

# Ten Economic Facts on How Mothers Spend Their Time

Lauren Bauer, Eliana Buckner, Sara Estep, Emily Moss, and Morgan Welch



## ACKNOWLEDGMENTS

The authors would like to thank Kristen Broady, David Dreyer, Misty Heggeness, Michael Madowitz, and Isabel Sawhill for their feedback on this paper and to Wendy Edelberg, Kriston McIntosh, Ryan Nunn, and Richard Reeves for both feedback on this paper and their support for the SMYC. We also extend our gratitude to Jay Shambaugh for supporting this project's inception and to Nick Bauer, Michael Madowitz, Diane Schanzenbach, and Abigail Wozniak for helpful conversations on the SMYC. Mitchell Barnes, Madison Bober, Stephanie Lu, Moriah Macklin, Jennifer Umanzor, and Sarah Wheaton provided superior research assistance. We thank Alison Hope for her diligent copy edit, and any errors that remain belong to the authors. Lastly, the authors would like to thank Jeanine Rees for all of her help with the graphic design and layout of this document.

## MISSION STATEMENT

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth.

We believe that today's increasingly competitive global economy demands public policy ideas commensurate with the challenges of the 21st Century. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments.

Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers—based on credible evidence and experience, not ideology or doctrine—to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first Treasury Secretary, who laid the foundation for the modern American economy. Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that “prudent aids and encouragements on the part of government” are necessary to enhance and guide market forces. The guiding principles of the Project remain consistent with these views.





# Ten Economic Facts on How Mothers Spend Their Time

Lauren Bauer

*The Hamilton Project and Economic Studies, The Brookings Institution*

Eliana Buckner

*The Hamilton Project at The Brookings Institution*

Sara Estep

*The Hamilton Project at The Brookings Institution*

Emily Moss

*The Hamilton Project at The Brookings Institution*

Morgan Welch

*The Center on Children and Families at The Brookings Institution*

*March 2021*

BROOKINGS

# Contents

Introduction.....	1
Facts	
Section 1. Labor Force Participation and Child Care	
1. Through 2019, labor force participation rates of prime-age women had converged, with the exception of married mothers of young children.....	2
2. After March 2020, parents of young children dropped out of the labor force at higher rates than parents of teens.....	3
3. More than one in ten mothers of young children left their jobs due to child-care responsibilities at some point in 2020.....	4
4. At the start of 2021, Black and Hispanic mothers of young children were more likely to be unemployed than were white mothers of young children.....	5
Section 2. Labor Force Participation and Time Use	
5. Employed mothers of young children spend two hours a day more than fathers on nonmarket labor.....	6
6. During the COVID-19 pandemic, fewer working mothers with young children are working full time.....	7
7. Seventy percent of mothers who are essential workers or working from home report that it is difficult to balance work and family.....	8
Section 3. Child Care and Time Use	
8. The vast majority of mothers with young children are now spending time on educational activities with their children.....	9
9. Mothers report doing the majority of child care.....	10
10. Lower mental health among mothers is associated with poor economic outcomes.....	11
Technical Appendix.....	12
References.....	16

# Introduction

The COVID-19 pandemic is taking a toll.

The pressures that mothers of young children (defined throughout as having a child under the age of 13 in the household) have faced over the course of the COVID-19 pandemic are legion. Pressure to stay in the labor market as schools closed and child-care networks collapsed (Madowitz and Boesch 2020). Pressure to facilitate their children’s formal education and provide child care as the economy shut down, the labor market contracted, and families struggled to make ends meet. Pressure to work, care, cook, clean, keep safe, keep afloat. From the outset of the pandemic, mothers faced pressure to “do it all” but with fewer resources and support than before.

While inequities persist in many aspects of women’s lives, some of the stickier problems for women stem from the difficult choices they face in reconciling competing demands on their time. Even before the pandemic, caregiving and family responsibilities disproportionately fell on women and on mothers; in 2018, a third of women who reported wanting a job but who were not actively looking for work cited family responsibilities as the reason why (Nunn, Parsons, and Shambaugh 2019). For each American to reach their full potential and for the American economy to grow, it is essential to remove barriers to women’s full and equitable participation in the labor market. But to remove those barriers and support mothers’ economic recovery from the COVID-19 pandemic requires an understanding of the problem.

As we celebrate Women’s History Month and as we observe the anniversary of the onset of the COVID-19 recession, we review trends in women’s labor force participation and document how mothers of children under age 13 have changed how they spend their time. In this set of economic facts, we detail some of the ways in which work, time, and caregiving have changed for mothers with young children from before the onset of the COVID-19 pandemic through 2020 until early 2021.

In addition to relying on data collected by the federal statistical agencies, we also developed and fielded our own survey. This survey, the Survey of Mothers with Young Children (SMYC), was administered by The Hamilton Project and the Future of the Middle Class Initiative at Brookings twice, between April 27 and April 28, 2020, and between October 7 and November 5, 2020.

While these economic facts focus on mothers with young children, fathers and parents of teens have also experienced a time squeeze, labor market volatility, mental health struggles, and parenting pressures (Aaronson and Edelberg 2020; Ammerman et al. 2020; de Miranda et al. 2020; Patrick et al. 2020; Petts, Carlson, and Pepin 2020; Stevenson 2020; Weissbourd et al. 2020). Yet, the economic facts presented here demonstrate that it is difficult to overstate the disruption that parents—disproportionately mothers, and even more disproportionately mothers of young children—have borne during the COVID-19 pandemic.

In 2017, The Hamilton Project published the book *The 51 Percent: Driving Growth through Women’s Economic Participation* (Schanzenbach and Nunn 2017), which argued that many of the limits on American women’s labor market opportunities could be addressed by public policy reforms. The Hamilton Project has offered policy proposals to address the high cost of child care (Cascio 2017), as well as access to paid parental leave (Ruhm 2017), and earned sick leave (Maestas 2017) to spur labor force participation among women. These policies have gained more attention in light of the pandemic, but will support working mothers long after the acute crisis caused by the COVID-19 pandemic has passed. In May 2021, The Hamilton Project will be releasing new policy proposals that address child care and paid family and sick leave in light of the current crisis. Policy proposals in this realm will both benefit working mothers and help create an economy that works for everyone.



# Section 1. Labor Force Participation and Child Care

## 1. Through 2019, labor force participation rates of prime-age women had converged, with the exception of married mothers of young children.

Figure 1 shows labor force participation rates (LFPRs) for women by marital status and by the age of the mother's youngest child: whether they have a young child (a child under 13 years old), a teenager (a child aged 13–18), or no children at home. While 2019 did not mark a peak in participation for any of these groups, we note several trends.

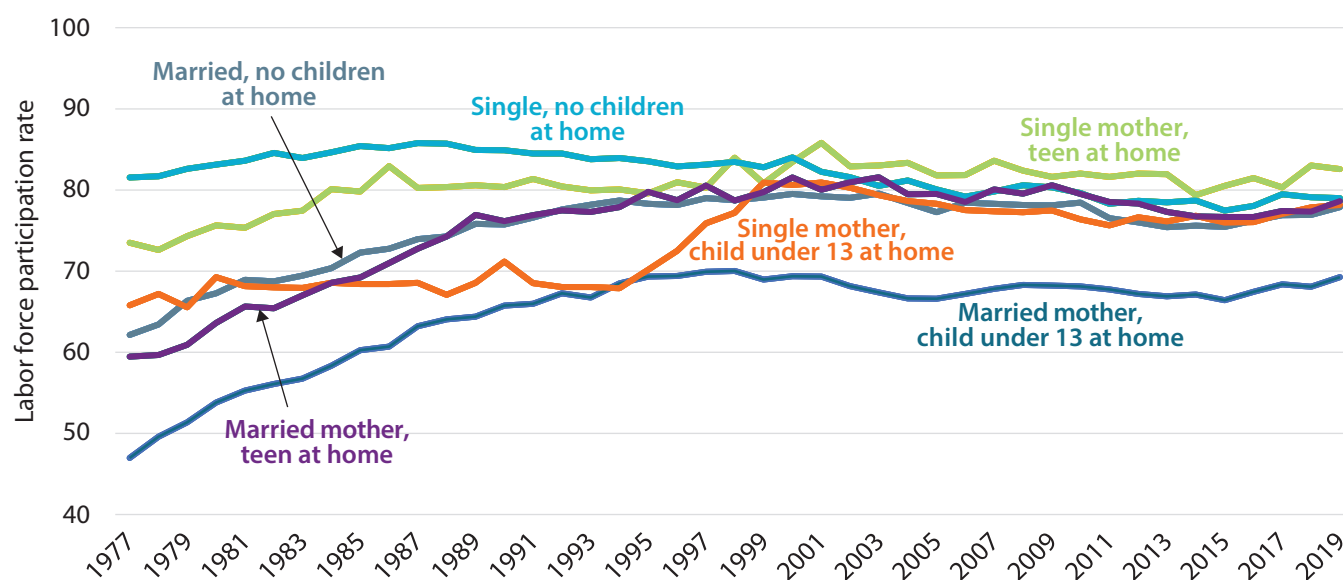
First, the LFPRs of single mothers with young children have followed a similar pattern to others since the mid-1990s. Notably, single mothers with young children made a ten percentage point jump (from 70.2 to 80.6 percent) in their LFPRs from 1995 to 2000. A tight labor market and policy changes including welfare reform and the introduction of the Earned Income Tax Credit spurred this growth (Bastian and Lochner 2021; Black, Schanzenbach, and Breitwieser 2017). In 2019 the LFPRs of single women with young children, married women with teenagers, and women without children (regardless of marital status) were statistically indistinguishable.

Second, for the past 20 years single mothers with teenagers have had the highest LFPRs, overtaking single women without children at the turn of the 21st century. This flip occurred at the same moment that we document declining labor force participation among teens and young adults—coupled with increasing school enrollment; we have no clear evidence that prime-age women (i.e., women aged 25–54) without children are also decreasing the labor force participation to enroll in school (Bauer et al. 2019).

Finally, while married women with young children have the lowest LFPRs, their participation rates were accelerating prior to the onset of the COVID-19 pandemic. The LFPR for married women with young children increased by 1.1 percentage points (from 68.1 to 69.2 percent) from 2018 to 2019. In particular, the LFPRs for married women between the ages of 25 and 34 with young children and for married women between the ages of 45 to 54 without children were statistically significantly higher in 2019 than in 2018, growing from 62.6 to 64.4 percent, and from 74.5 to 76.4 percent, respectively.

FIGURE 1.

### Prime-Age Women's Labor Force Participation, by Marital Status and Presence of Children, 1977–2019



Source: Current Population Survey Annual Social and Economic Supplement (ASEC) (Bureau of Labor Statistics [BLS], 1977–2019); author's calculations.

Note: "Teen" refers to children ages 13 to 18. Women are exclusively assigned to a group based on the age of their own youngest child.

## 2. After March 2020, parents of young children dropped out of the labor force at higher rates than parents of teens.

The COVID-19 pandemic has exacerbated the existing labor force participation gap between married mothers with young children and everyone else. While employment has steadily increased since the start of the pandemic, it is still substantially below pre-pandemic levels; overall, many mothers have dropped out of the labor force entirely (Stevenson 2020; Heggeness et al. 2021).

