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Gender Gaps in the Labor Market Effects of COVID-19: Evidence for Mexico

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Gender Gaps in the Labor Market Effects of COVID-19: Evidence for Mexico

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Abstract

This paper studies the unequal effects of the COVID-19 pandemic on labor market outcomes for men and women in Mexico. Using a large longitudinal dataset and an event-study design, I find that the gender differential effect of the pandemic changed considerably in time. While men suffered larger and temporary losses in terms of unemployment, women experienced greater and more persistent declines in labor force participation. By comparing the effects across sub-samples, I show that these disparities in the recovery of labor participation are mainly driven by increased childcare needs and are linked to women being over-represented in the informal and part-time workforce.

Keywords— COVID-19, gender gaps, labor markets, Mexico.

JEL Codes— J16, J2.

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I. Introduction

The COVID-19 pandemic has affected labor markets worldwide in an unprecedented way. The associated restrictions to economic activity have highlighted previously neglected differences among occupations and sectors, such as the possibility of working from home or the degree of frequent interactions among customers, providers, and coworkers (Dingel and Neiman, 2020). Moreover, the pandemic implied the closure of schools and daycare centers, thus affecting the volumes of home production (Alon et al., 2020; Hupkau and Petrongolo, 2020).

The emerging but growing literature on the effect of COVID-19 restrictions on labor market outcomes has devoted attention to the unequal employment impacts among men and women in developed economies (Adams-Prassl et al., 2020; Montenegro et al., 2020; Angelucci et al., 2020; Casarico and Lattanzio, 2020; Hupkau and Petrongolo, 2020; Dang and Viet Nguyen, 2021; Fairlie et al., 2021). However, there is more limited evidence on unequal gender impacts on low and middle-income countries that are characterized by lower levels of female labor participation and higher labor market segmentation.

This paper studies the impacts of COVID-19 on the labor market outcomes among men and women using longitudinal data from the Mexican National Survey of Occupation and Employment (ENOE). Following the first reported case on February 2, 2020, Mexican authorities implemented a national lockdown between March 23 to May 30, 2020, under the National Campaign of Healthy Distancing. This measure implied the closure of non-essential activities and schools and was followed by a state-level alarm system that imposed measures according to the level of epidemic risk.

I provide a broad picture of the labor market response to the pandemic by looking at the impacts on labor force participation, employment, unemployment, worked hours, and earnings. Using an event-study design that allows me to validate the assumption of common pre-trends in labor outcomes and controlling by individual fixed effects, I find evidence for contrasting differential effects in unemployment and labor force participation. On the one hand, unemployment incidence was about twice as large for men immediately after the onset of the restrictions, but this unequal impact was no longer statistically significant by the

last quarter of 2020. On the other hand, although the initial decrease in labor participation was similar for men and women, the slower recovery of female labor participation produced a gender differential effect that only materialized after June 2020 and progressively widened. Hence, the longer-lasting effect of the COVID-19 pandemic in the Mexican labor market was a two-fold larger decrease in labor participation for women.

To further explore heterogeneous effects among sub-samples, I estimate the impacts across different pre-pandemic labor features and childcare responsibilities. My results indicate that the largest differential decrease in labor participation for women occurred among those with informal and part-time jobs. Moreover, the gender gap in the effect on labor force participation is only significant for individuals with children of school-going age.

This paper contributes to an emerging literature on the unequal gender effects of the COVID-19 shock on labor outcomes ([Dang and Viet Nguyen, 2021](#); [Albanesi and Kim, 2021](#); [Hupkau and Petrongolo, 2020](#); [Fairlie et al., 2021](#); [Blundell et al., 2020](#); [Casarico and Lattanzio, 2020](#); [Angelucci et al., 2020](#); [Couch et al., 2020](#); [Adams-Prassl et al., 2020](#); [Montenovo et al., 2020](#)). In particular, the paper contributes to the scarce evidence on low and middle-income economies ([Viollaz et al., 2022](#); [Cueva et al., 2021](#); [García-Rojas et al., 2020](#)).

The paper stands out in several aspects compared to the existing studies. First, while most studies examine effects on job loss and employment, I also investigate the effects on labor force participation. Estimating effects on labor participation is relevant since re-entering the labor force after a dropout may imply significant penalties in terms of position and earnings ([Kleven et al., 2019](#); [Angrist and Evans, 1998](#)). Moreover, potential long-term reductions in female labor participation would imply a reversal of the recent narrowing of the labor participation gender gap in Mexico, with its consequent implications in terms of economic and social opportunity losses ([Lim and Zabek, 2021](#); [Lopez-Acevedo et al., 2020](#)). Second, my analysis relies on a large longitudinal labor market survey that allows me to trace pre-pandemic characteristics and check for the presence of pre-trends in labor outcomes. Therefore, unlike most studies on low and middle-income economies that rely on real-time telephone surveys carried out during the pandemic ([Nieves et al., 2020](#)), I can explore the persistence of the effects and provide supporting evidence for the identification assumption using the event-study design.

The rest of the paper is organized as follows. [Section II](#) describes the data. [Section III](#) discusses the empirical strategy. [Section IV](#) presents the results. [Section V](#) concludes.

