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DISCUSSION PAPER SERIES

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ABSTRACT

The COVID-19 Pandemic in Latin American and Caribbean Countries: The Labor Supply Impact by Gender*

We study the labor supply impact of the COVID-19 pandemic by gender in four Latin American and Caribbean (LAC) countries: Brazil, Chile, Dominican Republic, and Mexico. To identify the impact, we compare labor market stocks and labor market flows over four quarters for a set of balanced panel samples of comparable workers before and after the pandemic. We find that the pandemic has negatively affected the labor market status of both men and women, but that the effect is significantly stronger for women, magnifying the already large gender gaps that characterize LAC countries. The main channel through which this stronger impact is taking place is the increase in child care work affecting women with school-age children.

JEL Classification: J6, J16, J46, O10, O17

Keywords: labor supply, labor market transitions, COVID-19, gender differentials, Latin American and Caribbean countries

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1 Introduction

The crisis associated with the COVID-19 pandemic is unprecedented and has generated widespread economic impacts that affected labor markets all over the world. Employment losses have been documented for both sexes but unlike recent recessions where men lost employment more than women, the COVID-19 shock seems to have larger negative impacts on women (Alon et al., 2021; Shibata et al., 2021; Nieves et al., 2021). This asymmetry – the so-called "she-cession" – is due to the combination of women being over-represented in the services and retail sectors hardest hit by the pandemic and of women playing a larger role in caring for children.

This paper assesses if the COVID-19 pandemic has implied a she-cession also in Latin American and Caribbean (LAC) countries as it did in most high-income countries. It also attempts to identify the channels that may have led to a she-cession or, on the contrary, may have prevented it. Given the paucity of data, we focus on one aspect of the labor market that can be measured well on representative samples of workers in multiple LAC countries: the dynamic of workers between labor market states.

The question is relevant for three main reasons. First, the economic crisis caused by the pandemic in the LAC region has been one of the most devastating in recent decades and one of the worst in the world. Overall GDP fell by 7.4 percent in 2020, more than three times the fall during the Great Recession of 2009, and more than twice the fall during the Debt Crisis of 1983. This drop in GDP is significantly larger than the one experienced by other emerging economies or by most high-income economies (IMF, 2021). The recession has caused a large drop in employment: over a sample of 15 LAC countries with available data, total employment fell by almost 15 percent between February 2020 and July 2020. Despite representing 42 percent of the workforce, by March 2020 women had sustained 56 percent of all job losses, bringing back female labor force participation to 2010 levels (IADB, 2021).

Second, gender labor market gaps in the LAC region are larger than the ones in regions of comparable income and much larger than the ones in high-income countries (Bustelo et al., 2019; Gasparini and Marchionni, 2015) A she-cession on top of this initial conditions risks to become much more costly and persistent in the LAC region than in other world regions.

Third, there are no empirical contributions that have studied the issue on representative samples of workers in multiple LAC countries collected before and after the pandemic. The studies conducted so far have either considered only one country (Cueva et al., 2021; Higa et al., 2021; Monroy-Gomez-Franco, 2021; Garcia-Rojas et al., 2020; Juarez and Villaseñor, 2022; Hoehn-Velasco et al., Forthcoming), or relied on phone surveys with limited comparability with nationally representative surveys or only focused on the post-pandemic period (Berniell et al., 2021; Kugler et al., 2021). In our contribution, instead, we compare the employment status of women and men during the pandemic with respect to a relevant pre-pandemic period, as done in recent contribution on high-income countries.[1] In addition to most of the previous contributions even for high-income countries, we do not only compare the labor market state of a given individual before and after the pandemic but also the individual dynamic through those states before and after the pandemic.

We use data from the only four LAC countries with longitudinal data covering the pandemic period and previous comparable periods that were available as of December 2021. The four countries (and data sets) we work with are: Brazil (*Pesquisa por Amostra de Domícilios Contínua* (PNADC)); Chile, (*Encuesta Nacional de Empleo* (ENE)); the Dominican Republic, (*Encuesta Nacional Continua de Fuerza de Trabajo* (ENCFT)); and Mexico, (*Encuesta Nacional de Empleo y Ocupaciones* (ENOE) and the *Nueva Encuesta Nacional de Empleo y Ocupaciones* (ENOE-N)). For all countries we build a series of year-long balanced panel data spanning the period 2017-2020.

Our results indicate that the pandemic negatively affected both men and women. But the negative effects were significantly stronger for women, magnifying the already large gender gaps that characterize LAC countries. The main channel through which this stronger impact is taking place is the increase in child care work affecting women with children at home, in particular if they are school-age children. In Brazil, Chile and the Dominican Republic women with school-age children are, respectively, 2.2, 5.8 and 3.8 percentage points less likely to participate in the labor market than men during the pandemic. These differences are on top of a baseline gender gap in labor market participation which is typically higher than 20 percentage points. Results on labor market dynamic show higher churning and mobility of women with respect to men during the pandemic. In Brazil, for example, women with school-age children are 3.7 percentage points more likely to lose or leave a job than men but they are also 7.3 percentage points more likely to find one. This latest positive result is largely driven by the ability of finding a job toward the end of the pandemic period but it is not enough to reverse the overall negative impact.

The literature analyzing the labor market impacts of the COVID-19 pandemic by gender in high-income countries is large and growing. These studies mainly use labor force surveys covering both a pre-pandemic and a post-pandemic period. Some also employ real-time survey data collected during the pandemic with retrospective information on employment status. Thanks to this type of data, they can compare labor market outcomes of men and women before and after the pandemic. The main findings from this literature show that women faced larger employment reductions than men in the U.S., Canada, and Spain (Alon et al., 2021; Fairlie et al., 2021), larger declines in labor force participation in the U.S. (Albanesi and Kim, 2021), larger reductions in hours of market work in the U.S., Canada and Germany (Alon et al., 2021), and larger rates of job

[1]See for example, Alon et al. (2021); Fairlie et al. (2021); Albanesi and Kim (2021); Adams-Prassl et al. (2020); Farre et al. (2021); Hupkau and Petrongolo (2020)

loss in the U.S., the U.K. and Spain (Adams-Prassl et al., 2020; Farre et al., 2021).[2] There is only one study comparing labor market flows before and during the pandemic using longitudinal data, Albanesi and Kim (2021). They construct monthly labor transitions for women and men in the U.S. and find that movements from employment to unemployment grew more for women compared to men in the spring and summer for 2020. These studies also find relevant heterogeneous effects regarding the presence of children at home. In the U.S., Canada, Spain, and the U.K., the COVID-19 pandemic led to larger gender gaps in employment among workers with school-age children with respect to workers with younger children or no children (Qian and Fuller, 2020; Alon et al., 2021; Albanesi and Kim, 2021; Fairlie et al., 2021). Hansen et al. (2022) find that in US locations where schools reopened more quickly, employment and hours of work of married women with school-aged children increased more quickly, too.

The evidence for developing countries, and specifically for those from the LAC region, is still scarce. Descriptive evidence based on phone surveys has shown that the rate of work stoppage has been larger for women than for men in May-August 2020 in comparison to February 2020 (Cucagna and Romero, 2021; Kugler et al., 2021). Country-specific studies using longitudinal data and comparing the pre- and post-pandemic periods have found that women lost their jobs at a higher rate than men in Peru (Cueva et al., 2021; Higa et al., 2021) and that women faced lower chances of being employed and higher chances of having an informal job than men in Mexico (Monroy-Gomez-Franco, 2021; Hoehn-Velasco et al., Forthcoming; Juarez and Villaseñor, 2022). When disaggregating by the presence children at home, Juarez and Villaseñor (2022) finds that Mexican women with children decreased their labor supply more than women without children in the first months of the pandemic but then recovered faster in the later months of the pandemic. Evidence using cross-sectional data from Colombia finds a negative impact on women's employment rates, employment quality, and participation rates (Garcia-Rojas et al., 2020). Finally, Berniell et al. (2021) report results from a large study collecting phone surveys during the pandemic in 13 LAC countries. They compare the labor market status of women and men from May to August 2020 with their pre-pandemic status and find that the COVID-19 shock led to larger job losses for women than men, specially those living with children 5 to 18 years old .

The paper is organized as follows. Section 2 briefly describes the methodology and the data requirements. Section 3 defines and describes the data we use in the analysis. Section 4 presents the results and section 5 concludes. A large Appendix completes the paper.

[2] Important exceptions to these findings are the lack of differential job loss between women and men in the U.K. reported by Hupkau and Petrongolo (2020) using data from a web-based survey, and the lack of gender gaps in the pandemic impacts on employment and hours of work in the Netherlands, Germany, and the U.K. reported by Alon et al. (2021)

2 Methodology

We identify the impact of the COVID-19 pandemic by comparing the labor market states dynamics of representative samples of workers observed before and after the pandemic.

2.1 *Stock* regressions

First, we focus on labor market *stocks* by estimating regressions with the following specification:

$$y_{it} \quad = \quad \beta_0 + \beta_1 P_t + \beta_2 F_i + \beta_3 P_t \times F_i + \boldsymbol{x}'_{it}\boldsymbol{\beta_4} + \boldsymbol{z}'_t\boldsymbol{\beta_5} + \boldsymbol{s}'_i\boldsymbol{\beta_6} + \epsilon_{it} \tag{1}$$

where P_t is an indicator function equal 1 if t belongs to the pandemic period, F_i is an indicator function equal 1 if i is female, $\boldsymbol{x}'_{it}$ is a set of individual-specific time-varying controls, $\boldsymbol{z}'_t$ is a set of time-varying controls, $\boldsymbol{s}'_i$ is a set of individual-specific time-invariant controls, and ϵ_{it} is the error term. The main coefficient of interest is β_3, which estimates the relative difference in the impact of the pandemic for women with respect to men. The dependent variable of interest y_{it} is an indicator function equal to 1 if i is employed in time t or, in the other specification we run, if i is participating in the labor market in time t. This is the main specification run by contributions on high-income countries[3] but still missing on representative samples of LAC countries.

In addition to the baseline specification (1), we also run a version of the same model estimating the impact in each pandemic period. Defining with PK_t an indicator function equal 1 if t belongs to the Kth pandemic period and and denoting with K^* the maximum number of pandemic periods observed, we estimate:

$$\begin{aligned} y_{it} \quad &= \quad \beta_0 + \beta_1 F_i + \sum_{K=1}^{K^*} \beta_{K+1} PK_t + \sum_{K=1}^{K^*} \beta_{K+K^*+1} PK_t \times F_i \\ &+ \quad \boldsymbol{x}'_{it}\boldsymbol{\beta_{2K^*+1}} + \boldsymbol{z}'_t\boldsymbol{\beta_{2K^*+2}} + \boldsymbol{s}'_i\boldsymbol{\beta_{2K^*+3}} + \epsilon_{it} \end{aligned} \tag{2}$$

where the main coefficients of interest are the β_{K+K^*+1}, with $K \in \{1, 2, ..K^*\}$: they estimate the relative difference in the impact of the pandemic for women in each pandemic period observed in the data.

Finally, we allow for heterogeneous effects in the impact of the pandemic. We are particularly concerns with how the pandemic affected women with children of different age group and women with different education levels. Denoting with C_{it} the observed source of heterogeneity – for example the presence of children in a given age range – we estimate specifications of the following

[3] As mentioned in Section 1, they include for example Alon et al. (2021) and Fairlie et al. (2021).

form:

$$
\begin{aligned}
y_{it} &= \beta_0 + \beta_1 P_t + \beta_2 F_i + \beta_3 P_t \times F_i + \beta_7 C_{it} + \beta_8 C_{it} \times P_t + \beta_9 C_{it} \times F_i + \beta_{10} C_{it} \times P_t \times F_i \\
&+ \boldsymbol{x}'_{it}\boldsymbol{\beta_{11}} + \boldsymbol{z}'_t\boldsymbol{\beta_{12}} + \boldsymbol{s}'_i\boldsymbol{\beta_{13}} + \epsilon_{it} \qquad (3)
\end{aligned}
$$

where the main coefficient of interest is β_{10}, which estimates the relative difference in the impact of the pandemic for women characterized by heterogeneity C_{it} with respect to men characterized by heterogeneity C_{it}.

2.2 *Flow* regressions

Then, we focus on labor market *flows* over time to better compare the differential impacts of the pandemic on labor market dynamics and better control for selection. We condition on individuals in a given labor market state on the time t right before the pandemic starts. We then create a dependent variable equal to 1 if the individual changes labor market state in the following pandemic-affected periods $t+1, t+2, ...t+\delta$. To isolate the impact of the pandemic through a control group, we repeat the procedure over a similar time span but for a period never affected by the pandemic. Formally, we pick a $t-\gamma$ (with $\gamma > \delta$) and we focus on individuals in a given labor market state at time $t-\gamma$. We then create a dependent variable equal to 1 if the individual changes labor market state in the following periods $t-\gamma+1, t-\gamma+2, ...t-\gamma+\delta$. We denote the dependent variable created with this procedure with $d_{i\tau}$ where $\tau = 2$ denotes the period affected by the pandemic ($t \in \{t, ...t+\delta\}$) while $\tau = 1$ denotes the period not affected by the pandemic ($t \in \{t-\gamma, ...t-\gamma+\delta\}$.) We focus on two labor market states, employment and non-employment. In the first specification, $d_{i\tau}$ is equal 1 if individuals employed at the beginning of the period (t or $t-\gamma$) are observed not being employed in at least one of the following δ periods. We call this dependent variable *job loss*. In the second specification, $d_{i\tau}$ is equal 1 if individuals unemployed at the beginning of the period (t or $t-\gamma$) are observed being employed in at least one of the following δ periods. We call this dependent variable *job gain*. For both specifications, we run the following regressions:

$$
d_{i\tau} = \alpha_0 + \alpha_1 F_i + \alpha_2 R_\tau + \alpha_3 R_\tau \times F_i + \boldsymbol{x}'_{i\tau}\boldsymbol{\beta_4} + \boldsymbol{z}'_\tau\boldsymbol{\beta_5} + \boldsymbol{s}'_i\boldsymbol{\beta_6} + u_{i\tau} \qquad (4)
$$

where: R_τ is an indicator function equal 1 if $\tau = 2$; F_i is an indicator function equal 1 if i is female; $\boldsymbol{x}, \boldsymbol{z}, \boldsymbol{s}'_i$ is a set of controls defined as in equation (1); and u_{it} is the error term. The main coefficient of interest is α_3, which estimates the relative difference in the impact of the pandemic for women with respect to men. This is a novel specification rarely run on either high-income or developing countries.[4]

As we explained in Section 2.1, we extend the baseline model to allow for separate impacts in each pandemic period and to allow for heterogeneous effects. The specifications needed to estimate such effects are straightforward extensions of equation (4), just as equations (2) and (3) are straightforward generalization of equation (1).

3 Data

3.1 Data Sources and Definitions

We use longitudinal data from national household surveys for four Latin American countries covering the 2017-2020 period.[5] For Brazil, we use the *Pesquisa por Amostra de Domícilios Contínua* (PNADC); for Chile, the *Encuesta Nacional de Empleo* (ENE); for the Dominican Republic, the *Encuesta Nacional Continua de Fuerza de Trabajo* (ENCFT); and for Mexico, the *Encuesta Nacional de Empleo y Ocupaciones* (ENOE) and the *Nueva Encuesta Nacional de Empleo y Ocupaciones* (ENOE-N) that started being collected on the third quarter of 2020.

These four surveys follow a rotating structure similar to the *Current Population Survey* in the US. In the Dominican Republic and Mexico, 20% of the sample is refreshed every quarter. In Brazil and Chile, a household is interviewed in a given month, then leaves the sample for the next two months, and then it is interviewed again in the next month. This sequence is repeated five times in Brazil and six times in Chile. The panel structure of Dominican Republic, Mexico, and Brazil allows to follow the same household over five consecutive quarters, while in Chile the same household is followed over six consecutive quarters.

The empirical strategy described in Section 2 requires the comparison of representative samples of workers observed for a discrete period of time before and after the pandemic started. Given the quarterly structure of all the datasets at our disposal, we need at least a quarter before and after the pandemic to run equation (1). Since in LAC countries the pandemic started in the second quarter of 2020 (2020Q2), we need at least observations for 2020Q1 and 2020Q2. To control for selection due to sampling and attrition, we prefer to focus on the *same individuals* observed in both quarters, i.e. on balanced panels of data. This minimum data requirement may be extended to more quarters before and after 2020Q2 if more data is available. In all of our datasets, we have more data available since we can observe a balanced panel of individuals up to 2020Q4, i.e. from the quarter right before the pandemic hit, up to two quarters afterward. The fourth quarter of 2020 is the last quarter currently available in all four countries.