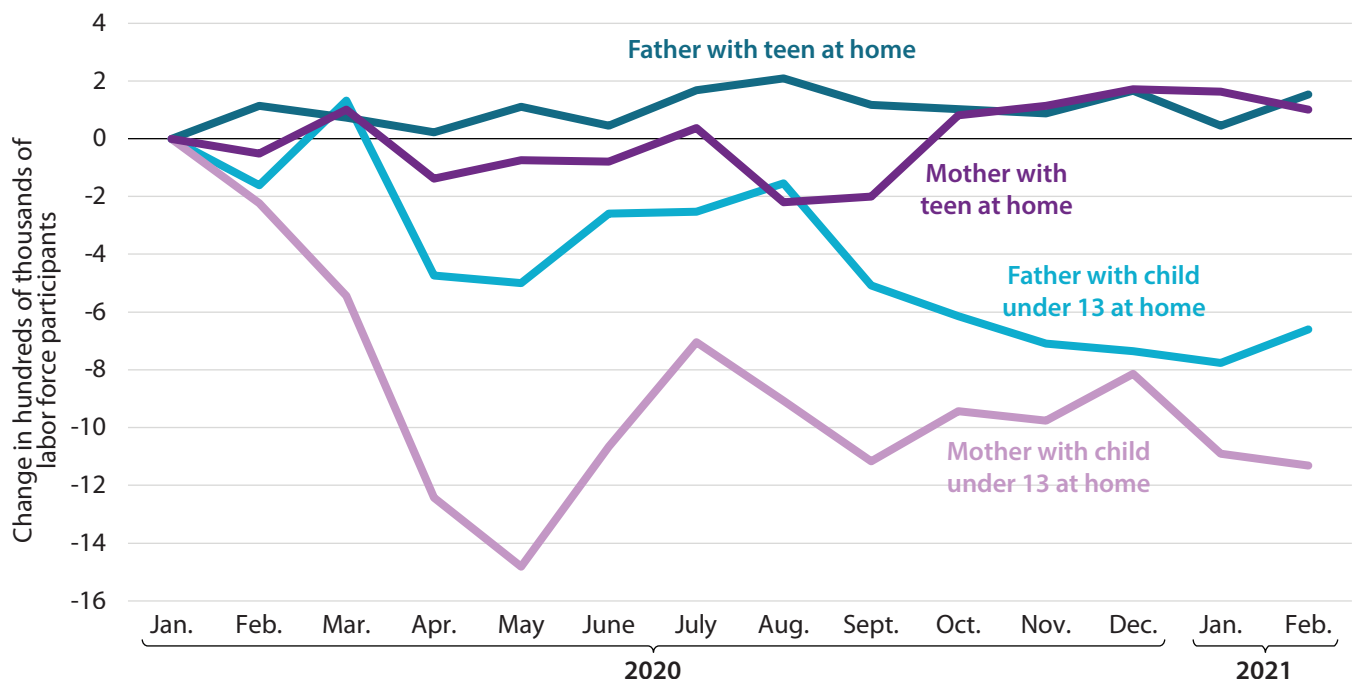
The number of children in a household and the ages of those children have been consequential to differences in labor market outcomes during the pandemic (Edwards 2020). Figure 2 shows changes in the number of labor force participants—those who are employed and those who are seeking employment—for fathers and mothers with minor children at home by the age of one's youngest child.

Changes in labor force participation levels for parents of young children are linked to school closures: the lowest

levels of participation among mothers with young children and fathers with young children were at the onset of the pandemic when schools first closed and then in September 2020, when students typically would be returning to school (Amuedo-Dorantes et al. 2020). Working mothers in states that imposed early stay-at-home orders and school closures were 68.8 percent more likely to take leave from jobs than were working mothers in states that closed schools later (Heggeness and Fields 2020). In April 2020, the loss of full-time child care and remote schooling were associated with a higher likelihood that mothers would leave the labor force (Petts, Carlson, and Pepin 2020). In October 2020 an estimated 1.2 million parents of school-age children had been pushed out of the labor force since February, around the time the pandemic started, largely due to school closings (Tedeschi 2020). About 2.3 million fewer women were in the labor force in February 2021 than in February 2020 (National Women's Law Center 2021).

FIGURE 2.

### Change in Labor Force Participation among Prime-Age Adults since January 2020, by Gender and Parental Status



Source: Current Population Survey (Bureau of Labor Statistics), 2020–2021; authors' calculations.

Note: "Teen" refers to children ages 13 to 18. Parents are exclusively assigned to a group based on the age of their own youngest child.

### 3. More than one in ten mothers of young children left their jobs due to child-care responsibilities at some point in 2020.

An individual's personal decision to stop working reflects a variety of factors, but evidence and economic theory suggest that it is disproportionately women who face these decisions (Goldin 1990; Blau and Kahn 2013). The pandemic, as well as traditional gender divisions of labor, has intensified child-care concerns: during the COVID-19 pandemic one-third of working-age women who are not working cite child-care concerns as their reason for not working; by contrast, only 12 percent of working-age men who are not working cite child-care concerns as the reason for not working (Heggeness and Fields 2020). Three out of four mothers with children under age 10 say child care is one of their top three challenges during the COVID-19 pandemic, compared to 54 percent of fathers (LeanIn and McKinsey & Company 2020). Only one in five families was receiving in-person help with child care, and as many as 4.5 million child-care positions could be permanently lost as a result of this pandemic (Miller 2020a; Jessen-Howard and Workman 2020).

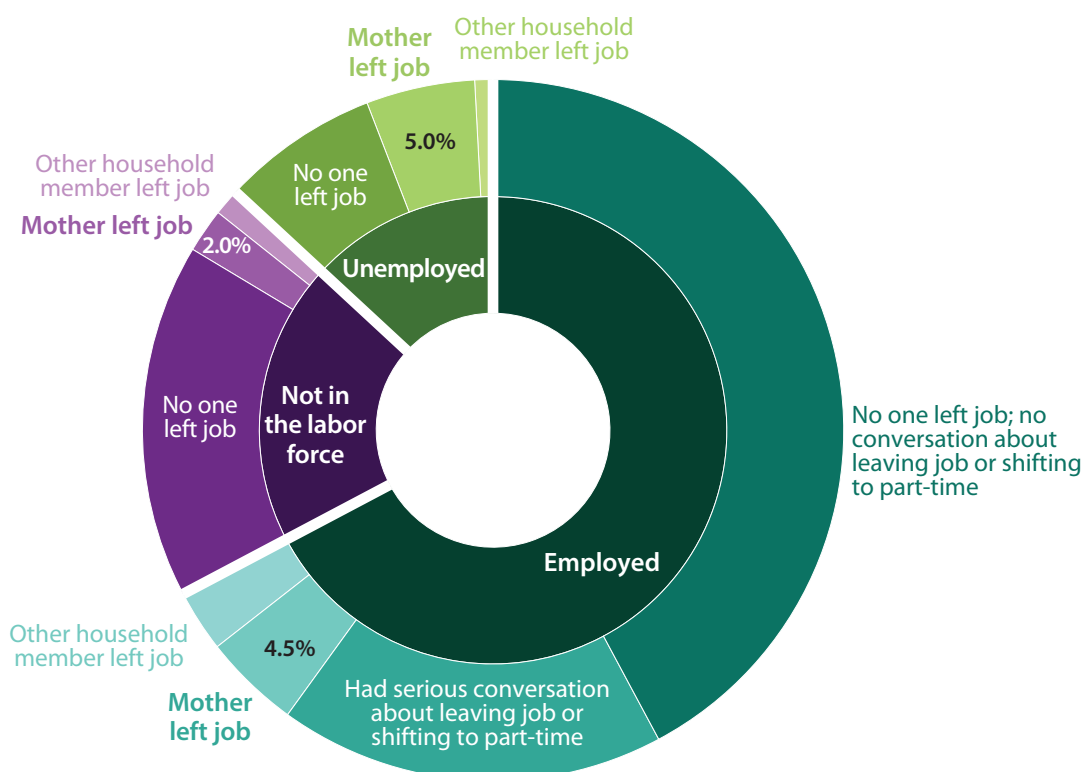
In the SMYC that was fielded between October 7 and November 5, 2020, mothers were asked whether they or someone else in their household had left their job due to caregiving responsibilities. Figure 3 shows the share of mothers who

reported leaving her job at some point in 2020 due to child care responsibilities, her spouse/partner or another adult in the household left their job at some point in 2020 due to child care responsibilities, or no one in the household left their job at some in 2020 due to child care responsibilities. Those who were employed at the time of the SMYC were then asked if they had had a serious conversation about leaving their job or formally moving to part-time status to care for their child.

Of mothers with young children, more than 16 percent reported that someone in their household left their job due to child-care responsibilities at some point in 2020; in those cases, 70 percent of that group were the mothers themselves who left their job. Some of these mothers (4.5 percent) who left work due to child care responsibilities at some point in 2020 were reemployed by October. But notably, among mothers who were unemployed in October, almost 40 percent (5.0 percent overall) reported that they had left their job because of child-care responsibilities since March 2020. Among mothers who were employed in October, 25 percent reported having a serious conversation about leaving the workforce or formally moving to part-time status to take care of their children.

FIGURE 3.

#### Distribution of Mothers Who Left their Job Due to Child Care at Some Point in 2020, by Fall 2020 Employment Status



Source: Brookings Institution Hamilton Project and Future of the Middle Class Initiative Survey of Mothers with Young Children 2020; authors' calculations.

Note: For additional details, see the technical appendix.



## 4. At the start of 2021, Black and Hispanic mothers of young children were more likely to be unemployed than were white mothers of young children.

Figure 4 shows that there are substantial differences in the distribution of employment statuses across white, Black, and Hispanic mothers with young children in 2021. When comparing employment status in February 2021 to February 2020, mothers with young children saw decreases in the share employed at work. While all mothers with young children are more likely to be out of the labor force due to caregiving responsibilities, based on these data, white mothers of young children were closer to their pre-pandemic baseline distribution as of February 2021 than Black, Hispanic, or Asian (not shown) mothers (Weller 2020).

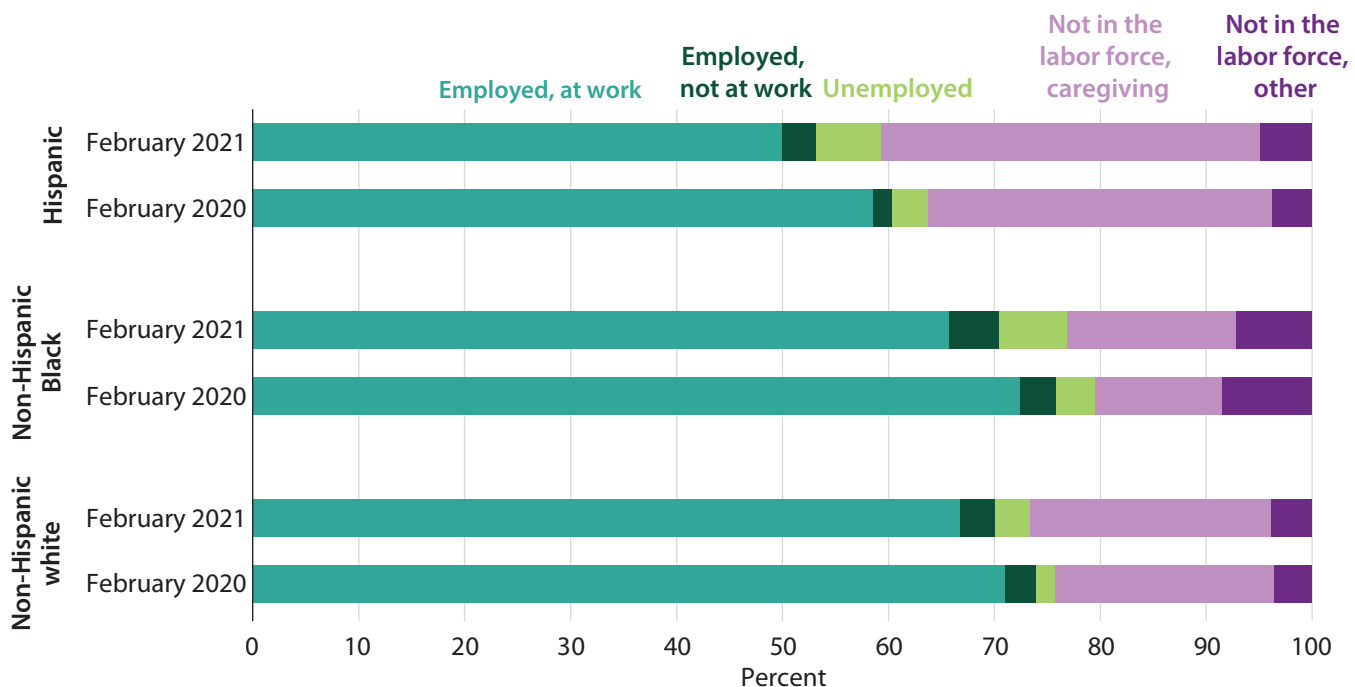
At the beginning of 2020, roughly 59 percent of Hispanic mothers with young children were employed at work; at the beginning of 2021, about 50 percent were. Hispanic mothers

of young children were mostly likely before and during the pandemic to be a labor force nonparticipant due to caregiving. The longer the pandemic continues, the more likely it is that women, and in particular Hispanic women, will permanently be without employment (Horsley 2020).

