# Direct and Spillover Effects of Enforcing Labor Standards: Evidence from Argentina

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**Abstract**

I study how increases in labor standards and enforcement affect workers and their families. Using a policy in Argentina that targeted domestic workers and their employers, I find a 31% increase in formality rates of domestic workers and an increase in monthly earnings of almost 4%, despite a reduction in hours of work. I also study whether the reform produced changes among other members of domestic workers' families. I find a substantial reduction in labor supply among children of domestic workers (especially women).

**JEL Classification:** J08, J46, O17

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# I. Introduction

In developing countries, informal employment accounts for 60% of total employment (ILO, 2018). Labor informality poses a great challenge to governments because it hinders tax collection (Ulyssea, 2018) and identify the beneficiaries of welfare spending (Gerard & Gonzaga, 2021). Yet the enforcement of labor regulations has ambiguous effects on workers. On the one hand, formal jobs are associated with higher wages, job security, and social benefits (Camacho et al., 2013). On the other hand, researchers point out that the costs incurred by firms to comply with labor regulations and workers' preferences for informal jobs are the reasons why a large informal sector exists (Djankov et al., 2002; Maloney, 2004). The problem of whether labor regulations are desirable becomes even more complex when one considers how these regulations affect the decisions of other members of the targeted worker's household, in terms of their labor supply and sector of employment.

In this paper, I study how labor regulations and their enforcement affects workers and their families. I evaluate a policy introduced in Argentina that strengthened the labor standards of domestic workers (individuals whose employer is a household instead of a firm) and increased the cost of noncompliance for their employers. Until 2013, labor standards granted domestic workers fewer rights than other workers, and employers faced lesser sanctions if they did not comply with these regulations. The policy removed most of these differences, increasing workers' rights and employer's penalties in cases of noncompliance; it also increased the probability of detecting noncompliers. The government actively publicized the reform, raising awareness among employers about domestic workers' rights and the costs of noncompliance.

To study the effects of this policy change, I use individual-level data between 2010 and 2015 from the Permanent Household Survey (EPH), a household survey representative of the largest urban areas of the country. Using this survey, I compare the labor market outcomes of domestic workers with those of similar workers (women employed in low-wage occupations in the service sector) in a difference-in-differences (DID) framework.

I find that two years after the reform was implemented formality rates of domestic workers increased by 4.8 percentage points, or 30%. Compared to other studies surveyed recently by Jessen

and Kluve (2021), the percent increase in formality is large, mainly because only 15% of domestic workers were registered when the reform was introduced. On the other hand, I find a reduction of almost 5% in hours of work per week among domestic workers, but no significant changes in unemployment rates, suggesting that at least in the short-run labor demand in the sector is inelastic along the extensive margin and all the impact of higher costs of hiring a worker was channeled through the intensive margin. Despite the reduction in work time, I find an increase of hourly wages of more than 8%, which implies that monthly earnings increased almost 4% after the reform. These results are robust to using other comparison groups (such as female wage workers in all occupations) and different time windows.

My findings are in line with predictions from several search and matching models in dual labor markets developed in the last decade (Basu et al., 2010; Ulyssea, 2010; Meghir et al., 2015). The increase in enforcement of labor regulations causes certain households to register workers who were previously unregistered. This increases competition for workers in the formal sector and thus raises wages in that sector. However, this also implies that households who now hire formally demand less labor than they would if they did it off the books. These results are also in line with studies in developed countries that look at the increase in labor regulations when employers have market power (Azar et al., 2019; Balasubramanian et al., 2020; Lipsitz & Starr, 2021)

When I analyze the heterogeneous effects of the reform, I find that effects are concentrated among domestic workers with the highest earnings. Assuming that the earnings of domestic workers are positively correlated with those of their employers, this result provides further evidence that the higher enforcement of labor standards was the driver to the increase in formality rates, and that employers who began to comply with the regulations partially offset the increase in cost by reducing labor demand along the intensive margin.

Restricting the study of the effects of the policy to targeted workers alone may fail to account for the full effects of the policy. Collective household models (Chiappori, 1992) predict that other household members might reduce their labor supply as a consequence of the increase in earnings and the reduction in domestic workers' hours of work.[1] Additionally, because other family members

can enjoy some of the benefits received by a registered worker, they may have fewer incentives to participate in the formal sector themselves (Galiani & Weinschelbaum, 2012).

I first look at the effects of the reform on labor market outcomes aggregated at the household level. While I do not observe any significant impacts on average, I find reductions in labor force participation but increases in earnings among lower-income households. This could mean that these families benefited the most from the reform, and as a result of the increase in earnings among domestic workers, other household members with low labor market attachment decided to drop out of the market.

I then use the same difference-in-differences framework to separately compare the outcomes of male spouses and children of domestic workers with those of the spouses and children of women employed in low-wage occupations in the service sector, respectively. I find a significant reduction in labor force participation among children of domestic workers: after the reform, they are 3.3 percentage points (7.2%) less likely to be in the labor force, an effect mainly driven by a reduction of almost four percentage points (11.2%) among female children. In contrast, I do not observe changes in the labor market outcomes of spouses of domestic workers.

The decrease in women's labor force participation is not associated with an increase in schooling or home production. This may indicate that the time away from work is instead devoted to leisure, as observed previously by Oster and Thornton (2011) and Devoto et al. (2012), among others. Unfortunately, lack of detailed time-use information prevents me from determining which activities are being substituted for work.

My findings on the spillover effects of the policy suggest that analyzing how labor regulations affect workers directly targeted by them alone can underestimate the total impact of these regulations. This would in turn lead to mistaken conclusions about their benefits and desirability. While the reform was welfare-improving for domestic workers and their families, a back-of-the-envelope calculation also suggests that the overall costs of the new regulations for the government (given by the cost of enforcement and the increase in future pension claims) are not significantly higher than the benefits (in terms of tax revenue). Hence, when assessing the impact of changes in labor

regulations, researchers should also consider the effects on individuals indirectly affected by them.

This paper relates to studies of labor regulations and their effect on the labor market. Most studies on this topic focus on minimum wages, be it its introduction (Dinkelman & Ranchhod, 2012; Bhorat et al., 2013), its expansion to cover additional workers (Bailey et al., 2021; Derenoncourt & Montialoux, 2021), or its increase (Meer & West, 2016; Cengiz et al., 2019; Harasztosi & Lindner, 2019). With few exceptions, the recent literature has found little disemployment effects of minimum wages, while the impact on earnings is positive among workers for which the minimum wage has "bite", contributing to a reduction in inequality. Fewer studies have looked at the impacts of additional regulations such as changes in payroll taxes (Cruces et al., 2010) and firing costs (Adhvaryu et al., 2013). While these regulations are not found to increase unemployment, high firing costs may reduce job creation during periods of economic growth. This paper complements the existing literature by studying not only how the introduction of labor regulations affects the labor market outcomes of workers, but also their effect on other individuals indirectly affected by these regulations.

Another strand of the literature to which I contribute is the one that studies the effects of inspections to enforce compliance with labor regulations, such as Ronconi (2010) in Argentina, Almeida and Carneiro (2012) in Brazil, and recently Samaniego de la Parra (2019) in Mexico. The results of these studies suggest that higher enforcement of existing regulations raises compliance but can, in some cases, reduce the earnings of workers who are paid above the minimum wage. This contrasts with the results I find, which might be related to the degree of market power that employers of domestic workers held before the reform. Compliance with labor standards increased simply by using public campaigns that have proven cost effective in other contexts (Castro & Scartascini, 2015; Bott et al., 2017), suggesting that enforcement shifted part of the surplus from labor relationships from employers to domestic workers.

The rest of the paper is structured as follows: In section II., I describe the regulations of wage workers in general and those of domestic workers before and after the reform took place. Section III. describes the data used and the empirical strategy implemented. Section IV. presents the results

of the reform to domestic workers, while section V. shows the spillover impacts on other household members. Finally, section VI. presents the conclusions.

# II. Background: Employment regulations and domestic workers' labor reform

In this section, I first outline the employment regulations for all but domestic workers in Argentina. I then describe the characteristics and employment arrangements of domestic workers, as well as their labor regulations before the reform was enacted. Finally, I detail the changes in regulations that took place in 2013 and how I expect them to affect the labor market outcomes of domestic workers.

## A. Regulations to wage employment of non-domestic workers

In Argentina, employers must register all labor relationships with the Federal Administration of Public Revenue (AFIP), and every month they must pay health insurance and pension contributions that amount to 26.5% of the worker's wage.[2] The government can monitor compliance with this mandate either through inspections or anonymous reports by workers.

If caught, employers who fail to register a worker when the labor relationship begins have to pay each unregistered worker an amount equal to 25% of their monthly gross salary per month of employment.[3] In addition, employers face sanctions which amount depends on the number of unregistered workers. In 2013, that fine could be as high as ARS 7,500 per worker, or approximately 2.6 times the federal minimum wage at the time.

All workers are entitled to a monthly wage that cannot be lower than either the federal minimum or, in the case of unionized occupations, the minimum established by collective bargaining.[4] Overtime compensation (for workdays longer than 8 hours or workweeks longer than 48 hours) is set at time and a half the regular wage per hour. Workers have the right to a minimum of two weeks of paid vacation per year, paid sick leave and, in the case of women, 90 days of paid maternity leave.

If a worker is terminated without cause, they are entitled to a severance payment equal to one month's salary per year of tenure on the job. However, if the worker was unregistered, the severance payment they are entitle to doubles. In that case, to receive it the worker must sue their former employer. While anecdotal evidence suggests that courts tend to favor employees because they are considered the weakest part of the labor relationship, trials can take up to three years so employers and employees often negotiate a severance payment before going to court.[5]

## B. Domestic workers and labor standards before 2013

### 1. Characteristics of the domestic workers in Argentina

By 2013, there were approximately one million employed domestic workers (7% of all wage workers), of which 89% were cleaners and 9% were caregivers. Women constitute 98% of all domestic workers, and almost one out of six female employees is a domestic worker. They have lower levels of education than the average worker and are more than twice as likely to be foreign migrants.[6]

Figure 1 shows the distribution of domestic workers by the number of households they work for. Most domestic workers are employed by only one household, something that did not change in the first years after the reform. However, the majority of domestic workers are part-time employees: Figure 2 shows that the average working time is 25 hours per week and the median worker is employed 20 hours per week. This characteristic only intensified after the reform. Positions are not typically advertised in newspapers or job boards but rather are filled through word of mouth and referrals, so workers face a thin labor market.

### 2. Labor standards before 2013

As in most developing countries, until 2013 domestic workers were exempted from the regulations and enjoyed fewer rights than other wage workers. These differences are rooted in the belief that the employer (a household) does not make a profit from the domestic worker's work, and its association with colonial-era servitude (ILO, 2016).

Regular hours of work were capped at 12 per day, and they were not entitled paid vacations, sick

or maternity leave.[7] The minimum wage was set by the government, usually at or below the federal minimum wage; severance pay for those terminated without cause amounted to half a monthly salary per year worked, regardless of whether they were registered.

Social security contributions by employers were a step function of the number of hours per week the worker was hired for. The maximum contribution was set at approximately 3% of the minimum wage, for workers employed for 16 hours or more per week. In addition, employers were not required to carry an occupational accident insurance policy.

Despite the lower cost of registration, formality rates among domestic workers are the lowest of all wage employees in Argentina: only 15% of domestic workers were registered in 2013, compared to 65% of all other wage workers.[8] This is due to several reasons: first, labor inspectors are not allowed to enter a person's home and employees do not report their employer for fear of retaliations, making detection of unregistered domestic workers challenging.[9] Second, even if an employer was detected, there were no sanctions set in place. Finally, most employers were unaware of the obligation to register a domestic worker (Oelz, 2014; Groisman & Sconfienza, 2016).

## C. The reform to domestic worker's labor standards

In April 2013, the President signed a bill that set most of the regulations of domestic worker's employment on par with those of other wage workers.[10] A summary of the regulations of domestic workers before and after the bill was signed, together with the regulations of other wage workers is presented in Table A1.1. Certain differences between these two groups of workers remained: minimum wages are still set by the government, and contributions continue to be fixed amounts based on the number of hours the employee is hired for.[11] Although domestic workers are now granted paid sick and maternity leave, the latter is covered by the government instead of the employer.

Failure to register a domestic worker would lead to a fine of up to ARS 7,500 if employers were detected, although the government gave a grace period of 60 days after the enactment of the law. Moreover, a few weeks after the law passed, AFIP announced that it would send letters to households with annual income of ARS 500,000 (fewer than 1% of households) or ARS 300,000 in assets (1

million persons or 2.5% of the population). These letters informed recipients that AFIP assumed they were employing a domestic worker, and compelled them to either register the worker or prove that they did not have any employee to avoid sanctions.[12] Figure A1.1 presents an example of these letters. Only a few days before starting to send these letters, the government announced it would only send them to individuals who satisfied both the income and assets conditions (approximately 200,000 households).

Both the reform and the campaign by AFIP received substantial media attention, raising awareness about the capacity of the tax authority to detect potential evaders.[13] Additionally, the government made public campaigns to raise awareness of the changes and the requirement for employers to register their employees. As a proxy for the attention generated by the reform, Figure 3 shows the relative number of Google searches for the terms "domestic worker" (*empleada doméstica*) in Argentina. The peak number of searches corresponds to May 2013, a month after the bill was signed by the president.[14]

Figure 4 presents a first look at how the reform changed compliance with the regulations, in particular the requirement to register a worker. It shows, for each year, the share of registered workers, separately for domestic workers and for women employed in other low-wage service occupations (cleaners, caregivers, servers, etc.) who are not subject to the reform. The pre-reform period is characterized by small increases in formality rates for both groups. However, in 2013 (the year of the reform), the formality rate among domestic workers increases almost four percentage points followed by a two-percentage-point increase in 2014. In comparison, formality rates among other workers continued to increase at a similar rate than before the reform took place.

## D. Expected effects of the reform

In a standard labor market model, the increase in labor standards for domestic workers to lead to a reduction in labor demand, hence reducing employment and hours of work of domestic workers. The presence of a minimum wage would exacerbate this effect.

However, in the presence of search frictions (such as the reliance almost exclusively on rec-

ommendations for hiring) that confer employers some degree of market power, and a dual labor market (as in Meghir et al., 2015), the effects of the reform are less clear cut. Higher enforcement of labor standards would lead some employers to register domestic workers who were hired off the books, despite the increase in hiring costs. Employers may adjust by reducing labor demand along the intensive margin (hours of work) rather than the extensive margin. This would be in line with studies that find larger disemployment effects of higher minimum wages when employers cannot pass the higher cost on to consumers (Harasztosi & Lindner, 2019).

If the new regulations make employment in the formal sector more attractive for unregistered workers, the reduction in labor supply should put upward pressure on wages, while in the formal sector the existence of a binding minimum wage should make wages inflexible downward despite the increase in labor supply. The effect of the reform on earnings would in turn depend on the interplay between the effect on wages and hours of work.

# III. Data and empirical strategy

## A. Data

To analyze the effects of this reform I use the Permanent Household Survey (EPH), a stratified random sample that has been conducted quarterly since July 2003 by the National Statistical Office (INDEC, 2003). The survey covers the 32 largest metropolitan areas (*aglomerados urbanos*) of the country, where 62% of the population and 68% of the country's urban population live. It is the main source for the country's socioeconomic indicators, including labor force participation, unemployment, earnings, and poverty status.

The survey has a specific question regarding whether a person is a domestic worker, which is use to define the affected group of workers. Also, all wage workers are asked whether their employer makes pension contributions for their work, and those who answer in the negative are considered unregistered.[15] This is the standard "legalistic" classification of an informal worker (Tornarolli et al., 2014). It should be noted that individuals are not asked about who their employer is and no

information is collected that could allow the government to link respondents to their employers. Workers therefore have no incentive to misreport employment and/or informality status.

For this paper, I use data from the period between 2010 and the first half of 2015. The survey was interrupted for almost a year after July 2015, which is why I do not extend the analysis further.[16] On the other hand, the reason for starting in 2010 is to avoid the recession that occurred in 2009 (when GDP fell by 6%). Because of the recession, the earnings of workers whose wages are set through collective bargaining fell in real terms in 2009 but recovered in 2010. On the other hand, wages of domestic workers (which are set by the government) remained constant, creating pre-trend differences between affected and unaffected workers. Results starting in 2009 are shown in the online appendix and are qualitatively similar to those presented here.

Monetary values are expressed in 2008 Argentine pesos (ARS). There is ample evidence that the national statistical institute falsified the inflation figures between 2007 and 2015 by a significant margin (see Cavallo et al., 2016 for a detailed description of the issue). For this reason, studies that use price data from Argentina have relied on alternative estimations produced either by private companies or the statistical offices of certain provinces, which replicate INDEC's methodology on a smaller scale. Here, I use PriceStat's chained index (Cavallo & Bertolotto, 2016; Cavallo & Rigobon, 2016), an inflation series that merges official data from the period 1943 and 2007 with data obtained by scraping the prices of millions of products sold in the country since 2007.

The EPH has a rotating panel structure: households are interviewed in two consecutive quarters, then excluded for two quarters and re-interviewed in the following two periods. Using this structure, Table A1.2 shows the proportion of registered and unregistered domestic workers and workers in other occupations conditional on their registration status in the previous year.

