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Mothers’ caregiving during COVID: The impact of marital property laws on women’s labor force status

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ABSTRACT

If mothers take care of children more than fathers, then after the onset of COVID-19 mothers’ employment is expected to drop more than that of fathers. This gender gap is likely to be larger where women are less concerned about the financial repercussions of opting out of the labor force, and therefore the gender gap in employment is likely to grow more where community property or homemaking provisions give more protection to homemakers in case of union dissolution. Difference-in-differences and dynamic study estimations applied to CPS data for 2019–2020 show that after the onset of COVID-19 the labor force participation of mothers of school-age children—but not of fathers—dropped more in states with marital property laws more generous to parental caregivers. These results stand in contrast to how these groups’ labor force participation changed after the Great Recession, compared to pre-recession levels.

1. Introduction

In the U.S. the COVID-19 pandemic has had a larger impact on women’s employment than on men’s (e.g. (Heggeness, 2020). In April 2021, more than a year after the onset of the pandemic, US men’s labor force participation was 1.53% lower than it had been before the onset of COVID-19, in February 2020 (comparing 83.6% versus 84.9% in the labor force). In contrast, women’s labor force participation rate was 2.34% lower (71.1% versus 72.8% in the labor force). Were these gender differentials in how COVID-19 affected employment levels the result of particularly large job losses in industries with high proportions of female workers? Or were they due to larger drops in the supply of female workers with children following school closures and restrictions on childcare availability? Excess employment losses among mothers of young children, compared to fathers or childless women, support a supply-side explanation. We offer further evidence that COVID-19 affected the labor supply of women more than men’s by showing that the COVID labor-supply response of mothers of school-age children varied with laws regarding division of marital property, but that of fathers did not. Specifically, compared to the previous year, in the first ten months of COVID-19 (March to December 2020), in the US married and cohabiting mothers of school-aged children were more likely to report not working for caregiving reasons in states with legal regimes offering more financial protection to a couple’s lower earner. In contrast, over this period fathers’ labor force participation did not change differentially as a function of the presence of community property or other laws regarding the division of marital property.

US states differ in their laws regarding marital dissolution. Previous research has documented links between state divorce laws and economic behaviors such as labor supply and savings, including Peters, 1986, Gray, 1998, Stevenson, 2008, Voena, 2015), and Altindag et al., 2017. More specifically, community property laws—which regulate division of marital property—have been shown to matter when estimating how exogenous changes in other divorce laws are associated with economic behaviors such as labor supply (Gray, 1998) or savings (Voena, 2015). This paper shows how another exogenous shock, the onset of COVID-19, affected women’s labor force participation as a function of community property laws.

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1 These rates were calculated for men and women ages 25–64. Those in the labor force were either working, on leave, or unemployed. We thank Misty Heggeness from the Bureau of Labor Statistics for these calculations based on the Current Population Survey, U.S. Census Bureau/Bureau of Labor Statistics, ipums.org.

2 In the US (e.g. (Alon et al., 2021), (Zamarro and Prados, 2021); in the UK (e.g. Cheng et al., 2021); in Italy (e.g. (Del Boca et al., 2020); in Germany (e.g. Huebner et al., 2021).

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In addition to testing for the role played by community property laws we also examine whether the presence of a homemaking provision influenced mothers’ labor supply responses to COVID-19. Between 1972 and 2002 many states without community property introduced so-called homemaking provisions. It was found that the introduction of such provisions helps explain entry into marriage (Wong, 2016) and women’s labor supply (Wong, 2021). This is the first study that examines labor supply effects of both types of laws regulating division of marital property: community property laws and homemaking provisions, and we do so in the context of COVID-19.

Motivating this exploration of the link between exogenous changes in the price of outside services (school services), laws regarding division of marital property and labor supply is economic analysis of household production. Reid 1934 and Mincer 1962 were among the first economists to study household production, Becker 1965 was the first to model it, tying its analysis to that of labor supply and consumption. He assumed, and most models of household production and labor supply have followed him in making this assumption, that spouses readily supply the household production time needed to produce what the household needs. Instead, here it is assumed that spouses are separate decision-makers and individual producers of household production, each influenced by their own financial opportunities, including their expected financial situation in case of dissolution of marriage or cohabitation, as in Grossbard-Shechtman (Grossbard-Shechtman, 1984) and Lundberg and Pollak (Lundberg and Pollak, 1993). Following Grossbard-Shechtman (Grossbard-Shechtman, 1984) it is also assumed that there are markets for work in household production that establish prices for such work, in part with the help of gender norms related to household production.

The empirical analysis relies on two related methodologies: a difference-in-differences analysis and a dynamic study. While the difference-in-differences approach can subsume that of the dynamic study when there is only one treated period, the dynamic study allows us to also examine pre-COVID conditions. We use monthly data from the US Current Population Survey (CPS) in 2019 and 2020, selecting women who were married or living with a partner and who had children in elementary school (in the K-6 grade range). After controlling for a wide array of factors that are expected to affect non-participation in the labor force by mothers of young children, we find that after the onset of the pandemic, state marital property laws likely to allocate more of the marital property to mothers caring for school-age children (in case of marital dissolution) are associated with

more women being out of the labor force: relative to her counterpart living in an equitable-division state with no homemaking provision, after the onset of COVID-19 a woman’s probability of non-participation due to caregiving increased by 3.4–3.6 % points more if she resided in a community property state, and by 2.4–2.8 % points more if she resided in a homemaking provision state. The finding only applies to US-born women and applies more to women in states with high homeownership rates and in the case of the homemaking provisions, it applies only to the first months after the onset of the pandemic. Robustness and placebo tests show that the positive associations between division-of-property regimes more protective of caregivers and women’s non-participation in the labor force during the pandemic do not hold for young women of similar ages without children, mothers of older children, or partnered men with school-age children. Furthermore, laws regarding division of marital property don’t contribute to differences in mothers’ non-participation in the labor force when comparing periods before and during a non-COVID recession, the Great Recession that started in 2007.

Our findings, including the contrast with the 2007 recession, reinforce the view that labor supply considerations have been important determinants of decreased female labor force participation in the COVID-19 recession.

Section 2 presents the conceptual framework that guided this investigation. Information on the data used in the paper and the empirical specifications are found in Section 3. Section 4 presents the results; Section 5 the robustness tests. Section 6 concludes.

2. Conceptual framework

Following Grossbard-Shechtman, 1984; Grossbard-Shechtman, 2003) it is assumed that individuals living in couples are either spouse/workers (for short workers) who supply time in household production, or spouse/consumers (for short consumers) who don’t do home production but benefit from what the workers produce. Workers may work at household production full-time or part-time. In the latter case they also participate in the labor force. Consumers may compensate workers financially in the form of workers’ access to material and financial resources. Individual demands and supplies are derived, assuming that the rate at which workers are compensated, price \( y \), is given to individual workers and consumers (of household production). This price is influenced by conditions in markets for work in household production and may partially take the form of gender norms. At a second stage, all individual demands and supplies of participants in a particular market are aggregated and the price of household production work \( y \) is established in markets.