Among all women who were laid off, quit, or dropped out of the labor force, Black women saw the greatest increase in the share of population that was not in the labor force due to caregiving responsibilities, in part due to a high labor force participation baseline among Black women. Black mothers of young children in the labor force are struggling to get jobs; as of February 2021, 6.5 percent of Black mothers of young children were unemployed, compared to 3.4 percent of white mothers.

FIGURE 4.

### Distribution of Employment Statuses Among Prime-Age Mothers with Children under 13, by Race and Ethnicity



Source: Current Population Survey (Bureau of Labor Statistics), 2020–2021; authors' calculations.

Note: For additional details, see the technical appendix.

## Section 2. Labor Force Participation and Time Use

### 5. Employed mothers of young children spend two hours a day more than fathers on nonmarket labor.

While gender division of labor in the household has become more egalitarian over the past few decades as women entered the workforce in increasing numbers, women do much of the child care and household duties (e.g. nonmarket labor; Bauer and Moss 2020; Pew Research Center 2017). Figure 5 shows the differences in hours spent on various activities between employed mothers and employed fathers with children under the age of 13 prior to the onset of the COVID-19 pandemic, pooled for 2014–19.

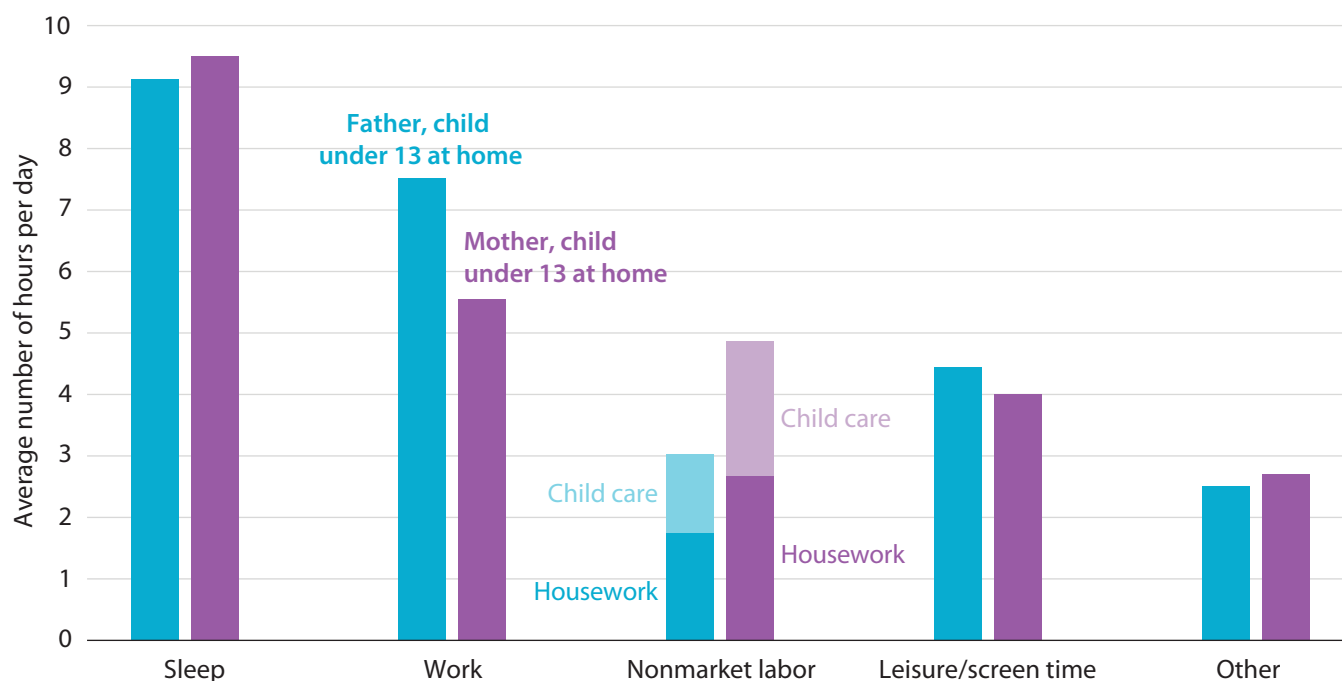
In recent years, mothers of young children were spending about 25 percent less time working compared to fathers; however, they were still performing more unpaid labor in the form of nonmarket labor and child care. Employed mothers spent on average five hours a day on nonmarket labor including two hours a day on direct child care, which is about double that spent by fathers. Additionally, mothers spent more time than fathers with their children (not

shown). In total, employed mothers with young children spent six hours on an average day with their children, either on direct child care or on other activities with their child present. Fathers with young children spent approximately four hours on an average day on activities with their children present.

Despite working parents spending less time than nonworking parents spend on direct child care, working parents in 2014–19 spent more time on this task than working parents did in previous decades; in part due to their ability to work nonstandard hours (Fox et al. 2012). Given competing demands and a finite supply of time, evidence suggests that the time that parents carve out for and spend with their children is time well spent (Caucutt et al. 2020; Kalil 2015; Guryan, Hurst, and Kearney 2008).

FIGURE 5.

#### Time Use of Employed Parents with Young Children, by Gender, 2014–2019



Source: American Time Use Survey (ATUS), 2014–2019; authors' calculations.

Note: Data are restricted to employed respondents with children under age 13. Employment refers to both part-time and full-time employment. "Other" includes activities related to education, civic engagement, and personal care. All activities in the ATUS have been assigned to one of the six time use categories in the figure, or are unclassified. Respondents with nonzero minutes recorded as unclassified time are not included. See the technical appendix for the full list of activities within each time use category.

## 6. During the COVID-19 pandemic, fewer working mothers with young children are working full time.

The COVID-19 recession has highlighted and aggravated differences in how parents spend their time as schools and child-care centers closed. In particular, the share of employed mothers with young children working part-time instead of full-time hours was much higher in April 2020 than it was in 2014–19. While more employed mothers were working full-time in October 2020 than in April, fewer than three in ten were—still well below the rate from 2014–19. The share of employed mothers spending no time working has also increased since the beginning of the pandemic but is somewhat lower than it was during the years 2014–19.

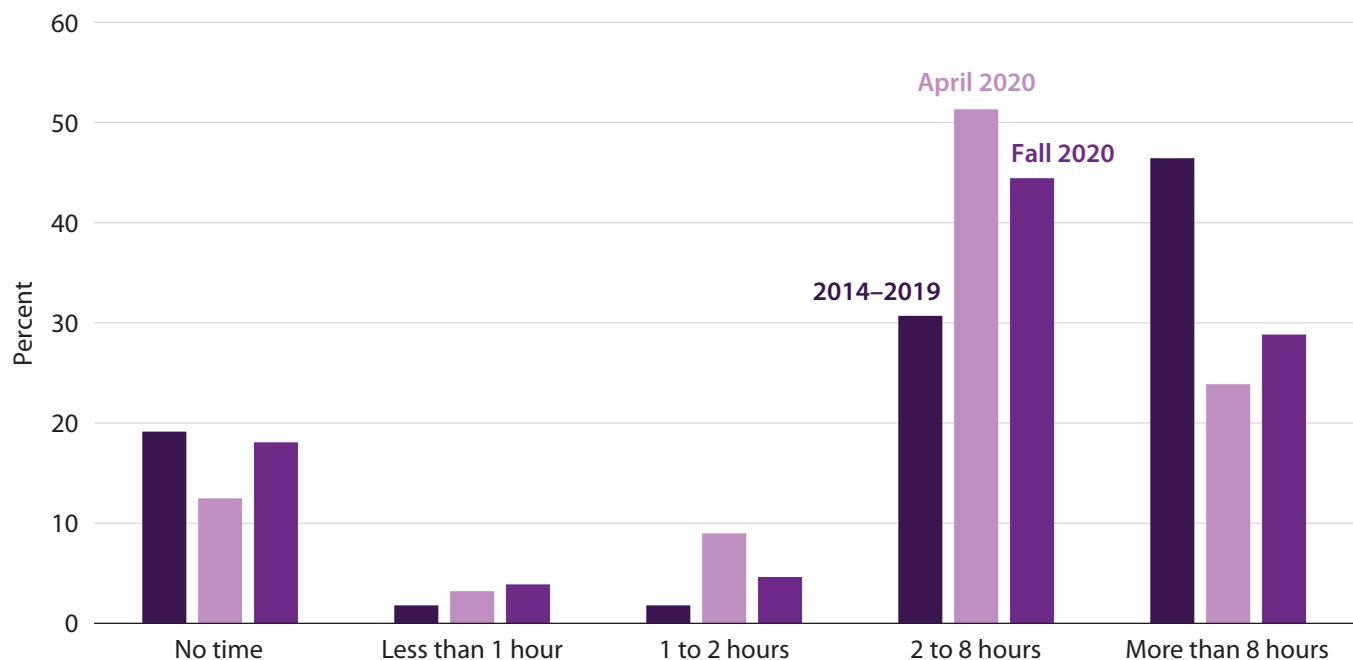
Working mothers, particularly part-time workers, have been subjected to cuts in their hours as a result of the pandemic. Cultural pressures may play a role in the difference in time women spend working compared to men; employers do not

expect women to work more or even the same amount than they were working pre-pandemic (Miller 2020b). Employers may be responding to the additional homeschooling responsibilities that have been borne primarily by women. In a Pew Research Center survey, 65 percent of respondents listed child-care responsibilities as a reason they were working from home (Parker, Horowitz, and Minkin 2020).

The gender gap in hours worked which already existed in the time use data we present prior to 2020 increased due to the current recession (Collins et al. 2020; Kashen, Glynn, and Novello 2020). Collins and her coauthors (2020) found that, during the first two months of COVID-19 among parents with children under age 13, mothers reduced their time spent working by 4 to 4.5 times more than fathers did.

FIGURE 6.

### Distribution of Weekday Time Spent on Work among Employed Mothers with Young Children



Source: American Time Use Survey (ATUS), 2014–2019; Brookings Institution Hamilton Project and Future of the Middle Class Initiative Survey of Mothers with Young Children, 2020; authors' calculations.

Note: All data are restricted to women with children under age 13. Employment refers to both part-time and full-time employment. ATUS respondents with nonzero minutes recorded as unclassified time are not included. See the technical appendix for the full list of activities within the ATUS work category.

THE  
HAMILTON  
PROJECT  
BROOKINGS

## 7. Seventy percent of mothers who are essential workers or working from home report that it is difficult to balance work and family.