II. Data

The primary data source is the National Survey on Occupation and Employment (ENOE), a nationally representative survey with a rotating panel structure in which one-fifth of the sample is replaced every three months after five interviews. Due to the health contingency, ENOE information collection was suspended after the first quarter of 2020 and temporarily replaced by a strategy of telephone surveys (the Telephone Survey of Occupation and Employment - ETOE) that provided monthly information between April and June 2020. While both surveys are nationally representative and use a probability-sampling design, the telephone surveys were conducted using a sub-sample of housing units in ENOE's first quarter of 2020. As a result, the sample size decreases from around 126,000 households in ENOE to about 14,000 households ¹.

This paper uses a longitudinal data set that matches individual data from the telephone survey waves collected between May and June 2020 with previous rounds from ENOE. This approach allows me to evaluate the short-term effects of the lockdown and check for the existence of pre-trends in labor outcomes. Additionally, I also match observations with subsequent waves of the ENOE to explore the persistence of the effects during the last two quarters of 2020, although I can only trace a smaller share of households.

The sample contains all individuals between 16 and 65 who participated in the May 2020 survey. After tracing individuals during previous and subsequent waves, the resulting subsample includes 11,512 individuals observed for an average of five periods. For the heterogeneity analysis, I use pre-pandemic labor and family characteristics reported in the first quarter of 2020. Labor informality is defined using the Mexican National Institute of Statistics and Ge-

¹In [Appendix B](#), I compare the whole sample from the first quarter of 2020 and the sub-sample from the same quarter that was contacted by phone in May 2020.

ography (INEGI) and includes individuals employed in economic units without a registry as providers of goods and services and workers without a social security scheme.

Table 1: DESCRIPTIVE STATISTICS AT BASELINE.

	All	Men	Women
Female (%)	0.52	0.00	1.00
College degree (%)	0.38	0.42	0.34
Age 18-24 (%)	0.14	0.16	0.13
Age 25-30 (%)	0.16	0.17	0.15
Age 31-44 (%)	0.31	0.30	0.32
Age 45-65 (%)	0.39	0.37	0.40
Labor participation (%)	0.62	0.75	0.49
Unemployment (%) ^t	0.37	0.34	0.37
Informal (%)	0.52	0.50	0.54
Part-time (%)	0.23	0.17	0.31
Weekly working hours	38.89	43.17	33.50
Monthly earnings (USD)	268.2	299.5	228.7
Living as a couple (%)	0.57	0.64	0.49
Kids aged 0-4 (%)	0.19	0.18	0.21
Kids aged 5-15 (%)	0.43	0.43	0.43

Notes: The table display descriptive statistics for the sample during the first quarter of 2020 using survey weights.

III. Empirical Strategy

My baseline event-study specification to estimate the effect of the COVID-19 is:

$$Y_{it} = \alpha_i + \sum_{t=1, t \neq 4}^9 \beta_t D_t + u_{it}, \quad (1)$$

where Y_{it} is a labor outcome of individual i in period t , α_i are individual fixed effects, and D_t is a vector of dummy variables for each period. t ranges from the second quarter of 2019 to the fourth quarter of 2020 ($t = 1, 2, \dots, 9$). β_t parameters are estimated using the first quarter of 2020 as a reference period ($t = 4$). My vector of outcomes Y_{it} includes an indicator variable for labor participation, employment, and unemployment, the log of weekly working hours, and

the log of monthly earnings. Throughout the paper, I present unemployment results with and without conditioning on labor participation.

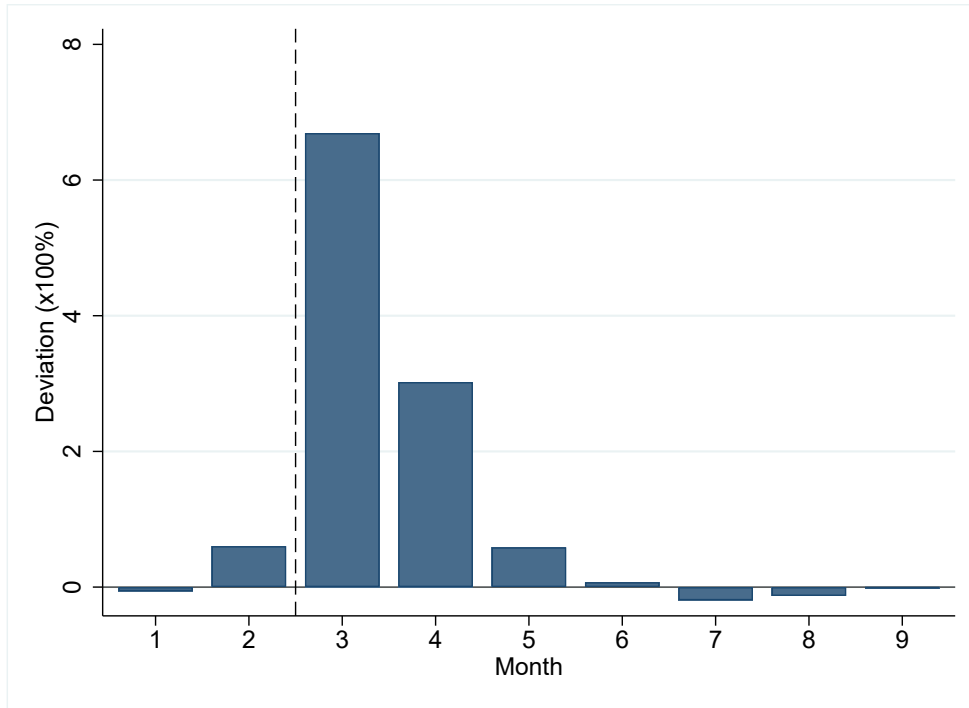
I estimate differential effects by gender using the following specification:

$$Y_{it} = \alpha_i + \sum_{t \neq 4}^9 \left(\beta_t D_t + \gamma_t D_t \cdot I_i^f \right) + \epsilon_{it}, \quad (2)$$

where I_i^f is a gender dummy variable equal to 1 for female individuals. I estimate all specifications using linear estimators, individual weights, and clustered standard errors at the municipality level.