[4] A notable exception is Albanesi and Kim (2021).

[5] These four countries are the only LAC countries with longitudinal data covering the pandemic period that were available at the moment we started the project.

However, this data extraction is not enough to estimate equation (4), i.e. to estimate the impact of the pandemic on labor market flows. To accomplish that, we need to observe another balanced panel of individuals at least four quarters before 2020Q1. Exploiting the rotating sampling structure of the surveys, we can extract such a panel, spanning from 2019Q1 to 2019Q4. In the notation of Section 2.2, t =2020Q1, $\delta = 3$, therefore γ must be at least 4: we chose it to be exactly 4, comparing a panel affected by the pandemic with a panel spanning exactly the same quarters but a year before.

With these two panels – a pandemic-affected panel (2020Q1–2020Q4) and a pre-pandemic panel (2019Q1–2019Q4) – we can in principle identify and estimate all the coefficients of interest. However, the sample size of the surveys is not particularly large and may hinder the empirical identification of some effects, in particular the heterogeneous ones. For this reason, we added overlapping balanced panels of individuals following exactly the same structure just described. The identification strategy is exactly the same and the objective of adding this survey cohorts is simply increasing the sample size of the estimation sample. We started adding a pandemic-affected panel running from 2019Q4 (two quarters before the pandemic) to 2020Q4 and we pair it with a pre-pandemic panel running from 2018Q4 to 2019Q4.[6] We continued adding a 2019Q3–2020Q3 panel and a 2019Q2–2020Q2 panel paired with panels of same length extracted a year before.[7] The last step we do in order to increase sample size is adding panels going back 8 quarters with respect to the pandemic-affected panels instead of only 4 quarters. In this way, we can add sample size to the control group and also smooth out specific cyclicality affecting 2018/2019. In terms of the notation of Section 2.2, we build a set of control panels with $\gamma = 4$, a set with $\gamma = 8$ and we use both to compare with the set of panels treated by the pandemic.

In Appendix A, Table A.1 reports the number of observations for each panel used in the estimation sample. The only restriction we impose on the raw data to extract these balanced panel samples are: women and men aged 25 to 55, living in urban areas, and who are wage employees or self-employed when employed. In addition and only for Mexico, we do not use data collected in 2020Q2. In the second quarter of 2020, data were collected in Mexico only through phone interviews and, as a result, the sample was not representative of the national population. For this reason, the Mexican National Institute of Statistics (INEGI) which supervises the sample collection recommends to *not* use this quarter when constructing panels.

The main variables we use in the analysis are defined as follows. To obtain the dependent variables, we assign each individual in a given quarter to one of the following five labor market states: formal wage employment, informal wage employment, self-employment, unemployment,

[6] We do not build panels longer than 5 quarters because this is the maximum span of time collected on all surveys, with the exception of Chile.

[7] No further panels can be added to the pandemic-affected set because a five-quarter panel starting earlier than 2019Q2 will not end in a pandemic-affected quarter.

non-participation. As controls and as observables to estimate heterogeneous effects, we define the following variables: *Age* measured in years; three *education level* dummies: low (0 to 8 years of education), medium (9 to 13 years of education) and high (14 or more); three *presence of children* dummies: pre-schoolers (0 to 5 years olds); school-age (6 to 17 years old); older children (18 years old or more) or no children; three *economic sector* dummies: primary, secondary and tertiary; three *employment type* dummies denoting formality, informality and self-employment; *regional* dummies varying in number depending on the number of states or macro regions in each country; and *quarter* and *year* dummies depending on the specification.

3.2 Data Description

In Table 1 we present descriptive statistics for the pre-pandemic period (from 2017Q1 to 2020Q1) and for the post-pandemic period (from 2020Q2 to 2020Q4) by gender. Overall sample sizes range from about 63,000 observations in Dominican Republic to more than 1.2 million observations in Brazil. These figures correspond to about 13,500 unique individuals for Dominican Republic and to more than 250,000 for Brazil. In addition to standard demographic characteristics, the Table presents statistics on labor market status. After the pandemic, all countries register an increase in the shares of women and men out of the labor force and a decrease in employment rate.

In Figure 1, we report the employment rate of women and men by years and quarters. In all countries, there is a clear change in employment between the eve of the pandemic (2020Q1) and the beginning of the pandemic (2020Q2.) In Brazil and Dominican Republic, the reduction was evident for both men and women. The gender gap (calculated as male minus female employment rates) shows that the decline in employment was larger for women than for men in the first two quarters of the pandemic and that the gap stopped increasing in the last quarter of 2020. In Mexico, there is a decline in female and male employment when comparing 2020Q1 and 2020Q3[8] with no apparent effect on the gender employment gap, and a recovery in employment and decline in the gender gap in the last quarter of 2020. Finally, in Chile the reduction in employment was slightly larger for men than for women, leading to a small reduction in the gender gap.

Taking advantage of the panel structure of our data, we present conditional labor market transitions in Figure 2 for women and in Figure 3 for men. We condition on the labor market state in the first quarter of each year and we report the proportion of the *same* individuals in each labor market state in the last quarter of that year. For example, for women in Brazil in the post-pandemic period, we observe that 80% of the women that were formally employed in 2020Q1 are still formally employed in 2020Q4. For the pre-pandemic transition matrices, we pool together 2017, 2018, and 2019 if the first quarter was observed.

[8]Recall that we did not use 2020Q2 for Mexico because of data issues.

First, we observe that, *independently from the pandemic*, women have a higher probability to move out of the labor force than men (gray areas are always higher for women) and that women have a lower probability to move to formal employment than men (dark blue areas are always smaller for women). In Dominican Republic and in Brazil, women have a higher probability to move to informal employment than men (red areas are always higher for women).

Second, in the pandemic period, both women and men leave the labor force at higher rate that in the pre-pandemic periods. This is true for all countries except for Mexico, where actually labor transitions are more similar for women and men. Women unemployed, self-employed, and working informally in Brazil and Dominican Republic transit to formal employment at a lower rate in the post-covid period.

In conclusion, as expected the pandemic has negatively affected the labor market state of all workers in all countries: they moved to informal jobs and to out of the labor force at higher rates than in a regular year. For women, these movements are more intense than for men, but this is true also in a regular pre-pandemic year. From these preliminary and superficial descriptive statistics is therefore not yet clear if the pandemic has been a "she-cession" in LAC countries or not.

4 Results

4.1 Baseline

Figure 4 reports the main coefficients of interest for what we defined as *stock* regressions in Section 2.1.[9] We report results on only two labor market states: participation in the labor market (LFP) and being in one of the employment state (Employment). Regressions using the other labor market states as dependent variables generate similar results. The coefficients we report in the Figure refer to the impact of being female (Female) and to the differential impact of the pandemic for women with respect to men (Female*Post). We present two specifications: one without any additional controls (No Controls) and one with all the controls listed in Section 3.1 (Controls). More formally, and using the notation of equation (1), the LFP figure defines the dependent variable $y_{it} = 1$ if individual i in quarter t participate in the labor market, while the Employment figure defines $y_{it} = 1$ if individual i in quarter t is employed. All the figures report only the coefficient β_2 (Female) and β_3 (Female*Post). The No Controls specification only includes a constant and the variables $\{P_t, F_i, P_t \times F_i\}$, the Controls specification adds $\{\boldsymbol{x}'_{it}, \boldsymbol{z}'_t, \boldsymbol{s}'_i\}$.

The main results are as follows. First, and confirming previous literature, women are less likely

[9] Table B.1 in Appendix B contains point estimates, standard errors and additional statistics. We use the same structure for all the results: we comment on the Figures and we report in Appendix B a selection of the estimated coefficients.

to participate in the labor market and to be employed than men. The gender gap is large, ranging from about 20 percentage points in Brazil to about 30 in Mexico. Second, the negative impact of the pandemic on employment and participation, present for both men and women, is significantly stronger for women in all countries except Mexico. The magnitudes are not negligible since they happen over such a short time period: on labor force participation, we estimate the pandemic has increased the gap of an additional 3.6 percentage points in Chile and of an additional 1.3 points in Brazil. Figure 5 reports results by quarters, as estimated using equation (2). We only focus on point estimates from regressions containing the full set of controls and we report results on the differential impact for women with respect to men in the first, second and third quarter of the pandemic (respectively, F*Q1P, F*Q2P, F*Q3P). In all countries experiencing a significant negative effect of the pandemic on women, the second quarter into the pandemic (2020Q3) is the one with the strongest effect. For Chile, for example, the negative effect on labor market participation is more 4 percentage points in that quarter; it is 2 percentage points in Brazil and more than for in the Dominican republic. As mentioned in Section 3, Mexican data on the first quarter of the pandemic are not available. On the remaining two pandemic quarters, Mexico is again an outlier, showing no effects on participation and a small positive effect on employment.

Figure 6 reports the main coefficients of interest for what we defined as *flow* regressions in Section 2.2. We report results on both the *job loss* and *job gain* dependent variables. As in Figure 4, we report only coefficients for the impact of being female (Female) and of being female during the pandemic (Female*Post) and we present two specifications, with and without controls. More formally, and using the notation of equation (4), the Job loss column reports results where the dependent variable $d_{i\tau} = 1$ if individual i was employed at the beginning of the period but not at the end; the Job gain column reports results where the dependent variable $d_{i\tau} = 1$ if individual i was not employed at the beginning of the period but was employed at the end. We only report coefficients α_2 (Female) and α_3 (Female*Post).

The main results are as follows. The pandemic has generated more job mobility for women since it has increased both their probability of losing a job and their probability of finding one. However, the relative increase in probability of finding a job during the pandemic is not enough to close the gap with respect to men on overall employment rates, as we have seen from the stock regressions. In Brazil, where all the coefficients are very precisely estimated, women are more likely to lose a job by about 5 percentage points in a regular year and by about 8 percentage points during the pandemic. At the same time, women are less likely to find a job than men by about 19 percentage points, a level that decreases to about 13 percentage points during the pandemic. Similar but less precisely estimated patterns are observed for Chile and Dominican Republic. Mexico is an exception again: it does not report a significant gender gap of the pandemic's impact on job loss but reports a significant gender gap in favor of women on job gain during the pandemic. Figure

7 reports results by quarters, as estimated using the extension of equation (4) that corresponds to equation (2). As in the stock regressions by quarters, we only focus on point estimates from regressions containing the full set of controls. The patterns on job loss show a strong significant negative impact on the first pandemic quarter for all countries, i.e. women are much more likely to lose a job than men when the pandemic starts. This impact monotonically decreases and turns positive in the last pandemic quarter we observe, i.e. women are less likely to lose a job than men when the (first wave of the) pandemic ends. On job gain, patterns is noisier: at the beginning of the pandemic the impact is positive for women in Brazil and negative for the other countries; toward the end of the period, it is positive across the board, i.e. women are significantly more likely to find a job than men. The changes is magnitudes over the period are important: for Chile, women are 3.6 percentage points more likely to lose a job at the beginning of the pandemic period and 2.7 points less likely to do so at the end; for Dominican Republic, women are 7.8 percentage points less likely than men to find a job at the beginning of the pandemic period and 7.5 points more likely to do so at the end. To reinterpret the overall results of Figure 6, we can say that the stronger job loss of women with respect to men is mostly driven by the early pandemic period while the higher job gain rate is mostly driven by the late pandemic period. Mexico warrants a separate discussion. As mentioned in Section 3, Mexican data on the first quarter of the pandemic are not available. In addition, the aggregate result reported in Figure 6 seems to indicate that, contrary to women in the other countries, Mexican women were *not* disproportionately affected by the pandemic. But Figure 7 shows that Mexican women experience disproportionately more job losses in the second quarter of the pandemic and started to recover in the third. This is a similar dynamic to the one observed in the other countries but with the important difference that missing data force us to exclude the *worst* quarter for women from the analysis. We can then speculate that the lack of effect found for Mexico in the aggregate specification may be due to the missing information on the first quarter of the pandemic.

In conclusion, results on stocks confirm for LAC countries what found for other countries by previous literature: the pandemic had a significant negative impact on employment and participation for both men and women. But the impact was disproportionately stronger for women, in particular at the beginning of the pandemic. Results on flows are novel for LAC and relatively rare for other world regions, too. They paint a more nuanced picture of the the differential impact of the pandemic by gender: if women are more likely to lose or leave their jobs during the pandemic, they are also more likely to find and accept one. Therefore, more churning and more job mobility seems the most striking difference between men and women in terms of labor market dynamic over the period. Results by quarters show that the higher rate of job loss for women is mostly driven by the early pandemic period while the higher job gain rate is mostly driven by the late pandemic period. The next sections will clarify if these impacts affect the entire labor force or if they are concentrated on specific groups, occupations or sectors.

4.2 Heterogeneous Effects: the Presence of Children

The first heterogeneity dimension we focus on is the presence of children in the household. Due to childcare duties and the closing of schools and child care services, previous literature[10] has already shown that the labor supply of mothers with children is potentially the most affected by the pandemic. We study the issue by estimating the same stocks and flows regressions presented in the previous section but now allowing for heterogeneous effects based on the presence of children of different ages. In the specification, we allow different effects of the pandemic for three different groups: those without children younger than 17 living at home; those with only children younger than 6 living at home; those with at least one children of age 6 to 17 living at home. This last group is the one we expect to be the most affected by school closures due to the pandemic. Formally, we are estimating specifications of the form described by equation (3) where we report coefficients β_9 (overall impact of being female in that specific group) and β_{10} (impact of the pandemic for that specific female group). Equation (3) is an example with only one heterogeneous category. In most specifications we actually estimate, we will have more than one. For example, not only the presence of children but the presence of children of different age groups. We will then estimate a generalized version of equation (3) where the source of heterogeneity is categorical and described by a set of dummies. Finally, we will specialize the equation to run flows regression of the form corresponding to equation (4).

Figure 8 reports heterogeneous effects by age and presence of children estimated from the stock regressions. In line with previous evidence, women with young children are less likely to participate in the labor market and less likely to be employed than men and than women without young children. The pandemic has significantly magnified these effects for women with school-age children in all countries with the exception of Mexico. For women with pre-school-age children the impact is more mixed, possibly as a result of child-care centers being more flexible in being open for service or thanks to the presence of alternative form of care (nannies, family members). The magnitudes are relevant: in Brazil, women with school-age children are 2.2 percentage points less likely to participate in the labor market during the pandemic than men, 5.8 in Chile and 3.8 in the Dominican Republic. Women with younger children in Brazil experience, instead, impacts in the order of magnitude of one percentage point. The significant difference with respect to men confirm the well-known asymmetry in household production and care provision: women provide more household production than men and devote more hours to the care of family members, even

[10] See in particular Alon et al. (2021) and Fairlie et al. (2021) for high-income countries and Berniell et al. (2021) for LAC countries.

if they supply labor in the market.[11] As in the homogeneous specifications, we also run regression to decompose the impact by pandemic quarter. Results reported in Figure 9 show a small trend for Brazil and Dominican Republic: the impact for women with school-age children becomes worse as the pandemic progresses. The other heterogeneous impacts are too imprecisely estimated to draw meaningful inference.

Figure 10 reports heterogeneous effects by age and presence of children estimated from the flows regressions. Results show that the higher churning and mobility of women during the pandemic was mainly driven by women with children. In Brazil, women with school-age children are 3.7 percentage points more likely to lose or leave a job than men and 7.3 percentage points more likely to find one. In Chile, women with school-age children are the only ones that are significantly more likely than men to leave or lose a job during the pandemic. In Mexico, results are more mixed; in the Dominican Republic, are very imprecisely estimated. Figure 11 reports impacts by pandemic quarter. They show a small trend for Brazil and a stronger one for Mexico, with impacts becoming more marked as the pandemic progresses. A similar but noisier trend is present in Chile and in the Dominican Republic. We confirm that the aggregate results we found in Section 4.1 are mainly driven by women with children: in the third quarter of the pandemic, women with school-age children in Brazil are 1.4 percentage points more likely to lose or leave a job than men, while they are 3 point *less* likely to do so in the first quarter of the pandemic; in Chile, the values are, respectively, 3.7 and 6.5. With respect to the probability to find a job, it is 6.1 percentage points higher for women with school-age children than men in Brazil in the third pandemic quarter while it was one point *lower* in the first pandemic quarter. In Chile, the values are, respectively, 9.5 and 2.2.