Before the reform, an average of 8.9% of domestic workers who reported not being registered in a given year were registered the next year (column 1), while the average for women in other low-wage service occupations was 25.5% (column 2). In the years after the reform, 12.5% of unregistered domestic workers were registered when they were re-surveyed a year later, an increase of 3.6 percentage points, or 40%, from the pre-reform period average. For non-domestic work-

ers, the probability of being registered, conditional on being unregistered the year before, remained relatively unchanged at around 24%.

Among individuals who were registered in any given year, 64.8% of domestic workers (column 3) and 95.1% of non-domestic workers (column 4) had a job in the formal sector the next year (moves from a registered to an unregistered job usually involve a change in jobs). In the post-reform period, these figures were 68.2% (an increase of 3.4 percentage points) and 92.8% (a 2.3-percentage-point reduction), respectively.

These figures suggest that the reform increased the likelihood that domestic workers become registered, as well as the likelihood that an employer registers a new hire. Unfortunately, the small number of domestic workers who appear both before and after the reform implies that the study is not powered enough to take advantage of its panel structure. Hence, throughout this paper I stack each quarterly survey within a year and use it as a repeated cross section.[17]

## B. Empirical strategy

Because the policy reform affected only one well-defined group of workers and all of these workers were treated at the same time, it can be analyzed using a difference-in-differences framework (Angrist and Krueger, 1999). Throughout this paper I use the following specification to estimate the impact of the reform on labor market outcomes of the employees:

$$Y_{ijmt} = \beta_0 + \beta_1 DW_{ijmt} + \beta_2 DW_{ijmt} \times Reform_t + \Gamma X_{ijmt} + \theta_t + \nu_j + \mu_m + \varepsilon_{ijmt} \qquad (1)$$

where $Y_{ijmt}$ is the outcome of interest for individual *i* working in sector *j* from metropolitan area (MA) *m* in year *t*. When looking at the direct effects of the reform, I focus on the formality rates, unemployment, income, and hours of work of domestic workers. For the spillover effects, I focus on the labor force participation, formality rates, earnings, and hours of work of male spouses and adolescent and young-adult children (16 to 25) of domestic workers.

$DW_{ijmt}$ indicates that the person is a domestic worker, or the spouse or child of a domestic worker depending on whether I focus on the direct or spillover effects of the policy, respectively. $Reform_t$ is a dummy variable equal to one in the post-reform periods (i.e., 2013 to 2015). $X_{imt}$ is a set of worker characteristics (which, unless otherwise specified, comprises age, age squared, country of birth, household size, marital status, literacy status, years of education, and years of education squared). Finally, I include fixed effects by year ($\theta_t$), occupation ($\nu_j$), and MA of residence ($\mu_k$).

The main parameter of interest, $\beta_2$, captures the effect of the policy change on the target population. In all cases, following Bertrand et al. (2004), I cluster the standard errors at the Metropolitan Area (MA) level to control for serial correlation across time and adjust the p-values for multiple hypothesis testing using Hochberg's step-up procedure (Benjamini and Yekutieli, 2001).

### 1. Comparison group

Choosing the appropriate comparison group is not a trivial task in this case. Although identification does not require that treatment and comparison groups be similar in their baseline characteristics, it increases the likelihood that the evolution of both groups would be similar in the absence of treatment. On the other hand, if the treated and comparison workers are similar in terms of the skills used, one could be concerned that workers might switch occupations (and thus treatment status) as a response to the reform, violating a key assumptions needed for identification of treatment effects.

Because more than 98% of domestic workers in my sample are women, I keep only female domestic workers and compare their outcomes before and after the reform with those of low-wage female workers in other service occupations. The comparison group is thus composed of cooks, waiters, cleaners, and the like. These individuals perform tasks that are similar to those of domestic workers, but they were not affected by the reform because their place of work is not a household. The results are similar when using female wage workers in all occupations as the comparison group (shown in the online appendix).

Table A1.4 presents summary statistics for female domestic workers and female low-wage workers in service occupations. Domestic workers are 40.5 years old on average, almost two years older

than individuals in the comparison group. Eight percent of them are foreign migrants, almost twice as many as female workers in service occupations.

In terms of education, they have an average of 8.9 years of schooling, which is one year less than women in the comparison group and corresponds to primary school plus almost two years of secondary school. In fact, 90% of domestic workers have finished primary school (five percentage points fewer than female workers in service occupations), but only 31% have finished secondary school (versus 44% of women in the comparison group).

Regarding labor market outcomes, the average domestic worker is a part-time worker, with fewer than 25 hours of work per week, ten hours fewer than the average woman in low-wage occupations in the service sector. Partially because of this difference, the monthly earnings of domestic workers are less than half of those of individuals in the comparison group (ARS 470 versus ARS 1,092). However, even after taking into account the difference in working time, hourly wages of domestic workers are 30% lower than for workers in the comparison group.

At baseline, only 15% of domestic workers are registered, while 63% of women in the comparison group are. However, the difference in health insurance coverage is not as large: 42% of domestic workers have healthcare coverage, as opposed to 72% of women in other low-wage service occupations. The difference between contributions to health insurance and coverage can be attributed to coverage through a spouse or parent who has a formal job.

Even though female workers in low-wage occupations in the service sector are the closest to domestic workers in terms of the tasks performed, the differences between affected and unaffected groups reduces the concern that treatment could induce workers to move across groups.

## C. Identification assumptions

The differences in observable characteristics between affected and unaffected workers, though substantial, are not an issue for obtaining unbiased estimates of the effect of the policy reform. Instead, identification relies on two crucial assumptions: no changes in group composition and that trends of the outcomes of interest be parallel in the absence of treatment. Here, I discuss each of these

assumptions in more detail and show different tests to reduce the concern that these assumptions could be violated in this context.

### 1. Stability of group composition

The first assumption refers to the fact that the characteristics that could be correlated with the outcomes of interest should not change as a result of the treatment for individuals in either the affected or unaffected group. Because the data are used as a repeated cross section, determining whether the treatment generated changes in the composition of either group is not straightforward.

One possibility is that the reform changed the type of individuals who decide to supply labor as domestic workers. To test this hypothesis, I regress each individual characteristic on a domestic worker indicator, a post-reform indicator, and an interaction between them, controlling for year, MA, and occupation fixed effects. The difference-in-differences estimate for each regression is shown in Table 1. After controlling for multiple hypothesis testing, I do not find evidence that any of the observable characteristics of domestic workers changed after the reform.

The assumption of stability of group composition would also be violated if individuals changed occupations due to the reform. I check this graphically, plotting the share (Figure A1.2) and number (Figure A1.3) of workers surveyed who are employed in each occupation. In both cases it can be seen that the composition of each group remains stable over time.

In addition to these checks, I regress the domestic worker indicator on the treatment dummy among the sample of workers of interest (women employed or unemployed with a previous job as either a domestic worker or a low-wage worker in the service sector). The results are presented in Table A1.3, where I show that, following the reform, the share of domestic workers among the sample under study increased by 1 percentage point. This represents a 1.4% increase with respect to the share of domestic workers among this group before the reform (64.4%).

Even if all these new domestic workers were registered, this would account for no more than a quarter of the effect that I find regarding the change in formality rates. Given that the observable characteristics of domestic workers after the reform is not different from those prior to the policy

change, it is likely that the incidence of this compositional change is even smaller.

Finally, I take advantage of the rotating panel structure of the data to construct transition matrices of the probability that a person is a domestic worker given their status in the labor force and their occupation in the previous year. These transition probabilities are presented in Table A1.5, showing no changes in the probability that a person is employed as a domestic worker after the reform.

### 2. Parallel trends

The second requirement for internal validity of the empirical strategy, known as "parallel trends", is equivalent to requiring that, in the absence of the policy, the evolution of the outcome variables for the affected and comparison groups would have been similar. It is not possible to directly test this assumption, because in the post-reform period individuals are either affected or unaffected. However, one can find evidence to support this assumption by looking at the behavior of the variables of interest in periods before the reform takes place.

Figures 4 and 5, provide graphical evidence that the assumption of parallel trends holds in this context. Figure 4 shows the share of registered workers in each year, and Figure 5 shows the average of the natural logarithm of hours of work per week in the main job (Panel A), hourly wages in the main job (panel B), and income per month in the main job (panel C).

Each figure includes the coefficients of the interaction between a domestic worker indicator and yearly dummies (right axis), with the year 2012 as the base year. In all cases, the coefficients corresponding to the years prior to the reform are statistically indistinguishable from zero. A more detailed analysis using this specification (i.e. replacing the interaction between a domestic worker indicator and a post-reform dummy by multiple interactions between a domestic worker indicator and yearly dummies) can be found in Appendix 3.

# IV. Labor market effects of the reform for domestic workers

The effects of the reform on labor market outcomes of domestic workers can be found in Table 2. Column 1 estimates the effect on formality rates, measured as the likelihood that the employer of a domestic worker is making contributions to the pension system on the worker's behalf. After the policy was implemented there is an increase of 4.8 percentage points in the probability that a domestic worker is registered. Given a baseline value of 15.6%, this corresponds to an increase of 30.8% in formality rates.

These effects are on the upper end of those found in previous studies, and are particularly larger than those estimated by de Melo Costa et al. (2016) for the Brazilian reform of domestic workers' labor regulations. Two likely reasons for this are that in Argentina formality rates were lower at baseline, and that the reform in Brazil did not alter the penalties or the probability of detection for employers hiring off the books.

Despite the increase after the reform, formality rates of domestic workers remain below those of other occupations even two years after the reform. This is because for many employers, based on their level of income and assets, the probability of detection did not increase enough in relation to pre-reform levels to make it more convenient to register their employee. However, given that almost 80% of domestic workers are employed by only one household, the observed increase means that more than 50 thousand employers registered a worker who was previously off the books.

Because the cost of employing a domestic worker increased for all employers, some might lay off their employees producing an increase in unemployment. This behavior, while interesting in itself, could bias the estimates for the other outcomes if it affects domestic workers in one sector more than in the other. I test this in column 2 of Table 2, where the dependent variable is an indicator that takes the value of one if the individual is unemployed, and the sample is comprised of both employed and unemployed workers who had a previous job, so it is possible to determine their last occupation.

The result suggests that the reform did not generate significant changes in employment along the extensive margin. The DiD coefficient is positive but very small and statistically indistinguishable

from zero. Nevertheless, since the standard error is large, I cannot rule out an increase in unemployment of 1 percentage point (which corresponds to an 11.3% increase from baseline). To study how this would affect the other results, in Appendix 4 I run all the regressions including unemployed individuals with a previous job (I assume they are not registered and that they have zero labor income and zero hours of work). All estimates are robust to the inclusion of unemployed workers.

In addition, I look at the net change in domestic worker jobs below and above the minimum wage following a similar approach as (Cengiz et al., 2019). I create bins of ARS 0.25 and assign workers on each bin based on their hourly wage. I then estimate the change in the number and share of domestic workers in the bins around the minimum wage after the reform.[18]

Figure A1.4 shows the results of the analysis. The largest reduction in the share (number) of workers is found for bins that are 5 and 6 ARS below the minimum wage per hour. On the other hand, the reform increased the mass of domestic workers closer (and even above) the minimum wage.[19] Whether I focus on the share or the number of workers, I cannot reject the null hypothesis of zero net change in jobs (the p-values are 0.69 and 0.41 for the share and number of workers, respectively) suggesting that the reform did not reduce employment among domestic workers.

While the reform did not increase unemployment, column 3 of Table 2 shows that hours of work of domestic workers decreased by 4.7%. Hence, employers may have chosen to reduce labor demand on the intensive rather than the extensive margin as a consequence of the increase in the cost of hiring a worker. In Table A1.6 I investigate this change further by splitting the sample between part-time and full-time workers, defining full-time as employed for either 30 or 35 hours of work. Not only the effect size is similar among full and part-time workers regardless of the cutoff used, but the share of full-time workers decreases after the reform in both cases, suggesting that this impact was homogeneous across all domestic workers.

Despite the reduction in hours of work, I do not observe a significant increase in the likelihood that a domestic worker is willing to work more hours as column 4 of Table 2 shows.[20] One potential explanation for this is that, despite the reduction in hours of work, the earnings of domestic workers were not negatively affected. In fact, column 5 of Table 2 shows that after the reform monthly

earnings of domestic workers from their main job increased by 3.7%. Together with the reduction in hours of work of 4.7%, this implies that hourly wages of domestic workers increased by 8.4% as a result of the reform (column 6).

## A. Robustness checks and treatment effect heterogeneity

One concern with the results shown above is that estimates could be capturing the effect other policies or events that might have a differential effect among domestic workers. For example, if economic growth favored mostly high-income households, these households might decide to transfer some of this additional well-being to their domestic workers.

Even though during most of the period of analysis GDP growth alternated years of expansion and contraction with an almost net zero growth (World Bank, 2021), I cannot discard that growth was uneven across the population. Although I do not have earnings data from employers, it is safe to assume that earnings of domestic workers correlate positively with those of their employers. Hence, in Table A1.7 I show estimates of the effects for each decile of labor earnings. Because the distribution of earnings is different across treatment and comparison groups and earnings evolved differently across groups after the reform, I create deciles of income using the distribution of earnings of domestic workers in the pre-reform period. I then assign non-domestic workers and domestic workers in the post-reform period to these deciles based on the reported income.

In Table A1.8 I perform a similar exercise dividing workers in deciles according to their hours of work, showing again that domestic workers employed the longest were more likely to become registered, and they were also more likely to experience an increase in monthly earnings and wages per hour.

The results show that the increase in formality rates and reduction in hours of work were mostly concentrated among domestic workers with earnings and work hours above the median. If the effects found among domestic workers were the consequence of improvements in economic conditions, and this improvement benefited high-income employers, one would not expect the reduction of hours of work to be higher for those domestic workers earning higher wages. Instead, it seems

more plausible that the reduction in hours of work was the way employers subject to higher enforcement used to reduce the higher cost of compliance with the labor regulations.

In addition, in Appendix 5 I estimate the treatment effect heterogeneity of the labor market outcomes along their distribution using Athey and Imbens' *changes-in-changes* (CIC) model (Athey and Imbens, 2006). This model is a generalization of the standard difference-in-differences model that compares individuals across groups according to their outcomes and across time according to their quantiles. This is a more realistic comparison given that the distribution of outcomes at baseline are different for the affected and unaffected groups.

The results are qualitatively similar to those presented before: the reduction in hours of work is driven by those above the median working above the median (which corresponds to approximately 25 hours a week). On the other hand, the increase in earnings per month are relatively uniform across the distribution, with a somewhat larger increase around the median. This implies that hourly wages increase monotonically along the distribution of this outcome.

An additional confounder could come from the introduction of additional policies that might affect domestic workers in a different way as other workers. One such policy is the Universal Child Allowance for Social Protection (*Asignación Universal por Hijo* or AUH), a conditional cash transfer program introduced in the October 2009.[21] To be eligible, both parents of children aged 18 or less had to be unemployed or work in the informal sector. An amendment introduced a month after its creation made domestic workers earning less than the minimum wage eligible to receive the transfer regardless of registration status, creating differential incentives to work in the formal sector between domestic workers and other wage workers with children.

While the survey does not have information about AUH beneficiaries, to analyze the extent of this concern, Table A1.9 presents the results separately for women who have children aged 18 or below and so might be eligible for the program (Panel A), and those with no children under the age of 18 (Panel B).[22] The only difference across groups can be found in the likelihood of being formal, which is lower for domestic workers with children. Although puzzling, it is possible that that domestic workers, unaware of their eligibility regardless of registration status, asked their

employers to not be registered. On the other hand, the fact that the impact of the reform on other outcomes is similar for workers with and without children may indicate that the reform improved the bargaining power of domestic workers.

## B. Interpretation of results

In recent years there has been increased interest in understanding and analyzing the effects of enforcement of labor standards in economies with dual labor markets.[23] Among these, the framework developed by (Meghir et al., 2015) is best suited to explain the my findings. In their model, homogeneous workers engage in undirected search both when unemployed and on-the-job. In turn, firms of different productivity levels can demand labor either in the formal or the informal sector. While firms that operate in the formal sector have to pay taxes and nonwage benefits to their employees, informal firms face a probability of being detected and fined that is increasing in their size.

The authors calibrate their model for the labor market of low-skilled workers in Brazil and show that, when enforcement of regulation increases, the share of formal firms increases, wages increase due to higher competition for workers in each sector (especially in the formal sector), and average firm size (the number of employees in each firm) decreases because firms that switch from the informal to the formal sector hire less labor.

The change in enforcement is arguably the main feature of the policy change I study. Before the reform there was virtually no enforcement of labor regulations, and noncompliers did not face any fines. Hence, employers had no incentive to register a domestic worker. The reform increased both the the fines faced by noncompliers, and for some of them probability of being detected. Other changes in the cost of hiring workers (such as fringe benefits, limits on hours of work or severance pay) were either relatively small in magnitude, nonbinding (because most domestic workers are part-time employees) or affected both registered an unregistered workers. While it is out of the scope of this paper to do an exercise similar to the one performed by (Meghir et al., 2015), the institutional features of Argentina and the characteristics of its labor market are similar to those of Brazil, making it likely that such counterfactual analysis would yield similar results.[24]

# V. Spillover effects of the reform

As a result of the policy reform formality rates of domestic workers increased, and although unemployment rates did not increase, average hours of work decreased. However, the high increase in hourly wages more than compensated the fall in hours of work, resulting in a moderate increase in monthly earnings.