Panel a in Fig. 1 shows individual supply \( s_i \) of household production time of representative worker \( j \) (potentially) married to consumer/partner \( i \), and \( d_j \), representative individual i’s demand for work in household production supplied by a representative worker \( j \). Supply is a function of the potential given price \( y \) for household production time. It is upward-sloping, for the marginal utility of time in alternative time uses keeps increasing as individuals spend more time at one kind of work. Supply is expected to shift as a function of income, wage earned in the labor force, and the price of inputs going into consumption goods. In the case considered here, the price of outside schooling rises after the onset of COVID and ensuing school closures. The higher price of outside

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2 Homemaking provisions state that in case of marital dissolution the division of a household’s resources should recognize that spouses who opted to stay home for the sake of the union contributed valuable to household consumption, even if they did not earn monetary income from market work. Most states adopted such provisions in the 1980 s. For more on this provision see Wong 2016.

4 For instance, this assumption underlies Becker (Becker, 1965; Becker, 1981), Leibowitz 1974) and more recent models of parental investments in school-age children (in case of marital dissolution) are associated with

5 In Manser and Brown 1980, McElroy and Horney 1981 and Chiappori 1992 it is also assumed that spouses are separate decision-makers, but the emphasis is on how they distribute consumption goods inside their household.

6 While we hoped the empirical analysis could distinguish between opposite-and same-sex couples, numbers of same-sex couples with children in the K-6 age range in the monthly CPS samples were too small to provide a reliable basis for difference-in-differences analysis. Thus, the current paper focuses on different-sex couples, with the hope that future work can broaden the scope.

7 This may involve bargaining over household production work and pay.

8 Fig. 1, panel a, is adapted from Figure 3.4 in Grossbard-Shechtman (Grossbard-Shechtman, 1993).

9 Even in locations where schools remained open after the onset of covid, in-person schooling was often less than 5 days per week, with unscheduled suspensions due to increased COVID cases, quarantines, and the time needed to perform contract tracing.
substitutes leads the supply to shift to the right, as workers are more willing to care for their children. These individual supplies of work in household production also shift as a function of laws dealing with the division of marital assets: the more protection they can expect in case of marital dissolution, the more household production workers will be willing to work in household production at any given current price \( y \) for such work and the more supply will shift to the right. Laws about marital property affecting future well-being are more likely to influence workers’ allocation of time when current compensation and work assignments are fixed. Workers cannot work more than the time limit \( T \).

### Individual Demands for Time in Household Production

Individual demands for time in household production are also derived based on individual optimization.\(^{11}\) Quantity demanded by consumers is an inverse function of price \( y \). Individual demands shift as a function of income, own wage, and price of outside goods and services. In the case considered here, when the price of outside schooling rises due to school closures this will lead to a higher demand for their substitute: time in household production, and thus a decrease in labor force participation of caregivers.

Panel b in Fig. 1 presents a market for marriage (or cohabitation) involving workers \( j \) and consumers \( i \). \( S_{ij} \) is the market supply of household production time by workers \( j \) (potentially) married to consumer/ partners \( i \). \( D_{ij} \) is the market demand by consumers \( i \) marrying spouse/ workers \( j \). The market price for workers of type \( j \) married to consumers of type \( i \) is established at \( y^* \), where market demand and market supply intersect. There are many hedonic markets, defined for a variety of individual characteristics such as education, age and ethnicity. Each market establishes a market price, and these prices feed back into individual optimization problems by workers and consumers.

COVID-19 and ensuing school closures caused a sudden increase in the price of outside schooling, which presumably led individual parents to substitute away from outside schooling and towards more home production time. This resulted either from a shift to the right in the amount of household production work supplied by worker/spouses, from a shift to the right in the demand for such work on the part of consumer/spouses, or from both. More time in household production implies either lower participation in the labor force (if labor supply is measured at the extensive margin), or fewer hours of work.

To the extent that increased time in household production results from a right-ward shift in the supply of household production work it follows that better financial incentives available to workers are likely to cause a larger COVID-related shift in supply due to school closures. Workers can better afford to respond to the COVID-related school closures. Likewise, the more they can afford it, the more consumers are likely to increase their demand for home schooling and caregiving as a result of school closures.

Laws regarding division of marital property in case of divorce, separation or death influence the financial resources available to workers and consumers. This holds even if the likelihood of dissolution via divorce, separation or death does not change as a result of the pandemic. If the perceived likelihood of dissolution grows after the onset of the pandemic, the effect of high protection in case of marital dissolution on time supplied to household production would grow over time.\(^{12}\)

Laws giving more of the property to the workers in household production also give less to the consumers. For instance, if the state has community property, workers will hesitate less about leaving the work force to engage in more home production because they know they own half the assets that the couple acquired, regardless of how much they earn. At the same time consumers will be less eager to demand that their spouse produces more caregiving at home as this implies that their personal income or assets will be drained more in case of marital dissolution. To the extent that the supply side of household production (by workers) dominates the demand side (by consumers of such production), we get:

**PREDICTION 1.** In states with better protection for homemakers in case of marital dissolution household production workers will respond more to school closures after the onset of COVID-19.

Better protection could take the form of presence (versus absence) of community property provisions OR homemaking provisions. In terms of Fig. 1, in states that offer more future protection to household production workers, there will be a larger right-ward shift in supply of work in household production when the price of outside schooling rises due to COVID-19. This implies more of a drop in labor force participation or

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\(^{10}\) What matters is total compensation for work in household production and the \( y \) part of that compensation is likely to change and adapt to new circumstances such as COVID. For a formal derivation of this supply see Problem 4.2 in Grossbard-Shechtman, 2003.

\(^{11}\) These are mega-goods; what Becker 1965 calls ‘commodities’, but Becker has ‘households’ derive demands for these commodities and does not have individual supplies of work in household production. See Problem 3.1 in Grossbard-Shechtman 2003 if consumers aspire to consume private goods and Problem 3.3. if they aspire to consume commonwealth “goods”, such as joint children.

\(^{12}\) Divorce probability may increase due to covid as domestic violence has surged (Bullinger et al., 2020; Hsu and Henke, 2021). In China, divorce filings rose after weeks of government-mandated lockdowns related to COVID-19 (Prasso, 2020).
number of hours in the labor force on the part of household production workers.

Workers’ supply of household production time may respond faster to COVID-19 and school closures than their spouses’ demand for such production. The workers, by assumption, are the main agents who can possibly bring a change in the production of children’s learning. They don’t necessarily need to wait and coordinate their switch to full-time home production with their spouse or partner. They can respond right away. In contrast, to the extent that home childcare consumers remain consumers and rely on their spouse to produce the care that the children need (rather than provide the care themselves), any increase in their demand involves an agreement with the home production worker in their couple. Getting more of their spouse’s time taking care of kids who are forced to be at home because of COVID-19 may require negotiations, possibly involving an agreement to pay the household production worker a higher compensation y. This may be a relatively lengthy process. Consequently, workers’ withdrawals from the labor force driven by increases in demand for home production may take more time to happen than such withdrawals driven by increases in the workers’ own supply of home production.