The identifying assumption for estimates of coefficients β to recover the causal effect of the pandemic is that counterfactual outcomes would have remained unchanged in the absence of the shock. Additionally, I must assume the lack of differential counterfactual outcomes between men and women in the absence of the pandemic for estimates of coefficients γ to recover the differential effects. These assumptions are plausible since the national lockdown was an unprecedented shock to economic activity. According to the Mexican National Institute of Statistics and Geography (INEGI), nearly 12 million jobs were lost during the start of the pandemic. By the end of 2020, confirmed cases raised to 10.9 million. GDP fell 8.3 percent in 2020, its largest decline since 1932. From [Figure 1](#), I observe that job loss was up to 6 times larger in 2020 compared to 2018-2019 averages. I also evaluate this assumption more directly by analyzing the estimates of pre-treatment periods ($t = 1, 2, 3$).

Figure 1: JOB LOSS INCIDENCE DURING 2020.



Notes: The figure plots the last self-reported employment loss per month during 2020 as a proportion of to the corresponding monthly average in 2018-2019. Figures are obtained using the retrospective labor market module of the National Survey on Occupation and Employment (ENOE). The sample is restricted to individuals between 18-65 years old.

IV. Results

A. Overall Effects

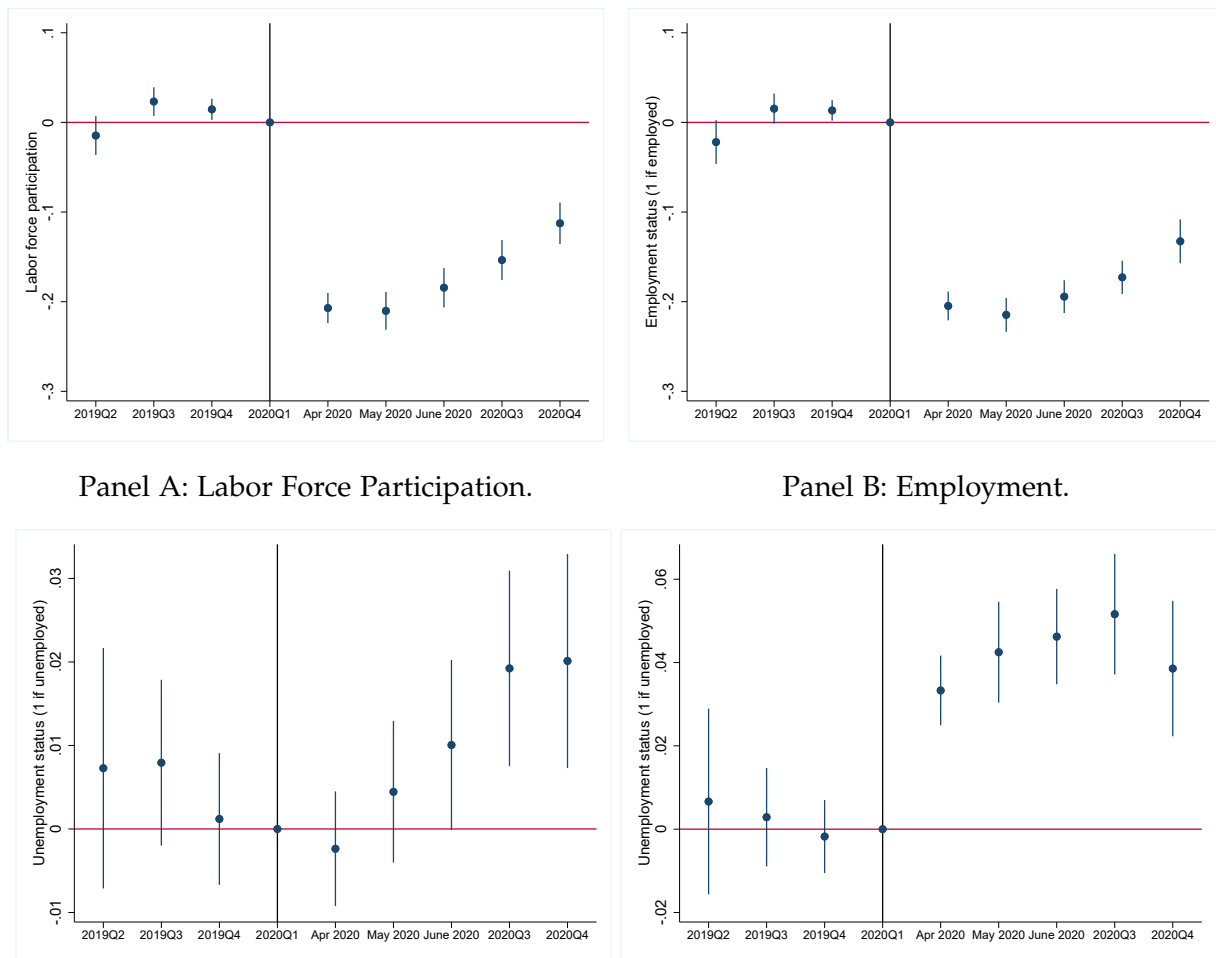
I start by presenting baseline estimates of the overall effects of the pandemic. [Figure 2](#) plots the estimates of the event-study regression for the binary variables of labor participation, employment, and unemployment. Estimates of pre-COVID periods are not statistically significant at the 1 percent level, which validates the assumption of parallel pre-trends in labor outcomes.