The conclusion of estimating heterogeneous effects by age and presence of children is that women with children are the main source of the differential impact of the pandemic on women with respect to men. Among women with children, those with school-age children are the ones experiencing the stronger impacts.

4.3 Heterogeneous Effects: Education, Job Type, Sector.

The second heterogeneity dimension we focus on is the level of education. Different education levels frequently denotes different and segmented labor markets. We therefore allow the impacts of interest to flexible change with the education level of the men and women involved. We consider the three education levels defined in Section 3.1 and we replicate the analysis on stocks and flows regressions presented so far but estimating different regressions for each education level.

Figure 12 reports the stock regressions results. An interesting result emerge: while in a regular

[11] For data on LAC countries, see OECD (2020); for an empirical model taking into account these asymmetries in a LAC country, see Salazar-Saenz (2021).

year the gender gap is much larger for women with less than High School completed (*Low* and *Medium* categories), the pandemic has deferentially affected women with respect to men in the three education levels in a very similar way. For example, in Chile the gender gap in employment is about 11 percentage points in a regular year for women with at least High School completed, while it is more than 27 percentage points for women with a level of education lower than that. The differential impact of the pandemic, instead is not statistically different at usual significance level between the three education levels. Only in Brazil there is a statistically significant difference between High and Middle School but the magnitude is very small. Figure 13 reports the flow regression results and they broadly confirm what found on flows: the pandemic did not have a statistically significant different impact by education but in a regular year we observe a monotonicity in favor of women with higher education. However, this baseline difference is less marked than on stocks.

The third heterogeneity dimension we focus on is the formality level of the job. In the data we can observe if individuals are formally or informally employed or if they are self-employed, a very relevant third employment state very close to formality for low skilled workers and closer to formality for high skilled workers.[12] Given the widespread informality levels in LAC countries and given the lower firing costs associated with informal employment, it becomes very relevant to see if the pandemic has disproportionately affected this more flexible and frequently more vulnerable workers. Women belong to a vulnerable labor market group also because they are relatively more likely to work informally. We repeat on these three job-type categories the same analysis run on the three education levels but we one difference: we have to condition on the individual being employed to assign the job type. Therefore, we cannot run the stock labor force participation (LFP) regressions.

Figure 14 collects the main results both from stock and flow regressions. The dynamic in a typical year is for women to be significantly more likely to work as informal employees in all countries. The probability of being self-employment, instead, differs between countries. What is common in the stock regressions is that the pandemic did not have a large differential impact on women by job type. But it did have some differential impact on flows in Brazil and, partially, in the Dominican Republic and Mexico. In Brazil, among workers informally employed the quarter before the pandemic started (2020Q1), women were 8.7 percentage points more likely to leave or loose a job than man during the pandemic; the differential is only 2.3 points for women working in formal jobs. In Mexico, it is self-employed women that are 5.4 percentage points more likely to lose their job compared with self-employed men during the pandemic. In terms of the probability to find a job during the pandemic if not-employed before, self-employment seems the favorite

[12] For the relevance of these definitions in a country as Mexico, see Bobba et al. (2022); for Brazil, see Meghir et al. (2015); for a broader reference, see Bosch and Maloney (2010). For Chile the issue is less relevant but still non-negligible.

outcome for women with respect to men for Brazil, Chile and Mexico. But the differences are rarely statistically significant.

In conclusion, unlike the presence of young children, other source of observed heterogeneity do not seem to play an important role in increasing or decreasing the differential impact of the pandemic for women. While education level and formality level of the job certainly correlated with important labor market regularities in a typical year, they do not seem the main channels through which the pandemic has disproportionally affected women.

5 Conclusion

We compare a series of balanced panel data samples for Brazil, Chile, the Dominican Republic and Mexico to study if the COVID-19 pandemic has disproportionally affected women. We focus on these four countries because they are the only ones that, so far, have collected and reported comparable and representative panel data before and after the pandemic. We define the start of the pandemic with the second quarter of 2020 and follows individuals until the last quarter of 2020. We use data from 2019, 2018 and partially 2017 as comparison. We focus, as most of the previous literature, on comparing the labor market state of workers before and after the pandemic, including the participation decision. We add, as few contributions have done, also labor market dynamic outcomes: the probability to loose a job during the pandemic if employed before and the probability to find one if non-employed before. Methodologically, we run regressions exploiting both the difference before and after the pandemic and the difference between men and women. We also allow for some heterogeneous effects based on observable characteristics. No paper so far has conducted such analysis on multiple LAC countries using comparable data.

The analysis shows that the pandemic has magnified the significant gender gaps already present in these markets. Women are less likely to work than men and more likely to be informally employed when they do. The only silver lining is that women seem to fare better than men in their ability to find a job toward the end of the pandemic period we observe (2020Q4).

But composition effects are important. The main source of the difference between men and women during the pandemic are women with children. Women without children rarely register a significant difference with respect to men. Among women with children, the group with the stronger impact in terms of magnitudes are the *women with school-age children*, i.e. women with children aged 6 to 17, living at home. In this respect, our results on LAC countries broadly confirm those found on high-income countries: the pandemic as a *she-cession* of women with school-age children.[13] Therefore, any policy able to support the care of children or to reduce the asymmetric contribution within the household to the care of children is sure to generate more resilience and a

[13]See for example, Alon et al. (2021); Shibata et al. (2021); Nieves et al. (2021).

better distribution of the costs of the pandemic.

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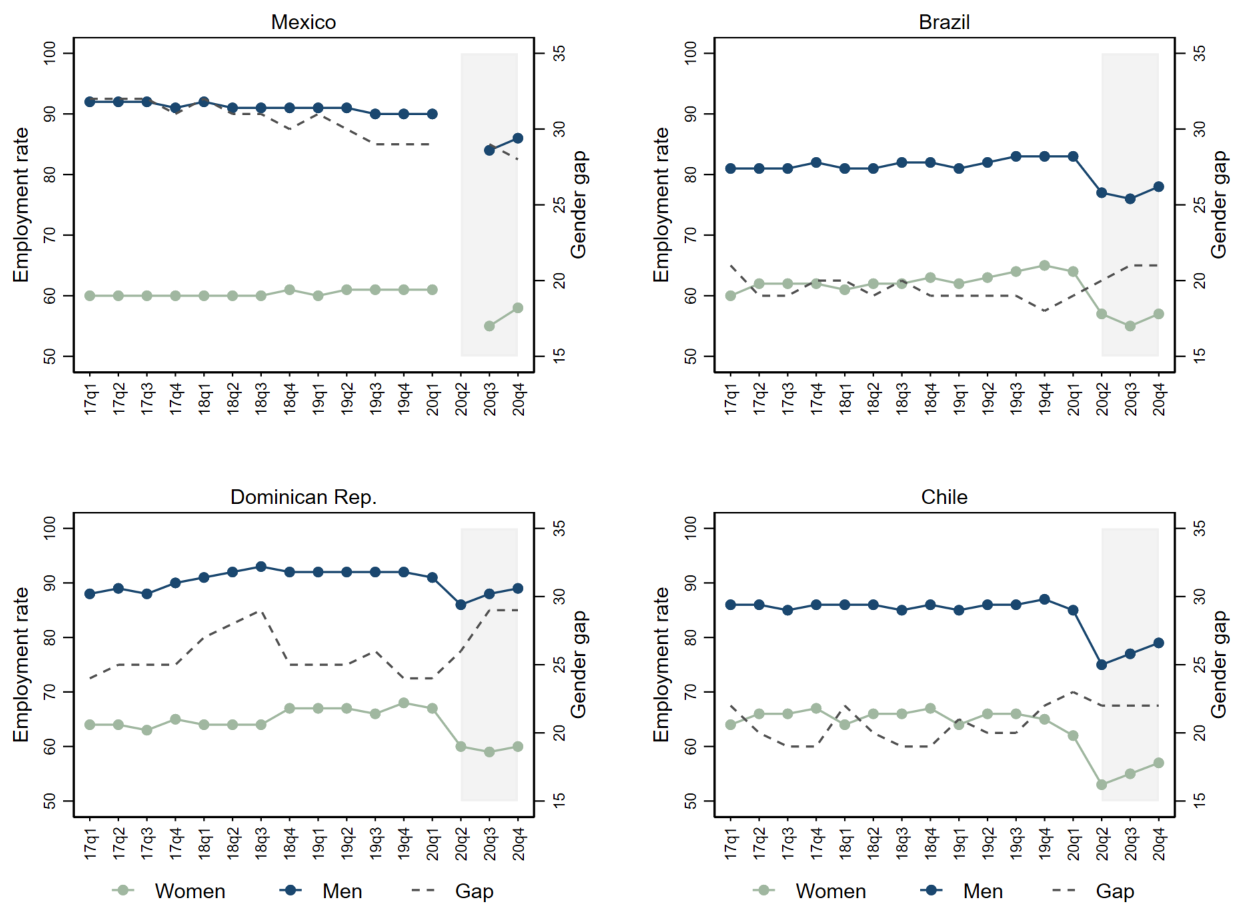
Table 1: Descriptive Statistics by Gender and Pandemic Period

	Brazil		Chile		Dom. Rep.		Mexico	
	Women	Men	Women	Men	Women	Men	Women	Men
Pre-pandemic period: 2017Q1 to 2020Q1								
Demographics								
Age	40.18	39.69	40.99	40.12	39.54	38.82	39.97	39.36
0-8 years of educ	0.32	0.38	0.12	0.11	0.33	0.43	0.17	0.16
9-13 years of educ	0.44	0.44	0.47	0.47	0.41	0.42	0.56	0.55
14+ years of educ	0.25	0.18	0.41	0.42	0.26	0.15	0.28	0.29
At least one children 0-5	0.25	0.24	0.30	0.26	0.36	0.31	0.30	0.29
At least one children 6-12	0.33	0.30	0.38	0.30	0.48	0.36	0.42	0.38
At least one children 13-17	0.27	0.23	0.30	0.24	0.38	0.29	0.34	0.29
Employment								
Employee formal	0.41	0.50	0.47	0.66	0.34	0.40	0.35	0.58
Employee informal	0.09	0.09	0.07	0.07	0.15	0.09	0.15	0.20
Self employed	0.12	0.23	0.11	0.13	0.16	0.43	0.10	0.13
Unemployed	0.08	0.07	0.05	0.06	0.04	0.02	0.02	0.03
OLF	0.30	0.11	0.29	0.09	0.30	0.06	0.38	0.06
Observations ($i \times t$)	476,332	387,872	103,131	78,477	15,455	13,748	227,556	178,745
Individuals (i)	102,085	83,159	22,041	16,775	3,333	2,961	49,851	39,169
Quarters (t)	4.67	4.66	4.68	4.68	4.64	4.64	4.56	4.56
Post-pandemic period: 2020Q2 to 2020Q4								
Demographics								
Age	40.14	39.76	41.14	40.56	39.89	39.12	40.03	39.38
0-8 years of educ	0.27	0.34	0.10	0.10	0.31	0.43	0.15	0.15
9-13 years of educ	0.45	0.45	0.45	0.43	0.42	0.42	0.56	0.55
14+ years of educ	0.28	0.21	0.45	0.46	0.27	0.15	0.29	0.30
At least one children 0-5	0.24	0.24	0.25	0.22	0.36	0.32	0.28	0.27
At least one children 6-12	0.33	0.29	0.39	0.33	0.46	0.36	0.40	0.36
At least one children 13-17	0.26	0.21	0.30	0.24	0.37	0.29	0.33	0.28
Employment								
Employee formal	0.40	0.50	0.45	0.67	0.34	0.40	0.35	0.56
Employee informal	0.09	0.08	0.04	0.04	0.14	0.08	0.13	0.19
Self employed	0.12	0.23	0.09	0.09	0.15	0.42	0.10	0.13
Unemployed	0.08	0.07	0.06	0.07	0.04	0.02	0.02	0.04
OLF	0.31	0.12	0.36	0.12	0.33	0.08	0.39	0.08
Observations ($i \times t$)	175,873	144,194	23,840	16,094	18,286	15,999	45,155	36,363
Individuals (i)	36,829	30,223	5,343	3,603	3,877	3,396	12,302	9,935
Quarters (t)	4.78	4.77	4.46	4.47	4.72	4.71	3.67	3.66

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N..

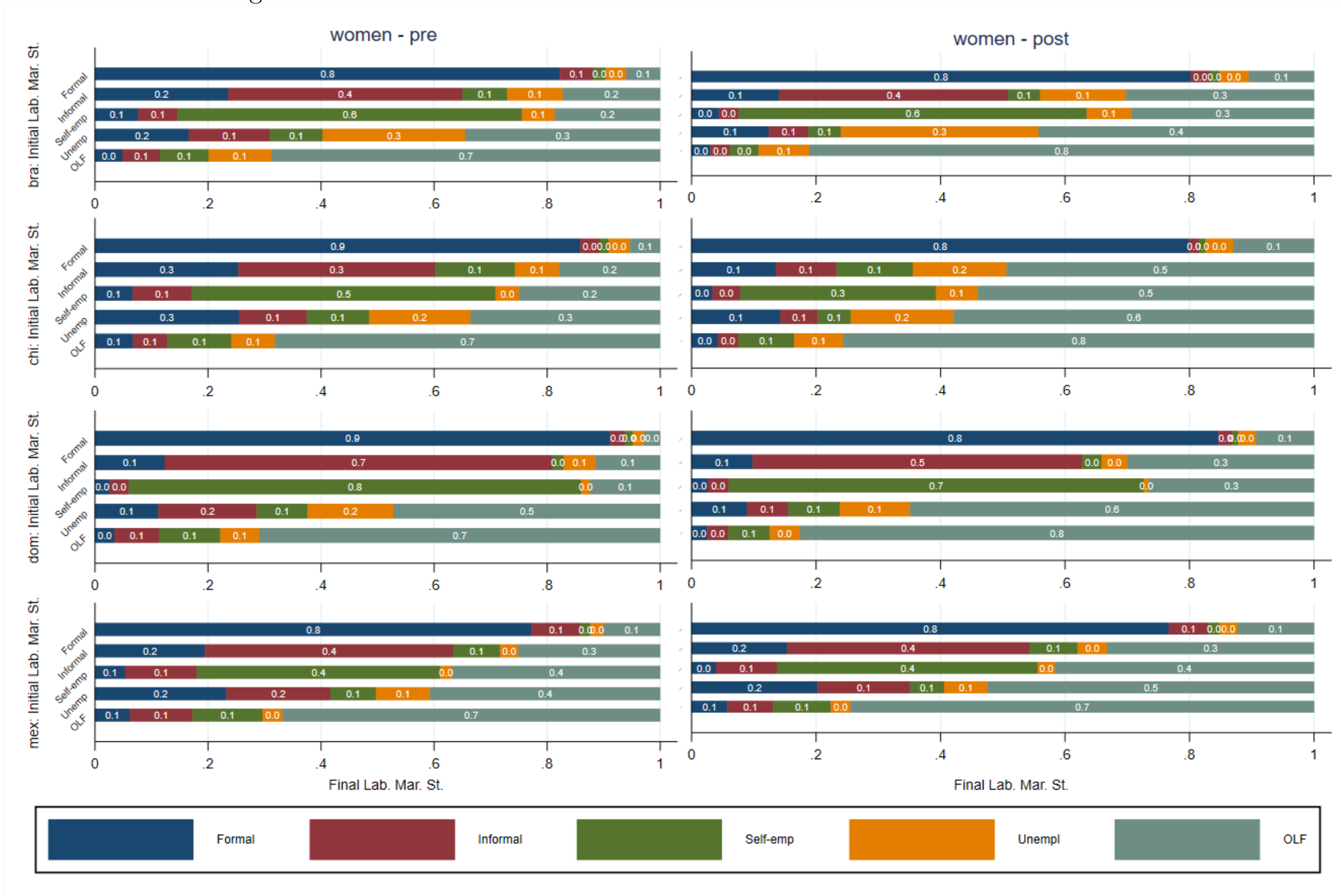
Notes: Sample includes women and men ages 25-55 living in urban areas. The during-pandemic period does not include 2020Q2 for Mexico.