Community property laws, an example of laws protecting home production workers who boost workers’ supply and dampens consumers’ demand are therefore more likely to have a positive effect on workers’ time in home production in the early months after COVID-19 (when only supply shifts to the right and more so in community property states) than in later months, when workers’ extra supply in community property states is likely to be neutralized by consumers’ lower demand in those states.

As time goes by, laws regarding future division of marital property and influencing personal wealth may become less important relative to other financial considerations influencing workers’ supply of home production. Parents have more opportunities to coordinate their actions and discuss optimal ways to handle the consequences of school closures and to possibly negotiate for higher intra-marriage transfers from consumers to workers. This implies that as couples adjust to the pandemic, even if schools remain closed, the supply of workers in states with low protection in case of marital dissolution may increase as much as that of workers in states with high protection or the gap between the two types of states may shrink. Couples may also shift from an arrangement involving one worker and one consumer to an arrangement involving shared household production, where both spouses become workers. Therefore, it is predicted that the gap in labor supply between high-protection and low-protection states will shrink over time. In sum,

PREDICTION 2.: Laws about division of marital property will have more of a positive effect on non-participation in the labor force at the onset of COVID-19 than later.

The same considerations lead us to expect a limited role of laws protecting workers/spouses in normal times, such as pre-pandemic times. Prior to the pandemic there may have been adjustments in the price of time in household production, possibly compensating for any differences in state laws protecting worker/spouses in case of marital dissolution. Likewise, firms offering few pension benefits often offer higher wages in the labor market, and when labor markets are in equilibrium we may not observe more workers flocking to the firms offering higher pension benefits.

Homeworship. Laws about the division of a couple’s property mean more when individuals living in couple are more likely to own a home, given that homes are often a major component of joint property owned by couples. We infer personal home ownership from state levels of ownership, due to lack of individual data.

PREDICTION 3. The labor supply effect of states’ property-division regimes on workers’ response to covid-related school closures is likely to be stronger in states where home ownership is more prevalent and property-division regime may matter more.

Nativity. Worker/spouses’ decisions to opt out of the paid labor force in favor of caregiving may be a function of their familiarity with divorce laws. Relative to immigrants, the US-born are likely to be more familiar with laws protecting worker/spouses in case of marital dissolution. Therefore,

PREDICTION 4. Relative to that of their US-born counterparts working in household production, immigrants’ willingness to shift into full-time caregiving and leave the labor force after the start of COVID-19 is expected to vary less with states’ property-division regimes.

Gender. Traditional norms may encourage women to be workers in household production and men to be consumers. Such traditional norms seem still to be quite common in the US and many other countries. For example, in our sample of couples with children in the K-6 grade range selected from the 2019–2020 GPS, only 2 % of male spouse/partners were not in the labor force due to caring for family members, versus 25–28 % of women. In view of this gender asymmetry our empirical work focuses on explaining changes in the labor supply of mothers who are in couples (married or not). Even though men often are workers in household production, our predictions are based on the assumption that mothers who live in couples are the workers in household production.

3. Empirical specification and data

In our empirical work, we test the four predictions of the conceptual framework section through two econometric approaches; both examine the interaction of COVID-19 and divorce laws on the labor force behavior of mothers of K-12 children. The first empirical model is a simple difference-in-differences (DiD) framework where we allow for differential impacts of state-level divorce legislation after the onset of the pandemic. In these specifications, we look for changes in the labor force participation of mothers after the onset of COVID (post-COVID) relative to the pre-pandemic time period and test whether this change varied by whether the mother lived in a community property state, an equitable division with homemaking provision state, or an equitable division state without homemaking provision. These three mutually exclusive policy regimes provided various financial protections and incentives for women to drop out of the labor force, with the equitable division without a homemaking provision providing the least financial support in the case of divorce.

The second empirical approach builds on the simple DiD by examining the potential for dynamic effects of the pandemic. While these models also assess whether mothers participate in the labor force or not, they include a series of dummies for months before and after the onset of COVID-19, allowing one to test for (and hopefully rule out) pre-trends while visually plotting the impact of the treatment in the periods after it went into effect.

3.1. Difference-in-differences approach

We estimate Eq. (1) below for our difference-in-differences (DiD) estimator. Our dependent variable, $\text{Car}_{it}$, is a binary variable indicating whether a mother stayed home to be a caregiver. $\text{Car}_{it}$, take the value one if woman $i$, residing in state $s$ in month $t$, reports that she is not in labor force because she is “taking care of house or family,” and zero otherwise. We define variable $P_{it}$ as a dummy variable equal to 1 if the pandemic was underway in state $s$ in month $t$, and 0 before that time. To test prediction 1, that more women will opt to stay home in states where they are more financially protected, we create two dummy variables regarding the legal rules about division of marital property: $\text{homeprov}_{it}$

13 Likewise, Alshaichmubarak et al. (2019) predicted and found that laws allowing women to keep their own earnings and to hold private property would have a larger impact on likelihood of out-of-marriage births among US-born women than among immigrant women.

14 We also estimated the model using nonparticipation for any reason as the dependent variable. Results differed minimally from those presented in the paper.
equal to one if the state has equitable division with homemaking provisions and \( \text{commprop}_s \) equal to one if the state has community property. More about these legal regimes is found below. The dummies are zero otherwise; equitable division without homemaking provisions is the omitted category.

We estimate the following linear probability model of young women’s absence from the labor force in order to be a caregiver:

\[
\begin{align*}
\text{Care}_{it} = & \beta_1 P_\text{u} + \beta_2 \text{homeprov} + \delta_1 P_\text{s} \text{ homeprov}_s + \\
& + \beta_3 \text{commprop}_s + \delta_2 P_\text{u} \text{ compprop}_u + X_{it} \beta + f_s + f_t + \epsilon_{it}
\end{align*}
\]  

(1)

Vector \( X_{it} \) includes standard individual characteristics of women and their partners/husbands, as listed in Table 1.\(^{15}\) \(^{16}\) We include cultural individual variables such as nativity and ethnicity variables, for they may influence cultural norms regarding gender roles.\(^{17}\) In some of our specifications we also include state level characteristics. Two dummies are related to state’s homeownership rate: \( \text{homeown}_{high} \) and \( \text{homeown}_{med} \), equal one if the state had a relatively high homeownership rate (over 70.4 %) or a homeownership rate in the medium range (between 64.5 % and 70.4 %), respectively, and zero otherwise (the omitted category is relatively low homeownership (below 64.5 %)).\(^{18}\) \( \text{Sex ratio}_s \), defined by birth cohort and region, is included since a higher sex ratio (more men than women) may encourage women to supply more hours of caregiving and supply less time to the labor force; see Grossbard-Shectman (Grossbard-Shectman, 1993). \( \text{Paid_sick} \), is a binary variable that takes 1 for states that have paid sick leave laws, and zero otherwise. It is included as paid sick leave laws could provide a safety net for workers and could affect labor supply decision. Protestant, represents the percentage of people considered themselves as protestants in state \( s \). A state that has a higher percent protestant may have a higher proportion of residents who hold more conservative values, and this could affect women’s labor supply, especially during the pandemic outbreak. For a full list of all the variables we control for see Table 1.