Panels A and B show that the probability of participation and being employed decreased by 21-22 percentage points immediately after the pandemic onset in April 2020. These effects

progressively decreased to 12-14 percentage points but remained statistically significant by the end of 2020. Panel C plots the estimates of unemployment effects, which increased 1-3 percentage points after June 2020. When restricting the sample to individuals participating in the labor force in Panel D, these effects arise in April 2020 and increase in magnitude to 4-6 percentage points.

Finally, Panels E and F present the effects on the intensive margin. Working hours and earnings declined by 21 and 17 percentage points during April 2020. These effects decreased in magnitude to about 6-8 percentage points by the end of the year.

Figure 2: EVENT STUDY BASELINE ESTIMATES.



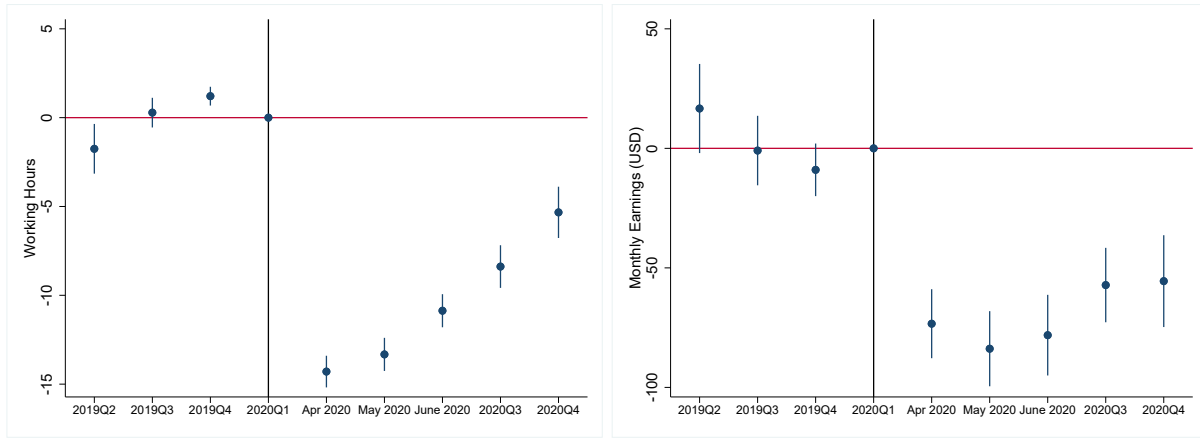
Panel A: Labor Force Participation.

Panel B: Employment.

Panel C: Unemployment.

Panel D: Unemployment - conditional on participation.

Figure 2: Continued.



Panel D: Log Working Hours.

Panel E: Log Monthly Earnings.

Notes: The figure plots estimated coefficients of the event-study regressions. The sample period covers from the second quarter of 2019 to the fourth quarter of 2020. The reference period is the first quarter of 2020. All specifications are weighted to be nationally representative and include respondent fixed effects, and a constant term. Standard errors are clustered at the municipality level.

B. Gender Differential Effects

I then proceed to assess the existence of gender gaps in the labor market effects of the pandemic. [Table 2](#) reports the estimates for differential effects on labor participation, employment, and unemployment for women. Estimates in Column 2 indicate that while there was no gender differential impact on labor participation during the first two months after the start of the restrictions, women experienced a significantly larger decrease in labor participation after June 2020. [Appendix Figure A1](#), which plots the coefficient estimates for each gender separately, shows that the gender gap in the effect of the pandemic on labor participation occurs due to the slower recovery of female labor participation relative to male participation.

While there are no differential effects in employment (Column 4), I find a gender gap in the probability of unemployment. According to estimates in Columns 6 and 8, unemployment incidence was about twice as large for men immediately after the onset of the restrictions, but the differential effect became statistically insignificant by the fourth quarter of 2020.

Finally, [Table 3](#) presents the estimation results for unequal gender effects at the intensive margins. While women suffered lower temporary losses in working hours and monthly earnings without conditioning on employment (Columns 2 and 5), these differential effects are not statistically significant conditional on working (Columns 3 and 6).

Table 2: GENDER GAPS IN COVID-19 EFFECTS - EXTENSIVE MARGIN.