Each of these impacts can affect the labor market outcomes other members of a domestic worker's family along several dimensions and in different ways. First, formal jobs include amenities that are enjoyed by all household members. For example, a pay stub gives individuals access to formal markets of credit and housing, which are are usually cheaper and of (in the case of the latter) better quality than informal ones. Additionally, in Argentina if a retired person dies their spouse is entitled to a survivor's pension. Therefore, access by one family member to a formal job reduces the incentives for other members to work in the formal sector themselves (Galiani and Weinschelbaum, 2012). Although empirical evidence of this prediction is lacking, studies have found disincentives towards formal employment of the extension of health care coverage (Camacho et al., 2013; Bosch and Campos-Vazquez, 2014; Bergolo and Cruces, 2014) and relatively large cash transfer programs for the unemployed (Gasparini et al., 2009).

Second, the increase in earnings perceived by domestic workers can affect the labor supply decisions of other household members. On one hand, models of collective labor supply (Chiappori, 1992) predict that the increase in earnings produces an income effect on other household members, thus reducing their labor supply either at the intensive or extensive margins. On the other hand, the increase in earnings by domestic workers may also increase their bargaining power inside the household (Heath, 2014). If spouses wanted to preserve their previous bargaining power, we would expect them to increase their labor supply and earnings.

Finally, the reduction in hours of work of domestic workers could also affect labor supply of other household members. If each household member's leisure enters in one another's utility function as a complement, we would expect that spouses and/or children of domestic workers would reduce their labor supply. Goux et al. (2014) found evidence of this in France, where the spouses of

workers whose workweek was reduced also reduced their hours of work, albeit by a lower amount.

In summary, the existing theoretical and empirical literature suggests that the reform could have a negative impact on the formality rates of the spouses and children of domestic workers. In terms of labor supply, I expect a reduction among children of domestic workers, while the impact for spouses is a priori undetermined. Hence, in this section I study the extent of these potential spillover effects of the reform within the household. I first present the effects of the reform on the labor market outcomes at the household level, and then I look at the effect on spouses and children of domestic workers separately.

## A. Household-level results

I restrict the sample to households composed of domestic workers or female workers in low-wage service occupations who live with their spouses, their children aged between 16 and 25, or both. While results are robust to including children of different age, the lower bound corresponds to the legal age to work (labor force participation is less than 0.4% below this age) and the upper bound corresponds to the 90$^{th}$ percentile of the age distribution among individuals in the survey who are categorized as children of the household head. Tables A1.12 and A1.13 present summary statistics for the samples of spouses and children, respectively.

Table 3 presents the difference-in-differences estimates on labor force participation, formality rates, hours of work and labor earnings for the entire household. Only the effect on formality rates (column 2) is significant and appears to be driven exclusively by the impact of domestic workers themselves (the effect size at the household level is approximately 1/3 of the impact found among domestic workers). In contrast, the effects on labor force participation (column 1), hours of work (column 3) and earnings (column 4) are small and imprecise. These results suggests that the reform may have triggered adjustments in the labor supply at the extensive and intensive margin within the household.

In Appendix Tables A1.10 and A1.11 I explore how these effects vary by deciles of household income and hours of work, respectively.[25] There is large heterogeneity in outcomes across deciles.

Reductions in labor force participation are high below the median of the distributions of income and hours, probably reflecting the fact that those dropping out are individuals with low attachment to the labor market. Because this changes the composition of workers across groups, the interpretation of other outcomes becomes challenging.

Increases in formality rates are higher in the center of both distributions, and reductions in hours of work seem to be higher among those at the bottom and top deciles of household income, although estimates are noisy. Finally, the increase in household earnings seems to be driven by households at or below decile 6 of the distribution of hours of work, suggesting the reform may have mostly benefited lower-income households.

## B. Labor market effects of the domestic worker reform among spouses and children

Given that the aggregate effects at the household level hide large differences across the distribution of household earnings and hours of work, it is also likely that the impacts vary by household member. Hence, in Table 4 I show the results separately for spouses of domestic workers (Panel A) and children (Panel B).

In the case of spouses of domestic workers, estimates are all negatively signed but quite small in magnitude. On the other hand, among children of domestic workers I find a significant decrease in labor force participation (column 1) of 3.3 percentage points (7% from its pre-reform mean). While the effect on other outcomes such as hours of work and wages are relatively large, the fact that some children dropped out of the labor force implies that the assumption of the stability of group composition no longer holds. Hence, these results should be taken with caution.

To further investigate the reduction in labor supply among children, in Table 5 I split the sample by gender. While both girls (Panel B) and boys (Panel C) reduce their labor force participation, the impact is stronger among the former group. Labor force participation for women is 11% lower with respect to its pre-reform mean, and it is statistically different from zero. In contrast, for men the reduction in labor force participation is less than half than that of women at 4.3%, and not

statistically different from zero.

This gender difference is further evidence that the spillover effects of the reform are driven by household members with lower labor market attachment: labor force participation at baseline is 34.7% among women, but 56.3% among men, and while employed female children work on average 29 hours per week, the corresponding figure for male children is 41.5 hours. In any case, the magnitude of the reduction in labor force participation among children of domestic workers suggests that policymakers should not neglect the potential spillover effects on the economy of the measures taken to enforce labor standards.

# VI. Conclusion

In developing countries, the design and enforcement of labor regulations is subject to intense debates. For governments, tax collection diminishes and welfare spending becomes less effective if a large proportion of employees are not registered with the authorities by their employer. Additionally, policy makers see enforcement as a means of improving the level of protection and standard of living of workers. Thus, it is common for governments to implement policies to increase the enforcement of regulations. Critics argue that enforcement of high labor standards can harm workers because firms could pass the cost of these regulations onto their employees, so that measures intended to benefit workers could reduce employment and earnings.

Assessing the effect of labor regulations and their enforcement becomes more complicated when one considers that workers' families can also be affected by these policies. This is not only because jobs in the formal sector include non-wage amenities that can be enjoyed by these members, but also because, under the assumption that these jobs are more stable, formality also reduces the volatility of household income. Despite this, the vast majority of existing studies have only focused on the direct effects on workers (Ronconi, 2010; Almeida and Carneiro, 2012; Adhvaryu et al., 2013).

This paper sheds light on the question of how labor standards affect workers and their families. To do this, I take advantage of a reform that increased both the labor standards of domestic workers

and the enforcement of compliance with these standards by their employers. I find that after the reform, compliance with labor standards improved, increasing formality rates by 31% and monthly earnings by 3.7% of domestic workers while reducing their hours of work by almost 5% with respect to the pre-reform average.

According to these results, in the short-run the reform increased the bargaining power of domestic workers, shifting part of the surplus of the labor relationship from employers to employees.[26] This is in line with research conducted in developed countries (mostly in the US) which find that labor regulations (such as minimum wage laws and bans on non-compete agreements) have positive effects on worker's outcomes when employers have market power (Azar et al., 2019; Derenoncourt & Montialoux, 2021; Lipsitz & Starr, 2021).

The findings of this study are also of particular relevance in light of the recent push toward increasing the rights of domestic workers around the world: countries such as Brazil, Chile, Ecuador, and Mexico have in recent years passed similar legislation to assimilate the labor standards of domestic workers to those of other wage employees, and in the United States, the National Domestic Workers Alliance (NDWA) has advocated to raise the labor standards for domestic workers.[27]

A back-of-the-envelope calculation indicates that for every Argentine peso spent to send letters to potential employers, the government increased its tax revenue by ARS 7.75.[28] Although these taxes entitle workers to health insurance coverage and a pension, this does not necessarily translate into higher public expenditures. This is because a significant portion of domestic workers already had healthcare coverage through another family member. Moreover, informal workers are already entitled to a reduced non-contributory pension, and because pension contributions for domestic workers do not depend on their salary, the difference per worker between the higher pensions and the amount of the contribution came to ARS 225 per month in 2013.[29]

Because domestic work is a female-dominated occupation, the improvement in the labor market outcomes of domestic workers is important in terms of women's empowerment and intra-household decision making. A substantial number of studies have documented the positive relationship between access to wage employment and women's well-being (Jensen, 2012; Majlesi, 2016; Cun-

ningham and Shah, 2017). Lack of detailed data on household decision making prevents me from analyzing this, but future work should explore whether the reform induced changes in women's bargaining power within the household.

In addition to the direct effects of the reform, I take advantage of the availability of data linking individuals within each household to study how the reform affected other members of domestic worker's families. I find a significant drop in labor force participation among adolescent and young adult children of domestic workers, but no significant changes in the labor market outcomes of spouses of domestic workers.

Treatment effect heterogeneity analysis suggests that the reduction in labor supply among children of domestic workers seems to be driven by those with low labor market attachment. While this represents an increase in wellbeing for treated households, lack of time use data prevents me from determining if this redounds in a welfare improvement for society as a whole (for example, if they used the extra time to get additional education or training).

Despite the shortcomings just described, the effects I am able to quantify suggest that by strengthening the labor standards of low-skilled workers and improving the enforcement of these standards, governments can improve the living standards of both those workers and their families at a relatively low cost.

# Notes

[1]Under the assumption of leisure complementarity across household members

[2]The breakdown of payroll taxes is as follows: 16% are pension contributions, 6% are health insurance contributions, 2% for the state-run health insurance system for the elderly, and 1.5% for the unemployment insurance fund. In addition, workers are deducted 17% of their gross wage in the concept of pension and health insurance contributions.

[3]This percentage corresponds to the contributions to pension and health insurance that the employer failed to make.

[4]Wages are set per month assuming a workday of 8 hours and a workweek of 48 hours, and per hour in case a worker is not hired full-time.

[5]The following news article reports that firms win only one of ten trials initiated by workers: https://www.clarin.com/economia/empresas-solo-ganan-juicios-laborales_0_BJ1LsCSTvXx.html. On the other hand, this article men-

tions that the number of trials in the labor jurisdiction doubled from 2010 to 2014, reaching more than 120 thousand: https://www.lanacion.com.ar/economia/en-cuatro-anos-se-duplicaron-los-juicios-laborales-nid1734898.

[6]This does not mean that they are not allowed to hold a formal job. Migratory regulations in Argentina are relatively lax, and most migrants come from countries with which Argentina has agreements allowing them to arrive and lawfully live in the country before having a job.

[7]Only live-in domestic workers (who constitute fewer than 3% of all domestic workers) were entitled to paid vacations.

[8]Even after AFIP introduced a tax break in 2006 for employers of domestic workers to encourage registration, the trend in formality rates among domestic workers since then has not been different from that of other sectors of the economy.

[9]Since there is typically only one worker per household, reports are no longer anonymous.

[10]The bill had been sent to Congress by the President in 2010.

[11]Contributions increased by 44% for the first time since 2011. During the same period, inflation was estimated at 59%.

[12]It was never specified how individuals could prove they did not employ a worker. However, after the letters were sent, AFIP sent inspectors to the homes of some individuals who had not responded to the letter to determine whether they had an unregistered employee.

[13]See https://www.clarin.com/trabajo/regimen-trabajo-domestico-ley_0_r1cE4TYPXg.html and https://www.lanacion.com.ar/sociedad/promulgan-la-ley-para-empleadas-domesticas-nid1572054 for articles in the main national newspapers about the enactment of the law. The following video from the national news agency explains the procedures for employers to register a domestic worker https://www.youtube.com/watch?v=tXX8W4IxXOo. Regarding the letters, these continued to be sent to a growing number of people. For example, in 2018, 650,000 letters were sent according to this report: https://www.lanacion.com.ar/economia/empleos/la-afip-manda-cartas-para-inducir-el-blanqueo-de-empleo-domestico-y-dice-que-hubo-36000-registros-nid2154549.

[14]The second peak corresponds to October 2014, when it became mandatory for employers to carry an occupational accident insurance policy.

[15]More precisely, the question asks whether pension contributions are deducted from their salaries. It is assumed that if this is the case, the employer is also paying their required share of the contributions.

[16]The interruption was done to assess the quality of all the work carried out by the office after the new administration that took office in 2016 raised concerns over the way INDEC was measuring prices and the CPI. To this date, there is no evidence that the EPH suffered similar issues.

[17]Similar results when data is used quarterly instead of yearly (setting the treatment period at the second quarter of 2013) are shown in Appendix 2.

[18]To be precise, I estimate the following model:

$$Y_{sjt} = \sum_{k=-6}^{8} \alpha_k DW_j^k \times Reform_t + \theta_{jt} + \nu_{sj} + \omega_{st} + u_{sjt} \quad (2)$$

where $Y_{sjt}$ is the share (number) of female workers in occupation $s = \{DW; OW\}$ (domestic worker or other low-wage service sector worker) in wage bin *j* in year *t*. $DW_j^k$ is an indicator that takes the value of one for domestic workers in wage bins *j* that are between *k* and *k+1* ARS relative to the minimum wage. $Reform_t$ is an indicator that takes the value of one for the years after the reform (i.e., from 2013 to 2015). I include bin-by-year, occupation-by-bin and occupation-by-year fixed effects $\theta_{jt}$, $\nu_{sj}$, and $\omega_{st}$, respectively.

[19]It should be noted that, while the reform increased enforcement of labor regulations (including the minimum wage), enforcement remained far from perfect.

[20]It is also possible that domestic workers reduced their labor supply following the increase in wages. However, this is unlikely given that most domestic workers are part-time employees and most of them are in the bottom deciles of the income distribution of the country. Moreover, the share of domestic workers who are willing to work more hours at baseline (17%) is more than twice the corresponding figure for other female low-wage workers (7%).

[21]See Gasparini et al. (2009) for a description of the program.

[22]Garganta et al. (2017) show that the transfer did not increase the proportion of new mothers.

[23]See for example Basu et al. (2010), Almeida and Carneiro (2012), and Ulyssea (2018)

[24]The authors model the labor market along the extensive margin, but it is possible to think of firm size in terms of hours of work and the wage of being per hour instead of per month. In turn, workers would receive job offer composed of a monthly wage and a number of hours of work.

[25]Because outcomes are different in levels across treatment and comparison groups, I define deciles of household income (hours of work) according to its distribution among treated households in the pre-reform period.

[26]It is possible that in the long run further adjustments by employers and/or employees changed some of the characteristics of the labor market for domestic workers and reduced the magnitude of these effects.

[27]See the NDWA website at https://www.domesticworkers.org and this article from the New York Times explaining the work of NDWA for more information.

[28]Pomeranz (2015) calculates the cost of sending one certified letter to be $1 in Chile, which translates to approximately ARS 5.8 in 2013. Since 200,000 letters were sent and 60,000 domestic workers were registered, this implies a "compliance rate" of 0.3. In turn, contributions for workers hired for 16 hours a week or more were set at ARS 135 in May 2013.

[29]This assumes that each worker contributes for 30 years (the minimum required to access a defined-benefit pension) and receives pensions for 15 years, from the time they turn 60 until age 75.