Some specifications also include monthly fixed effects, \( f_t \), and some include individual characteristics of the woman’s husband or partner, including her employment status, education, race/ethnicity, age, age squared, and the industry in which he works if he is employed or unemployed. Our full specification includes state fixed effects, \( f_s \). Note that in the specifications that include state fixed effects, the direct effects of the marital property laws and other demographic variables cannot be identified because they are measured at a state level and there is no time variation in the enactment of these laws during the sample period. Therefore, their estimates are not reported in specifications with state fixed effects.

All regressions are estimated using sample weights with robust standard errors clustered at the state level. We estimate most of our regressions for a sample of US-born women. However, to test Prediction 3 we include immigrants as well. We use this specification to test Predictions 1, 3, and 4.

\(^{15}\) Predicted wage and income effects on the likelihood of having opted out of the labor force due to caregiving are more complex according to Grossbard-Shectman (Grossbard-Shectman, 1984; Grossbard-Shectman, 2003) than according to standard labor supply models based on Becker (Becker, 1965). See Grossbard-Shectman and Neuman (Grossbard-Shectman and Neuman, 1988) and Grossbard (Grossbard, 2015).

\(^{16}\) This includes marital status, for married couples may have a “wealth advantage” over unmarried couples. It is also possible that divorce laws apply more to married couples than to unmarried couples.

\(^{17}\) E.g., Badgett and Folbre (Badgett and Folbre, 1999) and Fernandez and Fogli (2005).

\(^{18}\) States with high homeownership rates (above 70.4 %) are in the top 25 % of the population-weighted distribution of state homeownership rates, while states with low homeownership rates (below 64.5 %) have rates in the bottom 25 % of this distribution.

Table 1

| Variable | Definition | Mean* | Std. Dev. | Data source |
|----------|------------|-------|-----------|-------------|
| Dependent variable | | | | |
| Care | Woman is not in labor force due to caring for family | 0.224 | 0.416 | CPS |
| Not_in_labor | Woman is not in labor force due to not being in labor force | 0.258 | 0.438 | CPS |
| Pandemic indicator | | | | |
| Pandemic | – 1 one month after state’s first COVID-19 death and after; 0 before | 0.373 | 0.484 | USA Facts |
| State’s property-division laws and home ownership rate | | | | |
| No_homeprov | State has equitable-property division without homemaking provision (omitted) | 0.069 | 0.234 | Wong |
| Homeprov | State has equitable-property division with homemaking provision | 0.647 | 0.478 | Wong |
| Commprop | State has community property law | 0.284 | 0.451 | Wong |
| Homeown_low | State’s home ownership rate is < 64.5 % (omitted) | 0.312 | 0.463 | ACS |
| Homeown_med | State’s home ownership rate is 64.5 % and 70.4 % | 0.481 | 0.500 | ACS |
| Homeown_high | State’s home ownership rate > 70.4 % | 0.207 | 0.405 | ACS |
| Individual and household characteristics | | | | |
| Woman’s educational attainment | | | | |
| Below HS | Less than high school | 0.039 | 0.193 | CPS |
| HS | High school only (omitted) | 0.191 | 0.393 | CPS |
| Some college | Some college | 0.150 | 0.357 | CPS |
| Associates | Associate’s degree | 0.129 | 0.335 | CPS |
| Bachelors | Bachelor’s degree | 0.298 | 0.457 | CPS |
| Graduate | Graduate degree | 0.194 | 0.395 | CPS |
| White | White, non-Hispanic (omitted) | 0.745 | 0.436 | CPS |
| Black | Black, non-Hispanic | 0.078 | 0.268 | CPS |
| Hispanic | Hispanic ethnicity, any race | 0.126 | 0.332 | CPS |
| Asian | Asian, non-Hispanic | 0.022 | 0.146 | CPS |
| Other | Other race, non-Hispanic | 0.029 | 0.168 | CPS |
| Married | Women is married and living with spouse; 0 if living with partner | 0.902 | 0.298 | CPS |
| Yng_5_to12 | Youngest child in household is 5–12 years old | 0.682 | 0.466 | CPS |
| Yng_b5 | Youngest child in household is < 5 years old | 0.318 | 0.318 | CPS |
| N_kids | Number of children in household | 2.419 | 1.084 | CPS |

Number of observations is 95,235. * Means are population-weighted using individual sample weights.

| Variable | Definition | Mean* | Std. Dev. | Data source |
|----------|------------|-------|-----------|-------------|
| Other aggregate characteristics | | | | |
| Early | State had early school closure in Spring 2020 | 0.406 | 0.490 | Heggeness (Heggeness, 2020) |
| Sex ratio | Sex ratio by birth cohort | 1.021 | 0.040 | See text |
| Average earnings | Average 2019 earnings per hour for women with the same education living in that state | 24.61 | 7.92 | CPS |
| Protestant | Percentage of respondents considered themselves to be Protestants by state in 2014 | 47.73 | 14.07 | Pew Research |
| Paid sick leaves | State with paid sick leave laws | 0.331 | 0.471 | Shinall (Shinall, 2021) |

Number of observations is 95,235. * Means are population-weighted using individual sample weights.
3.2. Time dynamics of the pandemic and laws

To examine the dynamic effects of the pandemic on whether mothers are in the labor force or not, and how this possibly varies with type of marital property regime over time (Prediction 2), we estimate the following dynamic study regression:

\[
\text{Care}_{it} = \rho_1 + \sum_{j=1}^{5} \beta_j \text{pan}_j + f_1 + f_2 + \epsilon_{it}
\]

(2).

where \( \text{pan}_j \) represents a series of dummy variables that take the value one in the \( j \)th period (bi-monthly intervals) of the pandemic, and zero otherwise. Other controls are the same as in regression (1).\(^{19}\) This dynamic analysis is presented visually in Fig. 2. It enables us to trace out the adjustment path of women opting out of labor force for caregiving in response to COVID-19 over time. The time periods are bi-monthly and the baseline reference period is the period when the time of the treatment takes the value 0. Intuitively, that is the time period when the treatment went into effect. Given that there is almost no variation in the timing of the onset of the pandemic across US states–there were only two states in which the pandemic outbreak did not begin in March 2020–the period dummies in our dynamic study analysis actually capture time-trends in each legal regime in the months before and after the onset of the pandemic. Thus, we do not have staggered heterogeneous treatments and need not worry about addressing problems inherent with such staggered rollouts.