Figure 1: Female and Male employment rates and Gender Gap over Time



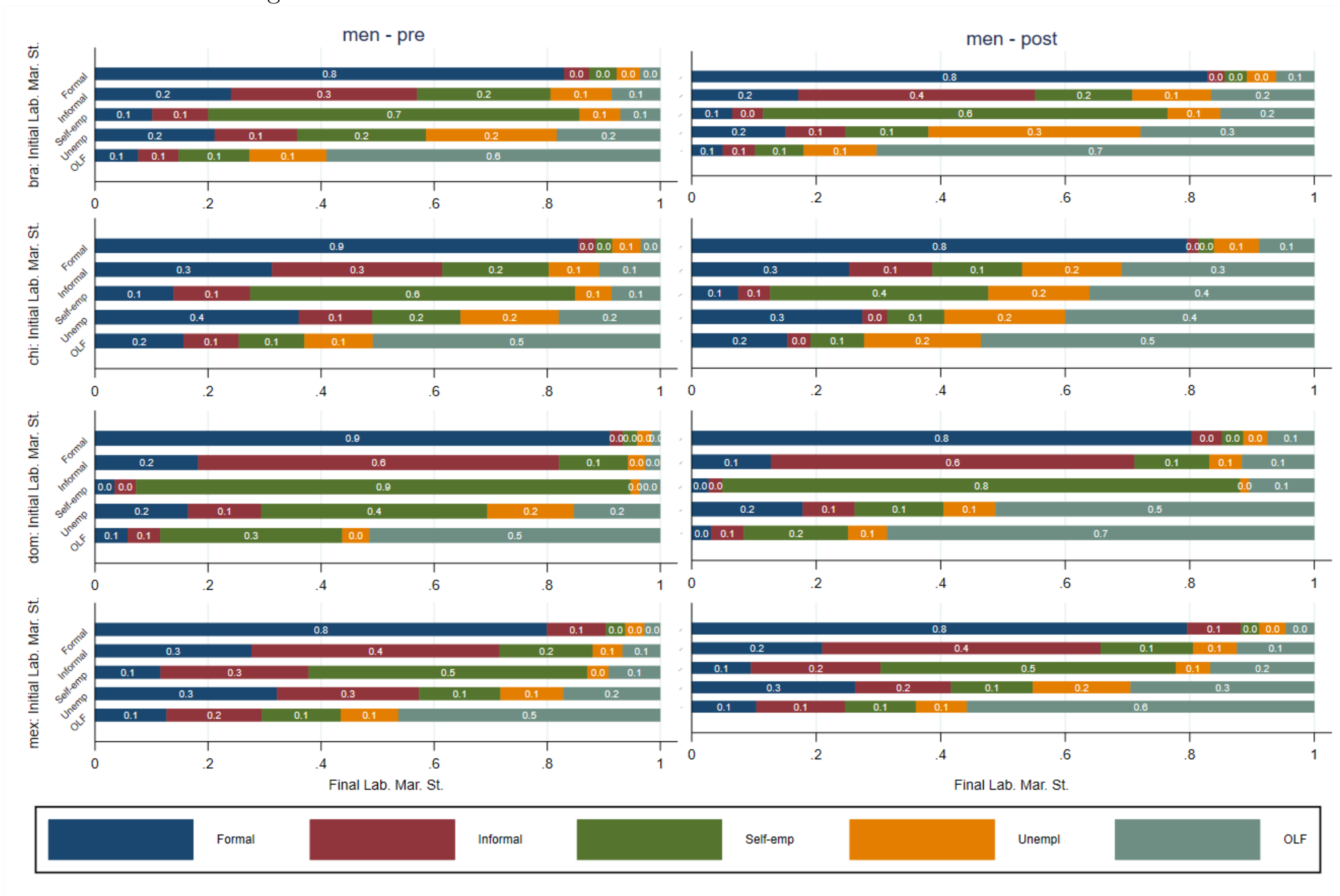
Source: PNADC for Brazil, ENE for Chile, ENCFT for the Dominican Republic, and ENOE and ENOE-N for Mexico. Notes: Employment rates in percentage. The gender gap is calculated as the male minus the female employment rates and is expressed in percentage points.

Figure 2: Labor market transition matrices Pre- and Post-Pandemic – Women



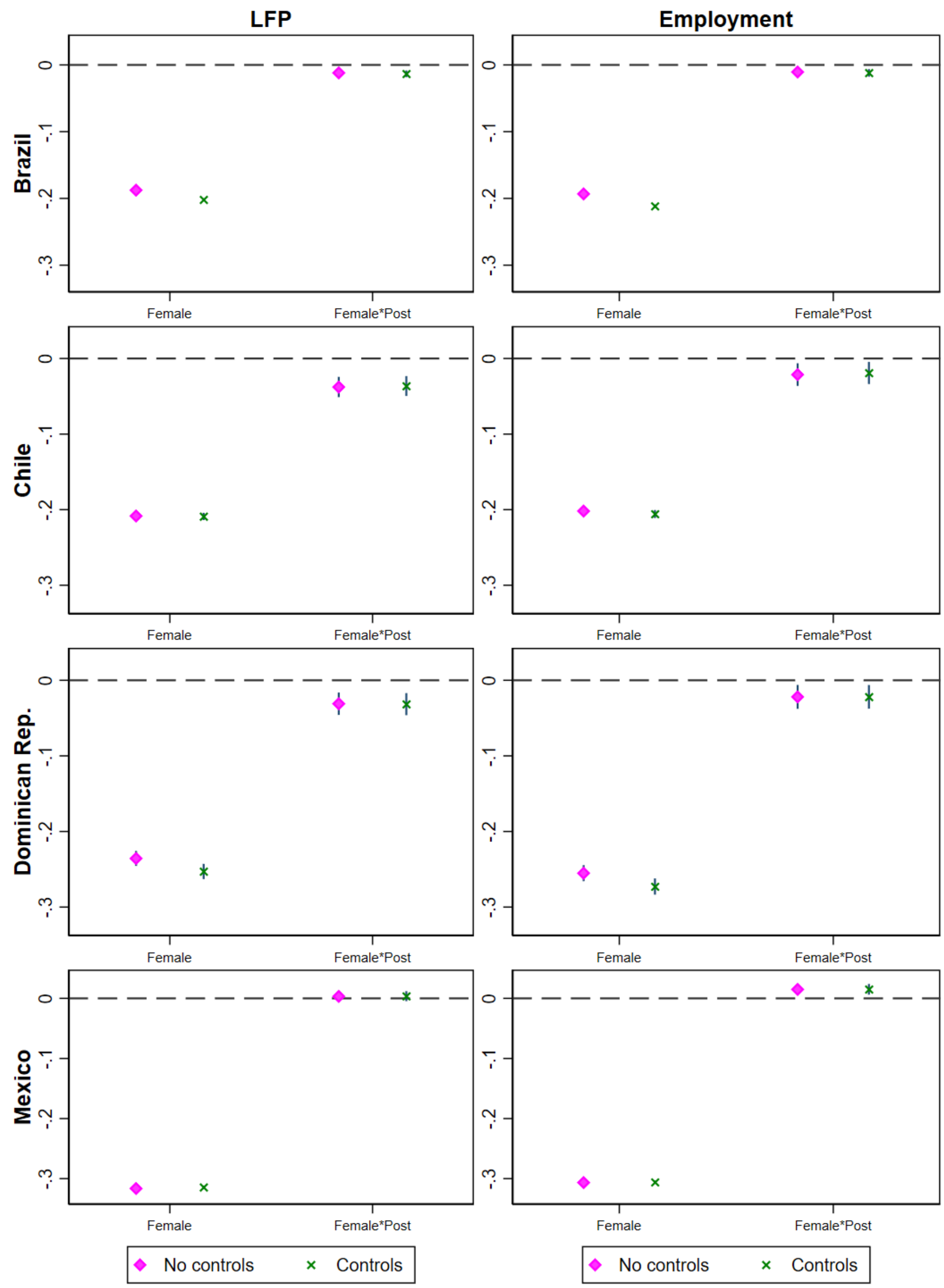
Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N. Notes: We report proportion in each labor market state, condition on the labor market state at the beginning of each year. Post-pandemic period report labor statuses during 2020 relative to the labor status on 2020Q1 (eve of the pandemic). Pre-pandemic period pool together data for 2017,2018, and 2019, and report labor statuses relative to the labor status in the first quarter of each year.

Figure 3: Labor market transition matrices Pre- and Post-Pandemic – Men



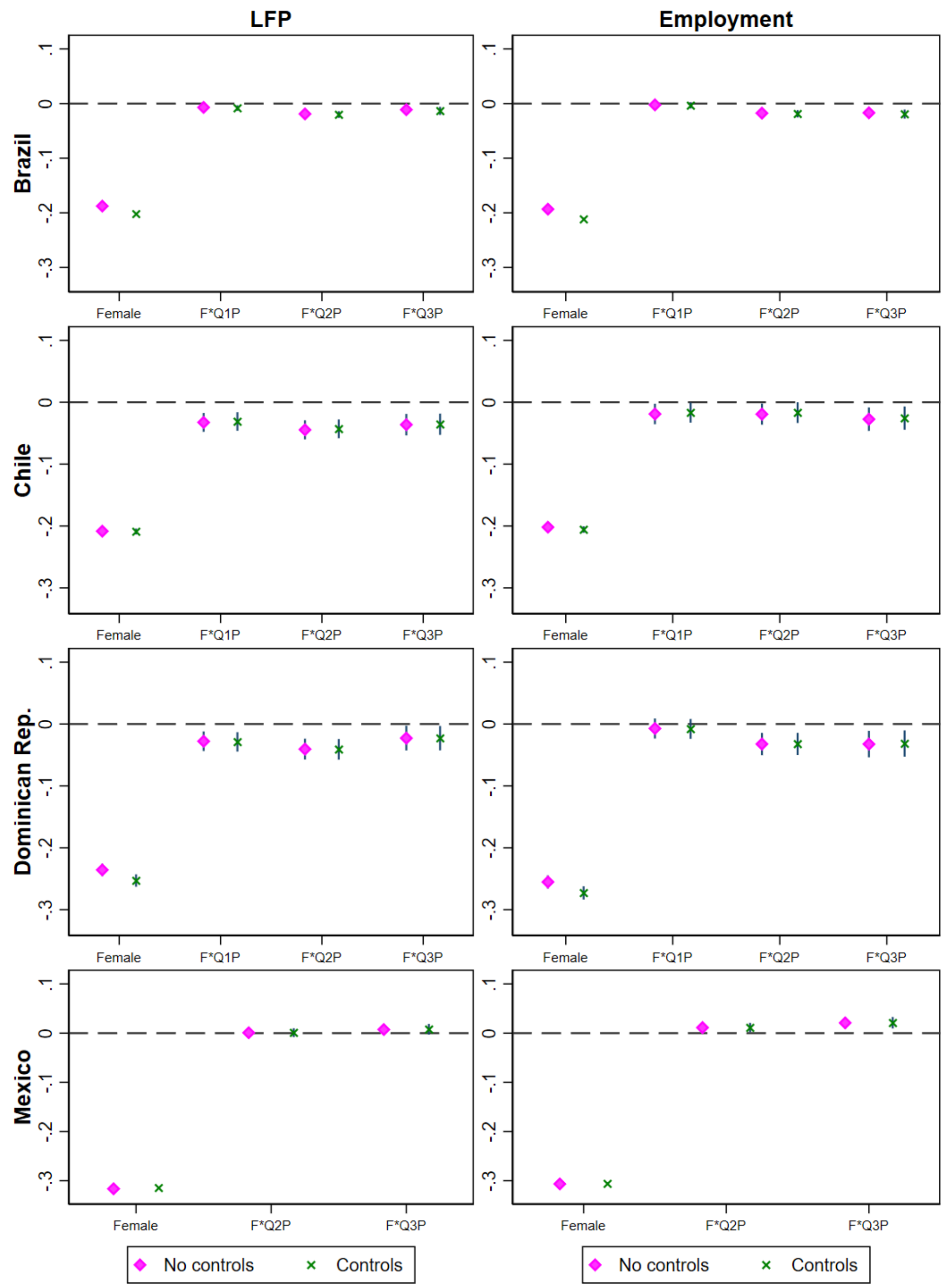
Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N. Notes: We report proportion in each labor market state, condition on the labor market state at the beginning of each year. Post-pandemic period report labor statuses during 2020 relative to the labor status on 2020Q1 (eve of the pandemic). Pre-pandemic period pool together data for 2017, 2018, and 2019, and report labor statuses relative to the labor status in the first quarter of each year.

Figure 4: Labor Market Stocks



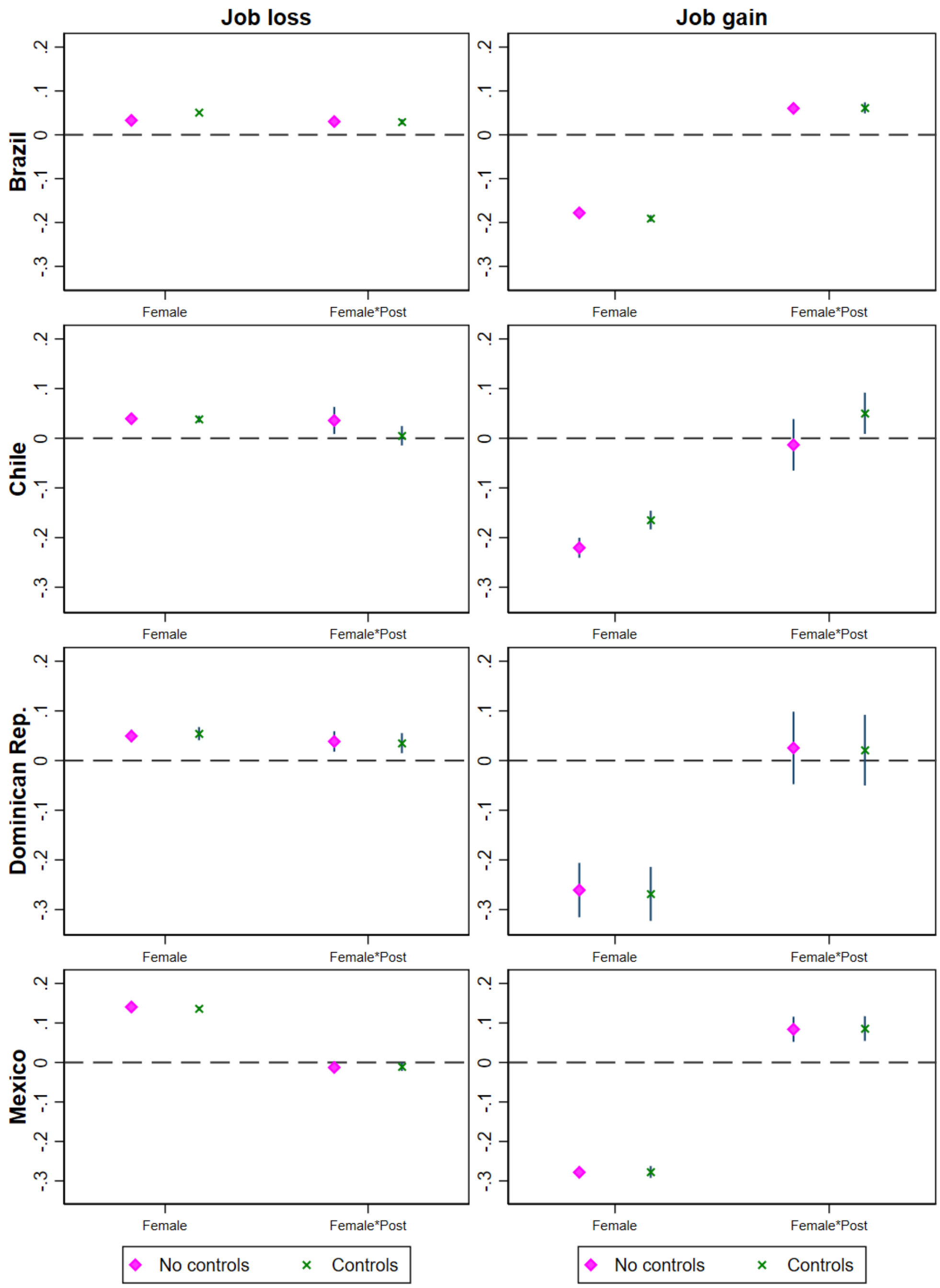
NOTE: *LFP* and *Employment* denote dependent variable =1 if, respectively, labor market participant and employed. *Female* denotes coefficients for the impact of being female (β_2 in equation (1)); *Female*Post* denotes the differential impact of the pandemic for women with respect to men (β_3 in equation (1)). Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.1.