	Participation		Employment		Unemployment		Unemployment (conditional on part.)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Apr 2020	-0.207*** (0.0085)	-0.204*** (0.0108)	-0.205*** (0.0082)	-0.211*** (0.0104)	-0.002 (0.0035)	0.007 (0.0053)	0.033*** (0.0043)	0.044*** (0.0060)
May 2020	-0.210*** (0.0108)	-0.207*** (0.0174)	-0.215*** (0.0096)	-0.223*** (0.0152)	0.004 (0.0043)	0.016** (0.0069)	0.042*** (0.0062)	0.054*** (0.0079)
June 2020	-0.184*** (0.0112)	-0.162*** (0.0141)	-0.194*** (0.0093)	-0.184*** (0.0114)	0.010* (0.0052)	0.022** (0.0084)	0.046*** (0.0058)	0.057*** (0.0074)
2020 Q3	-0.154*** (0.0114)	-0.119*** (0.0174)	-0.173*** (0.0094)	-0.163*** (0.0159)	0.019*** (0.0059)	0.044*** (0.0117)	0.052*** (0.0074)	0.066*** (0.0108)
2020 Q4	-0.113*** (0.0118)	-0.071*** (0.0150)	-0.133*** (0.0124)	-0.108*** (0.0176)	0.020*** (0.0065)	0.037*** (0.0123)	0.039*** (0.0083)	0.043*** (0.0112)
Female × Apr 2020		-0.007 (0.0169)		0.012 (0.0164)		-0.019*** (0.0061)		-0.027*** (0.0083)
Female × May 2020		-0.006 (0.0187)		0.016 (0.0163)		-0.022*** (0.0071)		-0.028*** (0.0073)
Female × June 2020		-0.043*** (0.0130)		-0.020* (0.0115)		-0.023*** (0.0080)		-0.027*** (0.0086)
Female × 2020 Q3		-0.067*** (0.0218)		-0.020 (0.0229)		-0.047*** (0.0135)		-0.039** (0.0157)
Female × 2020 Q4		-0.078*** (0.0217)		-0.046** (0.0224)		-0.032** (0.0130)		-0.009 (0.0129)
Obs.	65,511	65,511	65,511	65,511	65,511	65,511	41,407	41,407

Notes: Dependent variable: binary variable for unemployment. All specifications are weighted and include respondent fixed effects, and a constant term. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the municipality level in parentheses.

Table 3: GENDER GAPS IN COVID-19 EFFECTS - INTENSIVE MARGIN.

	Working Hours			Earnings		
	(1)	(2)	(3)	(4)	(5)	(6)
Apr 2020	-1.345*** (0.0761)	-1.509*** (0.1015)	-0.229*** (0.0246)	-1.345*** (0.0761)	-1.509*** (0.1015)	-0.229*** (0.0246)
May 2020	-1.527*** (0.1265)	-1.742*** (0.1637)	-0.210*** (0.0260)	-1.527*** (0.1265)	-1.742*** (0.1637)	-0.210*** (0.0260)
June 2020	-1.444*** (0.1111)	-1.543*** (0.1311)	-0.147*** (0.0261)	-1.444*** (0.1111)	-1.543*** (0.1311)	-0.147*** (0.0261)
2020 Q3	-1.164*** (0.1718)	-1.195*** (0.3113)	-0.122*** (0.0422)	-1.164*** (0.1718)	-1.195*** (0.3113)	-0.122*** (0.0422)
2020 Q4	-1.156*** (0.1256)	-1.124*** (0.1978)	-0.043 (0.0376)	-1.156*** (0.1256)	-1.124*** (0.1978)	-0.043 (0.0376)
Female × Apr 2020		0.319** (0.1231)	0.063* (0.0337)		0.319** (0.1231)	0.063* (0.0337)
Female × May 2020		0.417** (0.1615)	0.049 (0.0360)		0.417** (0.1615)	0.049 (0.0360)
Female × June 2020		0.191 (0.1511)	0.008 (0.0441)		0.191 (0.1511)	0.008 (0.0441)
Female × 2020 Q3		0.058 (0.3233)	0.062 (0.0489)		0.058 (0.3233)	0.062 (0.0489)
Female × 2020 Q4		-0.059 (0.2435)	-0.041 (0.0608)		-0.059 (0.2435)	-0.041 (0.0608)
Obs.	65,511	65,511	29,787	65,511	65,511	29,787
Conditioning on employment	No	No	Yes	No	No	Yes

Notes: All specifications are weighted and include respondent fixed effects, and a constant term. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the municipality level in parentheses.

C. Heterogeneity across Labor Characteristics and Childcare

To further investigate the differential effects by gender, I first analyze selected sub-samples and report the reduced-form coefficients of a post-COVID binary variable (May to Dec 2020) and its interaction with a dummy for gender that activates for women. [Table 4](#) reports the estimates for different sub-samples regarding job characteristics as labor formality and part-time status. Panel A shows that the additional decrease in labor participation for women is only statistically significant for informal and part-time workers. This heterogeneity in the effects suggests that labor market exit was prevalent among women with more flexible work arrangements. Panel B reports the estimates for differential effects on the probability of unemployment, where I

find little heterogeneity across sub-samples.

Table 4: GENDER GAPS BY SUBSAMPLES - JOB CHARACTERISTICS.