In Panels (a)-(d) of Fig. 3, we plot equation (2) using the whole sample and samples divided by marital property division rules: community property, homemaking provision and neither. The figures plot the coefficients of leads and lags and allow us to assess pre-trends in the months before and after the onset of the pandemic. For instance, in the event of divorce. A total of 37 states with equitable division have a “homemaking provision,” which recognizes that at-home caregivers’ contributions to the household exceed their contributions to its mone-
yary income and assets. In case of marital dissolution these states divide marital property in a way that is supposed to recognize the contributions of each person to household assets. As the contributions of an at-home caregiver to the household’s monetary income and assets are relatively small, equitable division rules may result in workers/spouses getting a relatively small share of the couple’s assets in the event of divorce. A total of 37 states with equitable division have a “homemaking provision,” which recognizes that at-home caregivers’ contributions to the household exceed their contributions to its mone-
yary income and assets. In case of marital dissolution worker/spouses are thus better protected in states with these provisions than in the states with equitable division only, and no homemaking provision.\(^{22}\) Data on states that have community property laws, all assets accumulated during the marriage are equally divided between the spouses. These states are Arizona, California, Idaho Louisiana Nevada New Mexico Texas and Washington, all states that were colonized by Spain or France prior to joining the US. Community property provides relatively strong protection for worker/spouses who are likely to be earning less than their spouse, compared to states without community property that are often called “equitable division” states. In case of marital dissolution these states divide marital property in a way that is supposed to recognize the contributions of each person to household assets. As the contributions of an at-home caregiver to the household’s monetary income and assets are relatively small, equitable division rules may result in workers/spouses getting a relatively small share of the couple’s assets in the event of divorce. A total of 37 states with equitable division have a “homemaking provision,” which recognizes that at-home caregivers’ contributions to the household exceed their contributions to its mone-
yary income and assets. In case of marital dissolution worker/spouses are thus better protected in states with these provisions than in the states with equitable division only, and no homemaking provision.\(^{22}\) Data on states that have paid sick leave laws come from Shinall (Shinall, 2021). Data on states that closed their schools early due to the outbreak of COVID-19 come from Heggness (Heggness, 2020). Data on the percentage of people considered themselves as Protestants by state come from the 2014 U.S. Religious Landscape Study conducted by the Pew Research Center.

As the monthly CPS survey does not collect information on individual or household homeownership, we take data on state homeownership rates from the IPUMS version of US Census Bureau’s 2019 5-year American Community Survey (Ruggles et al., 2021), which provides

\(^{19}\) A similar specification is found in Courtemanche et al. (Courtemanche et al., 2020).

\(^{20}\) Source: USA Facts. In April, it was recognized that the first COVID-19 death in the US had occurred in California in February, but because this was not recognized until well after the fact and caused no school or business closures or employment disruptions at the time, we treat the first concurrently recognized death in California (in March) as that state’s first death.

\(^{21}\) BLS, “Reference week and survey interview week” (https://www.bls.gov/cps/definitions.htm#refweek).

\(^{22}\) They are Alaska, Hawaii, Ohio, Utah and Wyoming.
representative estimates at the state level by pooling data from the annual 2015–2019 ACS surveys. Additional state-level characteristics include a dummy variable equal to one if the state closed its schools early and zero otherwise; a measure of the sex ratio specific to a woman’s age range and US region of residence; a measure of women’s potential market wage (which is foregone if the woman does not work outside the home) based on the average hourly earnings for women having the same education and living in the same state.

4. Results

We start by showing two graphs that make it obvious that a big change in non-participation of mothers in the labor force occurred after the onset of COVID-19 in the US. All results are about explaining non-participation due to caregiving and data are not seasonally adjusted. Fig. 2 superimposes month-by-month variation in share of mothers with children in the K-6 age range who were not in the labor force in 2020 over that share for the corresponding months in 2019. Fig. 2 shows a surge in the share of women who were not participating in the labor force due to caregiving after the onset of the pandemic (the vertical line), consistent with Heggeness, 2020. When the 2020/21 school year began in Fall 2020, shares of mothers of K-6 children who were out of the labor force were substantially higher than they were in Fall 2019. This is also consistent with reports of elevated withdrawals from the labor force for the purpose of helping younger children with schooling, relative to what would ordinarily been expected in the fall as children returned to school.

Fig. 2. Share of Married or Cohabiting Women with Children Ages 5–12 Not in the Labor Force due to Caring for Family Members, 2019 versus 2020. Source: IPUMS Monthly CPS data (weighted), 3-month moving average.

23 From Heggeness (Heggeness, 2020).
24 We use sex ratio data calculated from data for various US Census years (Grossbard, 2015). For age cohorts of women in the 4 major U.S. Census regions (Northeast, Midwest, South and West), and extend their data to include more recent age cohorts. For women born between 1991 and 1995, we use the 2019 5-year ACS to compute the sex ratio in their Census region when they were 15–19 years old (taking the corresponding male age cohort to be ages 17–21). For women born between 1986 and 1990, we use the 2010 Decennial Census 10 % sample to compute the sex ratio when they were 20–24. For women born between 1981 and 1985, we use the same data source to compute the sex ratio when they were 25–29. 25 Based on the merged data files from the Outgoing Rotation Panels in the 2019 CPS as compiled by the NBER.
26 Also see Lofton et al. (Lofton et al., 2021), Barroso and Horowitz, 2021, The Economist, 2021.

4.1. Testing for prediction 1

We first report results from difference-in-differences estimations and then include a larger number of time dummies in line with dynamic study analysis. Results are reported following the order of the predictions presented in Section 2 above.

Table 2 presents our results based on difference-in-differences models. We estimated Eq. (1) for a number of specifications: Column (1) shows baseline results from a model that does not distinguish between the pre-pandemic and pandemic periods; Column (2) adds the pandemic indicator and all pandemic difference-in-differences terms without state fixed effects and male partner’s characteristics; Column (3) adds state fixed effects; and Column (4) presents a model that includes husband’s or partner’s characteristics including his age, race, education and their interaction terms with the pandemic.

The results provide support for Prediction 1: during the COVID-19 pandemic, women’s decisions to withdraw from the labor force to provide care were affected in part by legal arrangements favoring at-home caregivers in event of marital dissolution. All specifications allowing for pandemic effects show that, controlling for a wide range of other factors that could affect a woman’s decision to opt out of the labor force to give care, in the pandemic women’s non-participation rose by significantly more in states that had property-division laws that would better protect the financial interests of a nonparticipating spouse in the event of marital dissolution. More specifically, in states that had equitable-division property laws with a homemaking provision, the probability that a given woman with young school-age children was out of the labor force giving care rose by an extra 2.1–2.7 % points, compared to states with equitable division but no homemaking provision, depending on the specification. In states that had community property laws, the woman’s probability of non-participation due to caregiving increased by 2.5–3.3

Table 2
Determinants of the Probability of Non-participation due to Giving Care: All US-Born Married or Cohabiting Women Ages 25–64, with Children in 5–12 Age Range.