Figure 5: Labor Market Stocks by Quarter



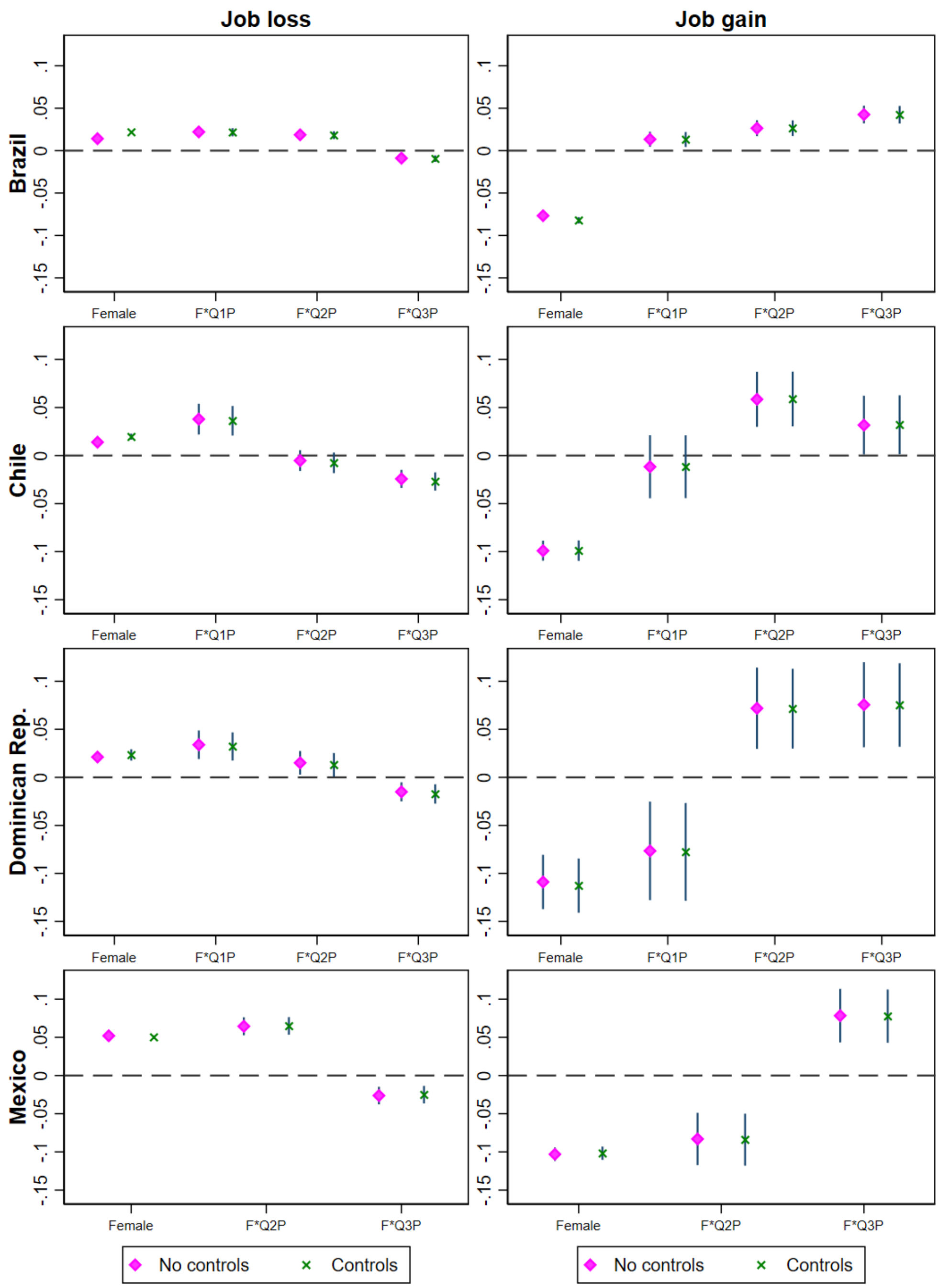
NOTE: *LFP* and *Employment* denote dependent variable =1 if, respectively, labor market participant and employed. *Female* denotes coefficients for the impact of being female (β_2 in equation (2)); *F*QKP* denotes the differential impact of the pandemic for women with respect to men in pandemic quarter K (β_{K+1} in equation (1)). Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.2.

Figure 6: Labor Market Flows



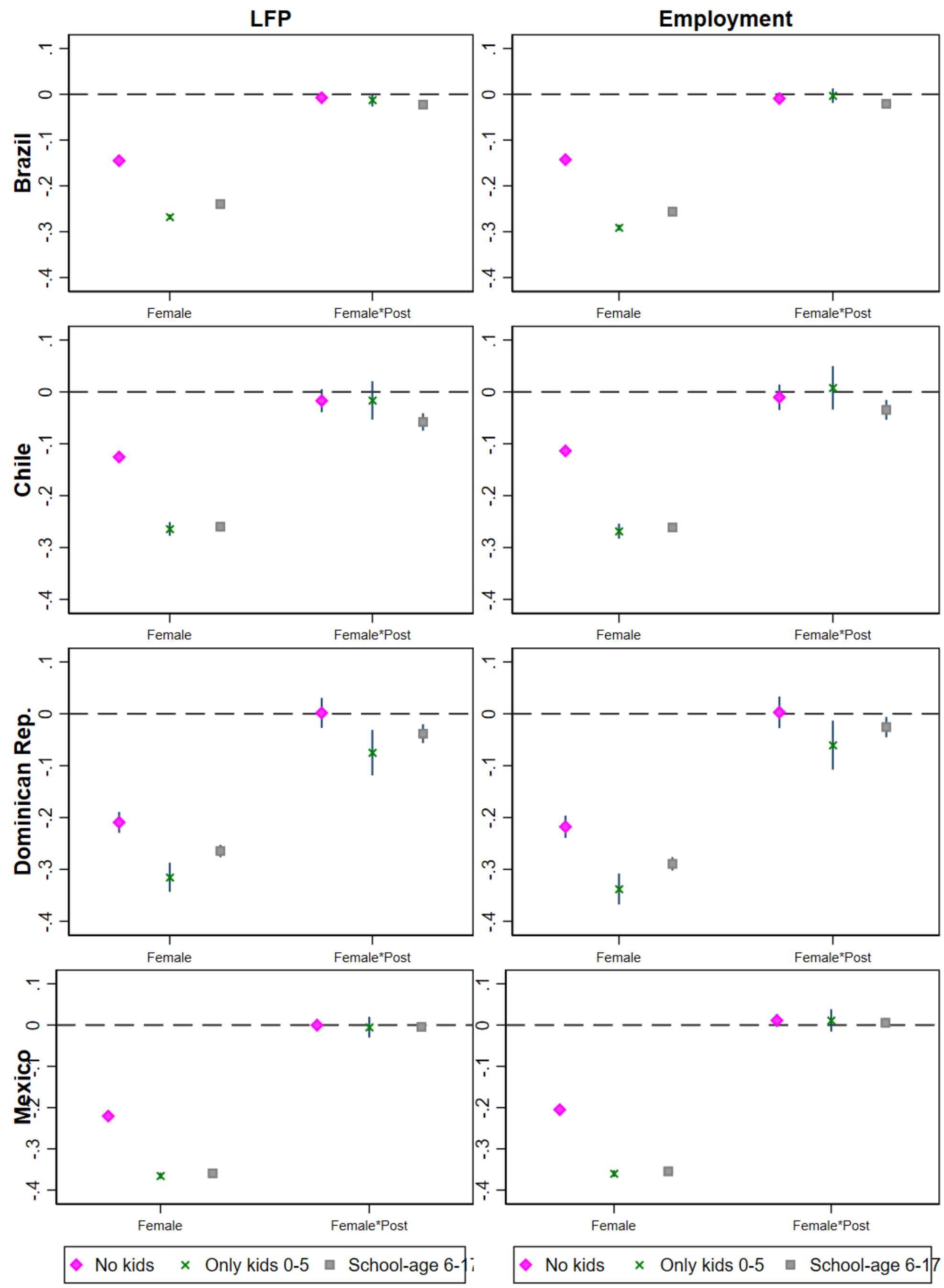
NOTE: *Job loss* and *Job gain* denote dependent variable =1 if, respectively, workers lost their job or non-workers found a job, taking as initial condition the first quarter of each year. *Female* denotes coefficients for the impact of being female (α_2 in equation (4)); $R_\tau \times F_i$ denotes the differential impact of the pandemic for women with respect to men (α_3 in equation (4)). Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.1.

Figure 7: Labor Market Flows by Quarter



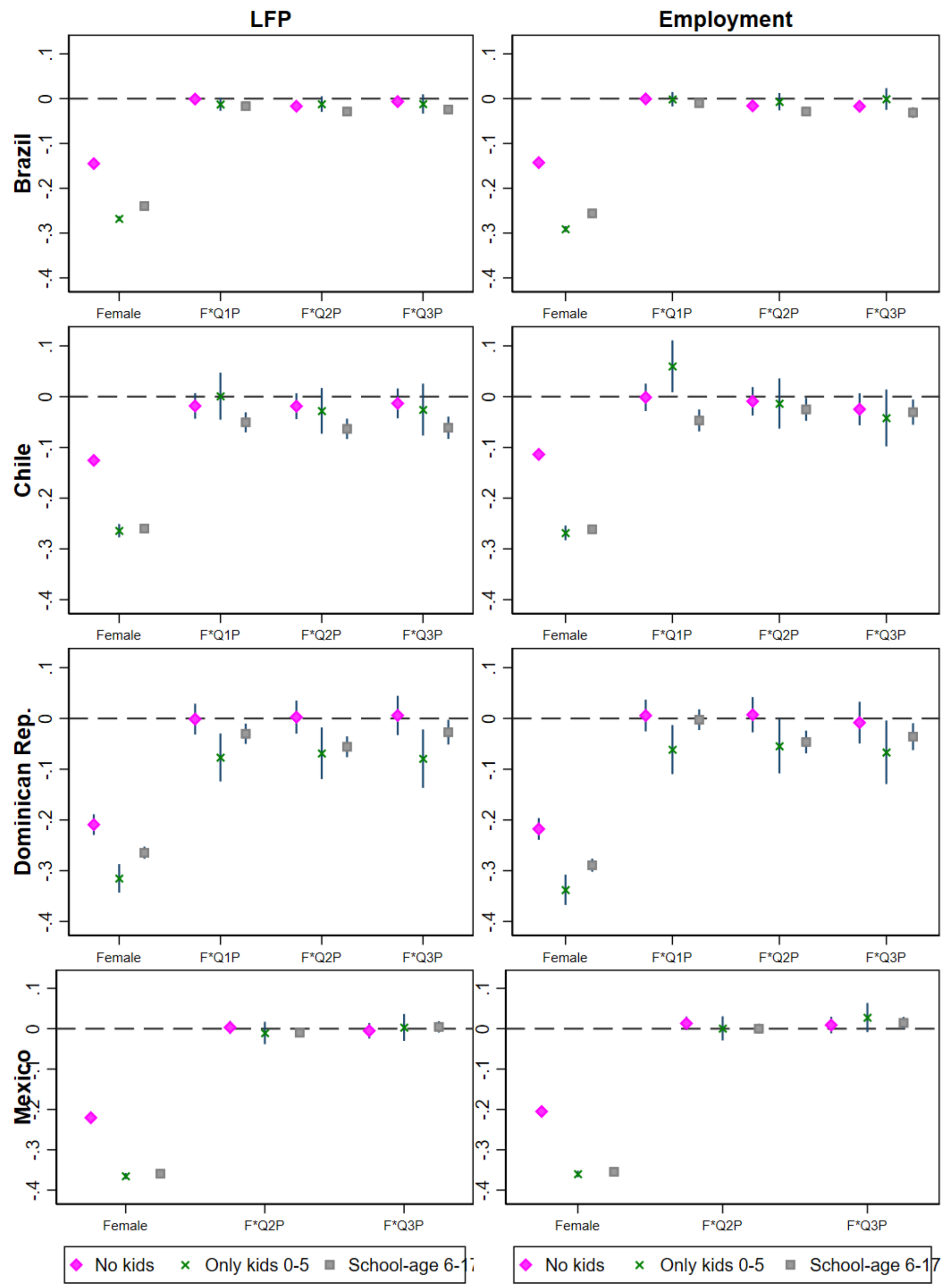
NOTE: *Job loss* and *Job gain* denote dependent variable =1 if, respectively, workers lost their job or non-workers found a job, taking as initial condition the first quarter of each year. *Female* denotes coefficients for the impact of being female; *F*QKP* denotes the differential impact of the pandemic for women with respect to men in pandemic quarter K. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.2.

Figure 8: Labor Market Stocks by Children Presence and Age



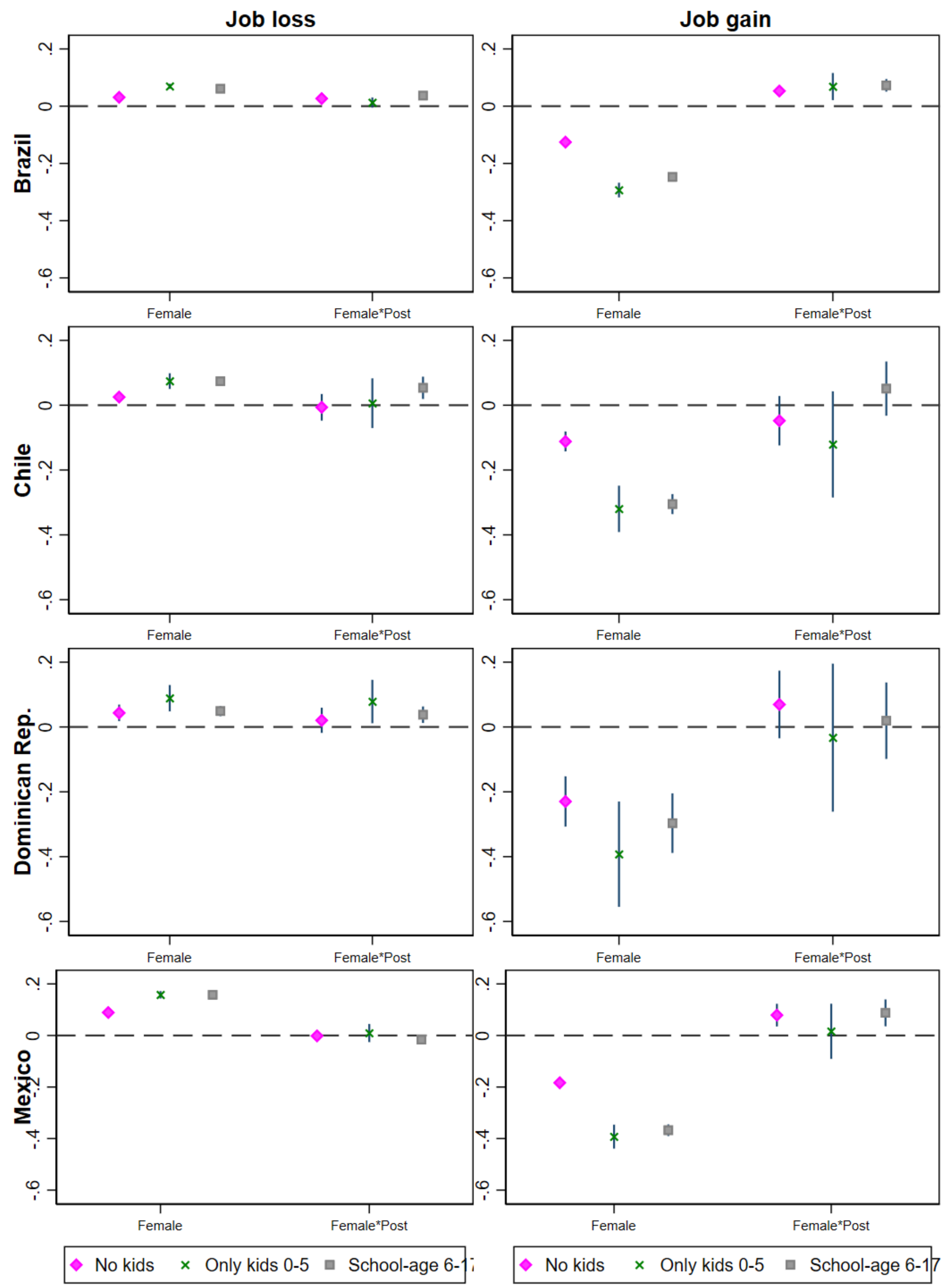
Note: *LFP* and *Employment* denote dependent variable =1 if, respectively, labor market participant and employed. *Female* denotes coefficients for the impact of being female with the corresponding age and presence of children with respect to men; *Female*Post* denotes the differential impact of the pandemic for women with the corresponding age and presence of children with respect to men. *No Kids* includes both women without children at home and women with children at home older than 17. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.3.