Many factors contributed to workplace pressures experienced by mothers of young children in the fall of 2020, with workplace flexibilities for those able to work from home enabling some mothers to remain attached to the labor force (Barkowski, McLaughlin, and Dai 2020). Figure 7 shows how mothers perceive workplace flexibilities in light of competing demands on and for their time.

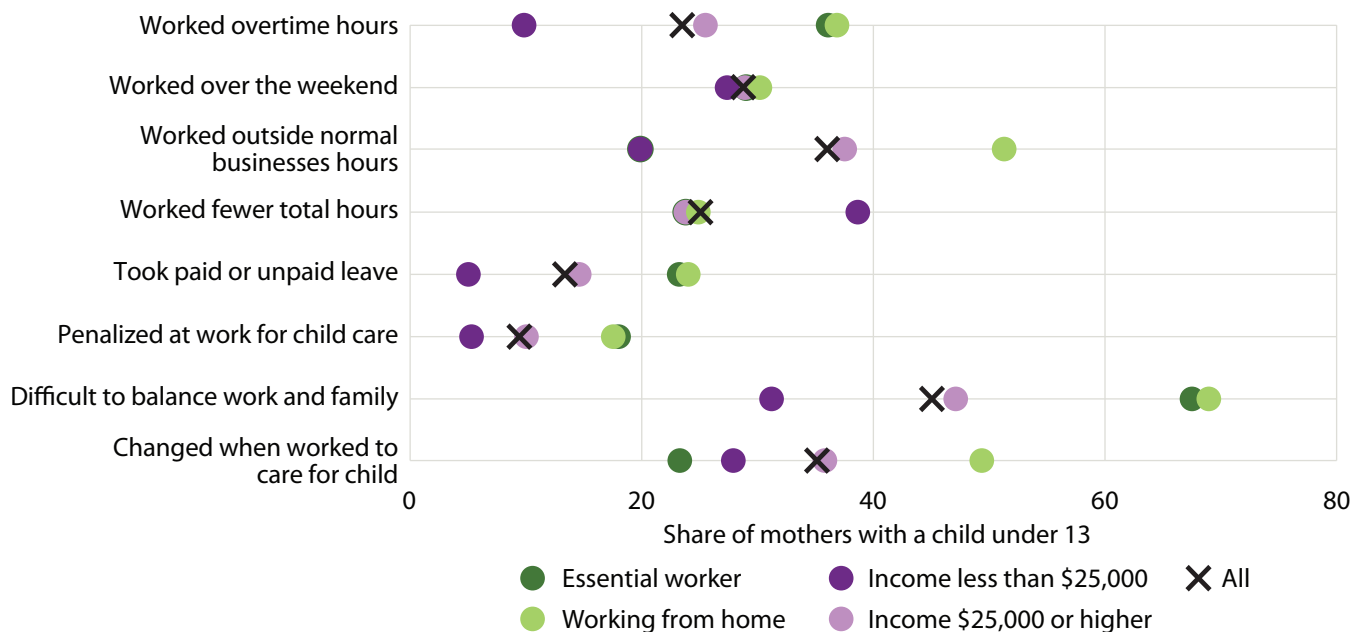
More than 10 percent of respondents said they had been penalized at work for needing to perform child-care duties. Nearly half of all parents said it was difficult to balance work and family responsibilities, but it was those who self-reported as essential workers (a subgroup of those working outside the home) and those who reported working from home that were more likely to say so; those working from home are obligated to care for their children during normal work hours while those who are essential workers lack the time to handle household obligations (Guyot and Sawhill 2020). This comports with other research which found that two in

five mothers say they must hide their caregiving struggles at work (Catalyst 2020) and that mothers who are working are more likely to report that their work-life balance has become more difficult (Igielnik 2021).

Workers earning more than \$25,000 annually were nearly twice as likely to work outside the normal business hours compared to those making less than that income. Forty percent of all workers were working outside the normal business hours compared to more than half of those working from home. Across the board, more than 30 percent of respondents were working over the weekend.

More than a quarter of respondents reported that they were working fewer hours relative to their pre-COVID baseline but low-income workers were nearly twice as likely to be working fewer hours. This finding is consistent with research indicating that low-income workers were more likely to have their total hours cut back by employers during the COVID-19 recession (Maye and Williamson 2020).

**FIGURE 7.**  
**Work-Related Experiences of Employed Mothers with Young Children, October 2020**



Source: Brookings Institution Hamilton Project and Future of the Middle Class Initiative Survey of Mothers with Young Children, 2020; authors' calculations.

Note: "Essential worker" refers to self-identified essential workers who also reported working outside the home. "Worked overtime hours" includes respondents who reported working overtime hours or more hours than usual. "Penalized at work for child care" includes those who responded "strongly agree" or "agree" to the statement: "I am being penalized at work because I have to care for my children during the coronavirus pandemic." "Difficult to balance work and family" includes those who responded it was "very difficult" or "somewhat difficult" to personally balance work and family responsibilities. While these responses refer to the period since March 2020, all other responses refer to the prior week.

## Section 3. Child Care and Time Use

### 8. The vast majority of mothers with young children are now spending time on educational activities with their children.

As schools closed, the burden of support for education fell on parents and other caretakers. Figure 8 shows the share of mothers who reported spending time on education support and enrichment shortly after the onset of the pandemic in the United States in April 2020 and in the fall of 2020 relative to the pre-pandemic period (2014–19) on measures that are comparable across both periods. The share of mothers with young children who engaged in educational activities skyrocketed in April of 2020: nearly every mother with a young child reported that they did something educational with their children.

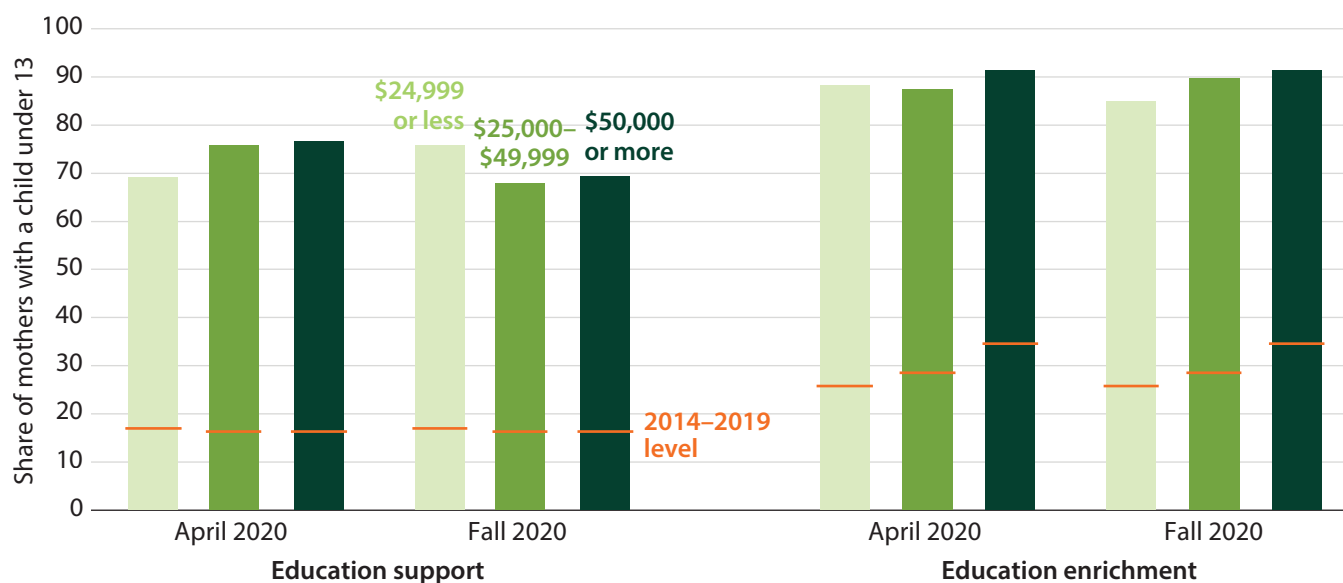
In April and the fall of 2020 the majority of mothers with young children reported that, in the preceding week, they had provided educational support through supervisory activities like doing schoolwork with their children. Similarly,

more than 90 percent of mothers of young children reported doing at least one enrichment activity, such as reading or playing with their children. While the American Time Use Survey asks about activities in the preceding 24 hours as opposed to the preceding week, it is clear that parents were asked to do more to support their children's education directly in 2020, and that they did so.

In October 2020 the share of mothers in the middle- and highest-income groups providing educational support decreased slightly, while those in the lowest-income group were more likely to engage in educational support; that is the reverse of findings in April. In the survey, this gradation is consistent with more lower-income parents reporting that their children were still engaged in remote schooling in the fall.

FIGURE 8.

#### Share of Mothers with Young Children Who Spent Time on Educational Activities with Their Children, by Income



Source: American Time Use Survey (ATUS), 2014–2019; Brookings Institution Hamilton Project and Future of the Middle Class Initiative Survey of Mothers with Young Children, 2020; authors' calculations.

Note: Respondents in the Survey of Mothers with Young Children were asked about activities that they engaged in with their children in the prior week. The American Time Use Survey is a time diary capturing activities in a 24 hour period. The differences in response periods likely inflate the differences between the 2014–19 levels and 2020 levels. For additional details, please see the technical appendix.



## 9. Mothers report doing the majority of child care.

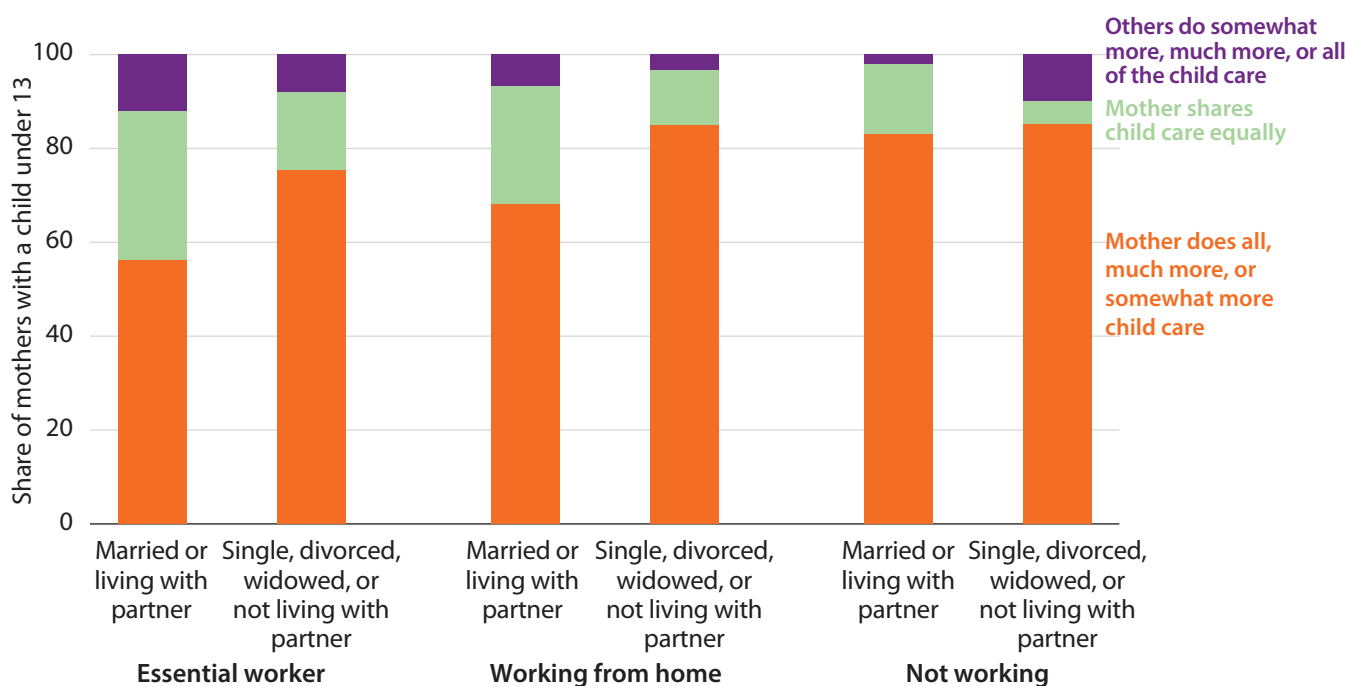
As school and day-care centers closed and stay-at-home orders ensued, parents assumed additional educational and child-care duties at home (Malik et al. 2020). In fact, more than 60 percent of parents with children under the age of 5 reported that their child-care provider had closed or reduced operations, leaving parents scrambling to find support (Smith and Tracey 2020; Ali, Herbst, and Makridis 2021). For single mothers, the loss of child care support has been particularly consequential.