| Determinants                                      | Probability of Non-participation due to Giving Care |
|--------------------------------------------------|-----------------------------------------------------|
|                                                  | (1)  | (2)  | (3)  | (4)  |
| Homemaking Provision                             | 0.006 | -0.003 | – | – |
| Homemaking Provision*Pandemic                    | – | 0.027 ** | 0.026 ** | 0.021 ** |
| Community Property                               | 0.016 | 0.004 | – | – |
| Community Property*Pandemic                      | – | 0.033 *** | 0.030 *** | 0.025 *** |
| Medium Home Ownership Rates                      | -0.022 ** | -0.031 *** | – | – |
| Medium Home Ownership Rates*Pandemic             | (0.010) | (0.010) | (0.010) | (0.010) |
| High Home Ownership Rates                        | -0.058 *** | -0.069 *** | – | – |
| High Home Ownership Rates*Pandemic               | (0.018) | (0.018) | (0.008) | (0.008) |
| Individual Characteristics                       | X | X | X | X |
| State Characteristics                             | X | X | X | X |
| Husbands’/Male Partners’ Characteristics          | X | | | |
| Month Fixed Effects                              | X | X | X | X |
| State Fixed Effects                              | 95,235 | 95,235 | 95,235 | 95,235 |

Notes: *** variable is statistically significant at 1 % level; ** variable is statistically significant at 5 % level; * variable is statistically significant at 10 % level. Robust standard errors clustered at the state level are in parentheses.
% points, relative to the otherwise similar women in equitable-division states with no homemaking provision. That the results are similar, regardless of whether we control for husband/partner’s characteristics, indicates our results are not sensitive to a potential sample selection bias due to missing information about husbands/partners. 27

4.2. Testing for predictions 1 and 2 with the dynamic analysis

In Fig. 3, we illuminate the time dynamics of the pandemics across marital property law regimes. Regressions of “not participating in the labor force due to caregiving” were estimated based on equation (2), with the addition of dummies for bimonthly periods before the onset of COVID-19 (table available upon request). These regressions were estimated for the whole sample (leading to Fig. 3, panel a) and by type of divorce law regime regarding division of marital property (Panels b, c, and d). Prior to COVID-19, the time trend takes a U-shape in all three types of states, with non-participation being higher about 10 months prior to the onset of the pandemic. Then we see a drop in non-participation and an increase in time as time gets closer to the onset of the pandemic in a particular state. The similarity in pre-COVID trends across panels b, c and d allows us to draw causal inferences regarding cross-state differences in trends after the onset of COVID-19.

In Table 3, we re-estimate Eq. (1) but to investigate the potential dynamic effect of the pandemic under different property division regimes, we interact the homemaking provision and community property regimes with a series of dummy variables that indicate that the pandemic has taken place for 1–2 months, 3–4 months, 5–6 months and 7 months or more. Specification 1 includes all female characteristics, prior to COVID-19, the time trend takes a U-shape in all three types of states, with non-participation being higher about 10 months prior to the onset of the pandemic. Then we see a drop in non-participation and an increase in time as time gets closer to the onset of the pandemic in a particular state. The similarity in pre-COVID trends across panels b, c and d allows us to draw causal inferences regarding cross-state differences in trends after the onset of COVID-19.

The time trend we observe for women residing in the 37 home- making provision states fits with the scenario presented in Section 2. In the initial months after COVID-19’s onset the presence of homemaking provisions may have played a decisive role in mothers’ decision to opt out of the labor force to care for their school-aged children. However, in later months the contrast between equitable-division states with and without homemaking provisions may have shrunk. There was more time for a couple’s worker and consumer to negotiate mutually satisfactory agreements that involved either a higher compensation paid by the consumer to the worker or the consumer becoming a co-worker and sharing the home-schooling work. The separate time trends we present for three groups of states are unlikely to simply be the result of schools reopening and women engaging in less home-schooling.

4.3. Testing for prediction 3: COVID-19 and homeownership

Prediction 3 stated that the labor supply effect of states’ property-division regimes on workers’ response to COVID-related school closures is likely to be stronger in states where home ownership is more prevalent and property-division regime may matter more. In those states it is more likely that marital dissolution involves high stakes and there is more potential protection that can be offered to homemakers. We proxy household ownership by state’s homeownership rate.

To test whether the interaction between homeownership and legal regime regarding division of marital property we present the models reported in Table 4. This table splits the sample between women in states with homeownership rates above and below the median level across US states. In states with homeownership rates above the median level, labor force withdrawals due to the pandemic were higher in states that had equitable division with a homemaking provision or community property laws, compared to states that had equitable division laws without a homemaking provision. In contrast, in states with homeownership rates below the median level across states, property-division laws and women’s labor market participation due to caregiving were not associated significantly. The results reported above thus only apply to states where nonlabor income is more likely to contribute significantly to post-
Furthermore, it can be seen from Table 2 that the pandemic had more of an effect on women’s non-participation in the labor force in states with medium and high levels homeownership, where homemakers may consider themselves more protected against the financial risks of leaving the labor force. During the pandemic, compared to women in states with relatively low homeownership rates, otherwise similar women who lived in states with homeownership in a medium (high) range were 1.9–2.3 (2.3–2.8) percentage points more likely to have shifted out of paid labor to caregiving.

4.4. Testing for prediction 4: US-born versus immigrant women

It was predicted that the impact of property-division laws on women’s caregiving and labor supply decisions would be smaller or possibly insignificant for immigrant women, compared to US-born women, as the former are less likely to be familiar with the legal and dissolution individual incomes in the form of part of the home equity.

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To help establish whether the large decreases in women’s labor force participation that we report are related to COVID-19’s impact on school closings interacted with property-division laws, we perform several robustness tests. These include looking at women without children, at women with older children and at men—three groups of individuals who we would expect to be minimally impacted by school closures compared to mothers with young children. These results are presented in Table 6.

In addition, in Table 7 we present regression models estimating whether the previous recession had similar effects on the labor supply of mothers of young children.30

### 5.1. Comparing mothers of school-age children with other groups

#### 5.1.1. Women without children

Given our expectation that women’s labor-force withdrawals in the pandemic were primarily driven by additional caregiving needs of children at home, we would not expect the property-division or homeownership variables to influence labor-force withdrawals of women without children to the same extent as they affected withdrawals of mothers of school-age children. Women without children are not balancing the same trade-offs between demand for their time at home and incentives to stay in the labor force, so it would be surprising to find effects of divorce laws or homeownership affecting their labor-force withdrawals in the same way.

The first column of Table 6 re-estimates our main specification (column 4 in Table 2) for a sample of married and partnered women who had no children under 18 in the household; analysis is confined to women in the 25–44 age range which corresponds to the age range in which mothers of K-6 children cluster. As the first column in Table 6 shows, this is indeed what we find. For women ages 25–44 without children, the probability of non-participation due to giving care was 0.049***—higher than any other group we considered. The coefficient estimates for the divorce laws are all significant at 1% level, with Homemaking Provision and Pandemic having a negative and significant coefficient of -0.021**, suggesting that women with a homemaking provision were less likely to withdraw from the labor force during the pandemic. Community Property and Pandemic also have a negative and significant coefficient of -0.025***, suggesting that women with community property were less likely to withdraw from the labor force during the pandemic. Similarly, Medium Home Ownership and Pandemic have a negative and significant coefficient of -0.019**, suggesting that women with medium home ownership were less likely to withdraw from the labor force during the pandemic. High Home Ownership and Pandemic also have a negative and significant coefficient of -0.023***, suggesting that women with high home ownership were less likely to withdraw from the labor force during the pandemic.
children, the property-division regimes that would apply in the event of marital dissolution had no significant effects on partnered women’s labor-force participation during the pandemic.\(^\text{31}\) Homeownership rates also played no role in affecting withdrawal rates of these women without young children.