Figure 9: Labor Market Stocks by Children Presence and Age and Quarter



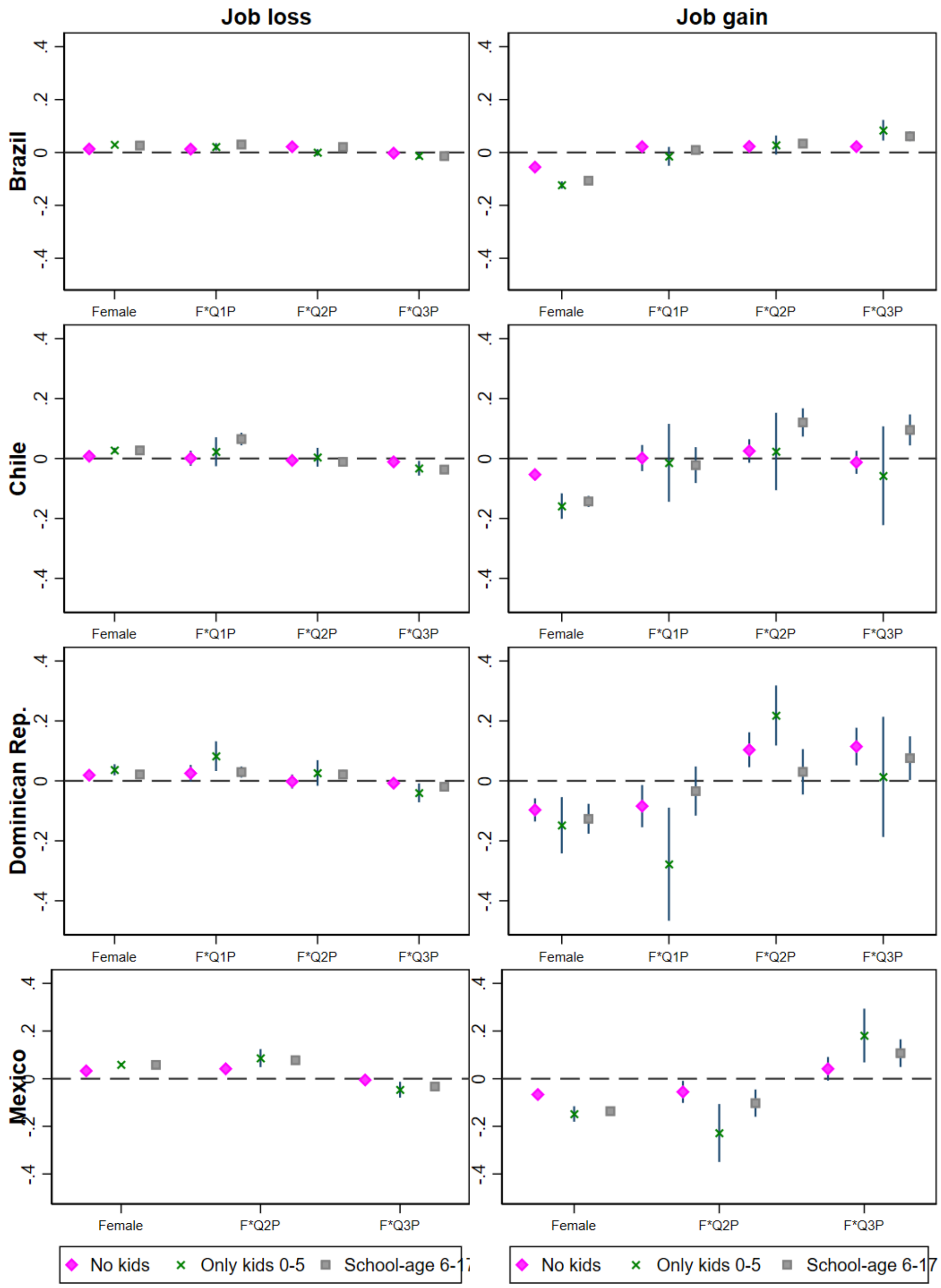
NOTE: *LFP* and *Employment* denote dependent variable =1 if, respectively, labor market participant and employed. *Female* denotes coefficients for the impact of being female with the corresponding age and presence of children with respect to men; *F*QKP* denotes the differential impact of the pandemic for women with the corresponding age and presence of children with respect to men in pandemic quarter K. *No Kids* includes both women without children at home and women with children at home older than 17. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.4.

Figure 10: Labor Market Flows by Children Presence and Age



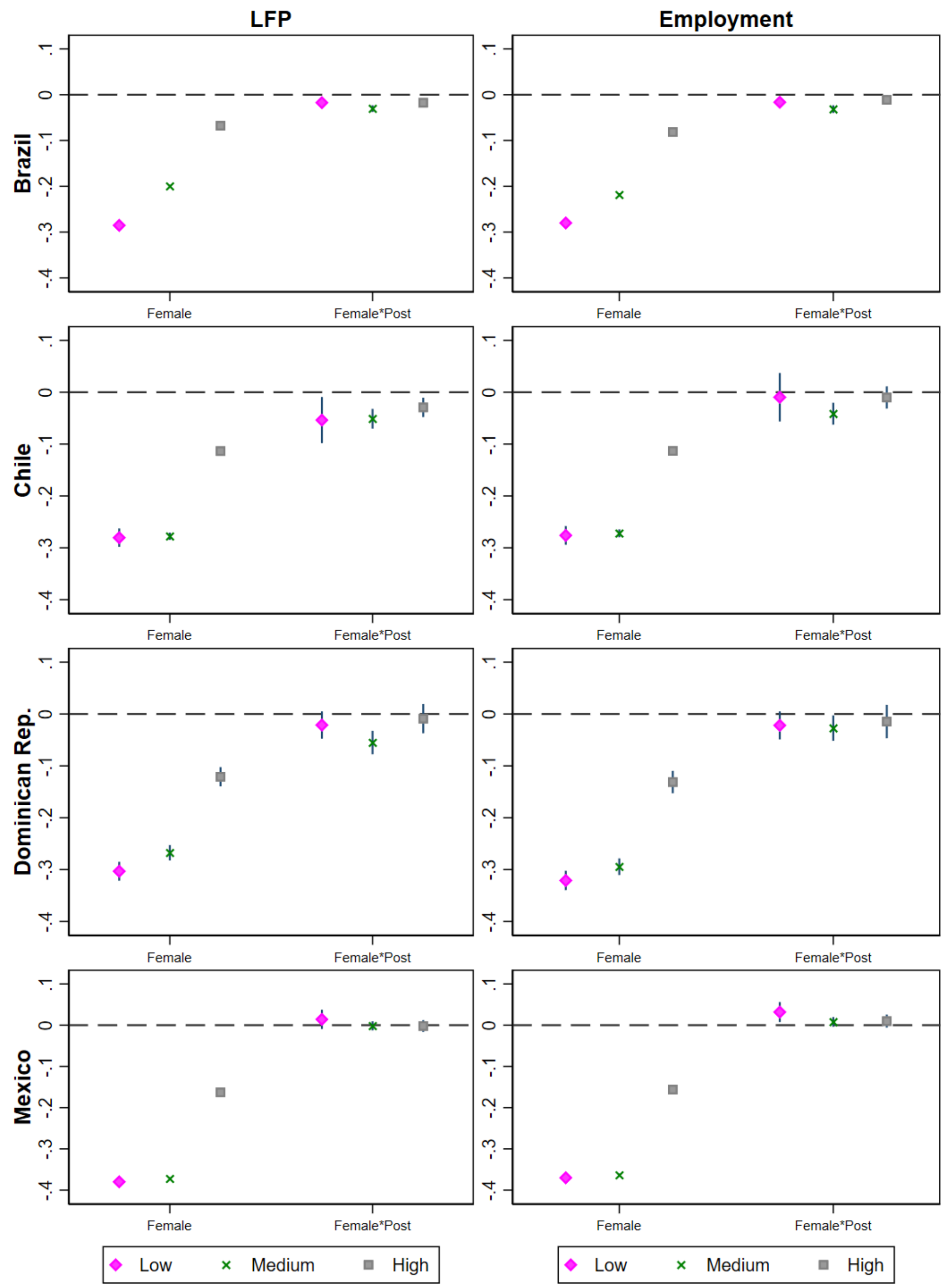
Note: *Job loss* and *Job gain* denote dependent variable =1 if, respectively, workers lost their job or non-workers found a job, taking as initial condition the first quarter of each year. *Female* denotes coefficients for the impact of being female with the corresponding age and presence of children with respect to men; *Female*Post* denotes the differential impact of the pandemic for women with the corresponding age and presence of children with respect to men. *No Kids* includes both women without children at home and women with children at home older than 17. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.3.

Figure 11: Labor Market Flows by Children Presence and Age and Quarter



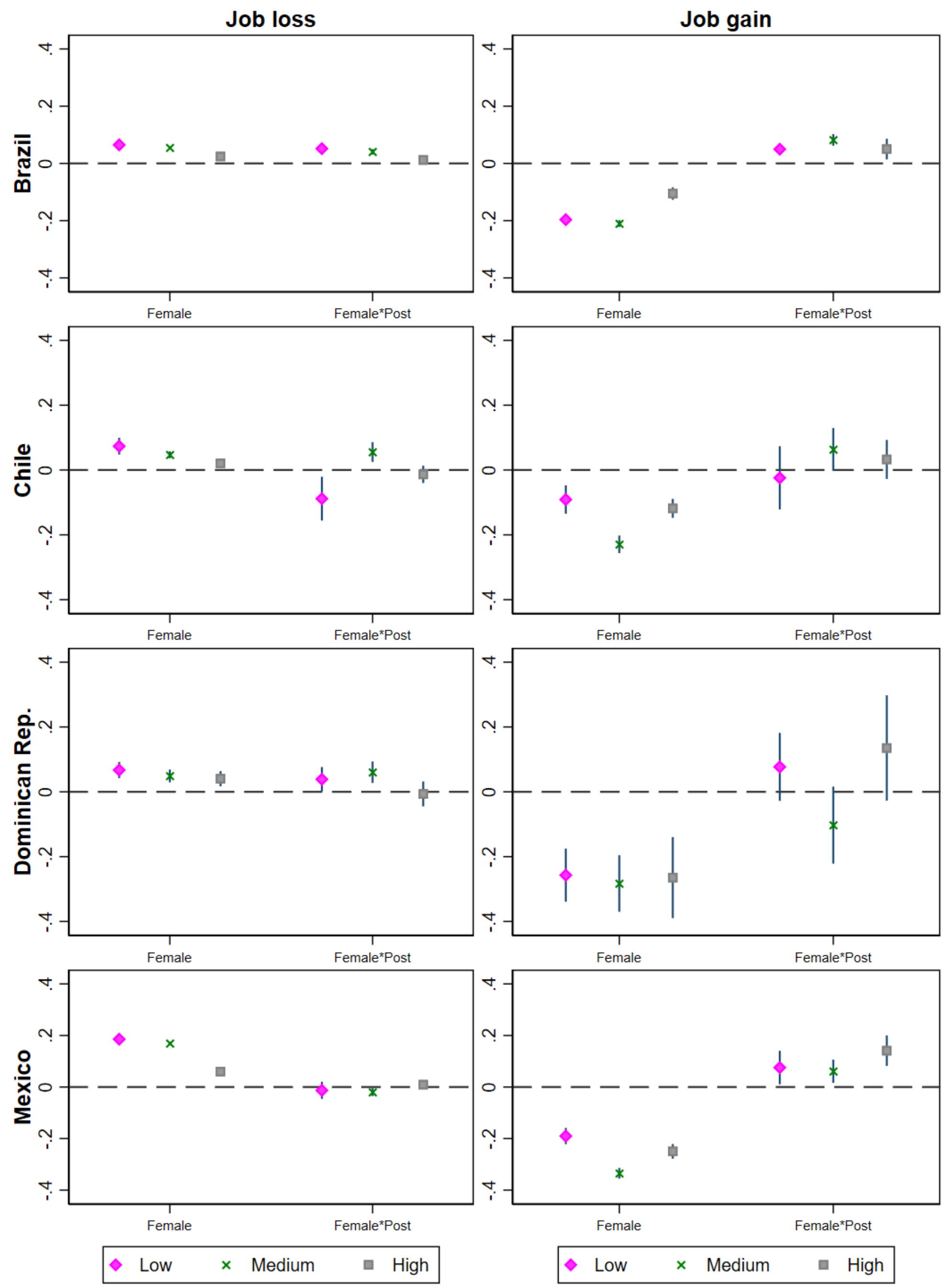
NOTE: *Job loss* and *Job gain* denote dependent variable =1 if, respectively, workers lost their job or non-workers found a job, taking as initial condition the first quarter of each year. *Female* denotes coefficients for the impact of being female with the corresponding age and presence of children with respect to men; *F*QKP* denotes the differential impact of the pandemic for women with the corresponding age and presence of children with respect to men in pandemic quarter K. *No Kids* includes both women without children at home and women with children at home older than 17. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.4.

Figure 12: Labor Market Stocks by Education



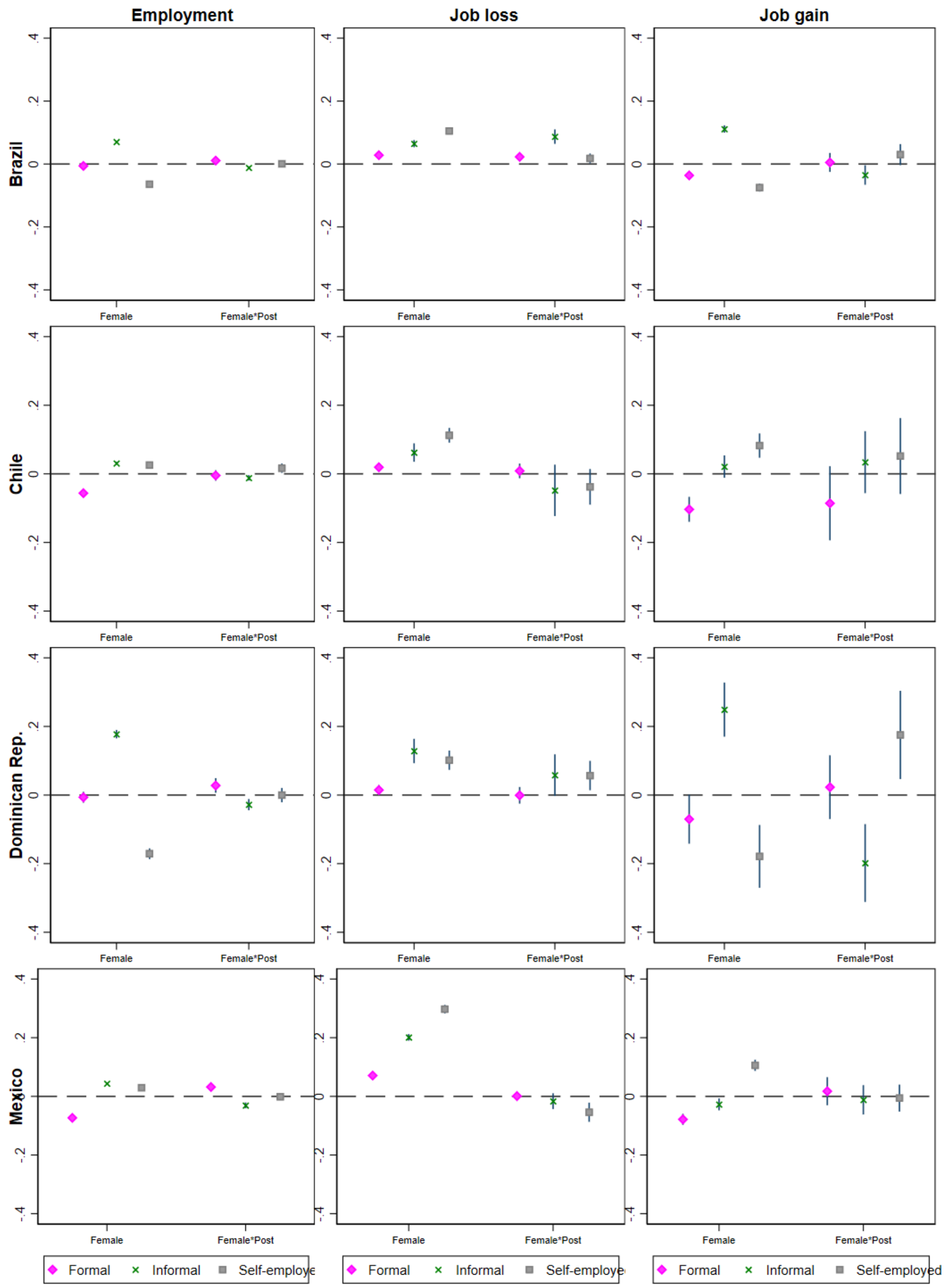
NOTE: *LFP* and *Employment* denote dependent variable =1 if, respectively, labor market participant and employed. *Female* denotes coefficients for the impact of being female with the corresponding education level with respect to men; *Female*Post* denotes the differential impact of the pandemic for women with the corresponding education level with respect to men. *Low* denotes 0 to 8 years of education completed; *Medium* 9 to 13 years; and *High* 14 or more. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.5.