	All (1)	Formal (2)	Informal (3)	Non Part-time (4)	Part-time (5)
<i>Panel A. Dependent variable: labor force participation</i>					
Post-COVID	-0.187*** (0.010)	-0.140*** (0.010)	-0.294*** (0.018)	-0.160*** (0.010)	-0.371*** (0.028)
Post-COVID × Female	-0.029** (0.013)	-0.031 (0.020)	-0.206*** (0.022)	0.016 (0.013)	-0.140*** (0.036)
Obs.	65,511	25,792	20,577	54,794	10,717
<i>Panel B. Dependent variable: employment status</i>					
Post-COVID	0.011** (0.004)	0.029*** (0.004)	0.043*** (0.006)	0.009* (0.005)	0.035*** (0.007)
Post-COVID × Female	-0.016*** (0.004)	-0.019*** (0.004)	-0.022*** (0.007)	-0.019*** (0.005)	-0.020** (0.008)
Obs.	65,511	25,792	20,577	54,794	10,717
<i>Panel C. Dependent variable: unemployment status (conditional on participation)</i>					
Post-COVID	0.047*** (0.005)	0.037*** (0.005)	0.065*** (0.009)	0.045*** (0.005)	0.060*** (0.012)
Post-COVID × Female	-0.018*** (0.006)	-0.022*** (0.006)	-0.021* (0.012)	-0.020*** (0.006)	-0.023* (0.014)
Obs.	41,407	23,906	16,374	33,066	8,341

Notes: Dependent variable: binary variable for labor participation, employment, and unemployment. All specifications are weighted and include respondent fixed effects, and a constant term. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the municipality level in parentheses.

In [Table 5](#), I explore differential effects according to different childcare responsibilities. Columns 2-4 of Panel A show that the gender gap in the effect on labor force participation is only significant for individuals with school-aged children. In particular, women with children of school-going age were almost four times more likely to leave the labor force compared to women without such caring responsibilities. Hence, my findings point toward the crucial role of childcare availability as a contributor to female labor participation ([Lim and Zabek, 2021](#); [Lopez-Acevedo et al., 2020](#)).

Regarding heterogeneous effects on unemployment, the estimation results of Panel B do

not suggest large differences across sub-samples (Panel B). If anything, women with children under 15 years old were less likely to become unemployed than women without those childcare responsibilities.

Table 5: GENDER GAPS BY SUBSAMPLES - CHILDCARE RESPONSABILITIES.

	All	No children under 15	Children 0-5	Children 5-15
	(1)	(2)	(3)	(4)
<i>Panel A. Dependent variable: labor force participation</i>				
Post-COVID	-0.187*** (0.010)	-0.197*** (0.013)	-0.164*** (0.017)	-0.179*** (0.012)
Post-COVID × Female	-0.029** (0.013)	-0.007 (0.019)	-0.051** (0.023)	-0.048*** (0.016)
Obs.	65,511	30,481	13,034	29,635
<i>Panel B. Dependent variable: Unemployment status</i>				
Post-COVID	0.011** (0.004)	-0.000 (0.007)	0.022*** (0.008)	0.026*** (0.005)
Post-COVID × Female	-0.016*** (0.004)	-0.002 (0.007)	-0.033*** (0.009)	-0.031*** (0.006)
Obs.	65,511	30,481	13,034	29,635
<i>Panel C. Dependent variable: unemployment status (conditional on participation)</i>				
Post-COVID	0.047*** (0.005)	0.040*** (0.008)	0.039*** (0.011)	0.057*** (0.007)
Post-COVID × Female	-0.018*** (0.006)	-0.009 (0.011)	-0.016 (0.013)	-0.028*** (0.010)
Obs.	41,407	19,158	8,240	18,768

Notes: Dependent variable: binary variable for labor participation, employment, and unemployment. All specifications are weighted and include respondent fixed effects, and a constant term. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the municipality level in parentheses.

Overall, the main mechanism behind the unequal gender effect of the pandemic on labor participation appears to be the combined effect of women's over-representation in informal and part-time jobs, where the associated opportunity cost of transitioning from employment to non-participation is lower, as well as the increased childcare needs that arose with the restrictions.

V. Concluding Remarks

This paper uses Mexican longitudinal data to study the unequal effects of COVID-19 on labor outcomes among men and women. Mexican authorities implemented a national lockdown between March 23 to May 30, 2020, that implied the closure of non-essential activities and schools. Using an event-study design, I find that although men suffered larger losses in terms of unemployment, women were more likely to exit the labor market after the pandemic. The estimates indicate that while the unequal effect on unemployment was immediate and diluted by the end of 2020, the unequal effect on female labor participation only materialized after June 2020 and widened during the following periods.

By exploring heterogeneity in the effects across different sub-samples, I find that the additional decrease in labor participation for women occurred among those with informal and part-time jobs. Moreover, the gender gap in the effect on labor force participation was only significant for individuals with school-aged children.

Overall, the empirical evidence suggests that the differential effect of the pandemic on female labor participation appears to be attributable to the increased childcare needs that created a motherhood penalty for women as primary providers of childcare ([Fairlie et al., 2021](#); [Collins et al., 2021](#)). Moreover, these adjustments mainly occurred among those with more flexible work arrangements, which also links with women being over-represented in the informal and part-time workforce ([OECD and ILO, 2019](#)).

My findings point toward the crucial role of childcare availability as a contributor to female labor participation ([Lim and Zabek, 2021](#); [Lopez-Acevedo et al., 2020](#)). In particular, the results highlight the importance of designing policies to provide childcare support to counteract the gender unequal effects of the pandemic on labor participation and avoid the labor penalties related to long spells of non-participation.