5.1.2. Women with older children

The second column in Table 6 re-estimates the model using a sample of married or partnered women who had older children—ages 16–20—in the household only. For the most part, we expect that the pandemic-caused increase in demand for at-home care would have been driven by children in K-6 grades, as they could not be left at home alone all day and needed significant help navigating distance-learning arrangements (see Bansak and Starr, 2021). Older children do not require the same level of supervision and are generally expected (by schools and parents) to be able to manage their own academic work. Thus, we do not expect to find the same effects of property-division laws on pandemic-related labor-force withdrawals of women with older children only.

Indeed, we find no significant difference-in-differences terms relating to property-division regime in the pandemic in the case of women with older children only: these women were equally likely to shift out of the labor force in states where a non-participating caregiver’s financial interests would be relatively more protected in a divorce settlement.

5.1.3. Men’s labor force participation

Given the strong association between caregiving and gender, along with evidence of extra burdens on women for caregiving during the pandemic in Italy (Del Boca et al., 2020), we would not expect men to be stepping out of the labor force to take care of children. It is rare for men to be out of the labor force due to caregiving: in the 2019–20 CPS data, only 2% of married or partnered men with K-6 children in the household had this labor market status. But if the homemaker provision or community property laws encourage gender division of labor during the pandemic, we might see an opposite effects from men. The third column of Table 6 reports estimates of a similar model using as the dependent variable the probability that the man in a couple is out of the labor force due to caregiving. There is some evidence that men are less likely to be out of the labor force for caregiving during COVID-19 with the homemaker provision, but the effect is only marginally statistically significant. We find no significant association between community property laws and the probability of caregiving or opting out of the labor force for men during the pandemic.

5.2. Is it the COVID-related recession?

The reduction in women’s employment that we reported above could be related to the onset of COVID-19 not due to school closures but as a result of the recession it triggered (as suggested e.g. by Albanesi and Kim, 2021) and (Alon et al., 2021). To the extent that mechanisms related to an economic recession play a role here, such as reduced demand for goods or reduced employment opportunities, there is no clear reason why this would be related to state-level property division laws.

To help us disentangle the causal mechanisms behind our findings reported above we therefore test whether changes in employment after the onset of the Great Recession had similar associations with states’ property-division regime. We rerun our principal models using the basic monthly CPS for a sample of mothers of school-age children, using the same sample selection criteria and control variables used in the analysis presented in Table 2 above. This time, we compare the months prior to the Great Recession with the period of the Great Recession, i.e. the “pandemic” dummy is replaced by a “recession” dummy. Following Albanesi and Kim (Albanesi and Kim, 2021) we define the period the Great Recession period as December 2007–June 2009, and zero otherwise and the pre-recession period as March 2007 to November 2007.

The results reported in Table 7 show that the patterns displayed by the property-division dummies interacted with the Great Recession differ sharply from those we reported for the COVID-19 interactions with these dummies in Table 2. According to Table 2 mothers of school-age children living in states with homemaking provision and community property regimes were more likely to be out of the labor force after the onset of COVID-19 than in normal times, before its onset. In contrast, Table 7 indicates that, compared to normal times, during the Great Recession mothers living in states with homemaking provision were less likely to be out of the labor force to care for family members, although the effect is only marginally statistically significant. We did not expect regimes regarding division of property to be associated with increased non-participation women in the labor force, comparing pre and post onset of the Great Recession. A possible explanation for why in the case of the Great Recession the sign of the homemaking provision is opposite of that in the case of COVID-19 is that during recessions women living in couple often enter the labor force as so-called secondary workers in a household with an unemployed man, i.e. there is an “added worker effect,” as stated in Mincer (Mincer, 1962) and Lundberg (Lundberg, 1985). This is what was observed during the Great Recession. It is possible that in states with stronger legal protection of women engaged in homemaking women work less in normal times than in states without homemaking provisions or community property, and therefore during a recession such as the Great Recession there was more of a potential for such women to enter the labor force as secondary workers. Once the recession was over, they went back to normal times and participated

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\(^{31}\) When we added older mothers (ages 45–64) to this sample we did find some evidence of an impact of divorce laws, possibly due to elder caregiving responsibilities. However, the effects were weaker than in Table 2.

### Table 7

Determinants of Mothers’ Probability of Non-participation due to Giving Care, Great Recession (Dec. 2007–June 2009) versus Pre-Recession (March 2007 to Nov. 2007).

| Probability of Non-participation due to Giving Care | (1) | (2) | (3) | (4) |
|----------------------------------------------------|-----|-----|-----|-----|
| Homemaking Provision                                | 0.009 | 0.025 | – | – |
| Homemaking Provision* Recession                    | – | -0.023 * | -0.020 * | -0.019 * |
| Community Property                                  | 0.007 | 0.016 | – | – |
| Community Property* Recession                      | – | -0.014 | -0.011 | -0.011 |
| Medium Home Ownership Rates                         | -0.030 ** | -0.043 *** | – | – |
| Medium Home Ownership Rates* Recession             | – | 0.019 * | 0.019 ** | 0.019 * |
| High Home Ownership Rates                           | -0.057 *** | -0.057 ** | – | – |
| High Home Ownership Rates* Recession               | – | -0.001 | -0.008 | 0.0006 |
| Individual Characteristics                         | X | X | X | X |
| State Characteristics                               | X | X | X | X |
| Husbands/ Male Partners’ Characteristics            | X | X | X | X |
| Month Fixed Effects                                 | X | X | X | X |
| State Fixed Effects                                 | X | X | X | X |
| N                                                   | 198,631 | 198,631 | 198,631 | 198,631 |

Notes: data selection and control variables follow Table 2. ** variable is statistically significant at 1% level; * variable is statistically significant at 5% level; † variable is statistically significant at 10% level. Robust standard errors clustered at the state level are in parentheses.
In Appendix III we report results that examine the effects of the homemaking provisions and the community property law during the pandemic on the probability of mothers not being in the labor force. The results are very similar to our main results in Table 2 in terms of magnitude, but the interaction term between presence of homemaking provisions and the pandemic becomes statistically insignificant when male partners’ characteristics are included. This suggests that the homemaking provisions primarily change the labor supply of women who are making the decision between remaining in the labor supply and staying at home to take care of family members during the pandemic.

6. Conclusions

When COVID-19 hit schools closed. Within the following year millions of women with school-age children living in couples opted out of the labor force to care for their children. Mothers were more likely to do so in states where property-division rules regarding marital dissolution would better protect the financial interests of those who became stay-at-home parents. First, this applies to the nine US states that have community property laws, a legacy from colonial America. After the pandemic started, a woman’s probability of non-participation due to caregiving increased by 3.4–3.6 % points more if she resided in one of these states than if she lived in an equitable-division state with no homemaking provision.

Second, if we just look at the states that have equitable-division property laws after the onset of COVID-19, in the thirty-seven states with homemaking provisions the probability that a given woman with school-age children was out of the labor force was 2.1–2.7 % points higher than in states with equitable division but no homemaking provision.