Figure 13: Labor Market Flows by Education



NOTE: *Job loss* and *Job gain* denote dependent variable =1 if, respectively, workers lost their job or non-workers found a job, taking as initial condition the first quarter of each year. *Female* denotes coefficients for the impact of being female with the corresponding education level with respect to men; *Female*Post* denotes the differential impact of the pandemic for women with the corresponding education level with respect to men. *Low* denotes 0 to 8 years of education completed; *Medium* 9 to 13 years; and *High* 14 or more. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.5.

Figure 14: Labor Market Stocks and Flows by Job Type



Employment denotes dependent variable =1 if employed. *Job loss* and *Job gain* denote dependent variable =1 if, respectively, workers lost their job or non-workers found a job, taking as initial condition the first quarter of each year. *Female* denotes coefficients for the impact of being female with a given job type with respect to men; *Female*Post* denotes the differential impact of the pandemic for women with a given job type with respect to men. *Formal, Informal, Self-Employed* denotes that the state of employment of reference is, respectively, in a formal job, an informal job or as self-employed. Vertical lines denote 95% confidence intervals. A more complete set of results is available in Table B.6.

Appendices

A Data

Table A.1: Sample Size by Panels Periods and Countries

Panel ID	Panel Period	Number of Observations Brazil	Chile	Dom. Rep.	Mexico
1	2017Q1-2018Q1	85,728	24,012	2,784	49,496
2	2017Q2-2018Q2	104,560	30,010	3,465	-
3	2017Q3-2018Q3	104,165	30,175	3,645	61,160
4	2017Q4-2018Q4	104,345	30,415	2,730	63,725
5	2018Q1-2019Q1	85,084	24,960	3,028	50,820
6	2018Q2-2019Q2	102,350	25,925	3,635	-
7	2018Q3-2019Q3	102,695	10,210	3,695	64,010
8	2018Q4-2019Q4	98,025	4,985	2,965	62,210
9	2019Q1-2020Q1	77,252	916	3,256	54,880
10	2019Q2-2020Q2	87,235	3,365	6,325	-
11	2019Q3-2020Q3	88,260	9,365	8,765	32,340
12	2019Q4-2020Q4	83,800	8,020	10,875	26,888
13	2020Q1-2021Q1	60,772	19,184	8,320	22,290

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N.

Notes: Samples only include women and men aged 25 to 55, living in urban areas, and who are wage employees or self-employed when employed.

B Estimation Results

Tables (B.1)–(B.6) report point estimates, standard errors and additional statistics on the coefficient reported in Figures 4–14. The full set of results and statistics, including point estimates of the controls included in the regressions, are available in this Web Appendix.

Table B.1: Stocks and Flows regressions: coefficient of interests

	Brazil		Chile		Dom. Rep.		Mexico	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Panel A. LFP								
Female	-0.188	-0.202	-0.208	-0.209	-0.236	-0.253	-0.316	-0.314
	(0.001)***	(0.001)***	(0.003)***	(0.003)***	(0.006)***	(0.006)***	(0.002)***	(0.002)***
Post	-0.039	-0.049	-0.062	-0.053	-0.036	-0.032	-0.041	-0.043
	(0.002)***	(0.002)***	(0.005)***	(0.006)***	(0.005)***	(0.007)***	(0.003)***	(0.003)***
Female*Post	-0.012	-0.013	-0.038	-0.036	-0.031	-0.032	0.003	0.004
	(0.003)***	(0.003)***	(0.008)***	(0.008)***	(0.009)***	(0.009)***	(0.005)	(0.005)
Observations	1,184,271	1,184,271	221,542	221,542	63,488	63,488	674,409	674,409
R-squared	0.053	0.118	0.070	0.101	0.096	0.118	0.136	0.163
Panel B. Employment								
Female	-0.193	-0.212	-0.202	-0.206	-0.255	-0.273	-0.306	-0.306
	(0.002)***	(0.001)***	(0.003)***	(0.003)***	(0.006)***	(0.007)***	(0.002)***	(0.002)***
Post	-0.050	-0.067	-0.088	-0.077	-0.040	-0.046	-0.060	-0.060
	(0.002)***	(0.002)***	(0.006)***	(0.007)***	(0.005)***	(0.007)***	(0.003)***	(0.004)***
Female*Post	-0.011	-0.012	-0.021	-0.019	-0.022	-0.022	0.015	0.015
	(0.004)***	(0.003)***	(0.009)**	(0.009)**	(0.010)**	(0.010)**	(0.005)***	(0.005)***
Observations	1,184,271	1,184,271	221,542	221,542	63,488	63,488	674,409	674,409
R-squared	0.047	0.107	0.057	0.086	0.097	0.117	0.119	0.143
Panel C. Job loss								
Female	0.033	0.051	0.039	0.038	0.049	0.054	0.141	0.136
	(0.002)***	(0.002)***	(0.005)***	(0.004)***	(0.008)***	(0.008)***	(0.003)***	(0.003)***
Post	0.030	0.048	0.232	0.091	0.073	0.079	0.032	0.020
	(0.003)***	(0.005)***	(0.012)***	(0.025)***	(0.007)***	(0.016)***	(0.004)***	(0.006)***
Female*Post	0.030	0.029	0.036	0.005	0.038	0.035	-0.013	-0.011
	(0.004)***	(0.004)***	(0.017)**	(0.012)	(0.013)***	(0.012)***	(0.007)*	(0.007)
Observations	178,649	178,649	24,770	24,770	10,550	10,550	82,087	82,087
R-squared	0.007	0.079	0.053	0.457	0.032	0.070	0.034	0.103
Panel D. Job gain								
Female	-0.178	-0.191	-0.220	-0.165	-0.261	-0.268	-0.278	-0.277
	(0.005)***	(0.004)***	(0.012)***	(0.011)***	(0.033)***	(0.033)***	(0.009)***	(0.009)***
Post	-0.214	-0.180	-0.022	-0.187	-0.114	-0.032	-0.187	-0.189
	(0.007)***	(0.010)***	(0.028)	(0.035)***	(0.042)***	(0.060)	(0.018)***	(0.021)***
Female*Post	0.060	0.061	-0.013	0.050	0.025	0.021	0.084	0.086
	(0.008)***	(0.008)***	(0.032)	(0.025)**	(0.044)	(0.043)	(0.019)***	(0.019)***
Observations	73,562	73,562	9,956	9,956	3,017	3,017	29,008	29,008
R-squared	0.056	0.100	0.039	0.336	0.066	0.105	0.046	0.064

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N.
Notes: Column (1) shows results without including controls and column (2) controls for age, age squared, level of education, indicator of not having kids 0-17 and year, quarter and geographic units fixed effects. Job loss models also control for sector and type of employment. Robust standard errors in parentheses; clustered at the individual level for LFP and Employment outcomes. *** p<0.01, ** p<0.05, * p<0.1

Table B.2 Stocks and Flows regressions: coefficient of interests by pandemic quarters

	Brazil		Chile		Dom. Rep.		Mexico	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Panel A. LFP								
Female*Q1P	-0.007	-0.008	-0.033	-0.031	-0.028	-0.029		
	(0.003)**	(0.003)***	(0.009)***	(0.009)***	(0.010)***	(0.010)***		
Female*Q2P	-0.019	-0.020	-0.045	-0.043	-0.041	-0.041	0.001	0.001
	(0.004)***	(0.004)***	(0.009)***	(0.009)***	(0.010)***	(0.010)***	(0.006)	(0.005)
Female*Q3P	-0.011	-0.013	-0.036	-0.036	-0.023	-0.023	0.007	0.008
	(0.005)**	(0.004)***	(0.011)***	(0.010)***	(0.012)*	(0.012)*	(0.007)	(0.007)
Observations	1,184,271	1,184,271	221,542	221,542	63,488	63,488	674,409	674,409
R-squared	0.054	0.118	0.070	0.101	0.097	0.118	0.136	0.163
Panel B. Employment								
Female*Q1P	-0.002	-0.003	-0.019	-0.017	-0.007	-0.008		
	(0.004)	(0.003)	(0.010)*	(0.010)*	(0.010)	(0.010)		
Female*Q2P	-0.018	-0.019	-0.019	-0.017	-0.032	-0.032	0.011	0.011
	(0.004)***	(0.004)***	(0.010)*	(0.010)*	(0.011)***	(0.011)***	(0.006)*	(0.006)*
Female*Q3P	-0.017	-0.019	-0.027	-0.026	-0.032	-0.032	0.021	0.021
	(0.005)***	(0.005)***	(0.012)**	(0.011)**	(0.013)**	(0.013)**	(0.007)***	(0.007)***
Observations	1,184,271	1,184,271	221,542	221,542	63,488	63,488	674,409	674,409
R-squared	0.047	0.107	0.057	0.086	0.098	0.117	0.119	0.143
Panel C. Job loss								
Female*Q1P	0.022	0.022	0.038	0.036	0.034	0.032		
	(0.003)***	(0.003)***	(0.010)***	(0.009)***	(0.009)***	(0.009)***		
Female*Q2P	0.019	0.018	-0.005	-0.008	0.015	0.013	0.064	0.065
	(0.003)***	(0.003)***	(0.007)	(0.007)	(0.007)**	(0.007)*	(0.007)***	(0.007)***
Female*Q3P	-0.009	-0.009	-0.024	-0.027	-0.015	-0.017	-0.026	-0.025
	(0.002)***	(0.002)***	(0.006)***	(0.006)***	(0.006)**	(0.006)***	(0.007)***	(0.007)***
Observations	411,231	411,231	80,113	80,113	24,913	24,913	148,678	148,678
R-squared	0.008	0.036	0.020	0.057	0.027	0.042	0.023	0.050
Panel D. Job gain								
Female*Q1P	0.013	0.013	-0.012	-0.012	-0.077	-0.078		
	(0.005)**	(0.005)**	(0.020)	(0.020)	(0.031)**	(0.031)**		
Female*Q2P	0.026	0.026	0.059	0.059	0.072	0.071	-0.083	-0.084
	(0.006)***	(0.006)***	(0.017)***	(0.017)***	(0.026)***	(0.025)***	(0.021)***	(0.021)***
Female*Q3P	0.043	0.042	0.032	0.032	0.076	0.075	0.078	0.078
	(0.006)***	(0.006)***	(0.019)*	(0.019)*	(0.027)***	(0.026)***	(0.021)***	(0.021)***
Observations	168,773	168,773	29,463	29,463	7,197	7,197	52,818	52,818
R-squared	0.019	0.049	0.020	0.063	0.034	0.049	0.015	0.052

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N..
Notes: All models control for age, age squared, level of education, indicator of not having kids 0-17 and year, quarter and geographic units fixed effects. Job loss models also control for sector and type of employment. Q1P indicates the first quarter of the pandemic (2020Q2), Q2P and Q3P indicate the second and third quarters of the pandemic (2020Q3 and 2020Q4 respectively). Robust standard errors in parentheses; clustered at the individual level for LFP and Employment outcomes. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table B.3 Stocks and Flows regressions: coefficient of interests by children age and presence.

		Brazil			Chile			Dom. Rep.			Mexico	
	No kids	0-5 only	6-17	No kids	0-5 only	6-17	No kids	0-5 only	6-17	No kids	0-5 only	6-17
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Panel A. LFP												
Female	-0.145	-0.268	-0.240	-0.125	-0.264	-0.260	-0.209	-0.315	-0.264	-0.221	-0.365	-0.359
	(0.002)***	(0.003)***	(0.002)***	(0.005)***	(0.008)***	(0.004)***	(0.012)***	(0.017)***	(0.007)***	(0.003)***	(0.005)***	(0.002)***
Post	-0.044	-0.045	-0.046	-0.079	-0.059	-0.058	-0.036	-0.027	-0.038	-0.054	-0.030	-0.030
	(0.003)***	(0.005)***	(0.003)***	(0.009)***	(0.013)***	(0.006)***	(0.009)***	(0.012)**	(0.006)***	(0.005)***	(0.007)***	(0.003)***
Female*Post	-0.007	-0.012	-0.022	-0.017	-0.016	-0.058	0.002	-0.075	-0.038	-0.000	-0.005	-0.004
	(0.005)	(0.009)	(0.004)***	(0.013)	(0.023)	(0.010)***	(0.018)	(0.027)***	(0.011)***	(0.009)	(0.015)	(0.006)
Observations		1,184,271			221,542			63,488			674,409	
R-squared		0.113			0.104			0.119			0.166	
Panel B. Employment												
Female	-0.143	-0.291	-0.256	-0.114	-0.268	-0.261	-0.218	-0.338	-0.289	-0.205	-0.360	-0.355
	(0.002)***	(0.004)***	(0.002)***	(0.005)***	(0.009)***	(0.004)***	(0.013)***	(0.018)***	(0.008)***	(0.003)***	(0.005)***	(0.002)***
Post	-0.056	-0.059	-0.059	-0.102	-0.091	-0.087	-0.038	-0.028	-0.045	-0.073	-0.053	-0.048
	(0.004)***	(0.006)***	(0.003)***	(0.010)***	(0.016)***	(0.008)***	(0.010)***	(0.015)*	(0.007)***	(0.006)***	(0.009)***	(0.004)***
Female*Post	-0.009	-0.003	-0.021	-0.010	0.008	-0.035	0.003	-0.060	-0.026	0.011	0.011	0.006
	(0.005)*	(0.010)	(0.005)***	(0.015)	(0.025)	(0.012)***	(0.019)	(0.029)**	(0.012)**	(0.010)	(0.016)	(0.007)
Observations		1,184,271			221,542			63,488			674,409	
R-squared		0.101			0.089			0.118			0.145	
Panel C. Job loss												
Female	0.031	0.070	0.061	0.025	0.074	0.074	0.043	0.089	0.049	0.089	0.158	0.158
	(0.003)***	(0.005)***	(0.003)***	(0.008)***	(0.015)***	(0.007)***	(0.016)***	(0.025)***	(0.010)***	(0.005)***	(0.009)***	(0.004)***
Post	0.028	0.040	0.035	0.249	0.279	0.224	0.082	0.087	0.068	0.034	0.031	0.026
	(0.004)***	(0.007)***	(0.004)***	(0.017)***	(0.034)***	(0.016)***	(0.013)***	(0.020)***	(0.009)***	(0.007)***	(0.012)***	(0.005)***
Female*Post	0.027	0.013	0.037	-0.007	0.006	0.054	0.021	0.078	0.038	-0.001	0.010	-0.016
	(0.006)***	(0.011)	(0.006)***	(0.025)	(0.047)	(0.021)**	(0.024)	(0.041)*	(0.015)**	(0.012)	(0.021)	(0.009)*
Observations		178,649			24,770			10,550			82,087	
R-squared		0.065			0.156			0.060			0.094	
Panel D. Job gain												
Female	-0.126	-0.293	-0.247	-0.112	-0.320	-0.305	-0.230	-0.392	-0.297	-0.183	-0.393	-0.368
	(0.006)***	(0.016)***	(0.007)***	(0.019)***	(0.043)***	(0.019)***	(0.047)***	(0.099)***	(0.056)***	(0.013)***	(0.028)***	(0.014)***
Post	-0.193	-0.223	-0.241	0.011	0.066	-0.086	-0.123	-0.088	-0.112	-0.196	-0.123	-0.184
	(0.009)***	(0.027)***	(0.012)***	(0.037)	(0.089)	(0.047)*	(0.055)**	(0.132)	(0.069)	(0.023)***	(0.062)**	(0.030)***
Female*Post	0.053	0.069	0.073	-0.048	-0.121	0.051	0.069	-0.033	0.019	0.079	0.016	0.088
	(0.010)***	(0.029)**	(0.013)***	(0.046)	(0.100)	(0.051)	(0.063)	(0.139)	(0.072)	(0.027)***	(0.065)	(0.032)***
Observations		73,562			9,956			3,017			29,008	
R-squared		0.076			0.059			0.083			0.058	