Gender disparities in time use documented in fact 5 have persisted in 2020; most mothers report that they are doing all, much more, or somewhat more child care than others during the pandemic. As shown in figure 9, regardless of marital status mothers reported performing a majority of child-care duties during the pandemic. More than half of mothers who were essential workers, working from home,

or not in the labor force identified as performing all, much more, or somewhat more of the child-care duties within their household.

Examining these differences in the share of child-care duties among these groups, we find mothers outside of the labor force are more likely to engage in child care and educational activities with their children relative to mothers participating in the labor force. However, we did find that a large share of married or cohabitating mothers (68 percent) and single mothers (85 percent) who were working from home were taking on most of the child-care duties in their household. This is consistent with findings from other research that found that women have carried a heavier load in child care during the pandemic, even while working (Prados and Zammaro 2020).

**FIGURE 9.**  
**Mother's Perception of Child Care Responsibilities, by Employment and Marital Status, Fall 2020**



Source: Brookings Institution Hamilton Project and Future of the Middle Class Initiative Survey of Mothers with Young Children, 2020; authors' calculations.

Note: Essential workers are restricted to self-identified essential workers who did not report working from home.

## 10. Lower mental health among mothers is associated with poor economic outcomes.

During the COVID-19 pandemic, researchers have found that mothers are struggling to take care of their own and their children's health and that well-being has declined (Almeida et al. 2020; Calarco et al. 2020; Hibell et al. 2021; Kotlar et al. 2021; Prados and Zamarro 2020). To better understand the relationship between mental health and economic consequences, we created a standardized measure of four key variables from the Household Pulse Survey to capture maternal mental health based on questions about feeling lack of interest, worried, anxious, or down in the preceding seven days. The resulting index, split into four quartiles, places mothers on a scale of roughly -2 to 1, with a mean of 0; higher positive numbers indicate better mental health.

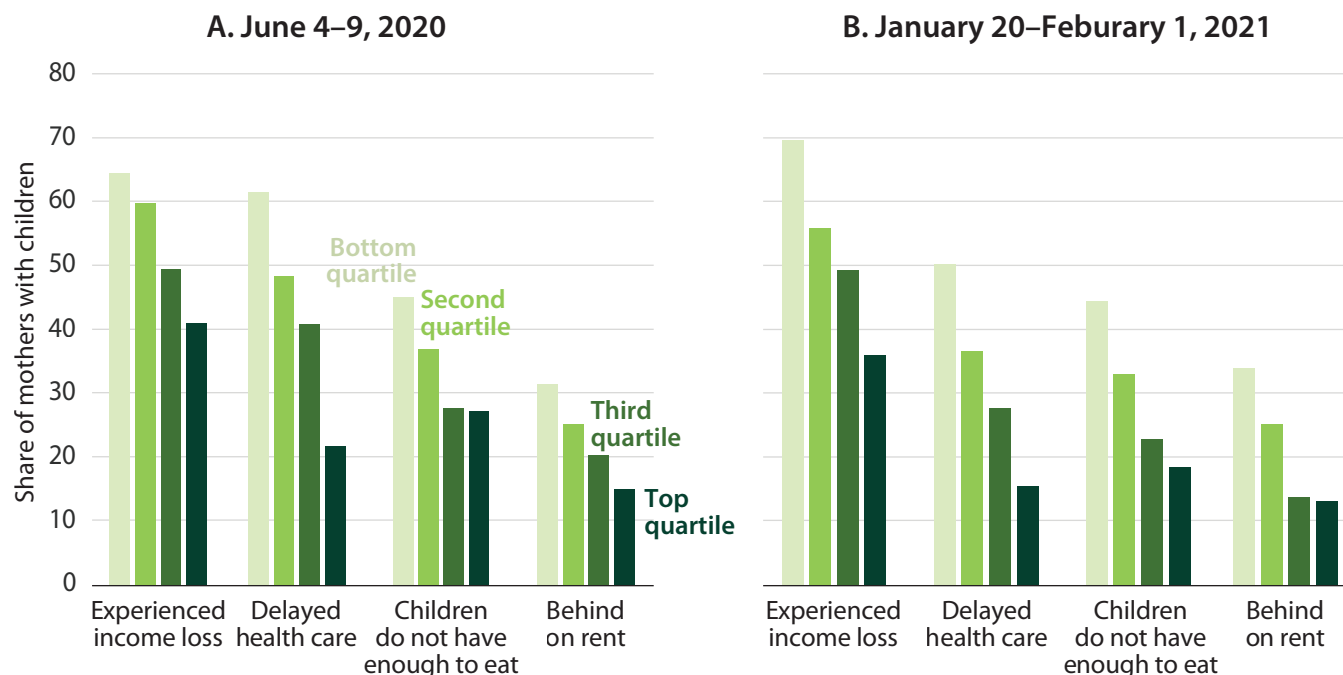
Figure 10 shows, by mental health quartile in early June 2020 (Figure 10A) and late January 2021 (10B), the share of women living with minor children (under 18) who report

poor economic outcomes. These women experienced an income loss, they delayed health-care spending, they did not have the resources to feed the children in their household, or they got behind on rent or mortgage payments. These categories capture overall rates of these negative experiences, not necessarily experiences of multiple negative economic outcomes.

We find that by connecting economic consequences and maternal mental health, a clearer picture emerges. Across both weeks, those with a lower rating on the mental health index have a higher likelihood of experiencing each of the poor economic outcomes. While we do not take a stand on causality or directionality, it is self-evident (and evidence-based, i.e., Kalil, Mayer, and Shah 2020) that the COVID-19 pandemic is taking a physical, economic, and mental health toll on mothers.

FIGURE 10.

### Incidence of Economic Indicators, by Mental Health Quartile



Source: Household Pulse Survey, 2020–21 (Census Bureau); authors' calculations.

Note: The range of values on the mental health index are: bottom quartile (-2.15, -0.91), second quartile (-0.81, -0.01), third quartile (0.002, 0.52), top quartile (0.63, 0.98). Higher positive values indicate better mental health. For additional details, see the technical appendix.

# Technical Appendix

## Data Sources

### Current Population Survey

The Current Population Survey is a monthly instrument fielded to produce nationally representative statistics about the labor force in the United States. Additional documentation from the Census Bureau on this survey can be found here: [www.census.gov/programs-surveys/cps.html](http://www.census.gov/programs-surveys/cps.html). In addition to using the monthly survey, this piece uses data from two of its supplements: the American Time Use Survey and the Annual Social and Economic Supplement. We use annual labor force participation statistics from the ASEC to produce the statistics in fact 1.

### American Time Use Survey

The American Time Use Survey is an ongoing supplement to the Current Population Survey, collecting 24-hour diaries to produce nationally representative data about how Americans spend their time. In this paper, diary responses are pooled for 2014-19. Respondents with nonzero minutes recorded as unclassified time (code 500000) are not included. Time categorizations were constructed by the authors with IPUMS tools and data ([www.atusdata.org/atus/](http://www.atusdata.org/atus/)); details on the specific concepts are produced below. Additional documentation from Bureau of Labor Statistics on the ATUS can be found here: [www.bls.gov/tus/home.htm](http://www.bls.gov/tus/home.htm).

### Household Pulse Survey

Since April 2020, the U.S. Census Bureau has fielded a rapid survey, the Household Pulse Survey (HPS), which is meant to track changes in household circumstances during the coronavirus pandemic. Additional documentation from the Census Bureau on the HPS can be found here: [www.census.gov/programs-surveys/household-pulse-survey/technical-documentation.html](http://www.census.gov/programs-surveys/household-pulse-survey/technical-documentation.html).

### Survey of Mothers with Young Children

The Survey of Mothers with Young Children (SMYC) was conducted and funded by two initiatives of the Brookings Institution, The Hamilton Project and The Future of the Middle Class Initiative. The Survey of Mothers with Young Children was developed by Lauren Bauer and Richard Reeves; Katherine Guyot and Emily Moss contributed substantially to the development of the survey and we acknowledge the contributions of The Hamilton Project, Future of Middle Class Initiative, and Economic Studies staff at the Brookings Institution. Michael Madowitz was instrumental in helping to develop the survey question regarding whether mothers had a serious conversation about leaving the labor force. The purpose of the survey is to assess how mothers with children 12

and under have been affected by the COVID-19 pandemic, school closures, and the economic downturn.

The survey was fielded between April 27 and April 28, 2020 and between October 7 and November 5, 2020. These data were collected using SurveyMonkey Audience. Responses were collected from a national sample as well as an oversample of households with incomes below \$25,000 annually (spring and fall) and an oversample of mothers with children five and younger (fall). The sample is limited to women over the age of 18 in the US who are the mother to at least one child age 12 and under. Information on how respondents are recruited to SurveyMonkey is available here: [www.surveymonkey.com/mp/audience](http://www.surveymonkey.com/mp/audience). For any other questions regard instrumentation and methodology, please contact Lauren Bauer ([lbauer@brookings.edu](mailto:lbauer@brookings.edu)).

### April SMYC

The final analytic sample is 1,095 respondents who are mothers with children under 12 nationwide. 98 percent of surveys were completed. After data collection, an iterative raking procedure was used to adjust for noncoverage and oversampling. Raking variables include mother age, child age, race/ethnicity, income, region. Demographic weighting variables were obtained from the 2020 Current Population Survey. The weighted data reflect the U.S. populations of mothers with children 12 and under. 212 respondents were excluded from the analysis: pregnant women, respondents who did not report the demographic variables used to reweight the data (who were given a weight of zero and therefore excluded from the analysis), respondents who did not report employment or student status, respondents who did not have a child aged 12 or under, and respondents who provided non-exclusive answers to household employment status questions were also excluded from the survey.

### Fall SMYC

The final analytic sample is 1,397 respondents who are mothers with children 12 and under nationwide. 84 percent of surveys were completed. After data collection, an iterative raking procedure was used to adjust for noncoverage and oversampling. Raking variables include mother age, child age, race/ethnicity, income, region. Demographic weighting variables were obtained from the 2020 Current Population Survey. 391 respondents were excluded from the analysis: pregnant women, respondents who did not report the demographic variables used to reweight the data (who were given a weight of zero and therefore excluded from the analysis), respondents who did not report employment or student status, respondents who did not have a child aged 12 or under, and respondents who provided non-exclusive answers to household employment status questions were also excluded from the survey.

# Documentation for Each Fact

## Fact 1

*Source: Current Population Survey Annual Social and Economic Supplement, Bureau of Labor Statistics, 1977–19; authors' calculations.*

Prime age indicates ages 25 to 54. Women are exclusively assigned to groups by marital status and the age of their own youngest child at home. “Married” is defined by women who have a spouse in the household or not in the household. “Single” is defined as all other women, including divorced and widowed women. “Child under 13 at home” means that a child under the age of 13 lives at home with the mother. Teens refer to minor children living at home, between the ages of 13 and 18. The population is limited to civilians.