These findings suggest that financial considerations affecting caregiving mothers played a role when the sudden closing of schools placed a new burden on parents, many choosing to opt out of the labor force to care for their children. Robustness checks show that the negative association between division-of-property regimes more protective of caregivers and women’s participation in the labor force during the pandemic does not hold for young women of similar ages without children, mothers of older children, or partnered men with school-age children. From here we infer a causal link: having more rights over marital property incentivized mothers of school-age children to supply more caregiving of their children when schools suddenly closed due to COVID-19. Living in a country with high divorce and separation rates, and with the more remote prospect of widowhood hanging over them, mothers of school-age children seem to have felt more secure leaving the labor force if laws related to marital property and dissolution were more favorable to those opting out of the labor force to supply at-home caregiving.

Furthermore, based on the dynamic study, it appears that presence of a homemaking provision was most influential between the third and sixth month of COVID-19. From month 7 until the end of our observation period (one year) that provision is no longer significantly associated with mothers’ labor supply. This may mean that financial considerations motivating mothers to opt out of the labor force in order to care for their children were relatively more important soon after the onset of an exogenous shock, COVID-19, than they were many months later.

 Mothers’ likelihood to opt out of the labor force after the start of the pandemic varied more with laws regarding division of marital property in states with higher homeownership rates than in states with lower homeownership. Relative to their immigrant counterparts, US-born mothers were more likely to opt out in response to COVID-19 as a function of these laws. These findings are consistent with women or couples tying opting out decisions with financial considerations surrounding the loss of income following a withdrawal from the labor force: community property and homemaking provisions mean more where couples are more likely to own their home and for women more familiar with their state’s laws regulating division of marital property.

In contrast to our findings comparing pre-COVID and post-COVID periods, we found that the labor force participation of mothers of young children before and after the Great Recession of 2007 did not vary as a function of marital property laws. This contrast may be the result of the different scenarios: a crisis generated by sudden increase in overall unemployment versus a crisis creating a sudden need for additional time spent caring for young children. After COVID hit employment did not just shrink due to employers laying off their workers.

This research is important: it points out to a connection between laws regarding the division of marital property and labor force participation of mothers of school-age children. Further research may also uncover links between these laws and other measures of labor supply, such as hours of work and long-term commitment to the labor force. Again, the onset of COVID-19 may be interpreted as an unexpected shock causing behavioral changes. Our research also carries implications for labor force re-entry of mothers living in couples as COVID-19 becomes less of a threat to society.

Laws regarding the division of marital property are rarely used as a policy instrument and we don’t recommend that these laws be modified in light of their possible role influencing decisions regarding opting-out from the labor force to care for young children. There is plenty of evidence that in the U.S.A. women are currently disfavored by current marital property division regimes (see, e.g., (Hersch and Shinall, 2020). We already knew that opting out is an option more available to those who can afford it, as is the case with women who attended elite colleges when compared to graduates from public universities (Hersch, 2013). Now we also know that women expecting less financial loss from such decision are more likely to opt out from the labor force to care for young children when facing a crisis such as COVID-19.

CRediT authorship contribution statement

Shoshana Grossbard: Conceptualization, Methodology, Investigation, Writing – original draft preparation, reviewing and editing. Ho-Po Crystal Wong: Methodology, Data curation, Software, Investigation, Writing, Visualization. Cynthia Bansak: Investigation, Methodology, Writing, Validation.

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Appendix I. States by Rules for Division of Marital Property. For States with a Homemaking Provision the year of enactment is mentioned

| State       | Year of Enactment of the Homemaking Provision in Property Division | State       | Year of Enactment of the Homemaking Provision in Property Division |
|-------------|------------------------------------------------------------------|-------------|------------------------------------------------------------------|
| Alabama     | 1989                                                             | New York    | 1980                                                             |
| Alaska      | –                                                                | North Carolina | 1982                                                     |

(continued on next page)
State Year of Enactment of the Homemaking Provision in Property Division  
Arizona community property 1989  
Arkansas 1978  
California community property 1977  
Colorado 1973  
Connecticut 1988  
Delaware 1980  
District of Columbia 1981  
Florida 1985  
Georgia 2000  
Hawaii –  
Idaho community property 1984  
Illinois 1981  
Indiana 1978  
Iowa 1982  
Kansas 1988  
Kentucky 1972  
Louisiana community property 1979  
Maine 1979  
Maryland 1980  
Massachusetts 1982  
Michigan 2002  
Minnesota 1987  
Mississippi 1982  
Missouri 1986  
Montana 1975  
Nebraska 1984  
Nevada community property 1987  
New Hampshire 1988  
New Jersey 1988  
New Mexico community property 1989  
North Dakota 1989  
Ohio –  
Oklahoma 1999  
Oregon 1977  
Pennsylvania 1980  
Rhode Island 1983  
South Carolina 1982  
South Dakota 1991  
Tennessee 1984  
Texas community property –  
Utah –  
Vermont 1988  
Virginia 1981  
Washington community property 1984  
West Virginia 1984  
Wisconsin community property 1987  
Wyoming –  

Source: Wong (Wong, 2016), with updates by the authors.

Appendix II. Summary Statistics for Husbands and Partners of US-Born Married and Cohabiting Women Ages 25–64, with Children in 5–12 Age Range

| Variables | Mean | Standard Deviation |
|-----------|------|--------------------|
| Man’s educational attainment | | |
| Less than high school | 0.060 | 0.238 |
| High school only (omitted) | 0.261 | 0.439 |
| Some college | 0.153 | 0.360 |
| Associate’s degree | 0.114 | 0.318 |
| Bachelor’s degree | 0.256 | 0.436 |
| Graduate degree | 0.156 | 0.362 |
| Man’s race/ethnicity | | |
| White, non-Hispanic (omitted) | 0.722 | 0.448 |
| Black, non-Hispanic | 0.092 | 0.289 |
| Hispanic ethnicity, any race | 0.134 | 0.341 |
| Asian, non-Hispanic | 0.023 | 0.151 |
| Other race, non-Hispanic | 0.028 | 0.165 |
| Age | 40.55 | 7.583 |
| Not in labor force | 0.061 | 0.238 |
| Not in labor force due to caregiving | 0.020 | 0.141 |

Means are population-weighted using individual sample weights.

Appendix III. Determinants of the Probability of Not in Labor Force: All US-Born Married or Cohabiting Women Ages 25–64, with Children in 5–12 Age Range

| Probability of Not in Labor Force | (1) | (2) | (3) | (4) |
|-----------------------------------|-----|-----|-----|-----|
| Homemaking Provision             | 0.006 | 0.0002 | – | – |
| Homemaking Provision*Pandemic    | – | 0.016 * | 0.015 * | 0.010 |
| Community Property               | 0.013 | 0.002 | – | – |
| Community Property*Pandemic      | – | 0.029 * *** | 0.026 * *** | 0.022 * *** |
| Medium Home Ownership Rates      | -0.026 * * | -0.035 * ** | – | – |

(continued on next page)
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