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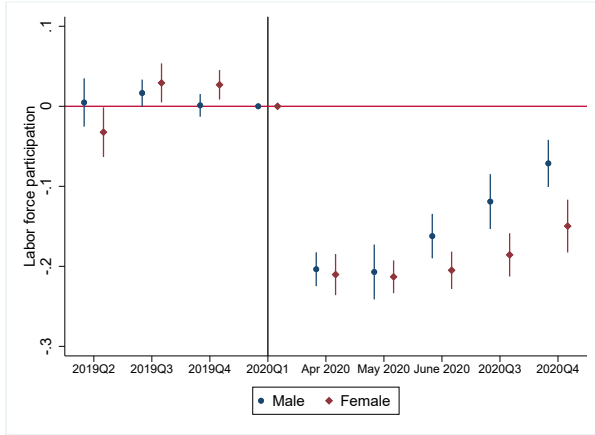
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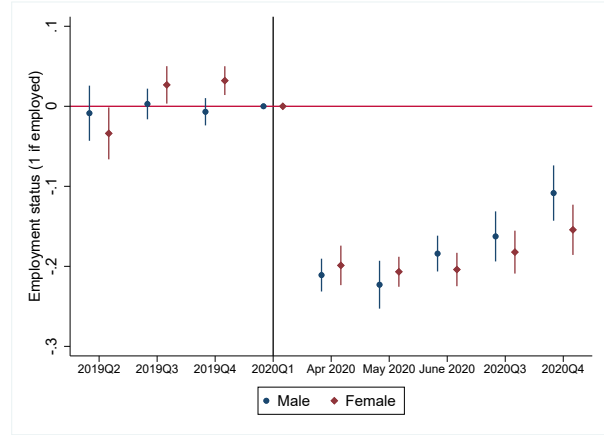
A Appendix

A. Event Study Estimates for Men and Women

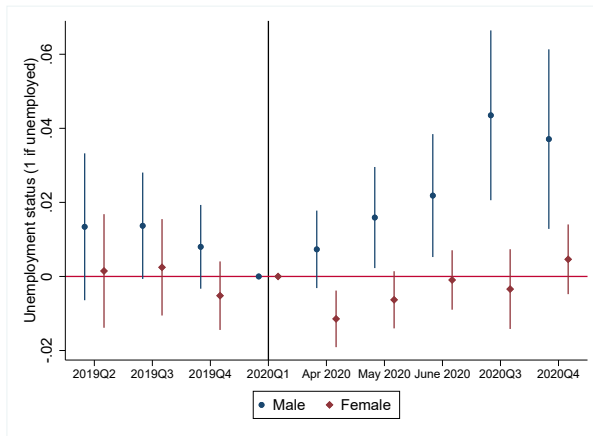
Figure A1: EVENT STUDY ESTIMATES BY GENDER - EXTENSIVE MARGIN.



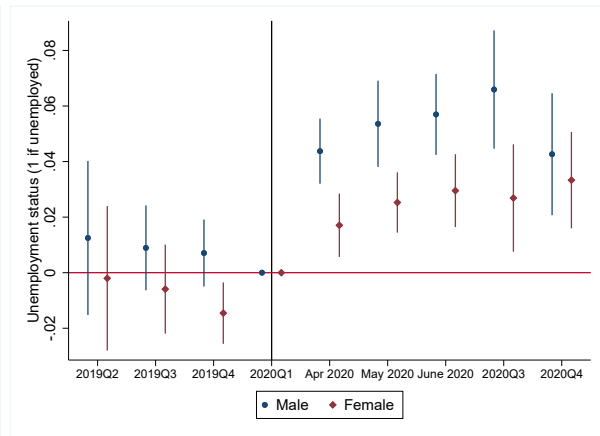
Panel A: Labor Force Participation.



Panel B: Employment.

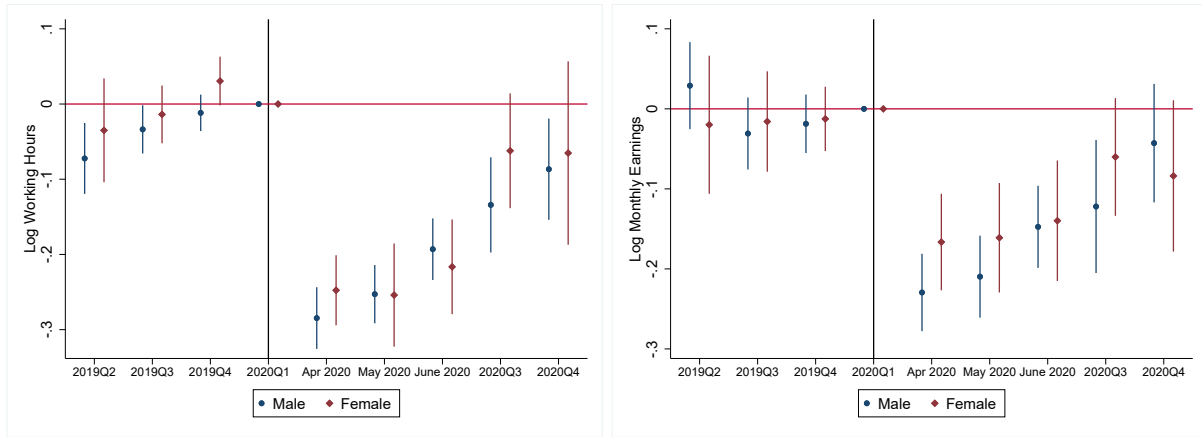


Panel C: Unemployment.