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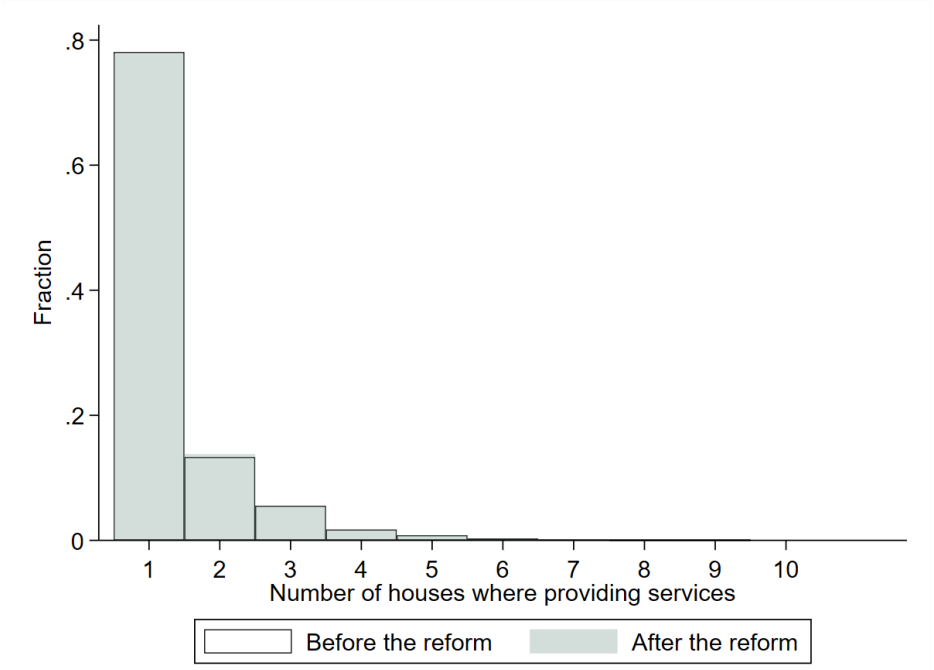
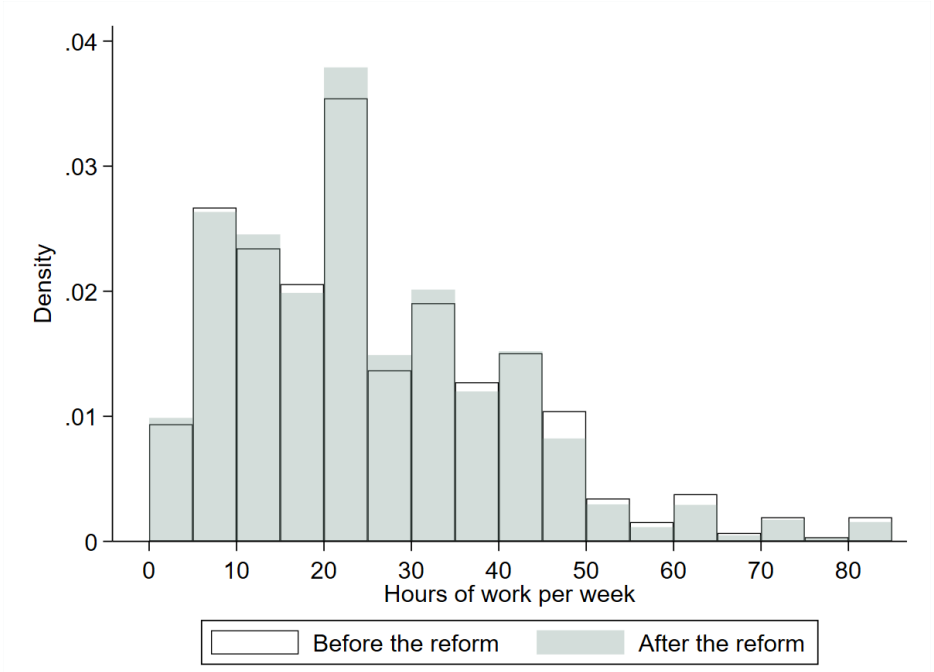
Figure 1: Number of houses where domestic workers are employed



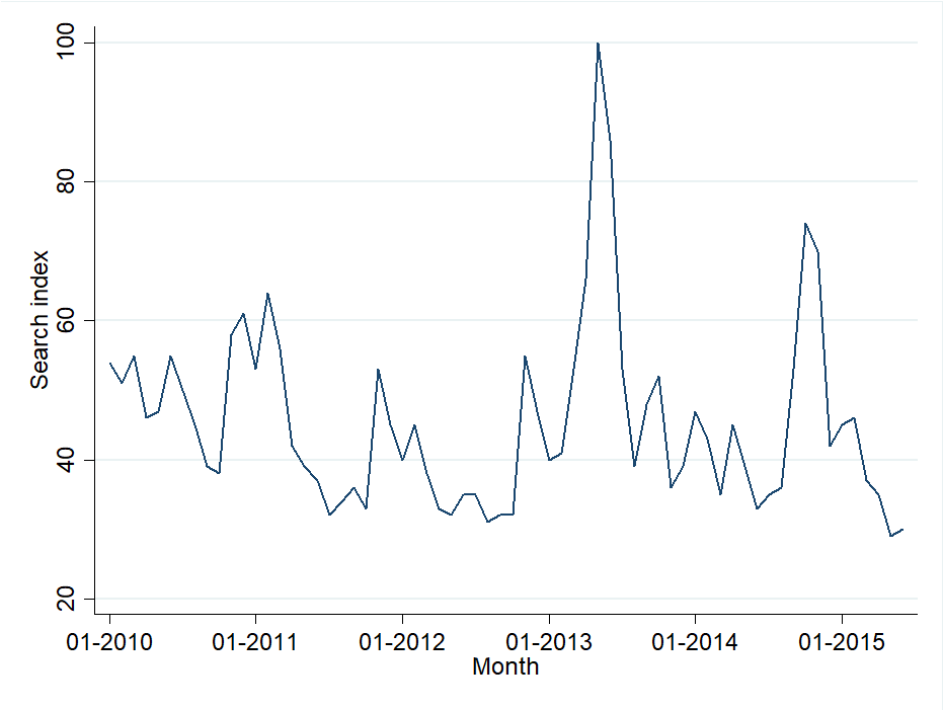

Note: The graph shows the histogram of the number of employers as reported by domestic workers for the pre-treatment years (2010 to 2012) and the post-treatment years (2013-2015).

Figure 2: Number of hours of work per week of domestic workers



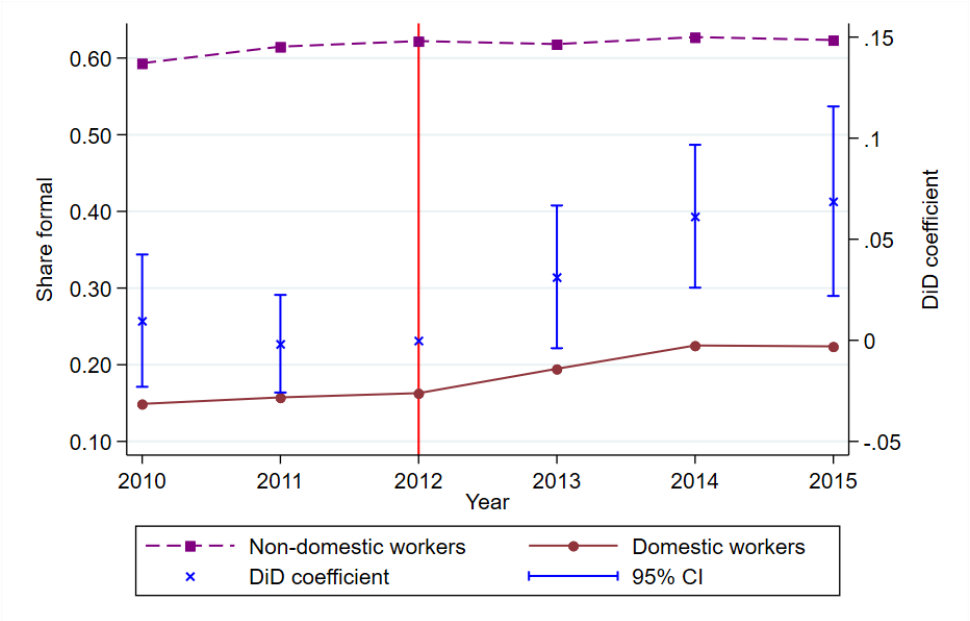

Note: The graph shows the distribution of hours of work per week as reported by domestic workers for the pre-treatment years (2010 to 2012) and the post-treatment years (2013-2015). Hours of work per week are binned in intervals of five hours.

Figure 3: Index of searches for "domestic worker" over time



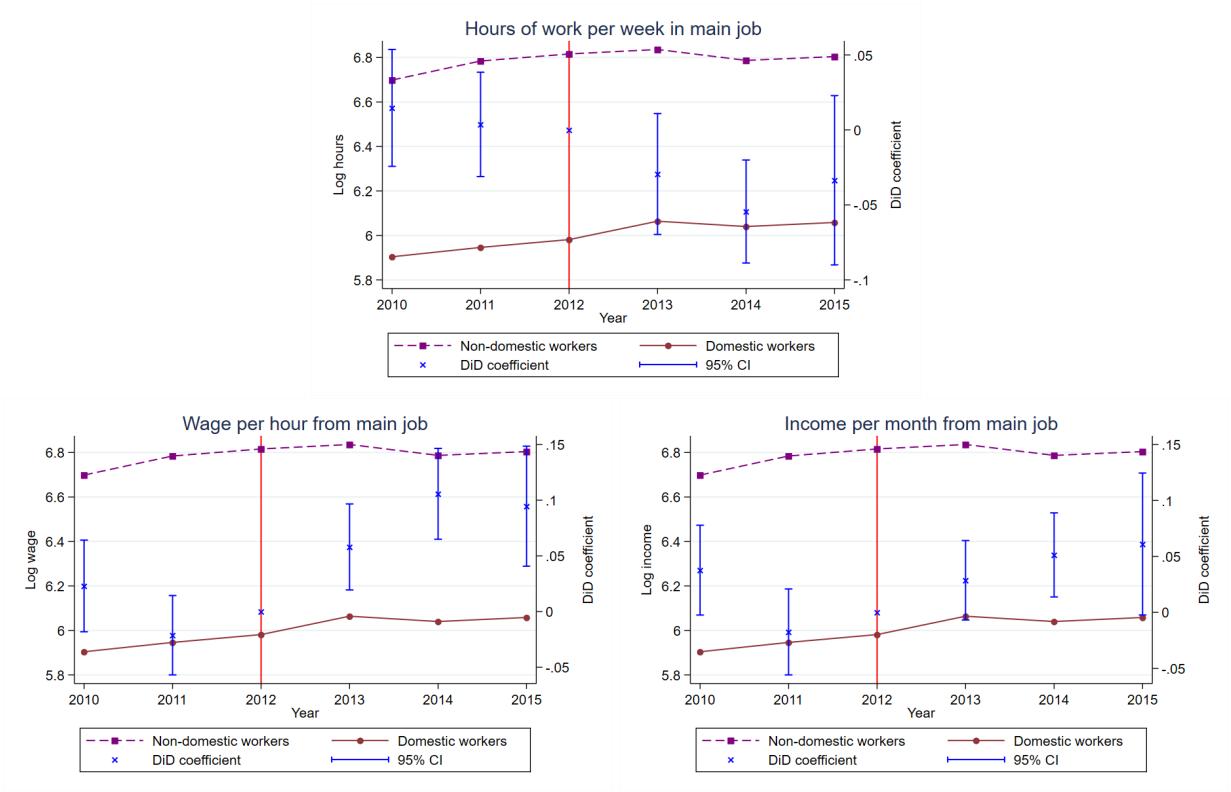

Note: The figure shows the relative number of searches for the term "domestic worker" (*empleada doméstica*) on Google between January 2010 and July 2015. The y-axis shows the frequency of searches for the term with respect to the peak of searches (registered in May 2010, the month after the reform to labor rights passed) during this time window .

Figure 4: Share of registered workers




Note: The Figure shows, for each year, the share of domestic workers and female workers in other low-wage service occupation that are registered (right axis), and the corresponding difference-in-differences coefficient (left axis). The base period corresponds to the year 2012.

Figure 5: Means of labor market outcomes per year and occupation




Note: The Figures show, for each year, the average of the natural logarithm of hours of work per week in the main job (panel A) wages per hour in the main occupation (panel B), and income per month from the main job (panel C), for domestic workers and female workers in low-wage service occupations separately. Each Figure includes the difference-in-differences coefficient for each year (right axis), using the year 2012 as the base category. Logarithms taken from monetary values expressed in Argentine Peso of 2008.

Table 1: Estimates of the effect of the reform on observable characteristics

| | Age (1) | Internal migrant (2) | Foreign migrant (3) | Household size (4) | Married (5) | Divorced (6) | Widow (7) | Literate (8) | Attended school (9) | Primary school (10) | Secondary school (11) | Tertiary school (12) | Years of education (13) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Domestic worker × Reform | 0.016 | 0.017 | -0.004 | 0.022 | 0.035 | 0.002 | -0.041* | -0.022 | -0.015 | 0.017 | -0.029 | 0.022 | -0.004 |
| | (0.026) | (0.023) | (0.019) | (0.024) | (0.033) | (0.026) | (0.021) | (0.020) | (0.016) | (0.021) | (0.020) | (0.028) | (0.020) |
| Observations | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 | 54963 |
| q-value | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 |

*Note:* The table shows the difference-in-differences estimate for the standardized value of each characteristic. Internal and foreign migrant are indicators that take the value of one if the individual is an internal or foreign migrant, respectively. Married, divorced and widow are indicators that take the value of one if the respondent is married, divorced or widow, respectively. Attended school is an indicator that takes the value of one if the respondent ever attended school. Primary school, secondary school and tertiary education are indicators that takes the value of one if the respondent finished each level of education. The comparison group is composed of female wage worker in blue-collar service occupations. Standard errors clustered at the Metropolitan Area (MA) level. Q-value correspond Hochberg's q-values that adjust for False Discovery Rate.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 2: Effect of policy reform on labor market outcomes of domestic workers

| | Registered | Unemployed | Hours of work per week on main job | Underemployment | Income per month from main job | Wage per hour from main job |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Domestic worker × Reform | 0.048*** | 0.000 | -0.047*** | 0.002 | 0.037** | 0.084*** |
| | (0.012) | (0.006) | (0.013) | (0.007) | (0.017) | (0.015) |
| Mean dependent variable | 0.156 | 0.0868 | 24.66 | 0.169 | 469.6 | 5.889 |
| R-squared | 0.315 | 0.093 | 0.201 | 0.087 | 0.432 | 0.306 |
| Observations | 54,963 | 60,394 | 54,963 | 54,963 | 54,963 | 54,963 |
| q-value | 0.000 | 0.995 | 0.003 | 0.995 | 0.075 | 0.000 |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. In column 2, the dependent variable is an indicator that takes the value of one if the individual is unemployed. The dependent variable in column 3 is the natural logarithm of number of hours of work per week in the main job. In column 4, the dependent variable is an indicator that takes the value of one if the respondent is willing to work more hours. In columns 5 and 6, the dependent variable is the natural logarithm of income from the main job and the hourly wage from the main job, respectively. In all cases, the coefficients are difference-in-differences estimates from an OLS regression.
The sample is composed of employed individuals, with the exception of column 2, where the sample includes all employed and unemployed individuals with a previous job. Domestic workers refers to female respondents who identify themselves as domestic workers. The comparison group is composed of female wage workers in low-wage service occupations. Means of dependent variable correspond to averages for the affected group in the pre-reform period. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.
*** p<0.01, ** p<0.05, * p<0.1

Table 3: Impact of domestic worker's reform on labor market outcomes at the household level

| | Labor force participation (1) | Share registered (2) | Hours of work per week (3) | Labor income per month (4) |
|---|---|---|---|---|
| Domestic worker × Reform | -0.008 | 0.032** | -0.007 | 0.023 |
| | (0.007) | (0.013) | (0.017) | (0.026) |
| Mean dependent variable | 0.767 | 0.274 | 73.65 | 1668 |
| R-squared | 0.038 | 0.208 | 0.036 | 0.134 |
| Observations | 36,194 | 36,194 | 36,194 | 36,194 |
| q-value | 0.675 | 0.056 | 0.685 | 0.685 |
| Controls | No | No | No | No |
| Year Fixed Effects | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | No | No | No |
| MA Fixed Effects | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 |

*Note:* Dependent variable in column 1 is the share of individuals in the household of legal working age (16 and above) who are working or looking for a job. In column 2, the dependent variable is the share of workers in the household who are registered by their employer and therefore work in the formal sector. The dependent variable in column 3 is natural logarithm of combined number of hours of work per week of all household members who are working. In column 4, the dependent variable is the natural logarithm of the combined labor income per month of all household members who are working. Coefficients are difference-in-differences estimates from an OLS regression. Domestic worker refers to household in which one member is a domestic worker. The sample includes all households in which there is a domestic worker or a woman employed in a low-wage occupation in the service sector who has a spouse and/or children of working age (16 and over). Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 4: Impact of domestic worker's reform on labor market outcomes of spouses and children

| | Participation | Registered | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| *Panel A: Spouses* | | | | | |
| Spouse of Domestic worker × Reform | -0.009 | -0.004 | -0.009 | -0.028* | -0.019 |
| | (0.009) | (0.018) | (0.009) | (0.016) | (0.018) |
| Mean dependent variable | 0.89 | 0.63 | 46.9 | 1541 | 8.83 |
| R-squared | 0.243 | 0.265 | 0.178 | 0.570 | 0.473 |
| Observations | 24,054 | 13,486 | 13,486 | 13,486 | 13,486 |
| q-value | 0.675 | 0.821 | 0.675 | 0.423 | 0.675 |
| *Panel B: Children* | | | | | |
| Child of Domestic Worker × Reform | -0.033** | 0.000 | -0.035 | 0.003 | 0.038* |
| | (0.012) | (0.015) | (0.027) | (0.030) | (0.022) |
| Mean dependent variable | 0.457 | 0.299 | 36.76 | 860.1 | 6.319 |
| R-squared | 0.305 | 0.328 | 0.315 | 0.516 | 0.353 |
| Observations | 31,282 | 8,820 | 8,820 | 8,820 | 8,820 |
| q-value | 0.163 | 0.975 | 0.975 | 0.975 | 0.975 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, and the hourly wage from the main job, respectively. Coefficients are difference-in-differences estimates from an OLS regression. In Panel A, the sample includes all spouses of female domestic workers and those of female workers from other low-wage service occupations (column 1) and only those who are employed (columns 2 through 7). In Panel B, the sample includes all children of household heads aged 16 to 25 (column 1) and those who are employed (columns 2 through 5). Treated group corresponds to men (Panel A) and children (Panel B) whose spouse (mother) is a domestic worker. Comparison group correspond to men (Panel A) and children (Panel B) whose spouse (mother) is a worker in a low-wage service occupation. Mean dependent variables correspond to average for the affected group in the pre-reform period, and in the case of earnings they are expressed in Argentina Pesos of 2008. Controls include age, age squared, gender, household size, marital status, years of education of the household head, years of education of the household head squared, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