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N..
Notes: All models control for age, age squared, level of education, indicator of not having kids 0-17 and year, quarter and geographic units fixed effects. Job loss models also control for sector and type of employment. No kids indicates no children 0-17 in the household, 0-5 indicates there is at least one kid 0-5 in the household but none 6-17, 6-17 indicates having at least one in this age range. Columns (1), (2) and (3) present results when no kids, 0-5 only, and 6-17 is the omitted category. Robust standard errors in parentheses; clustered at the individual level for LFP and Employment outcomes. *** p<0.01, ** p<0.05, * p<0.1

Table B.4 Stocks and Flows regressions: coefficient of interests by pandemic quarters and children age and presence

	Brazil			Chile			Dom. Rep.			Mexico		
	No kids	0-5 only	6-17	No kids	0-5 only	6-17	No kids	0-5 only	6-17	No kids	0-5 only	6-17
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Panel A. LFP												
Female*Q1P	-0.001	-0.013	-0.017	-0.018	0.001	-0.051	-0.001	-0.077	-0.030			
	(0.005)	(0.009)	(0.005)***	(0.015)	(0.028)	(0.012)***	(0.018)	(0.029)***	(0.012)**			
Female*Q2P	-0.017	-0.012	-0.029	-0.019	-0.028	-0.063	0.003	-0.069	-0.056	0.003	-0.011	-0.010
	(0.006)***	(0.011)	(0.005)***	(0.016)	(0.027)	(0.012)***	(0.020)	(0.031)**	(0.012)***	(0.010)	(0.017)	(0.007)
Female*Q3P	-0.007	-0.012	-0.024	-0.013	-0.026	-0.061	0.006	-0.079	-0.027	-0.005	0.003	0.005
	(0.007)	(0.013)	(0.006)***	(0.018)	(0.031)	(0.013)***	(0.024)	(0.035)**	(0.015)*	(0.012)	(0.020)	(0.008)
Observations		1,184,271			221,542			63,488			674,409	
R-squared		0.113			0.104			0.120			0.166	
Panel B. Employment												
Female*Q1P	-0.001	-0.001	-0.010	-0.001	0.060	-0.047	0.006	-0.061	-0.002			
	(0.005)	(0.010)	(0.005)**	(0.016)	(0.031)*	(0.013)***	(0.019)	(0.029)**	(0.012)			
Female*Q2P	-0.016	-0.007	-0.029	-0.009	-0.014	-0.025	0.007	-0.054	-0.046	0.013	0.001	0.000
	(0.006)**	(0.012)	(0.006)***	(0.017)	(0.030)	(0.014)*	(0.021)	(0.033)*	(0.014)***	(0.010)	(0.018)	(0.007)
Female*Q3P	-0.017	-0.001	-0.031	-0.025	-0.042	-0.031	-0.008	-0.067	-0.036	0.009	0.028	0.014
	(0.008)**	(0.015)	(0.007)***	(0.019)	(0.034)	(0.015)**	(0.025)	(0.038)*	(0.016)**	(0.012)	(0.022)	(0.009)
Observations		1,184,271			221,542			63,488			674,409	
R-squared		0.101			0.089			0.118			0.146	
Panel C. Job loss												
Female*Q1P	0.013	0.021	0.030	0.001	0.022	0.065	0.025	0.082	0.029			
	(0.004)***	(0.008)**	(0.004)***	(0.015)	(0.029)	(0.013)***	(0.017)	(0.030)***	(0.011)***			
Female*Q2P	0.022	-0.000	0.021	-0.006	0.004	-0.011	-0.002	0.026	0.021	0.042	0.086	0.078
	(0.004)***	(0.008)	(0.004)***	(0.011)	(0.019)	(0.009)	(0.014)	(0.026)	(0.009)**	(0.012)***	(0.023)***	(0.009)***
Female*Q3P	-0.002	-0.012	-0.014	-0.011	-0.033	-0.037	-0.008	-0.040	-0.020	-0.005	-0.046	-0.033
	(0.004)	(0.007)*	(0.003)***	(0.010)	(0.015)**	(0.008)***	(0.011)	(0.019)**	(0.008)**	(0.013)	(0.020)**	(0.009)***
Observations		411,231			80,113			24,913			148,678	
R-squared		0.031			0.054			0.039			0.044	
Panel D. Job gain												
Female*Q1P	0.022	-0.015	0.010	0.001	-0.015	-0.022	-0.084	-0.278	-0.034			
	(0.007)***	(0.022)	(0.010)	(0.026)	(0.079)	(0.036)	(0.043)**	(0.115)**	(0.050)			
Female*Q2P	0.023	0.028	0.034	0.025	0.023	0.120	0.104	0.218	0.030	-0.055	-0.228	-0.103
	(0.007)***	(0.022)	(0.010)***	(0.024)	(0.078)	(0.029)***	(0.035)***	(0.061)***	(0.046)	(0.028)**	(0.074)***	(0.035)***
Female*Q3P	0.022	0.084	0.061	-0.013	-0.058	0.095	0.115	0.013	0.076	0.041	0.181	0.107
	(0.008)***	(0.024)***	(0.011)***	(0.023)	(0.100)	(0.031)***	(0.038)***	(0.122)	(0.044)*	(0.030)	(0.069)***	(0.035)***
Observations		168,773			29,463			7,197			52,818	
R-squared		0.026			0.026			0.043			0.019	

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N..
Notes: All models control for age, age squared, level of education, indicator of not having kids 0-17 and year, quarter and geographic units fixed effects. Job loss models also control for sector and type of employment. Q1P indicates the first quarter of the pandemic (2020Q2), Q2P and Q3P indicate the second and third quarters of the pandemic (2020Q3 and 2020Q4 respectively). No kids indicates no children 0-17 in the household, 0-5 indicates there is at least one kid 0-5 in the household but none 6-17, 6-17 indicates having at least one in this age range. Columns (1), (2) and (3) present results when no kids, 0-5 only, and 6-17 is the omitted category. Robust standard errors in parentheses; clustered at the individual level for LFP and Employment outcomes. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table B.5 Stocks and Flows regressions: coefficient of interests by level of education

	Brazil			Chile			Dom. Rep.			Mexico		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Panel A. LFP												
Female	-0.285	-0.200	-0.068	-0.280	-0.278	-0.113	-0.303	-0.268	-0.121	-0.380	-0.372	-0.163
	(0.003)***	(0.002)***	(0.002)***	(0.011)***	(0.004)***	(0.004)***	(0.011)***	(0.009)***	(0.011)***	(0.004)***	(0.002)***	(0.003)***
Post	-0.057	-0.043	-0.027	-0.077	-0.049	-0.044	-0.031	-0.035	-0.029	-0.050	-0.038	-0.042
	(0.004)***	(0.003)***	(0.004)***	(0.019)***	(0.008)***	(0.008)***	(0.009)***	(0.008)***	(0.013)**	(0.009)***	(0.004)***	(0.005)***
Female*Post	-0.017	-0.030	-0.017	-0.054	-0.051	-0.029	-0.021	-0.055	-0.009	0.014	-0.002	-0.002
	(0.006)***	(0.004)***	(0.005)***	(0.027)**	(0.012)***	(0.011)***	(0.016)	(0.014)***	(0.017)	(0.014)	(0.007)	(0.009)
Observations		1,184,271			221,542			63,488			674,409	
R-squared		0.127			0.111			0.125			0.176	
Panel B. Employment												
Female	-0.280	-0.219	-0.081	-0.276	-0.272	-0.113	-0.321	-0.294	-0.131	-0.370	-0.364	-0.156
	(0.003)***	(0.002)***	(0.003)***	(0.011)***	(0.005)***	(0.005)***	(0.011)***	(0.010)***	(0.013)***	(0.005)***	(0.002)***	(0.003)***
Post	-0.078	-0.063	-0.041	-0.127	-0.071	-0.066	-0.036	-0.060	-0.036	-0.074	-0.055	-0.058
	(0.004)***	(0.003)***	(0.004)***	(0.021)***	(0.009)***	(0.009)***	(0.009)***	(0.010)***	(0.015)**	(0.010)***	(0.005)***	(0.006)***
Female*Post	-0.016	-0.031	-0.011	-0.010	-0.041	-0.010	-0.022	-0.027	-0.015	0.032	0.008	0.010
	(0.007)**	(0.005)***	(0.006)*	(0.028)	(0.013)***	(0.013)	(0.016)	(0.015)*	(0.020)	(0.015)**	(0.007)	(0.010)
Observations		1,184,271			221,542			63,488			674,409	
R-squared		0.113			0.094			0.124			0.154	
Panel C. Job loss												
Female	0.065	0.055	0.024	0.074	0.047	0.021	0.067	0.049	0.040	0.186	0.169	0.060
	(0.004)***	(0.003)***	(0.003)***	(0.016)***	(0.006)***	(0.006)***	(0.015)***	(0.012)***	(0.014)***	(0.009)***	(0.004)***	(0.004)***
Post	0.053	0.048	0.039	0.226	0.071	0.082	0.063	0.093	0.079	0.029	0.022	0.012
	(0.006)***	(0.005)***	(0.006)***	(0.038)***	(0.026)***	(0.026)***	(0.018)***	(0.019)***	(0.023)***	(0.012)**	(0.007)***	(0.009)
Female*Post	0.052	0.041	0.012	-0.088	0.056	-0.013	0.039	0.060	-0.007	-0.013	-0.020	0.009
	(0.009)***	(0.006)***	(0.006)**	(0.041)**	(0.019)***	(0.016)	(0.023)*	(0.020)***	(0.023)	(0.020)	(0.009)**	(0.011)
Observations		178,649			24,770			10,550			82,087	
R-squared		0.080			0.459			0.072			0.107	
Panel D. Job gain												
Female	-0.198	-0.210	-0.102	-0.081	-0.236	-0.117	-0.252	-0.293	-0.258	-0.191	-0.335	-0.250
	(0.006)***	(0.007)***	(0.013)***	(0.026)***	(0.016)***	(0.018)***	(0.050)***	(0.053)***	(0.077)***	(0.019)***	(0.013)***	(0.017)***
Post	-0.158	-0.210	-0.173	-0.089	-0.207	-0.217	-0.085	0.063	-0.079	-0.186	-0.167	-0.233
	(0.012)***	(0.014)***	(0.021)***	(0.058)	(0.044)***	(0.042)***	(0.073)	(0.082)	(0.102)	(0.038)***	(0.028)***	(0.034)***
Female*Post	0.051	0.086	0.035	-0.042	0.101	0.005	0.070	-0.092	0.132	0.076	0.061	0.141
	(0.011)***	(0.012)***	(0.022)	(0.058)	(0.039)***	(0.038)	(0.064)	(0.072)	(0.099)	(0.040)*	(0.027)**	(0.036)***
Observations		73,562			9,956			3,017			29,008	
R-squared		0.102			0.340			0.112			0.066	

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N..

Notes: All models control for age, age squared, level of education, indicator of not having kids 0-17 and year, quarter and geographic units fixed effects. Job loss models also control for sector and type of employment. Low education defined as 0-8 years of education, medium level as 9-13, and high level as 14 years of education and more. Columns (1), (2) and (3) present results when low, medium and high level of education is the omitted category. Robust standard errors in parentheses; clustered at the individual level for LFP and Employment outcomes. *** p<0.01, ** p<0.05, * p<0.1

Table B.6 Stocks and Flows regressions: coefficient of interests by type of employment

	Brazil			Chile			Dom. Rep.			Mexico		
	Formal WE	Informal WE	SE	Formal WE	Informal WE	SE	Formal WE	Informal WE	SE	Formal WE	Informal WE	SE
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Panel A. Employment												
Female	-0.006	0.070	-0.064	-0.056	0.031	0.026	-0.006	0.177	-0.171	-0.073	0.044	0.030
	(0.002)***	(0.001)***	(0.002)***	(0.004)***	(0.002)***	(0.003)***	(0.010)	(0.007)***	(0.009)***	(0.002)***	(0.002)***	(0.002)***
Post	0.016	-0.007	-0.009	0.031	-0.011	-0.020	-0.019	-0.002	0.021	-0.010	0.005	0.005
	(0.003)***	(0.002)***	(0.003)***	(0.006)***	(0.004)***	(0.006)***	(0.008)**	(0.007)	(0.008)***	(0.005)**	(0.004)	(0.004)
Female*Post	0.011	-0.012	0.001	-0.005	-0.012	0.017	0.028	-0.028	-0.000	0.032	-0.031	-0.001
	(0.004)**	(0.003)***	(0.004)	(0.009)	(0.005)**	(0.008)**	(0.013)**	(0.010)***	(0.013)	(0.007)***	(0.006)***	(0.006)
Observations	836,760	836,760	836,760	162,027	162,027	162,027	48,529	48,529	48,529	496,498	496,498	496,498
R-squared	0.100	0.073	0.042	0.048	0.023	0.031	0.154	0.078	0.126	0.126	0.087	0.031
Panel B. Job loss												
Female	0.028	0.065	0.105	0.019	0.062	0.112	0.015	0.128	0.102	0.071	0.201	0.297
	(0.002)***	(0.007)***	(0.005)***	(0.004)***	(0.016)***	(0.013)***	(0.009)*	(0.022)***	(0.017)***	(0.003)***	(0.007)***	(0.009)***
Post	0.033	0.061	0.077	0.058	0.265	0.216	0.079	0.126	0.067	0.004	0.057	0.038
	(0.005)***	(0.011)***	(0.007)***	(0.025)**	(0.044)***	(0.035)***	(0.018)***	(0.030)***	(0.018)***	(0.006)	(0.012)***	(0.014)***
Female*Post	0.023	0.087	0.018	0.009	-0.048	-0.038	-0.001	0.058	0.057	0.001	-0.017	-0.054
	(0.004)***	(0.014)***	(0.009)*	(0.013)	(0.046)	(0.032)	(0.015)	(0.037)	(0.026)**	(0.007)	(0.016)	(0.020)***
Observations	178,649	178,649	178,649	24,770	24,770	24,770	10,550	10,550	10,550	82,087	82,087	82,087
R-squared	0.082	0.082	0.082	0.462	0.462	0.462	0.081	0.081	0.081	0.115	0.115	0.115
Panel C. Job gain												
Female	-0.036	0.111	-0.075	-0.103	0.021	0.082	-0.070	0.249	-0.179	-0.078	-0.027	0.106
	(0.007)***	(0.007)***	(0.008)***	(0.022)***	(0.020)	(0.022)***	(0.043)	(0.048)***	(0.056)***	(0.011)***	(0.012)**	(0.012)***
Post	0.024	-0.006	-0.018	0.053	-0.109	0.056	-0.004	-0.003	0.007	-0.008	0.004	0.003
	(0.019)	(0.019)	(0.021)	(0.057)	(0.045)**	(0.056)	(0.070)	(0.095)	(0.103)	(0.030)	(0.032)	(0.030)
Female*Post	0.005	-0.035	0.030	-0.086	0.034	0.052	0.023	-0.198	0.175	0.018	-0.012	-0.006
	(0.018)	(0.019)*	(0.020)	(0.066)	(0.055)	(0.067)	(0.056)	(0.069)***	(0.078)**	(0.029)	(0.030)	(0.028)
Observations	19,844	19,844	19,844	2,546	2,546	2,546	667	667	667	10,546	10,546	10,546
R-squared	0.093	0.054	0.037	0.053	0.045	0.069	0.109	0.077	0.083	0.089	0.043	0.054

Source: For Brazil: PNADC, for Chile: ENE, for Dominican Republic: ENCFT, and for Mexico: ENOE and ENOE-N..
Notes: All models control for age, age squared, level of education, indicator of not having kids 0-17 and year, quarter and geographic units fixed effects. Job loss models also control for sector and type of employment. Columns (1), (2) and (3) present results when Formal wage employment, Informal wage employment, and self-employment is the omitted category. Robust standard errors in parentheses; clustered at the individual level for LFP and Employment outcomes. *** p<0.01, ** p<0.05, * p<0.1