## Fact 2

*Source: Current Population Survey, Bureau of Labor Statistics, 2020–21; authors' calculations.*

Prime age indicates ages 25 to 54. Mothers and fathers are exclusively assigned to groups by the age of their own youngest child at home. “Child under 13 at home” means that a child under the age of 13 lives at home with the mother. Teens refer to minor children living at home, between the ages of 13 and 18. The population is limited to civilians.

## Fact 3

*Source: Survey of Mothers with Young Children, Fall 2020; authors' calculations.*

Respondents were categorized as employed, unemployed, or not in the labor force based on responses to the question, “In the past seven days, what was your employment status?” Respondents were asked, “Has anyone in your household left their job due to child care responsibilities since the coronavirus pandemic began?” Respondents were able to give multiple responses: I left my job due to child care responsibilities, my spouse/partner left their job due to child care responsibilities, another adult in my household left their job due to child care responsibilities, no one in my household left their job due to child care responsibilities. Respondents who responded affirmatively to no one and one of the first three responses were excluded. Employed respondents were asked, “Since the pandemic began, have you had a serious conversation about leaving your job or formally shifting to part-time work to take care of your child?” Respondents were able to answer affirmatively to one, both, or none of these statements.

## Fact 4

*Source: Current Population Survey, Bureau of Labor Statistics, February 2020 and February 2021; author's calculations.*

Prime age indicates ages 25 to 54. “Child under 13 at home” means that a child under the age of 13 lives at home with the mother. Race/ethnicity categories are exclusive. The population is limited to civilians. Employment status is determined by responses to EMPSTAT. Those who report that they are not in the labor force and were not retired or disabled were asked the reason that they were not working or seeking work; those who responded “taking care of house or family” are classified as not in the labor force, caregiving.

## Fact 5

*Source: American Time Use Survey, Bureau of Labor Statistics, 2014–19; authors' calculations.*

The population is limited to employed respondents with children under 13 at home. All activities in the ATUS have been assigned to one of these categories.

*Sleep* includes sleeping; sleeplessness; sleeping not elsewhere classified.

*Work* includes work and work-related activities; travel related to work.

*Nonmarket labor* includes housework; food and drink preparation, presentation, and clean-up; interior maintenance, repair, and decoration; exterior maintenance, repair, and decoration; lawn, garden, and houseplants; animals and pets; vehicles; appliances, tools, and toys; financial management; household and personal organization and planning; household and personal mail and messages (except e-mail); home security; household management not elsewhere classified; household activities not elsewhere classified; caring for and helping non-household members; grocery shopping; purchasing gas; waiting associated with shopping; shopping not elsewhere classified; researching purchases; security procedures related to consumer purchases; consumer purchases not elsewhere classified; child care services; financial services and banking; legal services; real estate; veterinary services (excluding grooming); security procedures related to professional or personal services; professional and personal services not elsewhere classified; household services; telephone calls to or from salespeople; telephone calls to or from professional or personal care services providers; telephone calls to or from household services providers; telephone calls to or from paid child or adult care providers; travel related to household activities; travel related to caring for and helping non-household members; travel related to grocery shopping; travel related to other shopping, inclusive; travel related to purchasing gas; travel related to consumer purchases not elsewhere classified; travel related to using child care services; travel related to using financial services and banking; travel related to legal services; travel related to using real estate services; travel related to using veterinary services; travel related to using professional and personal care services not elsewhere classified; travel related to using household services.



*Leisure/screen time* includes shopping, except groceries, food, and gas; socializing and communicating; attending or hosting social events; relaxing, thinking; tobacco and drug use; listening to the radio; listening to or playing music (not radio); arts and crafts as a hobby; collecting as a hobby; hobbies, except arts and crafts and collecting; reading for personal interest; writing for personal interest; relaxing and leisure not elsewhere classified; attending performing arts; attending museums; attending gambling establishments; security procedures related to arts and entertainment; arts and entertainment not elsewhere classified; waiting associated with socializing, relaxing, and leisure; socializing, relaxing, and leisure not elsewhere classified; sports, exercise, and recreation; telephone calls to or from family members; telephone calls to or from friends, neighbors, or acquaintances; telephone calls (to or from) not elsewhere classified; waiting associated with telephone calls; telephone calls not elsewhere classified; travel related to shopping, except groceries, food, and gas; travel related to socializing, relaxing, and leisure; travel related to sports, exercise, and recreation; travel related to phone calls; security procedures related to traveling; traveling not elsewhere classified; household and personal e-mail messages; television and movies (not religious); television (religious); playing games; computer use for leisure (excluding games); attending movies or film.

*Child care* includes caring for and helping household children; activities related to household children's education; activities related to household children's health; travel related to caring for and helping household children; travel related to household children's education; travel related to household children's health.

*Other* includes grooming; health-related self care; personal activities; personal care emergencies; personal care not elsewhere classified; purchasing food (not groceries); medical and care services; personal care services; eating and drinking; travel related to personal care; travel related to purchasing food (not groceries); travel related to using medical services; travel related to using personal care services; travel related to eating and drinking; government services and civic obligations; religious and spiritual activities; volunteer activities; telephone calls to or from government officials; travel related to using government services and civic obligations; travel related to religious or spiritual activities; travel related to volunteering; education; telephone calls to or from education services providers; travel related to education.

## Fact 6

*Source: American Time Use Survey, Bureau of Labor Statistics, 2014–19; Survey of Mothers with Young Children, April 2020, Fall 2020; authors' calculations.*

In the SMYC, respondents were asked about how much time they spent doing a variety of activities the previous day. “Thinking about your day yesterday, about how many hours did you spend doing the following activities” for which

work was one of the categories. Using the bins offered in the SMYC (no time, less than 1 hour, 1–2 hours, 2–4 hours, 4–8 hours, more than 8 hours), we constructed these bins for the ATUS using the work activities (see technical appendix entry for fact 5) and restricted responses to weekdays.

## Fact 7

*Source: Survey of Mothers with Young Children, Fall 2020; authors' calculations.*

In the SMYC, only employed mothers were asked a module of questions about working conditions. Conditional on reporting being employed in the past week and then additionally on self-reported income (collected by SurveyMonkey and not Brookings) and self-reported status as an essential worker or working from home, we produce statistics based on the following questions: “Since the coronavirus pandemic, many people have had to change how they spend their time during the workday. Thinking about the past seven days, please select all of the following statements that are true about your time: I worked outside of normal business hours for me; I had to change when I worked to care for my child; I worked fewer total hours than usual; I worked over the weekend; I worked overtime hours; I worked more hours than usual.” “In the past seven days, did you take any paid or unpaid leave from your job?” “How difficult would you say it is for you personally to balance the responsibilities of your work with the responsibilities of your family?” with responses ranging from very difficult to not at all difficult. “Do you agree or disagree with the following statement: I am being penalized at work because I have to care for my children during the coronavirus pandemic,” with responses ranging from strongly agree to strong disagree.

## Fact 8

*Source: American Time Use Survey, Bureau of Labor Statistics, 2014–19; Survey of Mothers with Young Children, April 2020, Fall 2020; authors' calculations.*

Income is self-reported. Income was provided by SurveyMonkey and not collected on the SMYC instrument.

In the ATUS, the following activities make up education support and education enrichment. These are activities reported during the time use diary for the past 24 hours. *Education support* includes activities related to household children's education; travel related to household children's education. *Education enrichment* includes reading to or with household children; playing with household children, not sports; arts and crafts with household children.

In the SMYC, the following activities make up education support and education enrichment. These are activities that the respondents reported doing from a list of possibilities, asking about the past week. *Education support* includes schoolwork with child, teach child a school lesson, review child's independent work. *Education enrichment* includes



play with child, play games, sports, exercise with child, art/music with child, read with child.

## Fact 9

*Source: Survey of Mothers with Young Children, Fall 2020; authors' calculations.*

Marital status is assigned based on responses to the following question: "Which of the following best describes your current marital status: married; not married, living with partner; never married, not living with partner; single, never married; divorced or separated; widowed." Responses to the following question were aggregated into three categories, "Thinking about the last seven days, which statement best characterizes how you share child care responsibilities with other adults in your household or in your life." Respondents selected one from the following options: I do all the child care in my household; I do much more child care than others; I do somewhat more childcare than others; I share child care responsibilities equally with others; others do somewhat more child care than I do; others do much more child care than I do; I do none of the child care in my household.

## Fact 10

*Source: Household Pulse Survey, 2020–21, Census Bureau; author's calculations.*

Responses to the following questions underlie the mental health index: "Over the last 7 days, how often have you been bothered by the following problems...Feeling nervous, anxious, or on edge? Would you say not at all, several days, more than half the days, or nearly every day?" "Over the last 7 days, how often have you been bothered by the following problems...Not being able to stop or control worrying? Would you say not at all, several days, more than half the days, or nearly every day?" "Over the last 7 days, how often have you been bothered by...Having little interest or pleasure in doing things? Would you say not at all, several days, more than half the days, or nearly every day?" "Over the last 7 days, how often have you been bothered by...Feeling down, depressed, or hopeless? Would you say not at all, several days, more than half the days, or nearly every day?"

The scale is standardized for each of the four underlying components across the two survey weeks among women who report living with children and then given equal weight in the restandardized index of mental health. We then divide the mental health index into equally-sized quartiles. The bottom quartile (-2.150, -0.906) and second quartile (-0.809,-0.010) include respondents on the mental health index below the mean of zero. The third quartile (0.002,0.518) and top quartile (0.631,0.980) include respondents on the mental health index above the mean of zero. Higher numbers indicate better mental health outcomes, while negative numbers indicate worse mental health outcomes. Because these responses are standardized within the survey, we do

not interpret the normative meaning of falling at a particular point on the range relative to other surveys or instruments that capture well-being or mental health per se.

Mean responses to the following questions are reported by mental health quartile: experienced income loss ("Have you, or has anyone in your household experienced a loss of employment income since March 13, 2020?" delayed health care ("At any time in the last 4 weeks, did you delay getting medical care because of the coronavirus pandemic?"), children do not have enough to eat ("Please indicate whether the next statement was often true, sometimes true, or never true: in the last 7 days for the children living in your household who are under 18 years old: 'The children were not eating enough because we just couldn't afford enough food.'"), and behind on rent ("Did you pay your last month's rent or mortgage on time?").