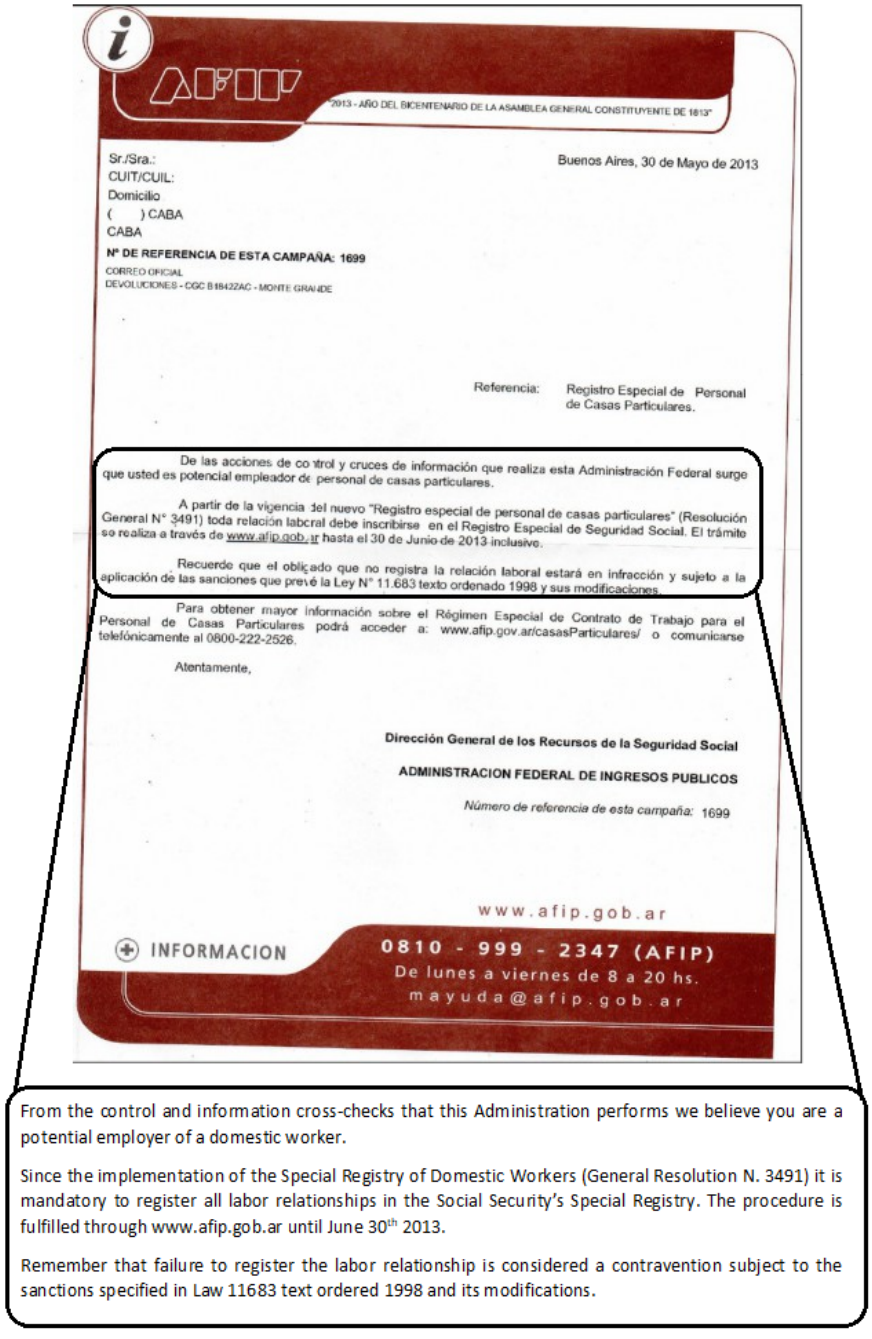
Table 5: Impact of domestic worker's reform on children's labor market outcomes

| | Participation | Registered | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| *Panel A: All Children* | | | | | |
| Child of Domestic Worker × Reform | -0.033** | 0.000 | -0.035 | 0.003 | 0.038* |
| | (0.012) | (0.015) | (0.027) | (0.030) | (0.022) |
| Mean dependent variable | 0.457 | 0.299 | 36.76 | 860.1 | 6.319 |
| R-squared | 0.305 | 0.328 | 0.315 | 0.516 | 0.353 |
| Observations | 31,282 | 8,820 | 8,820 | 8,820 | 8,820 |
| q-value | 0.163 | 0.975 | 0.975 | 0.975 | 0.975 |
| *Panel B: Female Children* | | | | | |
| Child of Domestic Worker × Reform | -0.039** | -0.016 | -0.050 | 0.015 | 0.065 |
| | (0.016) | (0.036) | (0.051) | (0.050) | (0.042) |
| Mean dependent variable | 0.347 | 0.279 | 29.05 | 673 | 6.307 |
| R-squared | 0.233 | 0.357 | 0.305 | 0.514 | 0.340 |
| Observations | 15,382 | 3,269 | 3,269 | 3,269 | 3,269 |
| q-value | 0.353 | 0.975 | 0.975 | 0.975 | 0.975 |
| *Panel C: Male Children* | | | | | |
| Child of Domestic Worker × Reform | -0.024 | 0.008 | -0.020 | 0.005 | 0.026 |
| | (0.020) | (0.022) | (0.033) | (0.048) | (0.031) |
| Mean dependent variable | 0.563 | 0.311 | 41.54 | 974.2 | 6.318 |
| R-squared | 0.344 | 0.339 | 0.194 | 0.480 | 0.391 |
| Observations | 15,899 | 5,519 | 5,519 | 5,519 | 5,519 |
| q-value | 0.975 | 0.975 | 0.975 | 0.975 | 0.975 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, the hourly wage from the main job, income from all jobs, and total income, respectively. Coefficients are difference-in-differences estimates from an OLS regression. The sample includes all children of household heads aged 16 to 25 (column 1) and those who are employed (columns 2 through 5). Treated group corresponds to children whose mother is a domestic worker. Comparison group correspond to children whose mother is a worker in other low-wage service occupations. Mean dependent variables correspond to average for the affected group in the pre-reform period, and in the case of earnings they are expressed in Argentina Pesos of 2008. Controls include age, age squared, gender, household size, marital status, years of education of the household head, years of education of the household head squared, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.
*** p<0.01, ** p<0.05, * p<0.1

# Appendix 1 Additional figures and tables

Figure A1.1: Letter sent by the tax authority compelling potential employers to register a domestic worker



2013 - AÑO DEL BICENTENARIO DE LA ASAMBLEA GENERAL CONSTITUYENTE DE 1813"

Sr./Sra.:
CUIT/CUIL:
Domicilio
( ) CABA
CABA

Buenos Aires, 30 de Mayo de 2013

**Nº DE REFERENCIA DE ESTA CAMPAÑA: 1699**

CORREO OFICIAL
DEVOLUCIONES - CGC B18422AC - MONTE GRANDE

Referencia: Registro Especial de Personal de Casas Particulares.

De las acciones de control y cruces de información que realiza esta Administración Federal surge que usted es potencial empleador de personal de casas particulares.

A partir de la vigencia del nuevo "Registro especial de personal de casas particulares" (Resolución General N° 3491) toda relación laboral debe inscribirse en el Registro Especial de Seguridad Social. El trámite se realiza a través de www.afip.gob.ar hasta el 30 de Junio de 2013 inclusive.

Recuerde que el obligado que no registra la relación laboral estará en infracción y sujeto a la aplicación de las sanciones que prevé la Ley N° 11.683 texto ordenado 1998 y sus modificaciones.

Para obtener mayor información sobre el Régimen Especial de Contrato de Trabajo para el Personal de Casas Particulares podrá acceder a: www.afip.gov.ar/casasParticulares/ o comunicarse telefónicamente al 0800-222-2526.

Atentamente,

**Dirección General de los Recursos de la Seguridad Social**

**ADMINISTRACION FEDERAL DE INGRESOS PUBLICOS**

*Número de referencia de esta campaña:* 1699

www.afip.gob.ar

INFORMACION

0810 - 999 - 2347 (AFIP)
De lunes a viernes de 8 a 20 hs.
mayuda@afip.gob.ar

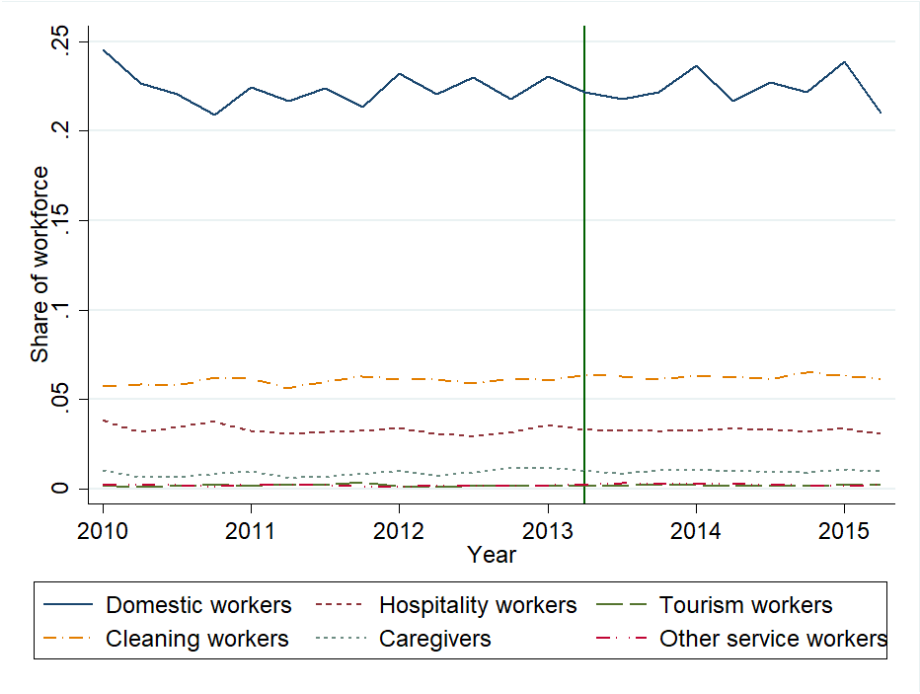
From the control and information cross-checks that this Administration performs we believe you are a potential employer of a domestic worker.

Since the implementation of the Special Registry of Domestic Workers (General Resolution N. 3491) it is mandatory to register all labor relationships in the Social Security's Special Registry. The procedure is fulfilled through www.afip.gob.ar until June 30th 2013.

Remember that failure to register the labor relationship is considered a contravention subject to the sanctions specified in Law 11683 text ordered 1998 and its modifications.

Note: The image shows the letter that the tax authority (AFIP) sent to potential employers of domestic workers compelling them to register such employee. The letter specifies which laws and procedures contain the sanctions employers would face if they do not comply with the regulations.

Figure A1.2: Share of workers by occupation

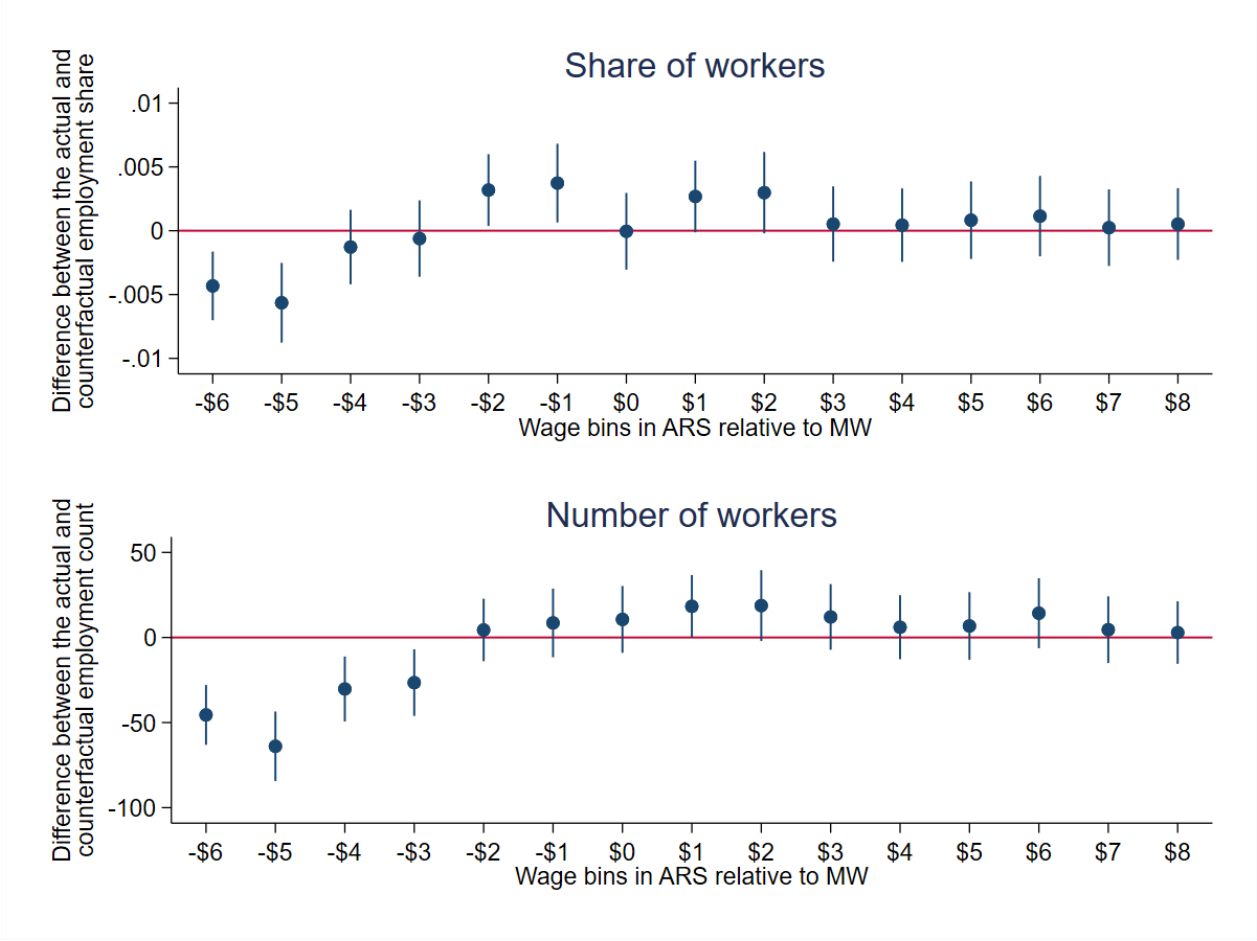



Note: The Figure shows the share of domestic workers and of workers in each occupation of the service sector for every wave in which the survey was conducted. Occupation is self-reported by survey respondents.

Figure A1.3: Number of workers by occupation

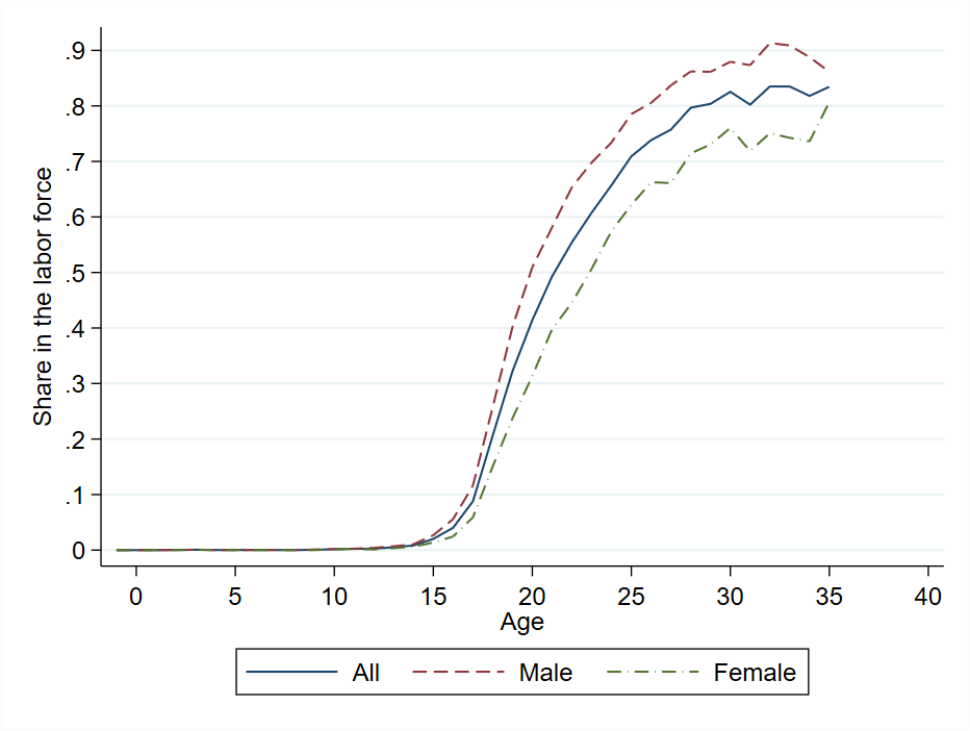

Note: The Figure shows the number of domestic workers and of workers in each occupation of the service sector for every wave in which the survey was conducted. Occupation is self-reported by survey respondents.

Figure A1.4: Impact of domestic worker reform on wage distribution




Note: The Figures show the change in the share (number) of domestic workers within each wage bin with respect to the minimum wage after the reform. In both cases the null hypothesis of no net job destruction (the sum of all wage bin coefficients is zero) cannot be rejected, with p-values of 0.69 and 0.41, respectively

Figure A1.5: Share of children in the labor force, by age




Note: The Figure shows the share of individuals who are employed or looking for a job by age. The sample is composed of individuals categorized as children of the household head.

