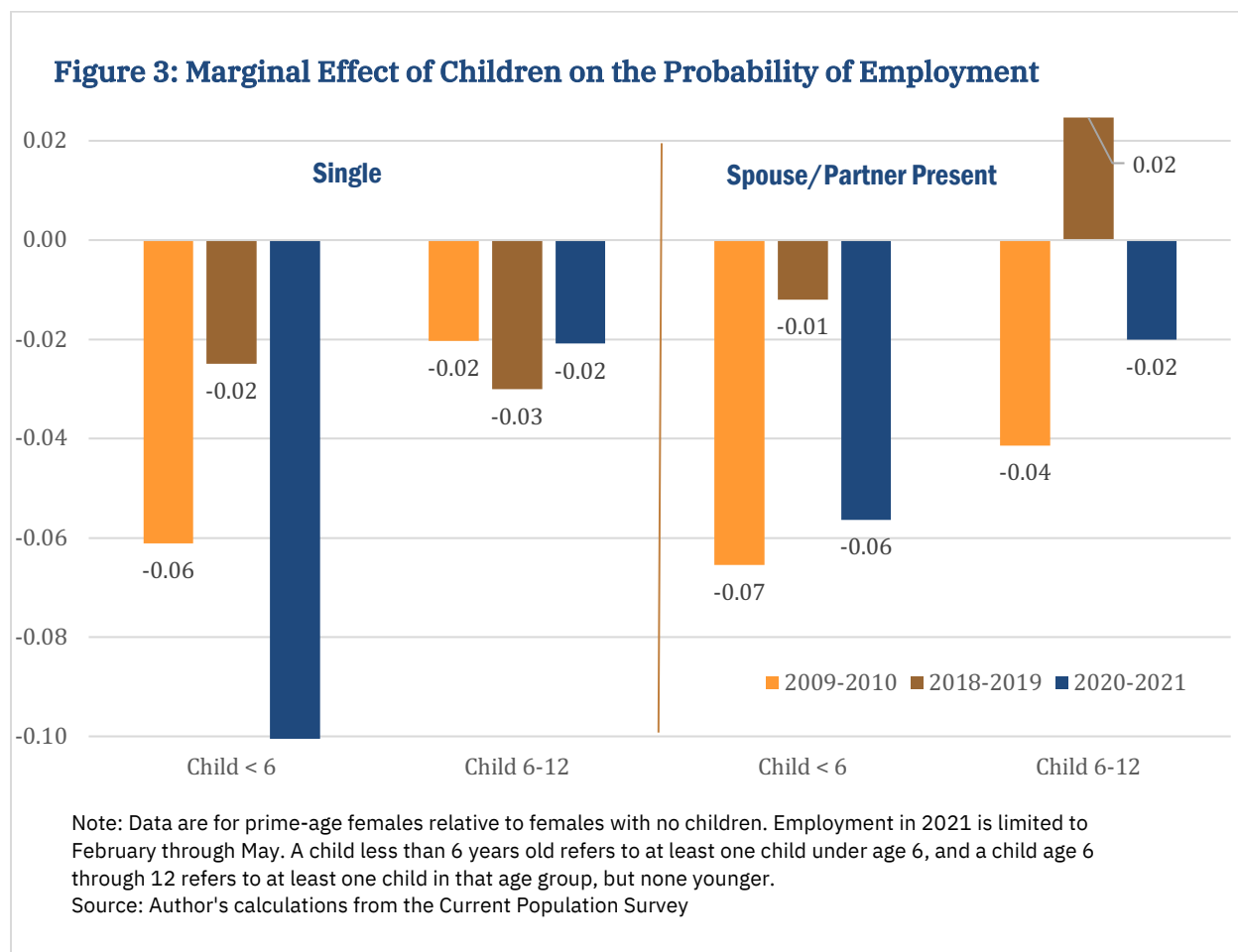
³ My model uses the same calendar months for each period to remove concerns of seasonality.

⁴ In any period, females and males without small children do not exhibit a statistical difference.



To assess the overall impact of the pandemic on the employment status of females with young children, a relevant comparison is to the prepandemic period, as shown by the brown bars. This period could be viewed as an approximation of what would have happened if the pandemic had not occurred. Here, compared to the prepandemic period, the relative probability of employment retention for females relative to males is significantly lower for all groups in the pandemic period. For this comparison, significant differences between the two periods is apparent, regardless of the presence of a spouse, with a differential ranging from 3 to 7 percentage points lower probability of employment as the marginal impact of being female.

The impact of gender on employment applies primarily to females with children. As figure 3 shows, females with young children are less likely to have maintained employment during the observed periods than females without children in almost every category and period. This differential between the two groups is very similar during the pandemic (the blue bars) and the Great Recession (the orange bars), but, as before, females with no spouse present and a child under age 6 have a larger decline in employment retention during the pandemic. Specifically, relative to females with no children, single mothers of children younger than 6 years old were 5 percentage points less likely to be employed in spring 2021 than they would have been during the Great Recession. In addition, relative to the most recent expansion (brown bars), females with children in the pandemic are significantly less likely to have retained employment than females with no small children, except for single mothers with school-age children.