# References

- Aaronson, Stephanie, and Wendy Edelberg. 2020. "Tracking the Mounting Challenges among Those Who Have Lost Their Jobs." Blog. The Hamilton Project, Brookings Institution, Washington, DC. November 5, 2020.
- Ali, Umair, Chris Herbst, and Christos Makridis. 2021. "The Impact of COVID-19 on the U.S. Child Care Market: Evidence from Stay-at-Home Orders." *Economics of Education Review*: 102094.
- Almeida, Marcela, Angela Shrestha, Danijela Stojanac, and Laura Miller. 2020. "The Impact of the COVID-19 Pandemic on Women's Mental Health." *Archives of women's mental health*: 1–8.
- Ammerman, Brooke, Taylor Burke, Ross Jacobucci, and Kenneth McClure. 2021. "Preliminary Investigation of the Association between COVID-19 and Suicidal Thoughts and Behaviors in the U.S." *Journal of psychiatric research* 134: 32–8.
- Amuedo-Dorantes, Catalina, Miriam Marcen, Marina Morales, and Almudena Sevilla. 2020. "COVID-19 School Closures and Parental Labor Supply in the United States." IZA Discussion Papers: No. 13827.
- Barkowski, Scott, Joanne Song McLaughlin, and Yinlin Dai. 2020. SSRN: 3630776.
- Bastian, Jacob, and Lance Lochner. 2021. "The Earned Income Tax Credit: Increasing Mothers' Work Hours Without Adverse Effects on Children." VoxEU.org, Center for Economic and Policy Research, Washington, DC.
- Bauer, Lauren, and Emily Moss. 2020. "Caregiving, Labor, Job Search, and Leisure: The Time Use of Prime-Age Adults." Blog. The Hamilton Project, Brookings Institution, Washington, DC. January 2, 2020.
- Bauer, Lauren, Emily Moss, Ryan Nunn, and Jay Shambaugh. 2019. "Employment, Education, and the Time Use of American Youth." Economic Analysis, The Hamilton Project, Brookings Institution, Washington, DC.
- Black, Sandra E., Diane Whitmore Schanzenbach, and Audrey Breitwieser. 2017. "The Recent Decline in Women's Labor Force Participation." Framing Paper, The Hamilton Project, Brookings Institution, Washington, DC.
- Blau, Francine and Lawrence Kahn. 2013. "Female Labor Supply: Why is the United States Falling Behind?" *American Economic Review* 103(3): 251–56.
- Bureau of Labor Statistics (BLS). 2020. "Current Population Survey." Bureau of Labor Statistics, US Department of Labor, Washington, DC.
- Calarco, Jessica, Emily Meanwell, Elizabeth Anderson, Amelia Knopf. 2020. "'Let's Not Pretend It's Fun': How COVID-19-Related School and Childcare Closures are Damaging Mothers' Well-Being." *Preprint*.
- Cascio, Elizabeth U. 2017. "Public Investments in Child Care." Policy Proposal. The Hamilton Project, Brookings Institution, Washington, DC.
- Catalyst. 2020. "The Impact of Covid-19 on Working Parents." *Catalyst*, New York, NY.
- Caucutt, Elizabeth M., Lance Lochner, Joseph Mullins, and Youngmin Park. 2020. "Child Skill Production: Accounting for Parental and Market-Based Time and Goods Investments." Working paper 27838, National Bureau of Economic Research, Cambridge, MA.
- Collins, Caitlyn, Liana Christian Landivar, Leah Ruppanner, and William J. Scarborough. 2020. "COVID-19 and the Gender Gap in Work Hours." John Wiley & Sons, Hoboken, NJ.
- de Miranda, Debora, Bruno da Silva Athanasio, Ana Cecilia Sena Oliveira, and Ana Cristina Simoes-e-Silva. 2020. "How is COVID-19 Pandemic Impacting Mental Health of Children and Adolescents?" *International Journal of Disaster Risk Reduction*: 101845.
- Edwards, Kathryn A. 2020. "Sitting It Out? Or Pushed Out? Women Are Leaving the Labor Force in Record Numbers." The RAND Blog, Pardee RAND Graduate School, Santa Monica, CA, October 23, 2020.
- Fox, Liana, Wen-Jui Han, Christopher Ruhm, and Jane Waldfogel. 2012. "Time for Children: Trends in the Employment Patterns of Parents, 1967–2009." *Demography* 50:25–49.
- Goldin, Claudia. 1990. *Understanding the Gender Gap: An Economic History of American Women*. National Bureau of Economic Research, Boston, MA.
- Guryan, Jonathan, Erik Hurst, and Melissa Kearney. 2008. "Parental Education and Parental Time with Children." *Journal of economic perspectives* 22(3): 23–46.
- Guyot, Katherine and Isabel Sawhill. 2020. "Telecommuting Will Likely Continue Long After the Pandemic." Blog. The Brookings Institution, Washington DC. April 6, 2020.
- Heggeness, Misty L., and Jason M. Fields. 2020. "Parents Juggle Work and Child Care during Pandemic: Working Moms Bear Brunt of Home Schooling While Working during COVID-19." US Census Bureau, Washington, DC.
- Heggeness, Misty L., Jason Fields, Yazmin A. García Trejo, and Anthony Schulzetenberg. 2021. "Moms, Work and the Pandemic: Tracking Job Losses for Mothers of School-Age Children during a Health Crisis." US Census Bureau, Washington, DC.
- Hibel, Leah, Chase Boyer, Andrea Buhler-Wassmann, and Blake Shaw. 2021. "The Psychological and Economic Toll of the COVID-19 Pandemic on Latina Mothers in Primarily Low-Income Essential Worker Families." *Traumatology*.
- Horsley, Scott. 2020. "'My Family Needs Me': Latinas Drop Out of Workforce at Alarming Rates." Special Series. Enough Already: How the Pandemic Is Breaking Women. NPR, Morning Edition, October 27, 2020.
- Igielnik, Ruth. 2021. "A Rising Share of Working Parents in the U.S. Say It's Been Difficult to Handle Child Care During the Pandemic." Pew Research Center, Washington, DC.
- Jessen-Howard, Steven, and Simon Workman. 2020. "Coronavirus Pandemic Could Lead to Permanent Loss of Nearly 4.5 Million Child Care Slots." Center for American Progress, Washington, DC.
- Kalil, Ariel. 2015. "Inequality Begins at Home: The Role of Parenting in the Diverging Destinies of Rich and Poor Children." In *Families in an Era of Increasing Inequality* edited by Paul Amato, Alan Booth, Susan McHale, and Jennifer Van Hook.
- Kalil, Ariel, Susan Mayer, and Rohen Shah. 2020. "Impact of the COVID-19 Crisis on Family Dynamics in Economically Vulnerable Households." Becker Friedman Institute for Economics Working Paper: 2020-139. University of Chicago, Chicago, IL.

- Kashen, Julie, Sarah Jane Glynn, and Amanda Novello. 2020. "How COVID-19 Sent Women's Workforce Progress Backward: Congress' \$64.5 Billion Mistake." The Century Foundation, New York, NY.
- Kinder, Molly, and Laura Stateler. 2021. "Essential Workers Comprise about Half of All Workers in Low-Paid Occupations; They Deserve a \$15 Minimum Wage." Series: Brookings Metro's COVID-19 Analysis. Brookings Institution, Washington, DC.
- Kotlar, Bethany, Emily Gerson, Sophia Petrillo, Ana Langer, and Henning Tiemeier. 2021. "The Impact of the COVID-19 Pandemic on Maternal and Perinatal Health: A Scoping Review." *Reproductive health* 18(1): 1–39.
- LeanIn and McKinsey & Company. 2020. *Women in the Workplace 2020: Corporate America Is at a Critical Crossroads*. New York, NY: McKinsey & Company.
- Madowitz, Michael, and Diana Boesch. 2020. "The Shambolic Response to the Public Health and Economic Crisis Has Women on the Brink as the Job Recovery Stalls." Center for American Progress, Washington, DC.
- Maestas, Nicole. 2017. "Expanding Access to Earned Sick Leave to Support Caregiving." Policy Proposal. The Hamilton Project, Brookings Institution, Washington, DC.
- Malik, Rasheed, Katie Hamm, Won Lee, Elizabeth Davis, and Aaron Sojourner. 2020. "The Coronavirus Will Make Child Care Deserts Worse and Exacerbate Inequality." Center for American Progress, Washington, DC.
- Maye, Adewale, and Emma Williamson. 2020. "In Their Own Voices: How Workers Earning Low Wages Struggle with COVID-19." Center for Law and Social Policy, Washington, DC.
- Miller, Claire Cain. 2020a. "‘I’m Only One Human Being’: Parents Brace for a Go-It-Alone School Year." *New York Times*, August 19, 2020.
- . 2020b. "Nearly Half of Men Say They Do Most of the Home Schooling. 3 Percent of Women Agree." *New York Times*, May 6, 2020.
- National Women's Law Center. 2021. *A Year of Strength & Loss: The Pandemic, the Economy, & the Value of Women's Work*. Washington, DC: National Women's Law Center.
- Nunn, Ryan, Jana Parsons, and Jay Shambaugh. 2019. "Labor Force Nonparticipation: Trends, Causes, and Policy Solutions." Strategy Paper, The Hamilton Project, Brookings Institution, Washington, DC.
- Parker, Kim, Juliana Menasce Horowitz, and Rachel Minkin. 2020. "How the Coronavirus Outbreak Has—and Hasn't—Changed the Way Americans Work." Social & Demographic Trends, Pew Research Center, Washington, DC.
- Patrick, Stephen, Laura Henkhaus, Joseph Zickafoose, Kim Lovell, Alese Halvorson, Sarah Loch, Mia Letterie, and Matthew Davis. 2020. "Well-being of Parents and Children During the COVID-19 Pandemic: A National Survey." *Pediatrics* 146(4).
- Petts, Richard, Carlson, Daniel, and Pepin, Joanna. 2020. "A Gendered Pandemic: Childcare Homeschooling, and Parents' Employment during COVID-19." *Gender, work, & organization*.
- Pew Research Center. 2017. "For Both Moms and Dads, More Time Spent on Child Care." Pew Research Center, Washington, DC.
- Prados, María, and Gema Zamarro. 2020. "Gender Differences in Couples' Division of Childcare, Work and Mental Health During COVID-19." CESR-Schaeffer Working Paper 003, Center for Economic and Social Research, University of Southern California, Los Angeles, CA.
- Ruhm, Christopher J. 2017. "A National Paid Parental Leave Policy for the United States." Policy Proposal. The Hamilton Project, Brookings Institution, Washington, DC.
- Schanzenbach, Diane Whitmore, and Ryan Nunn, eds. 2017. *The 51%: Driving Growth through Women's Economic Participation*. Washington, DC: The Hamilton Project.
- Smith, Linda, and Sarah Tracey. 2020. "Child Care in COVID-19: Another Look at What Parents Want." Bipartisan Policy Center, Washington, DC.
- Stevenson, Betsey. 2020. "The Initial Impact of COVID-19 on Labor Market Outcomes across Groups and the Potential for Permanent Scarring." Essay. The Hamilton Project, Brookings Institution, Washington, DC.
- Tedeschi, Ernie. 2020. "The Mystery of How Many Mothers Have Left Work Because of School Closings." *New York Times*, October 29, 2020.
- Weissbourd, Richard, Milena Batanova, Joseph McIntyre, and Eric Torres. 2020. "How the Pandemic is Strengthening Fathers' Relationships with their Children." Making Caring Common Project, Harvard Graduate School of Education. Harvard, Cambridge, MA.
- Weller, Christian. 2020. "Women Hurt More Than Men in the Recession, But It's More Complicated Than That." *Forbes*, May 12, 2020.

# Selected Hamilton Project Papers on Women and the Economy

## POLICY BOOK

### *The 51%: Driving Growth through Women's Economic Participation*

Today, large gaps remain between men and women in the jobs they hold, the wages they earn, and their overall economic security. We don't have all the answers to explain this recent trend. But we do know some of what limits American women's labor market opportunities. It is inflexible rules at many workplaces, which require long hours and penalize the wages of women who must balance demands at home. It is the failure of the United States to adopt national policies on paid leave for mothers following the birth of their children. It is the choice women are forced to make between child care and paid employment, or between child care and educational success. This book offers a suite of policy proposals meant to support women's full participation in the American economy, including:

- "Modernizing US Labor Standards for 21st Century Families" by Bridget Ansel and Heather Boushey
- "Making Work Pay Better Through an Expanded Earned Income Tax Credit" by Hilary Hoynes, Jesse Rothstein, and Krista Ruffini
- "Tax Policies to Encourage Women's Labor Force Participation" by Sara LaLumia
- "Increasing the Economic Security of Older Women" by Jason Brown and Karen Dynan
- Expanding Access to Earned Sick Leave to Support Caregiving" by Nicole Maestas
- "A National Paid Parental Leave Policy for the United States" by Chris J. Ruhm
- "Public Investments in Child Care" by Elizabeth U. Cascio
- "Helping Women to Succeed in Higher Education: Supporting Student-Parents with Child Care" by Bridget Terry Long

## POLICY PROPOSALS

### *Policies to Broaden Participation in the Innovation Pipeline*

*Lisa Cook*

Since the 1960s, both women and underrepresented minorities have earned an increasing share of bachelor's degrees and advanced degrees in fields most associated with invention—the STEM (science, technology, engineering, and mathematics) fields. Yet, we do not observe a similar increase in patenting activity among these groups. Whatever their source, gender and racial disparities exist at each stage of the innovation process—education and training, the practice of invention, and commercialization of invention—and can be costly to both productivity and the economy. The policies proposed here focus on improving data collection at the U.S.