Table A1.1: Labor regulations by occupation and time

| | Domestic workers before reform | Domestic workers after reform | Other workers |
|---|---|---|---|
| Minimum wage | Set by Government (Federal minimum or below) | Set by Government (Federal minimum or below) | Federal minimum or collective bargaining |
| Health and pension contributions | Fixed sum | Fixed sum | 26.5% of gross salary |
| Maximum hours of work | 12/day | 8/day and 48/week | 8/day and 48/week |
| Paid holidays per year | Minimum of 2 weeks only for live-in workers | Minimum of 2 weeks | Minimum of 2 weeks |
| Paid sick leave | Only for live-in workers | All workers | All workers |
| Paid maternity leave | No | Yes (paid by Government) | Yes (Paid by employer) |
| Accident insurance policy | Not required | Mandatory for each worker | Mandatory for each worker |
| Fines to employers for hiring off the books | Not specified | ARS 7500 | 25% of salary per month of employment plus ARS 7500 |
| Severance payment in case of dismissal | 1/2 monthly salary per year of work | 1 monthly salary per year of work | 1 monthly salary per year of work |
| Severance payment to unregistered workers | 1/2 monthly salary per year of work | 2 monthly salaries per year of work | 2 monthly salaries per year of work |

*Note:* The Table shows the main labor regulations to all workers except domestic workers (column 1), domestic workers before the reform took place (column 2) and the changes introduced by the reform (column 3). The reform to domestic worker's regulations took place in April 2013.

Table A1.2: Share of registered workers in each year by registration status the previous year and type of worker.

| Period | Year | Not registered the previous year | | Registered the previous year | |
|---|---|---|---|---|---|
| | | Domestic workers (1) | Other workers (2) | Domestic workers (3) | Other workers (4) |
| Pre-reform | 2011 | 0.081 | 0.254 | 0.672 | 0.941 |
| | 2012 | 0.097 | 0.256 | 0.623 | 0.962 |
| | Average | 0.089 | 0.255 | 0.648 | 0.951 |
| Post-reform | 2013 | 0.114 | 0.265 | 0.649 | 0.940 |
| | 2014 | 0.124 | 0.204 | 0.716 | 0.930 |
| | 2015 | 0.136 | 0.250 | 0.680 | 0.913 |
| | Average | 0.125 | 0.240 | 0.682 | 0.928 |

*Note:* The table shows, for each year, the proportion of workers who are registered, depending on their registration status as reported in the previous year and their type of work. Other workers refers to female wage workers with blue-collar occupations in the service sector.

Table A1.3: Likelihood of being a domestic worker after the reform

| | Employed (1) | Employed & unemployed with previous job (2) |
|---|---|---|
| Reform | 0.009** | 0.009*** |
| | (0.003) | (0.003) |
| Mean dependent variable | 0.644 | 0.643 |
| R-squared | 0.910 | 0.905 |
| Observations | 54,963 | 60,394 |
| Controls | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes |
| Number of clusters | 32 | 32 |

*Note:* The dependent variable is an indicator that takes the value of one if the individual considers herself a domestic worker. The sample in column 1 is composed of women employed at the time of the survey either as a domestic worker or as a blue collar worker in the service sector, and in column 2 the sample also includes all unemployed women whose previous job was either domestic work or a blue collar job in the service sector. In both cases, the coefficients are difference-in-differences estimates from an OLS regression. Mean dependent variable corresponds to the share of domestic workers in the sample in the pre-reform period. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.4: Summary statistics

| | Domestic workers | Low-wage service workers | Difference |
|---|---|---|---|
| **Demographics** | | | |
| Age | 40.50 | 38.76 | -1.735*** |
| Share internal migrant | 0.19 | 0.19 | 0.003 |
| Share foreign migrant | 0.08 | 0.05 | -0.031*** |
| Share married | 0.45 | 0.47 | 0.024*** |
| Household size | 4.32 | 4.36 | 0.041 |
| **Education** | | | |
| Literacy | 0.99 | 1.00 | 0.004*** |
| Ever attended school | 0.99 | 1.00 | 0.003*** |
| Complete primary school (share) | 0.90 | 0.95 | 0.050*** |
| Complete secondary school (share) | 0.31 | 0.44 | 0.133*** |
| Complete higher education (share) | 0.02 | 0.05 | 0.027*** |
| Years of education | 8.91 | 9.98 | 1.076*** |
| **Work** | | | |
| Hours of work per week | 24.66 | 34.97 | 10.315*** |
| Monthly income (2008 ARS) | 469.56 | 1095.85 | 626.296*** |
| Hourly wage (2008 ARS) | 5.89 | 8.39 | 2.498*** |
| Tenure (months) | 49.25 | 38.95 | -10.299*** |
| Pension contribution | 0.16 | 0.61 | 0.454*** |
| Health insurance contribution | 0.15 | 0.62 | 0.470*** |
| Has health insurance | 0.42 | 0.72 | 0.296*** |
| **Observations** | 19174 | 10582 | |

*Note:* Mean refers to the mean of the variable for the corresponding group in the pre-reform period (2010-2012). The column Difference shows the difference in the variable mean in the pre-reform period between affected and comparison groups, with stars representing the statistical significance of the difference. Domestic workers refers to female respondents who identify themselves as domestic workers. Low-wage service workers refers to female wage workers in other low-wage service occupations.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.5: Share of individuals employed as domestic workers each year by occupation and labor force status in the previous year.

| Year | Domestic worker | Female service worker | Inactive |
|---|---|---|---|
| 2011 | 0.901 | 0.136 | 0.386 |
| 2012 | 0.904 | 0.147 | 0.405 |
| 2013 | 0.906 | 0.111 | 0.372 |
| 2014 | 0.920 | 0.134 | 0.375 |
| 2015 | 0.903 | 0.152 | 0.414 |

*Note:* The table shows, for each year, the proportion of female wage workers who are employed as domestic workers, depending on their occupation and labor force participation status in the previous year. Female service worker refers to women employed in blue-collar occupations in the service sector.

Table A1.6: Effect of policy reform on hours of work for full and part-time workers

| | Full-time cutoff: 30 hours | | | Full-time cutoff: 35 hours | | |
|---|---|---|---|---|---|---|
| | Full time worker | Hours of work | Hours of work | Full time worker | Hours of work | Hours of work |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Domestic worker × Reform | -0.024* | -0.029* | -0.022** | -0.019* | -0.023 | -0.020** |
| | (0.014) | (0.017) | (0.009) | (0.010) | (0.017) | (0.008) |
| Mean dependent variable | 0.259 | 14.98 | 42.30 | 0.354 | 16.94 | 46.74 |
| Type of worker | | Part-time | Full-time | | Part-time | Full-time |
| R-squared | 0.168 | 0.124 | 0.096 | 0.138 | 0.163 | 0.077 |
| Observations | 54,963 | 29,273 | 25,684 | 54,963 | 36,304 | 18,653 |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 | 32 |

*Note:* In columns 1 and 4, the dependent variable is an indicator that takes the value of one if the worker is employed more than 30 and 35 hours, respectively. In columns 2, 3, 5 and 6, the dependent variable is the natural logarithm of number of hours of work per week in the main job. In all cases, the coefficients are difference-in-differences estimates from an OLS regression.
The sample is composed of employed individuals. Domestic workers refers to female respondents who identify themselves as domestic workers. The comparison group is composed of female wage workers in low-wage service occupations. Means of dependent variable correspond to averages for the affected group in the pre-reform period. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.7: Effect of policy reform by income deciles

| | Registered | Hours of work per week | Underemployment |
|---|---|---|---|
| | (1) | (2) | (3) |
| Decile 1 | 0.021 | -0.03 | 0.05 |
| | (0.017) | (0.091) | (0.051) |
| Decile 2 | -0.065* | -0.041 | 0.107** |
| | (0.036) | (0.072) | (0.041) |
| Decile 3 | -0.015 | -0.073 | 0.007 |
| | (0.021) | (0.064) | (0.047) |
| Decile 4 | -0.024 | -0.116 | -0.024 |
| | (0.026) | (0.075) | (0.039) |
| Decile 5 | 0.053 | -0.185*** | 0.081*** |
| | (0.035) | (0.060) | (0.029) |
| Decile 6 | -0.017 | -0.208*** | 0.018 |
| | (0.037) | (0.049) | (0.029) |
| Decile 7 | 0.074** | -0.129*** | -0.008 |
| | (0.031) | (0.043) | (0.021) |
| Decile 8 | 0.081** | -0.163*** | -0.015 |
| | (0.034) | (0.030) | (0.020) |
| Decile 9 | -0.006 | -0.166*** | 0.049*** |
| | (0.034) | (0.026) | (0.013) |
| Decile 10 | -0.005 | -0.220*** | 0.018* |
| | (0.022) | (0.029) | (0.010) |
| Observations | 54,918 | 54,918 | 54,918 |
| Controls | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes |
| MA Fixed Effects | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 |

*Note:* The table reports the difference-in-differences estimates of each outcome for the corresponding decile of individual income. Deciles are determined according to the distribution of income of domestic workers in the pre-reform period. Dependent variable in column 1 is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. In column 2, the dependent variable is the natural logarithm of number of hours of work per week in the main job. The dependent variable in column 3 is is an indicator that takes the value of one if the respondent is willing to work more hours. The sample is composed of employed women who identify themselves as domestic workers or who are employed in low-wage service occupations. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.8: Effect of policy reform by deciles of hours of work

| | Registered | Income per month from main job | Wage per hour from main job |
|---|---|---|---|
| | (1) | (2) | (3) |
| Decile 1 | 0.033 | 0.008 | 0.014 |
| | (0.032) | (0.083) | (0.076) |
| Decile 2 | -0.002 | 0.016 | 0.019 |
| | (0.030) | (0.051) | (0.052) |
| Decile 3 | 0 | 0.035 | 0.054 |
| | (0.029) | (0.057) | (0.057) |
| Decile 4 | 0.103*** | 0.098 | 0.094 |
| | (0.037) | (0.076) | (0.076) |
| Decile 5 | 0.066* | 0.029 | 0.029 |
| | (0.034) | (0.044) | (0.044) |
| Decile 6 | 0.109*** | 0.116*** | 0.114*** |
| | (0.026) | (0.029) | (0.029) |
| Decile 7 | 0.061*** | 0.071** | 0.072** |
| | (0.022) | (0.030) | (0.030) |
| Decile 8 | 0.112*** | 0.159*** | 0.162*** |
| | (0.032) | (0.038) | (0.039) |
| Decile 9 | 0.072*** | 0.088*** | 0.098*** |
| | (0.017) | (0.020) | (0.020) |
| Decile 10 | 0.085** | -0.001 | -0.01 |
| | (0.032) | (0.033) | (0.038) |
| Observations | 54,918 | 54,918 | 54,918 |
| Controls | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes |
| MA Fixed Effects | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 |

*Note:* The table reports the difference-in-differences estimates of each outcome for the corresponding decile of individual hours of work. Deciles are determined according to the distribution of income of domestic workers in the pre-reform period. Dependent variable in column 1 is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. In column 2, the dependent variable is the natural logarithm of income per month from the main job. The dependent variable in column 3 is the natural logarithm of the wage per hour in the main job. The sample is composed of employed women who identify themselves as domestic workers or who are employed in low-wage service occupations. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.9: Effect of policy reform on labor market outcomes of domestic workers with and without children

| | Registered | Unemployed | Hours of work per week on main job | Underemployment | Income per month from main job | Wage per hour from main job |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *Panel A: With children* | | | | | | |
| Domestic worker × Reform | 0.032** | -0.001 | -0.042** | 0.006 | 0.040** | 0.082*** |
| | (0.012) | (0.006) | (0.016) | (0.008) | (0.019) | (0.018) |
| Mean dependent variable | 0.127 | 0.0979 | 23.16 | 0.189 | 437.2 | 5.837 |
| R-squared | 0.332 | 0.093 | 0.218 | 0.091 | 0.441 | 0.313 |
| Observations | 36,542 | 40,497 | 36,542 | 36,542 | 36,542 | 36,542 |
| *Panel B: Without children* | | | | | | |
| Domestic worker × Reform | 0.082*** | 0.002 | -0.053** | -0.004 | 0.036* | 0.089*** |
| | (0.020) | (0.009) | (0.020) | (0.011) | (0.020) | (0.018) |
| Mean dependent variable | 0.213 | 0.0647 | 27.55 | 0.128 | 531.9 | 5.988 |
| R-squared | 0.287 | 0.104 | 0.182 | 0.076 | 0.435 | 0.322 |
| Observations | 18,413 | 19,889 | 18,413 | 18,413 | 18,413 | 18,413 |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 | 32 |

*Note:* Panel A shows the results for women who have children aged 18 or less and could thus eligible for the program. Panel B report results for women who do not have children aged 18 or less, and hence are not eligible for the Universal Child Allowance for Social Protection (AUH) program. In column 1, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. In column 2, the dependent variable is an indicator that takes the value of one if the individual is unemployed. The dependent variable in column 3 is the natural logarithm of number of hours of work per week in the main job. In column 4, the dependent variable is an indicator that takes the value of one if the respondent is willing to work more hours. In columns 5 and 6, the dependent variable is the natural logarithm of income from the main job and the hourly wage from the main job, respectively. In all cases, the coefficients are difference-in-differences estimates from an OLS regression. The sample is composed of employed individuals, with the exception of column 2, where the sample includes all employed and unemployed individuals with a previous job. Domestic workers refers to female respondents who identify themselves as domestic workers. The comparison group is composed of female wage workers in low-wage service occupations. Means of dependent variable correspond to averages for the affected group in the pre-reform period. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.10: Household level effects of policy reform by decile of household income

| | Labor force participation (1) | Share registered (2) | Hours of work per week (3) |
|---|---|---|---|
| Decile 1 | -0.03 | 0.018 | -0.22 |
| | (0.033) | (0.031) | (0.138) |
| Decile 2 | 0.029 | -0.003 | -0.017 |
| | (0.045) | (0.040) | (0.122) |
| Decile 3 | -0.036 | 0.095* | -0.015 |
| | (0.028) | (0.056) | (0.064) |
| Decile 4 | -0.031 | 0.037 | -0.022 |
| | (0.023) | (0.049) | (0.047) |
| Decile 5 | -0.070** | 0.109*** | 0.021 |
| | (0.029) | (0.038) | (0.058) |
| Decile 6 | -0.004 | 0.044 | -0.001 |
| | (0.016) | (0.034) | (0.043) |
| Decile 7 | -0.001 | -0.013 | 0.005 |
| | (0.012) | (0.029) | (0.032) |
| Decile 8 | 0.007 | -0.001 | -0.014 |
| | (0.014) | (0.019) | (0.030) |
| Decile 9 | 0.008 | 0.042** | -0.044 |
| | (0.010) | (0.019) | (0.028) |
| Decile 10 | 0.009 | 0.015 | 0.004 |
| | (0.013) | (0.017) | (0.026) |
| Observations | 36,194 | 36,194 | 36,194 |
| Controls | No | No | No |
| Year Fixed Effects | Yes | Yes | Yes |
| Occupation Fixed Effects | No | No | No |
| MA Fixed Effects | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 |

*Note:* The table reports the difference-in-differences estimates of each outcome for the corresponding decile of household income. Deciles are determined according to the distribution of household income of the treated group in the pre-reform period. Dependent variable in column 1 is the share of individuals in the household of legal working age (16 and above) who are working or looking for a job. In column 2, the dependent variable is the share of workers in the household who are registered by their employer and therefore work in the formal sector. The dependent variable in column 3 is natural logarithm of combined number of hours of work per week of all household members who are working. The sample includes all households in which there is a domestic worker or a woman employed in a low-wage occupation in the service sector living with their spouse, children of working age (16 and over) or both. Standard errors clustered at the Metropolitan Area level in parentheses.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.11: Household level effects of policy reform by decile of household hours of work

| | Labor force participation (1) | Share registered (2) | Labor income per month (3) |
|---|---|---|---|
| Decile 1 | -0.099*** | -0.045 | -0.189 |
| | (0.030) | (0.059) | (0.120) |
| Decile 2 | -0.063** | 0.07 | 0.055 |
| | (0.024) | (0.061) | (0.076) |
| Decile 3 | 0.009 | 0.068** | 0.098 |
| | (0.015) | (0.031) | (0.064) |
| Decile 4 | 0.004 | 0.05 | 0.035 |
| | (0.023) | (0.038) | (0.051) |
| Decile 5 | -0.03 | 0.048 | -0.071 |
| | (0.019) | (0.030) | (0.072) |
| Decile 6 | -0.012 | 0.067** | 0.120** |
| | (0.019) | (0.029) | (0.055) |
| Decile 7 | -0.011 | 0.009 | 0.012 |
| | (0.013) | (0.029) | (0.052) |
| Decile 8 | 0.007 | 0.032* | 0.02 |
| | (0.017) | (0.018) | (0.037) |
| Decile 9 | 0.002 | 0.028 | 0.07 |
| | (0.009) | (0.019) | (0.047) |
| Decile 10 | 0.007 | 0.01 | -0.006 |
| | (0.010) | (0.025) | (0.042) |
| Observations | 36,194 | 36,194 | 36,194 |
| Controls | No | No | No |
| Year Fixed Effects | Yes | Yes | Yes |
| Occupation Fixed Effects | No | No | No |
| MA Fixed Effects | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 |