Panel D: Unemployment - conditional on participation.

Figure A1: Continued.



Panel E: Log working hours.

Panel F: Log monthly earnings.

Notes: The figure plots estimated coefficients of the event-study regressions for men and women. The sample period covers from the first quarter of 2019 to the fourth quarter of 2020. The reference period is the first quarter of 2020. All specifications are weighted to be nationally representative and include respondent fixed effects, and a constant term. Standard errors are clustered at the municipality level.

B. Comparison between Samples

Table A1: SAMPLE MEAN DIFFERENCE TESTS

Variable	(1)	(2)	T-test
	2020Q2 ENOE Sample	2020Q2 Sub-sample	Difference (1)-(2)
Female	0.422 (0.005)	0.395 (0.005)	0.027*
Age	39.645 (0.130)	39.633 (0.120)	0.012
College degree	0.478 (0.005)	0.407 (0.005)	0.071***
Living as couple	0.582 (0.005)	0.597 (0.005)	-0.016
Children 0-5	0.232 (0.006)	0.272 (0.006)	-0.040**
Children 5-15	0.670 (0.010)	0.696 (0.010)	-0.026
Elder members	0.151 (0.004)	0.158 (0.004)	-0.007
Informal	0.484 (0.005)	0.466 (0.005)	0.018
Temporary	0.075 (0.003)	0.079 (0.003)	-0.004
Self-employed	0.183 (0.004)	0.172 (0.004)	0.011
Working from home	0.230 (0.004)	0.197 (0.004)	0.034***
Weekly worked hours	43.047 (0.173)	38.868 (0.166)	4.179***
Monthly earnings (USD)	410.596 (3.212)	376.388 (3.070)	34.208***
N	256216	20753	

Notes: The value displayed for t-tests are the differences in the means across the groups. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level. Samples are restricted to individuals between 18-65 years old.

C. Evidence on Reported Job Loss - ENOE sample

In this Appendix subsection, I provide additional evidence on gender gaps in the probability of job loss by using the whole sample of the National Survey of Occupation and Employment (ENOE) for the first quarter of 2021. ENOE samples collected during the first quarter of each year include a retrospective module with questions about the last job loss, including the year and month of occurrence and the loss reason. Using this sample, I estimate the following linear probability model:

$$l_{it} = \theta + \psi I_i^f + \Phi X_i + \delta_i^s + \eta_i^o + \varepsilon_i \quad (3)$$

where l_{it} is an indicator variable for job loss after March 2020, I_i^f is an indicator variable for gender that activates for female individuals, X_i includes a set of controls for age, educational attainment, job characteristics, and family characteristics, and δ_i^s, η_i^o are industry and occupation fixed effects. ψ is my parameter of interest and estimates the differential separation probability for women. By estimating this alternative specification, I add robustness to my previous results on the gender differential impact of the pandemic on the probability of unemployment using a larger sample and an approach that is similar to most of the studies in the literature.

[Table A2](#) reports the estimation results of [Eq. 3](#). In Column 1 I only include the gender indicator variable and progressively add age and education, family, and job control in subsequent models. In Column 5, I also include industry and occupation fixed effects. According to the estimates, women were 2.2 percentage points significantly less likely to have lost their jobs after the pandemic. Occupation and industry fix effects can account for a small part of this gender gap by reducing the point estimate to 1.9 percentage points, but the differential effect remains statistically significant after including all controls. It is also worth noting that family characteristics such as having school-going age or younger children or living as a couple are not significant predictors of job loss. On the contrary, job loss was significantly higher for informal and temporary workers.

Table A2: JOB LOSS PROBABILITY - INDIVIDUAL CHARACTERISTICS.

	(1)	(2)	(3)	(4)	(5)
Female	-0.021*** (0.00)	-0.022*** (0.00)	-0.022*** (0.00)	-0.021*** (0.00)	-0.019*** (0.00)
Couple			-0.007*** (0.00)	-0.005 (0.00)	-0.004 (0.00)
Children aged 0-5			0.004 (0.00)	0.001 (0.00)	0.001 (0.00)
Children aged 5-15			0.002 (0.00)	0.001 (0.00)	0.001 (0.00)
Informal				0.046*** (0.00)	0.047*** (0.00)
Temporary				0.098*** (0.01)	0.099*** (0.01)
Self Employed				-0.020*** (0.00)	-0.020*** (0.00)
Obs.	151,357	151,357	151,357	151,357	151,357
Age and education	No	Yes	Yes	Yes	Yes
Family composition	No	No	Yes	Yes	Yes
Job characteristics	No	No	No	Yes	Yes
Occupation and Industry	No	No	No	No	Yes

Notes: Dependent variable: Binary variable indicating job loss after March 2020. The sample consist of all individuals aged 18-65 in the ENOE restrospective module of 2021Q01. All specifications are weighted and include respondent fixed effects, and a constant term. * p<0.10, ** p<0.05, *** p<0.01. Clustered standard errors at the municipality level in parentheses.