Patent and Trademark Office (USPTO) and measurement of potential innovation, making commercialization more inclusive using the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs housed at the Small Business Administration (SBA), and addressing issues related to workplace climate in the innovation economy.

### *Improving TANF's Countercyclicity through Increased Basic Assistance and Subsidized Jobs*

*Indivar Dutta-Gupta*

The Temporary Assistance for Needy Families program (TANF) suffers from widely recognized and profound structural flaws—most notably, its inability to expand and contract with need. In addition, excessive flexibility allowed for types of state TANF spending has led states to use TANF funds in ways that are not well-targeted to support the basic living standards of families with the greatest need. Dutta-Gupta proposes that policymakers immediately establish a TANF Community and Family Stabilization Program to meet families' basic needs while also acting as an automatic economic stabilizer. As an intermediate step to broader TANF reform, this program would offer a generous and open-ended match to state provision of two specific types of support.

## FRAMING PAPERS

### *The Recent Decline in Women's Labor Force Participation*

*Sandra E. Black, Diane Whitmore Schanzenbach, and Audrey Breitwieser*

While women's labor force participation has increased substantially in the U.S. over the second half of the 20th century, this growth has stagnated and reversed since 2000, with women's labor force participation falling by 3.5 percentage points. This pattern persists across women of varying races and ethnicities, educational backgrounds, ages, and marital statuses, and for women with and without children alike. Interestingly, this decline seems to be moving directly against the trends observed in other major OECD economies. In order to facilitate economic growth in the United States, policies should be directed toward enabling and encouraging women to participate in the labor force.

### *The Incomplete Progress of Women in the Labor Market*

*Ryan Nunn and Megan Mumford*

The gap between wages of men and women has fallen over the past several decades, reflecting women's economic progress. Successive generations of women have obtained more education and received higher wages, entering a broader range of occupations that had previously been male-dominated. However, a significant gender wage gap remains. Occupational segregation, differences in academic specialization, difficulty in balancing work and household responsibilities, and wage discrimination—among many other factors—likely underlie much of the remaining gender wage gap.





## ADVISORY COUNCIL

**STEPHANIE AARONSON**  
Vice President and Director,  
Economic Studies; Senior Fellow,  
Economic Studies,  
The Brookings Institution

**GEORGE A. AKERLOF**  
University Professor,  
Georgetown University

**ROGER C. ALTMAN**  
Founder and Senior Chairman,  
Evercore

**KAREN L. ANDERSON**  
Senior Director of Policy & Communications,  
Becker Friedman Institute for  
Research in Economics,  
The University of Chicago

**ALAN S. BLINDER**  
Gordon S. Rentschler Memorial Professor of  
Economics and Public Affairs,  
Princeton University;  
Nonresident Senior Fellow,  
The Brookings Institution

**STEVEN A. DENNING**  
Chairman,  
General Atlantic

**JOHN M. DEUTCH**  
Institute Professor,  
Massachusetts Institute of Technology

**CHRISTOPHER EDLEY, JR.**  
Co-Founder and President Emeritus,  
The Opportunity Institute

**BLAIR W. EFFRON**  
Partner,  
Centerview Partners LLC

**DOUGLAS W. ELMENDORF**  
Dean and Don K. Price Professor of  
Public Policy,  
Harvard Kennedy School

**JUDY FEDER**  
Professor and Former Dean,  
McCourt School of Public Policy,  
Georgetown University

**JASON FURMAN**  
Professor of the Practice of  
Economic Policy,  
Harvard University;  
Senior Fellow,  
Peterson Institute for International Economics;  
Senior Counselor,  
The Hamilton Project

**MARK T. GALLOGLY**  
Cofounder and Managing Principal,  
Centerbridge Partners, L.P.

**TED GAYER**  
Executive Vice President,  
Senior Fellow, Economic Studies,  
The Brookings Institution

**TIMOTHY F. GEITHNER**  
President, Warburg Pincus;  
Senior Counselor, The Hamilton Project

**JOHN GRAY**  
President and Chief Operating Officer,  
Blackstone

**ROBERT GREENSTEIN**  
Founder and President,  
Center on Budget and Policy Priorities

**MICHAEL GREENSTONE**  
Milton Friedman Professor in  
Economics and the College,  
Director of the Becker Friedman Institute for  
Research in Economics, and  
Director of the Energy Policy Institute,  
University of Chicago

**GLENN H. HUTCHINS**  
Chairman, North Island;  
Co-founder, Silver Lake

**LAWRENCE F. KATZ**  
Elisabeth Allison Professor of Economics,  
Harvard University

**MELISSA S. KEARNEY**  
Neil Moskowitz Professor of Economics,  
University of Maryland;  
Nonresident Senior Fellow,  
The Brookings Institution

**LILI LYNTON**  
Founding Partner,  
Boulud Restaurant Group

**HOWARD S. MARKS**  
Co-Chairman,  
Oaktree Capital Management, L.P.

**ERIC MINDICH**  
Founder,  
Everblue Management

**DAMBISA MOYO**  
Co-Principal,  
Versaca Investments

**SUZANNE NORA JOHNSON**  
Former Vice Chairman,  
Goldman Sachs Group, Inc.;  
Co-Chair,  
The Brookings Institution

**PETER ORSZAG**  
CEO, Financial Advisory,  
Lazard Freres & Co LLC

**RICHARD PERRY**  
Managing Partner & Chief Executive Officer,  
Perry Capital

**PENNY PRITZKER**  
Chairman and Founder, PSP Partners;  
38th Secretary of Commerce

**MEEGHAN PRUNTY**  
Principal,  
PE Strategic Partners

**ROBERT D. REISCHAUER**  
Distinguished Institute Fellow and  
President Emeritus,  
Urban Institute

**NANCY L. ROSE**  
Department Head and Charles P. Kindleberger  
Professor of Applied Economics,  
Massachusetts Institute of Technology

**DAVID M. RUBENSTEIN**  
Co-Founder and Co-Executive Chairman,  
The Carlyle Group

**ROBERT E. RUBIN**  
Former U.S. Treasury Secretary;  
Co-Chair Emeritus,  
Council on Foreign Relations

**LESLIE B. SAMUELS**  
Senior Counsel,  
Cleary Gottlieb Steen and Hamilton LLP

**SHERYL SANDBERG**  
Chief Operating Officer,  
Facebook

**DIANE WHITMORE SCHANZENBACH**  
Margaret Walker Alexander Professor and  
Director, The Institute for Policy Research,  
Northwestern University;  
Nonresident Senior Fellow,  
The Brookings Institution

**STEPHEN SCHERR**  
Chief Executive Officer,  
Goldman Sachs Bank USA

**RALPH L. SCHLOSSTEIN**  
President and Chief Executive Officer,  
Evercore

**ERIC SCHMIDT**  
Technical Advisor,  
Alphabet Inc.

**ERIC SCHWARTZ**  
Chairman and CEO,  
76 West Holdings

**JAY SHAMBAUGH**  
Professor of Economics and International Affairs,  
The George Washington University

**THOMAS F. STEYER**  
Business Leader and Philanthropist;  
Founder,  
NextGen America

**MICHAEL R. STRAIN**  
Director of Economic Policy Studies and  
Arthur F. Burns Scholar in Political Economy,  
American Enterprise Institute

**LAWRENCE H. SUMMERS**  
Charles W. Eliot University Professor,  
Harvard University

**LAURA D'ANDREA TYSON**  
Distinguished Professor of the Graduate School,  
University of California, Berkeley

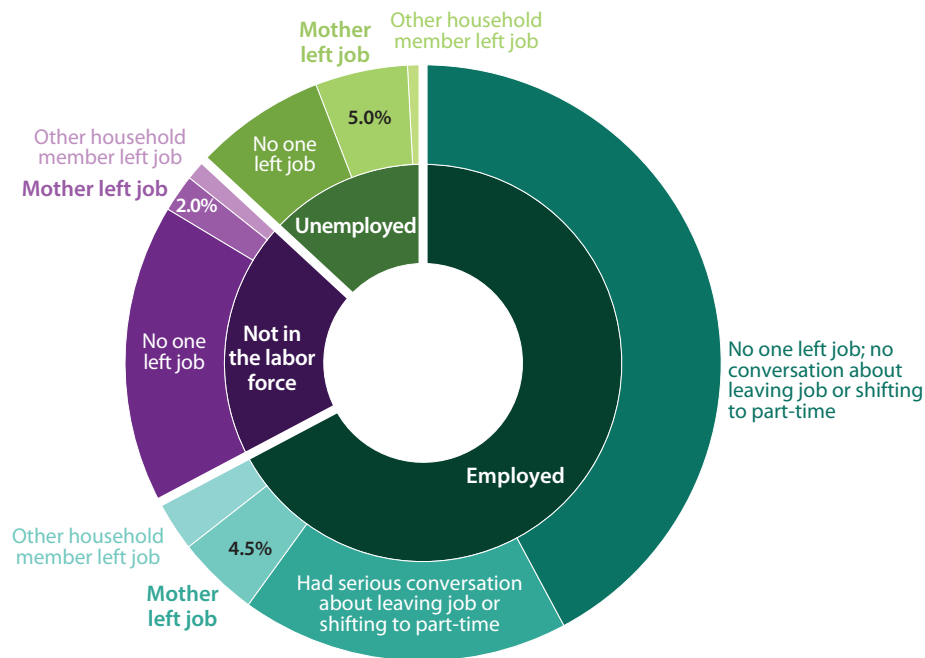
**DAVID WEIL**  
Co-President,  
Charles and Lynn Schusterman Family  
Philanthropies

---

**WENDY EDELBERG**  
Director



## Distribution of Mothers Who Left their Job Due to Child Care at Some Point in 2020, by Fall 2020 Employment Status



Source: Brookings Institution Hamilton Project and Future of the Middle Class Initiative Survey of Mothers with Young Children 2020; authors' calculations.

Note: For additional details, see the technical appendix.

THE  
HAMILTON  
PROJECT  
BROOKINGS

## Ten Economic Facts on How Mothers Spend Their Time

- Through 2019, labor force participation rates of prime-age women had converged, with the exception of married mothers of young children.
- After March 2020, parents of young children dropped out of the labor force at higher rates than parents of teens.
- More than one in ten mothers of young children left their jobs due to child-care responsibilities at some point in 2020.
- At the start of 2021, Black and Hispanic mothers of young children were more likely to be unemployed than were white mothers of young children.
- Employed mothers of young children spend two hours a day more than fathers on nonmarket labor.
- During the COVID-19 pandemic, fewer working mothers with young children are working full time.
- Seventy percent of mothers who are essential workers or working from home report that it is difficult to balance work and family.
- The vast majority of mothers with young children are now spending time on educational activities with their children.
- Mothers report doing the majority of child care.
- Lower mental health among mothers is associated with poor economic outcomes.

THE  
HAMILTON  
PROJECT

1775 Massachusetts Ave., NW  
Washington, DC 20036

(202) 797-6484

BROOKINGS



Printed on recycled paper.

WWW.HAMILTONPROJECT.ORG