*Note:* The table reports the difference-in-differences estimates of each outcome for the corresponding decile of household income. Deciles are determined according to the distribution of household income of the treated group in the pre-reform period. Dependent variable in column 1 is the share of individuals in the household of legal working age (16 and above) who are working or looking for a job. In column 2, the dependent variable is the share of workers in the household who are registered by their employer and therefore work in the formal sector. In column 3, the dependent variable is the natural logarithm of the combined labor income per month of all household members who are working. The sample includes all households in which there is a domestic worker or a woman employed in a low-wage occupation in the service sector living with their spouse, children of working age (16 and over) or both. Standard errors clustered at the Metropolitan Area level in parentheses.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.12: Summary statistics of male spouses

| | Spouses of domestic workers | Spouses of female service workers | Difference |
|---|---|---|---|
| **Demographics** | | | |
| Age | 45.49 | 43.83 | -1.663*** |
| Share internal migrant | 0.22 | 0.25 | 0.035*** |
| Share foreign migrant | 0.08 | 0.05 | -0.029*** |
| Household size | 4.32 | 4.28 | -0.033 |
| Has health insurance | 0.52 | 0.70 | 0.182*** |
| **Education** | | | |
| Literacy | 0.99 | 1.00 | 0.007*** |
| Ever attended school | 0.99 | 1.00 | 0.003* |
| Complete primary school (share) | 0.88 | 0.93 | 0.044*** |
| Complete secondary school (share) | 0.24 | 0.33 | 0.091*** |
| Complete higher education (share) | 0.02 | 0.04 | 0.021*** |
| Years of education | 8.36 | 9.24 | 0.883*** |
| **Work** | | | |
| Labor force participation (share) | 0.89 | 0.90 | 0.015** |
| Hours of work per week | 46.90 | 46.44 | -0.458 |
| Monthly income (2008 ARS) | 1540.61 | 1752.54 | 211.924*** |
| Hourly wage (2008 ARS) | 8.83 | 10.36 | 1.532*** |
| Pension contribution | 0.63 | 0.72 | 0.091*** |
| Health insurance contribution | 0.63 | 0.72 | 0.092*** |

*Note:* Mean refers to the mean of the variable for the corresponding group in the pre-reform period (2010-2012) for spouses in the sample. The column Difference shows the difference in the variable mean in the pre-reform period between affected and comparison groups, with stars representing the statistical significance of the difference. Spouses of domestic workers refers to male respondents married to or living with of domestic workers. Spouses of female service workers refers to male individuals married to or living with a wage worker in blue collar service occupations.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A1.13: Summary statistics of children

| | Children of domestic workers | Children of female service workers | Difference |
|---|---|---|---|
| **Demographics** | | | |
| Age | 17.84 | 17.83 | -0.011 |
| Gender | 0.50 | 0.51 | 0.002 |
| Share internal migrant | 0.07 | 0.07 | 0.002 |
| Share foreign migrant | 0.01 | 0.01 | -0.005*** |
| Household size | 5.51 | 5.33 | -0.183*** |
| Has health insurance | 0.37 | 0.61 | 0.245*** |
| **Education** | | | |
| Literacy | 1.00 | 1.00 | -0.001 |
| Ever attended school | 1.00 | 1.00 | -0.000 |
| Complete primary school (share) | 0.89 | 0.91 | 0.013** |
| Complete secondary school (share) | 0.46 | 0.50 | 0.044*** |
| Years of education | 9.36 | 9.53 | 0.167*** |
| **Work** | | | |
| Labor force participation (share) | 0.32 | 0.29 | -0.030*** |
| Hours of work per week | 36.76 | 36.85 | 0.090 |
| Monthly income (2008 ARS) | 860.10 | 999.61 | 139.51*** |
| Hourly wage (2008 ARS) | 6.32 | 7.20 | 0.885*** |
| Pension contribution | 0.30 | 0.39 | 0.095*** |
| Health insurance contribution | 0.30 | 0.40 | 0.105*** |

*Note:* Mean refers to the mean of the variable for the corresponding group in the pre-reform period (2010-2012) for children in the sample. The column Difference shows the difference in the variable mean in the pre-reform period between affected and comparison groups, with stars representing the statistical significance of the difference. Children of domestic workers refers to children whose mother is a domestic worker. Children of female service workers refers to whose mother is a wage worker in low-wage service occupations.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

# Appendix 2 Difference-in-differences estimates using quarterly data

The following tables replicate the results in tables 2 to 5 when the data is used quarterly and treatment is set from the second quarter of 2013 onwards. In all cases the specification is the same as in the main analysis, except that I use year-by-quarter fixed effects instead of year fixed effects to control for unobserved shocks that may affect all workers in a given quarter.

Table A2.1: Effect of policy reform on labor market outcomes of domestic workers

| | Registered | Unemployed | Hours of work per week on main job | Underemployment | Income per month from main job | Wage per hour from main job |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Domestic worker × Reform | 0.047*** | -0.004 | -0.054*** | 0.003 | 0.035* | 0.089*** |
| | (0.012) | (0.007) | (0.015) | (0.008) | (0.017) | (0.016) |
| Mean dependent variable | 0.158 | 0.0875 | 24.68 | 0.168 | 473.8 | 5.932 |
| R-squared | 0.315 | 0.094 | 0.201 | 0.087 | 0.434 | 0.308 |
| Observations | 54,963 | 60,394 | 54,963 | 54,963 | 54,963 | 54,963 |
| q-value | 0.001 | 0.695 | 0.003 | 0.695 | 0.128 | 0.000 |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. The dependent variable in column 2 is the natural logarithm of number of hours of work per week in the main job. In column 3, the dependent variable is an indicator that takes the value of one if the respondent is willing to work more hours. In columns 4 and 5, the dependent variable is the natural logarithm of income from the main job and the hourly wage from the main job, respectively. In all cases, the coefficients are difference-in-differences estimates from an OLS regression.
The sample is composed of employed individuals, with the exception of column 2, where the sample includes all employed and unemployed individuals with a previous job. Domestic workers refers to female respondents who identify themselves as domestic workers. The comparison group is composed of female wage workers in low-wage service occupations. Means of dependent variable correspond to averages for the affected group in the pre-reform period. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A2.2: Impact of domestic worker's reform on labor market outcomes at the household level

| | Labor force participation (1) | Share registered (2) | Hours of work per week (3) | Labor income per month (4) |
|---|---|---|---|---|
| Domestic worker × Reform | -0.008 | 0.029** | -0.007 | 0.029 |
| | (0.006) | (0.012) | (0.017) | (0.026) |
| Mean dependent variable | 0.766 | 0.276 | 73.74 | 1681 |
| R-squared | 0.038 | 0.208 | 0.036 | 0.134 |
| Observations | 36,194 | 36,194 | 36,194 | 36,194 |
| q-value | 0.525 | 0.070 | 0.696 | 0.525 |
| Controls | No | No | No | No |
| Year Fixed Effects | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | No | No | No |
| MA Fixed Effects | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 |

*Note:* Dependent variable in column 1 is the share of individuals in the household of legal working age (16 and above) who are working or looking for a job. In column 2, the dependent variable is the share of workers in the household who are registered by their employer and therefore work in the formal sector. The dependent variable in column 3 is natural logarithm of combined number of hours of work per week of all household members who are working. In column 4, the dependent variable is the natural logarithm of the combined labor income per month of all household members who are working. Coefficients are difference-in-differences estimates from an OLS regression. Domestic worker refers to household in which one member is a domestic worker. The sample includes all households in which there is a domestic worker or a woman employed in a low-wage occupation in the service sector who has a spouse and/or children of working age (16 and over). Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A2.3: Impact of domestic worker's reform on labor market outcomes of spouses and children

| | Participation | Registered | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| *Panel A: Spouses* | | | | | |
| Spouse of Domestic worker × Reform | -0.007 | 0.002 | -0.013 | -0.026* | -0.013 |
| | (0.009) | (0.017) | (0.010) | (0.014) | (0.017) |
| Mean dependent variable | 0.89 | 0.63 | 46.9 | 1551 | 8.88 |
| R-squared | 0.244 | 0.266 | 0.179 | 0.574 | 0.476 |
| Observations | 24,054 | 13,486 | 13,486 | 13,486 | 13,486 |
| q-value | 0.868 | 0.910 | 0.792 | 0.406 | 0.868 |
| *Panel B: Children* | | | | | |
| Child of Domestic Worker × Reform | -0.027* | -0.002 | -0.053* | -0.015 | 0.038 |
| | (0.014) | (0.015) | (0.026) | (0.027) | (0.025) |
| Mean dependent variable | 0.456 | 0.301 | 36.83 | 867.9 | 6.348 |
| R-squared | 0.306 | 0.330 | 0.318 | 0.518 | 0.354 |
| Observations | 31,282 | 8,820 | 8,820 | 8,820 | 8,820 |
| q-value | 0.898 | 0.929 | 0.895 | 0.929 | 0.929 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, and the hourly wage from the main job, respectively. Coefficients are difference-in-differences estimates from an OLS regression. In Panel A, the sample includes all spouses of female domestic workers and those of female workers from other blue-collar service sectors (column 1) and only those who are employed (columns 2 through 7). In Panel B, the sample includes all children of household heads aged 16 to 25 (column 1) and those who are employed (columns 2 through 5). Treated group corresponds to men (Panel A) and children (Panel B) whose spouse (mother) is a domestic worker. Comparison group correspond to men (Panel A) and children (Panel B) whose spouse (mother) is a worker in a low-wage service occupation. Mean dependent variables correspond to average for the affected group in the pre-reform period, and in the case of earnings they are expressed in Argentina Pesos of 2008. Controls include age, age squared, gender, household size, marital status, years of education of the household head, years of education of the household head squared, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A2.4: Impact of domestic worker's reform on children's labor market outcomes

| | Participation | Registered | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| *Panel A: All Children* | | | | | |
| Child of Domestic Worker × Reform | -0.027* | -0.002 | -0.053* | -0.015 | 0.038 |
| | (0.014) | (0.015) | (0.026) | (0.027) | (0.025) |
| Mean dependent variable | 0.456 | 0.301 | 36.83 | 867.9 | 6.348 |
| R-squared | 0.306 | 0.330 | 0.318 | 0.518 | 0.354 |
| Observations | 31,282 | 8,820 | 8,820 | 8,820 | 8,820 |
| q-value | 0.898 | 0.929 | 0.895 | 0.929 | 0.929 |
| *Panel B: Female Children* | | | | | |
| Child of Domestic Worker × Reform | -0.038** | -0.020 | -0.080* | -0.012 | 0.068* |
| | (0.017) | (0.035) | (0.042) | (0.044) | (0.039) |
| Mean dependent variable | 0.348 | 0.275 | 29.26 | 676 | 6.273 |
| R-squared | 0.235 | 0.359 | 0.312 | 0.520 | 0.345 |
| Observations | 15,382 | 3,269 | 3,269 | 3,269 | 3,269 |
| q-value | 0.614 | 0.929 | 0.929 | 0.929 | 0.929 |
| *Panel C: Male Children* | | | | | |
| Child of Domestic Worker × Reform | -0.014 | 0.003 | -0.030 | -0.004 | 0.025 |
| | (0.021) | (0.025) | (0.034) | (0.049) | (0.038) |
| Mean dependent variable | 0.562 | 0.317 | 41.58 | 986.7 | 6.389 |
| R-squared | 0.345 | 0.343 | 0.196 | 0.482 | 0.393 |
| Observations | 15,899 | 5,519 | 5,519 | 5,519 | 5,519 |
| q-value | 0.929 | 0.929 | 0.929 | 0.929 | 0.929 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, the hourly wage from the main job, income from all jobs, and total income, respectively. Coefficients are difference-in-differences estimates from an OLS regression. The sample includes all children of household heads aged 16 to 25 (column 1) and those who are employed (columns 2 through 5). Treated group corresponds to children whose mother is a domestic worker. Comparison group correspond to children whose mother is a worker in other low-wage service occupations. Mean dependent variables correspond to average for the affected group in the pre-reform period, and in the case of earnings they are expressed in Argentina Pesos of 2008. Controls include age, age squared, gender, household size, marital status, years of education of the household head, years of education of the household head squared, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.
*** p<0.01, ** p<0.05, * p<0.1

# Appendix 3 Difference-in-differences estimates using yearly interactions

The following tables replicate the results in tables 2 to 5 using the following specification:

$$Y_{ijkt} = \beta_0 + \beta_1 DW_{ijkt} + \sum_{t=2009}^{2015} \beta_t DW_{ijkt} \times I[Year = t] + \Gamma X_{ijkt} + \theta_t + \nu_j + \mu_k + \varepsilon_{ijkt} \quad (3)$$

The omitted category is always the year 2012, the year prior to the introduction of the reforms. It should be noted that p-values reported in these tables have not been corrected for multiple hypothesis testing.

Table A3.1: Effect of policy reform on labor market outcomes of domestic workers

| | Registered | Unemployed | Hours of work per week on main job | Underemployment | Income per month from main job | Wage per hour from main job |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| 2010 × Domestic worker | 0.010 | -0.001 | 0.015 | 0.000 | 0.038* | 0.023 |
| | (0.016) | (0.009) | (0.019) | (0.009) | (0.020) | (0.020) |
| 2011 × Domestic worker | -0.002 | 0.002 | 0.004 | 0.001 | -0.018 | -0.021 |
| | (0.012) | (0.008) | (0.017) | (0.011) | (0.019) | (0.017) |
| 2013 × Domestic worker | 0.031* | -0.000 | -0.029 | -0.002 | 0.029 | 0.058*** |
| | (0.017) | (0.009) | (0.020) | (0.009) | (0.017) | (0.019) |
| 2014 × Domestic worker | 0.061*** | 0.001 | -0.054*** | 0.004 | 0.051*** | 0.106*** |
| | (0.017) | (0.009) | (0.017) | (0.012) | (0.018) | (0.020) |
| 2015 × Domestic worker | 0.069*** | -0.001 | -0.034 | 0.009 | 0.061* | 0.095*** |
| | (0.023) | (0.012) | (0.028) | (0.015) | (0.031) | (0.026) |
| Domestic worker | -0.298*** | -0.006 | -0.287*** | 0.081*** | -0.501*** | -0.214*** |
| | (0.032) | (0.016) | (0.045) | (0.018) | (0.032) | (0.029) |
| Constant | -0.041 | 0.372*** | 2.807*** | 0.273*** | 5.340*** | 1.147*** |
| | (0.059) | (0.033) | (0.073) | (0.021) | (0.067) | (0.058) |
| R-squared | 0.315 | 0.093 | 0.201 | 0.087 | 0.432 | 0.306 |
| Observations | 54,963 | 60,394 | 54,963 | 54,963 | 54,963 | 54,963 |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. In column 2, the dependent variable is an indicator that takes the value of one if the individual is unemployed. The dependent variable in column 3 is the natural logarithm of number of hours of work per week in the main job. In column 4, the dependent variable is an indicator that takes the value of one if the respondent is willing to work more hours. In columns 5 and 6, the dependent variable is the natural logarithm of income from the main job and the hourly wage from the main job, respectively.
The sample is composed of employed individuals, with the exception of column 2, where the sample includes all employed and unemployed individuals with a previous job. Domestic workers refers to female respondents who identify themselves as domestic workers. The comparison group is composed of female wage workers in low-wage service occupations. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table A3.2: Impact of domestic worker's reform on labor market outcomes at the household level

| | Labor force participation (1) | Share registered (2) | Hours of work per week (3) | Labor income per month (4) |
|---|---|---|---|---|
| 2010 × Domestic worker | 0.011 | 0.024 | 0.055* | -0.008 |
| | (0.012) | (0.017) | (0.032) | (0.038) |
| 2011 × Domestic worker | 0.013* | 0.007 | 0.033 | -0.015 |
| | (0.007) | (0.016) | (0.026) | (0.034) |
| 2013 × Domestic worker | 0.002 | 0.037** | 0.031 | 0.017 |
| | (0.008) | (0.017) | (0.026) | (0.032) |
| 2014 × Domestic worker | 0.001 | 0.041** | 0.035 | 0.019 |
| | (0.011) | (0.018) | (0.025) | (0.038) |
| 2015 × Domestic worker | -0.008 | 0.059*** | -0.019 | 0.005 |
| | (0.012) | (0.021) | (0.032) | (0.044) |
| Domestic worker | -0.006 | -0.352*** | -0.250*** | -0.451*** |
| | (0.008) | (0.017) | (0.027) | (0.028) |
| Constant | 0.764*** | 0.624*** | 4.277*** | 7.529*** |
| | (0.003) | (0.007) | (0.012) | (0.016) |
| R-squared | 0.038 | 0.208 | 0.036 | 0.134 |
| Observations | 36,194 | 36,194 | 36,194 | 36,194 |
| Controls | No | No | No | No |
| Year Fixed Effects | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | No | No | No |
| MA Fixed Effects | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 |