Given the differing impact during this period relative to the reference periods, these results suggest that the presence of young children during the pandemic directly contributed to the decline in female employment retention—especially for those without a spouse—in a way that differs from the past, which is a conclusion supported by the work of Albenesi and Kim (2021). Modestino, Ladge, Swartz, and Lincoln (2021) suggest that the availability of quality childcare, which was already a significant constraint before the COVID-19 pandemic, is likely to be a determining factor for employment for females with very young children. Even as state COVID-19 restrictions on childcare have eased, neither access to childcare nor the willingness to use childcare services has increased.⁵ The National Association for the Education of Young Children surveyed 5,000 childcare providers from all over the country in June 2021, and the results indicate that, if anything, challenges in finding childcare have only grown during the pandemic. The survey found that not only have 18 percent of childcare centers and 9 percent of family childcare homes remained closed during the pandemic, but it found that 40 percent of the respondents indicated that, without more financial support, they would have to permanently close by September. The fact that employment in the childcare industry has declined 13

⁵ For example, Sun and Russell (2021) found that daycare closures and reductions in class size led to an increase in the unemployment rate for women, but the loosening of those restrictions did not yield a decline in unemployment in summer 2020. Rather, it yielded a further increase.

percent during the pandemic supports these survey results.⁶ Further, these results suggest that even if mothers with young children are ready to return to work, finding quality childcare might be difficult.

The effect on the employment retention of females with school-aged children (age 6–12) has been much less pronounced compared to the Great Recession, which, I should note, was the deepest recession in the postwar period before the current downturn. However, there were still significant differences compared to the most recent expansionary period. If this group were to receive an employment boost, we would have expected to see it in spring 2021, when many schools returned to in-person instruction. However, this group’s employment-retention level remains at the same level (90 percent) that we saw in March through May 2020. The flat employment growth is also consistent with the findings of Barkowski, McLaughlin, and Dai (2021), who found no support for school closures being associated with declines in employment.

Although these disparate impacts are important for understanding inequities in labor market outcomes, the macroeconomic implication from the unanticipated employment declines resulting from the presence of young children is less clear-cut. For example, Furman, Kearney, and Powell (2021) argue that the impact of children has not been a major driver of the pandemic’s overall employment loss. To explore this issue, I predict what employment retention levels in 2021 would have been if the pandemic had not occurred, using the behavior of the most recent expansionary period. Any differentials detected in predicted employment levels from this counterfactual analysis could be assumed to be an unanticipated, pandemic-related decline in employee retention in the workforce. Looking first at the initial sample, females with children under the age of 6 represented just under 10 percent of prepandemic employment in February 2020, as noted in figure 1. However, the analysis shows that this group accounts for 22 percent of the unanticipated pandemic-related employment decline (about 500,000 women). Thus, women with young children account for a disproportionate share of the unanticipated decline in employment retention during the pandemic. This decline in employment retention also has the potential to have a lasting effect, as spells of nonemployment can have a significant negative impact on lifetime earnings, especially for females.⁷

What does this mean for the large number of employers who are currently facing challenges in filling open positions? It’s an important question. As school-aged children return to reopened schools this fall, the labor supply among mothers will likely increase. However, the recent rise in cases due to the delta variant and the subsequent quarantine periods have introduced additional uncertainty to this group. The continued risk of new variants, the relatively low vaccination rates in many parts of the country, and the lack of a vaccine for young children—along with issues surrounding access to daycare—combine to suggest that women with children under age 6 are likely to face significant headwinds when reentering the workforce. It seems unlikely that these issues will resolve themselves in the immediate future, especially given the continued emergence of new variants and the low vaccination rates in many states.

⁶ Source: Bureau of Labor Statistics’s payroll survey

⁷ See Hotchkiss and Pitts (2004, 2007).

References

- Albanesi, Stefania, and Jiyeon Kim. 2021. Effects of the COVID-19 recession on the US labor market: Occupation, family, and gender. *Journal of Economic Perspectives* 35 (3):3–24.
- Barkowski, Scott, Joanne McLaughlin, and Yinlin Dai. 2021. Young children and parents' labor supply during COVID-19. May 28. Social Science Research Network. ssrn.com/abstract=3630776 <accessed August 23, 2021>.
- Furman, Jason, Melissa Schettini, and Kearney Wilson. 2021. The role of childcare challenges in the US jobs marked recovery during the COVID-19 pandemic. National Bureau of Economic Research working paper no. 28934. nber.org/papers/w28934.
- Hogan, Lauren, Michael Kim, Aaron Merchen, Johnette Peyton, Lucy Recio, and Henrique Siblesz. 2021. Holding On until help comes: A survey reveals child care's fight to survive. naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/public-policy-advocacy/holding_on_until_help_comes.survey_analysis_july_2020.pdf <accessed August 23, 2021>.
- Hotchkiss, Julie L., and M. Melinda Pitts. 2007. The role of labor market intermittency in explaining gender wage differentials. *American Economic Review* (May): 417–21.
- . 2005. Female labor force intermittency and current earnings: A switching regression model with unknown sample selection. *Applied Economics* 37 (March): 545–60.
- Modestino, Alicia Sasser, Jamie J. Ladge, Addie Swartz, and Alisa Lincoln. 2021. Childcare is a business issue. *Harvard Business Review*, April 29. hbr.org/2021/04/childcare-is-a-business-issue <accessed August 23, 2021>.
- Sun, Chuxuan, and Lauren Russell. 2021. The impact of COVID-19 childcare closures and women's labour supply. January 22. voxeu.org/print/67216 <accessed August 23, 2021>.