*Note:* Dependent variable in column 1 is the share of individuals in the household of legal working age (16 and above) who are working or looking for a job. In column 2, the dependent variable is the share of workers in the household who are registered by their employer and therefore work in the formal sector. The dependent variable in column 3 is natural logarithm of combined number of hours of work per week of all household members who are working. In column 4, the dependent variable is the natural logarithm of the combined labor income per month of all household members who are working. Domestic worker refers to household in which one member is a domestic worker. The sample includes all households in which there is a domestic worker or a woman employed in a low-wage occupation in the service sector who has a spouse and/or children of working age (16 and over). Standard errors clustered at the Metropolitan Area level in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table A3.3: Impact of domestic worker's reform on labor market outcomes of spouses of domestic workers

| | Participation | Registered | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 2010 × Spouse of domestic worker | 0.021* | 0.008 | 0.021 | -0.043 | -0.064* |
| | (0.012) | (0.026) | (0.023) | (0.029) | (0.035) |
| 2011 × Spouse of domestic worker | 0.017 | 0.002 | 0.024 | -0.029 | -0.053* |
| | (0.012) | (0.020) | (0.020) | (0.028) | (0.031) |
| 2013 × Spouse of domestic worker | 0.006 | -0.013 | 0.039** | -0.015 | -0.055** |
| | (0.012) | (0.024) | (0.016) | (0.025) | (0.025) |
| 2014 × Spouse of domestic worker | -0.000 | -0.016 | -0.009 | -0.079*** | -0.070** |
| | (0.012) | (0.027) | (0.017) | (0.029) | (0.027) |
| 2015 × Spouse of domestic worker | 0.008 | 0.056** | -0.029 | -0.071*** | -0.042 |
| | (0.014) | (0.024) | (0.023) | (0.025) | (0.027) |
| Spouse of domestic worker | 0.005 | 0.022 | -0.028 | 0.039 | 0.067** |
| | (0.014) | (0.037) | (0.030) | (0.038) | (0.026) |
| Constant | 0.637*** | -0.145* | 3.660*** | 5.651*** | 0.605*** |
| | (0.040) | (0.073) | (0.090) | (0.093) | (0.077) |
| R-squared | 0.243 | 0.265 | 0.178 | 0.570 | 0.474 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, and the hourly wage from the main job, respectively. The sample includes all spouses of female domestic workers and those of female workers from other blue-collar service sectors (column 1) and only those who are employed (columns 2 through 7). The comparison group correspond to men whose spouse is a worker in a low-wage service occupation. Controls include age, age squared, gender, household size, marital status, years of education, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A3.4: Impact of domestic worker's reform on children's labor market outcomes

| | Participation | Formality | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 2010 × Child of domestic worker | 0.015 | 0.036 | 0.045 | 0.060* | 0.015 |
| | (0.018) | (0.031) | (0.040) | (0.031) | (0.034) |
| 2011 × Child of domestic worker | 0.037* | 0.022 | 0.033 | 0.051 | 0.019 |
| | (0.019) | (0.030) | (0.040) | (0.035) | (0.033) |
| 2013 × Child of domestic worker | -0.030* | -0.009 | 0.010 | 0.045 | 0.035 |
| | (0.016) | (0.023) | (0.055) | (0.044) | (0.043) |
| 2014 × Child of domestic worker | -0.017 | 0.047* | -0.014 | 0.048 | 0.062* |
| | (0.022) | (0.027) | (0.039) | (0.037) | (0.034) |
| 2015 × Child of domestic worker | 0.015 | 0.021 | -0.045 | 0.009 | 0.054 |
| | (0.024) | (0.043) | (0.046) | (0.052) | (0.048) |
| Child of domestic worker | 0.066*** | -0.026 | -0.025 | -0.043 | -0.018 |
| | (0.019) | (0.036) | (0.036) | (0.044) | (0.043) |
| Constant | -1.323*** | -0.520*** | 2.301*** | 4.361*** | 0.674*** |
| | (0.048) | (0.067) | (0.080) | (0.112) | (0.091) |
| R-squared | 0.305 | 0.329 | 0.316 | 0.516 | 0.353 |
| Observations | 31,282 | 8,820 | 8,820 | 8,820 | 8,820 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| MA Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, and hourly wage from the main job, respectively. The sample includes all children of household heads aged 16 to 25 (column 1) and those who are employed (columns 2 through 7). Treated group corresponds to children whose mother is a domestic worker. Comparison group correspond to children whose mother is a low-wage worker in a service occupation. Controls include age, age squared, gender, household size, marital status, years of education of the household head, years of education of the household head squared, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table A3.5: Impact of domestic worker's reform on female children's labor market outcomes

| | Participation | Formality | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 2010 × Child of domestic worker | -0.017 | 0.001 | 0.086 | 0.056 | -0.030 |
| | (0.026) | (0.043) | (0.058) | (0.065) | (0.068) |
| 2011 × Child of domestic worker | 0.062** | 0.007 | 0.111 | 0.063 | -0.047 |
| | (0.025) | (0.047) | (0.071) | (0.072) | (0.079) |
| 2013 × Child of domestic worker | -0.051** | -0.052 | 0.059 | 0.104 | 0.045 |
| | (0.024) | (0.044) | (0.092) | (0.068) | (0.084) |
| 2014 × Child of domestic worker | -0.025 | 0.025 | 0.004 | 0.052 | 0.048 |
| | (0.026) | (0.059) | (0.073) | (0.074) | (0.063) |
| 2015 × Child of domestic worker | 0.027 | -0.005 | -0.087 | -0.072 | 0.014 |
| | (0.038) | (0.054) | (0.063) | (0.087) | (0.088) |
| Child of domestic worker | 0.075*** | 0.007 | -0.058 | -0.115 | -0.057 |
| | (0.024) | (0.090) | (0.061) | (0.098) | (0.082) |
| Constant | -1.075*** | -0.439*** | 1.793*** | 4.221*** | 1.041*** |
| | (0.077) | (0.104) | (0.228) | (0.232) | (0.150) |
| R-squared | 0.234 | 0.358 | 0.307 | 0.514 | 0.340 |
| Observations | 15,382 | 3,269 | 3,269 | 3,269 | 3,269 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| MA Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, and hourly wage from the main job, respectively. The sample includes all female children of household heads aged 16 to 25 (column 1) and those who are employed (columns 2 through 7). Treated group corresponds to children whose mother is a domestic worker. Comparison group correspond to children whose mother is a low-wage worker in a service occupation. Controls include age, age squared, gender, household size, marital status, years of education of the household head, years of education of the household head squared, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table A3.6: Impact of domestic worker's reform on male children's labor market outcomes

| | Participation | Formality | Hours of work per week | Income per month | Wage per hour |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 2010 × Child of domestic worker | 0.046 | 0.050 | 0.005 | 0.049 | 0.044 |
| | (0.029) | (0.050) | (0.043) | (0.033) | (0.039) |
| 2011 × Child of domestic worker | 0.018 | 0.038 | -0.016 | 0.043 | 0.059 |
| | (0.029) | (0.043) | (0.045) | (0.049) | (0.038) |
| 2013 × Child of domestic worker | -0.006 | 0.020 | -0.022 | 0.006 | 0.028 |
| | (0.024) | (0.037) | (0.057) | (0.059) | (0.049) |
| 2014 × Child of domestic worker | -0.006 | 0.053 | -0.032 | 0.047 | 0.078 |
| | (0.033) | (0.037) | (0.045) | (0.059) | (0.051) |
| 2015 × Child of domestic worker | 0.006 | 0.034 | -0.010 | 0.068 | 0.077 |
| | (0.032) | (0.077) | (0.060) | (0.081) | (0.070) |
| Child of domestic worker | 0.056* | -0.052 | 0.004 | 0.009 | 0.005 |
| | (0.031) | (0.037) | (0.052) | (0.083) | (0.065) |
| Constant | -1.339*** | -0.545*** | 2.750*** | 4.551*** | 0.415*** |
| | (0.052) | (0.088) | (0.104) | (0.121) | (0.121) |
| R-squared | 0.344 | 0.339 | 0.194 | 0.480 | 0.391 |
| Observations | 15,899 | 5,519 | 5,519 | 5,519 | 5,519 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | No | Yes | Yes | Yes | Yes |
| MA Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, dependent variable is an indicator that takes the value of one if the individual is working or looking for a job. In column 2, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. Dependent variables in columns 3 through 5 is the natural logarithm of hours of work in the main job, income from the main job, and hourly wage from the main job, respectively. The sample includes all male children of household heads aged 16 to 25 (column 1) and those who are employed (columns 2 through 7). Treated group corresponds to children whose mother is a domestic worker. Comparison group correspond to children whose mother is a low-wage worker in a service occupation. Controls include age, age squared, gender, household size, marital status, years of education of the household head, years of education of the household head squared, and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

# Appendix 4 Treatment effects including unemployed individuals

The following table replicate the analysis shown in Table 2 including unemployed individuals with a previous job. The affected group is composed of female domestic workers and unemployed women whose previous job was as a domestic worker. The comparison group is composed of women working in a low-wage service occupation or those unemployed whose last job was in a low-wage service occupation. Unemployed individuals are considered informal, with 0 hours of work and 0 income from the main job and all jobs, as well as 0 wage per hour. They are also considered involuntary part-time workers.

Table A4.1: Effect of policy reform on labor market outcomes of domestic workers

| | Registered | Hours of work per week on main job | Underemployment | Income per month from main job | Wage per hour from main job |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Domestic worker × Reform | 0.044*** | -0.047** | 0.003 | 0.033 | 0.079*** |
| | (0.010) | (0.023) | (0.009) | (0.040) | (0.017) |
| Mean dependent variable | 0.143 | 24.66 | 0.241 | 469.6 | 5.889 |
| R-squared | 0.302 | 0.160 | 0.133 | 0.178 | 0.232 |
| Observations | 60,394 | 60,394 | 60,394 | 60,394 | 60,394 |
| q-value | 0.000 | 0.201 | 0.759 | 0.759 | 0.000 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes | Yes | Yes |
| Number of clusters | 32 | 32 | 32 | 32 | 32 |

*Note:* In column 1, the dependent variable is an indicator that takes the value of one when the individual reports their employer makes contributions to the pension system. The dependent variable in column 2 is the natural logarithm of number of hours of work per week in the main job. In column 3, the dependent variable is an indicator that takes the value of one if the respondent is willing to work more hours. In columns 4 and 5, the dependent variable is the natural logarithm of income from the main job and the hourly wage from the main job, respectively. In all cases, the coefficients are difference-in-differences estimates from an OLS regression.
The sample is composed of employed and unemployed individuals with a previous job. Domestic workers refers to female respondents who identify themselves as domestic workers or who were previously employed as domestic workers and are currently unemployed. The comparison group is composed of female wage workers in low-wage service occupations or unemployed women with a previous job in a low-wage service occupation. Means of dependent variable correspond to averages for the affected group in the pre-reform period. Controls include age, age squared, migrant status, household size, literacy status, years of education, years of education squared, marital status and decile of per-capita family income. Standard errors clustered at the Metropolitan Area level in parentheses. Q-value corresponds to Hochberg's q-value to adjust for False Discovery Rate.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

# Appendix 5 Quantile Treatment Effects

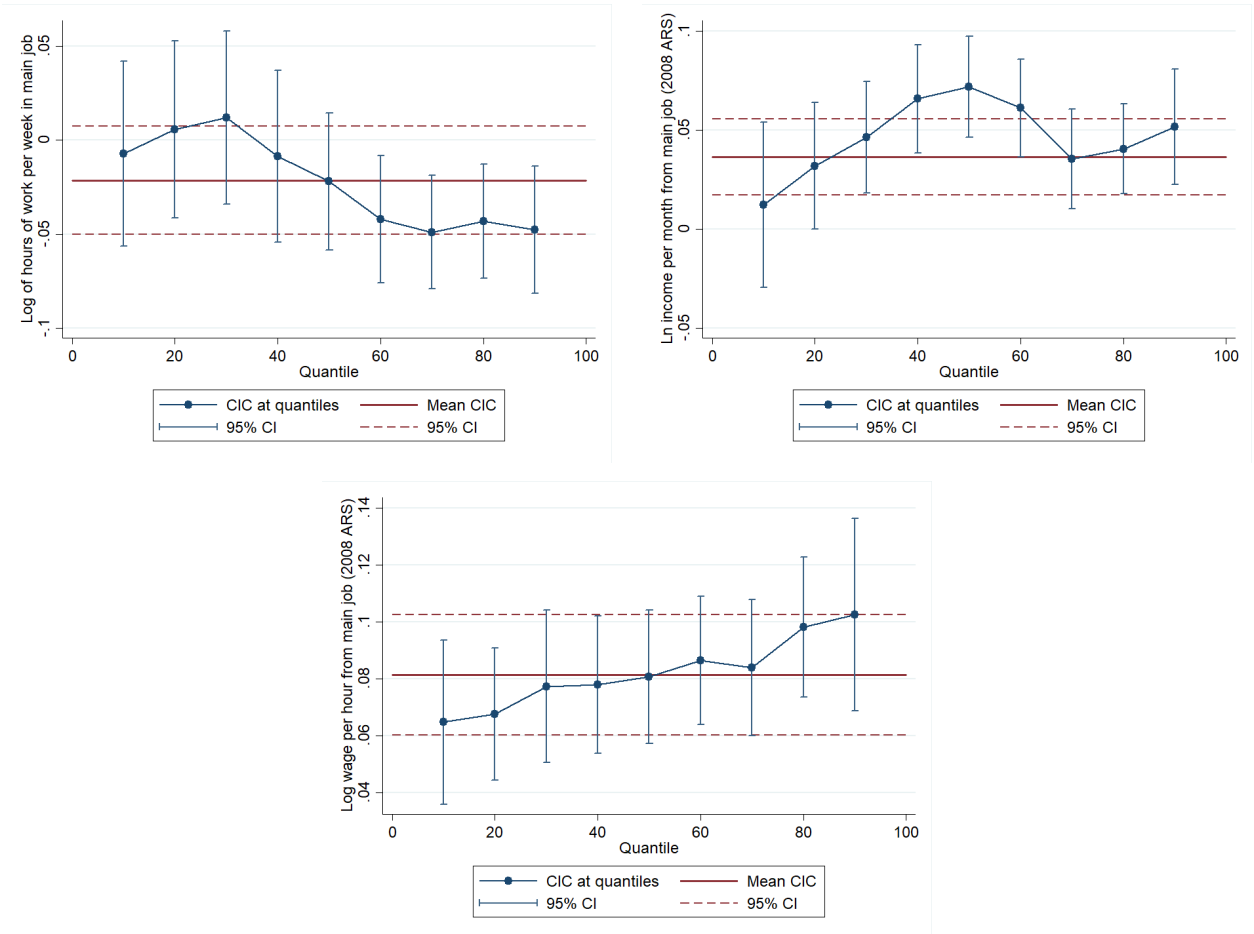
The following table shows the impact of the reform on hours worked, monthly earnings and hours of work for each decile of the distributions. The effects correspond to Athey and Imbens' Changes-in-changes model (Athey and Imbens, 2006). This model uses the change experienced by the comparison group across time at each decile of the pre-reform period to construct a counterfactual distribution for the affected group in the absence of the policy.

Table A5.1: Labor market effects of policy reform - Quantile Treatment Effects

| Quantile | Hours of work per week on main job (1) | Income per month from main job (2) | Wage per hour from main job (3) |
|---|---|---|---|
| 10 | -0.007 | 0.012 | 0.065*** |
| | (0.027) | (0.024) | (0.016) |
| 20 | 0.006 | 0.032* | 0.068*** |
| | (0.022) | (0.018) | (0.013) |
| 30 | 0.012 | 0.046*** | 0.077*** |
| | (0.020) | (0.016) | (0.013) |
| 40 | -0.009 | 0.066*** | 0.078*** |
| | (0.019) | (0.013) | (0.010) |
| 50 | -0.022 | 0.072*** | 0.081*** |
| | (0.017) | (0.012) | (0.010) |
| 60 | -0.042*** | 0.061*** | 0.086*** |
| | (0.015) | (0.013) | (0.010) |
| 70 | -0.049*** | 0.035*** | 0.084*** |
| | (0.015) | (0.012) | (0.011) |
| 80 | -0.043*** | 0.040*** | 0.098*** |
| | (0.015) | (0.012) | (0.011) |
| 90 | -0.048*** | 0.052*** | 0.103*** |
| | (0.016) | (0.014) | (0.016) |
| Mean | -0.021 | 0.036*** | 0.081*** |
| | (0.014) | (0.010) | (0.009) |
| Observations | 54,963 | 54,963 | 54,963 |
| Controls | Yes | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes |
| Occupation Fixed Effects | Yes | Yes | Yes |
| Metropolitan Area Fixed Effects | Yes | Yes | Yes |

*Note:* Estimates correspond to the treatment effect for the each quantile in the Changes-in-changes model (Athey and Imbens, 2006). Dependent variable is the natural logarithm of the number of hours of work per week in the main job (column 1), the monthly income from the main job (column 2), and the hourly wage in the main job (column 3). Controls include age, migrant status, household size, literacy status, years of education, marital status and decile of per-capita family income. Bootstrapped standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Figure A5.1: Changes-in-changes estimates of labor market outcomes of domestic workers by decile




The figures show the Changes-in-changes coefficients and confidence intervals for each decile of the distribution of hours of work per week in the main job (panel A), income per month from the main job (panel B), and wages per hour from the main job (panel C).Monetary values are expressed in logs of 2008 Argentine Pesos.