How does maternal labor supply respond to changes in children's school schedule?*

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Abstract

In this paper we analyze mothers' labor supply response to a reorganization of children's school schedule. Until 2013, French children between 2 and 11 years old had their class time spread over 4 days and they did not go to school on Wednesday. In 2013 a national reform shortened each school day by an average of 45 minutes and reallocated the resulting three hours to Wednesday morning. We look at the impact on mothers' labor supply exploiting variation in the implementation of this reform over time and across the age of the youngest child. We provide evidence of a reallocation of working hours over the week and no effect on the total number of hours worked. Overall, these results suggest that even in a context of high female labor force participation the organization of children's time still affects mothers' employment decisions.

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Introduction

Since 2008 to 2013, French children aged between 2 and 11 stayed in school 4 days a week for a total of 24 hours of classes. On Wednesday, they were supposed to stay at home. According to the Multinational Time Use Survey (Gershuny and Fisher 2013), women with children in the UK, Germany and Spain distribute their working time equally along the week. In contrast, French mothers work significantly less time on Wednesday than on the other working days of the week.

In January 2013, the French government approved a reform that restructured the weekly schedule of classes in kindergarten and elementary school. Following the suggestions of several chronobiologists, in order to lighten the daily workload of children, this intervention reduced the length of the instruction time per day; added an extra half-day of classes in order to maintain invariant the total amount of weekly teaching hours; and aimed at compensating the shortening of each school day with the introduction of optional extra-curriculum activities, possibly without any additional cost for families.

Two elements of this intervention can affect mothers' employment decisions. First, the reorganization of the teaching time and, in particular, the introduction of classes on Wednesday morning, may induce mothers to restructure their own working schedule, in order to have a more continuous presence at work. Secondly, this reform delivers an implicit wage subsidy to those mothers who had to pay for private care services to look after their children on Wednesday morning. This may push mothers to work more, depending on the interplay between substitution and income effects.

Analyzing mothers' response along these two dimensions is equally important. Regarding the organization of the working time, having a flexible schedule can be especially costly for some women, as suggested by Goldin (2014). In this recent contribution, she shows that "most of the residual gender gap in earnings exists because hours of work in many occupations are worth more when given at particular moments and when the hours are more continuous. [...] Much has to do with the presence of good substitutes for individual workers when there are sufficiently low transactions costs of relaying information. In many workplaces employees

meet with clients and accumulate knowledge about them. If an employee is unavailable and communicating the information to another employee is costly, the value of the individual to the firm will decline. Equivalently, employees often gain from interacting with each other in meetings or through random exchanges. If an employee is not around that individual will be excluded from the information conveyed during these interactions and has lower value unless the information can be fully transferred in a low cost manner." As Goldin (2014), other studies show that women value flexibility when making their career choices. In particular, Flabbi and Moro (2012) demonstrate this point by estimating, with the use of CPS data, a labor market search model in which jobs are characterized by work hours' flexibility. Similarly, Wiswall and Zafar (2016) analyze choices of undergraduate students who are presented sets of occupations with different characteristics, and find that women, on average, have a higher willingness to pay for jobs with greater work flexibility (lower hours, and part-time option availability). In light of these recent contribution of the literature, it appears especially important to gain more insight on the importance of the cost of flexibility, and to understand which mothers are more sensitive to the allocation of their working hours.

As to the second dimension of response, this reform gives us the opportunity to understand to what extent family-friendly policies can further boost women's labor supply in the context of an advanced economy, characterized by high female labor force participation rates. Some studies suggest that women's wage elasticity may slow down as their employment rates rise. Citing Goldin (2006), this would reflect "a fundamental transformation in how women view their employment. [...] Most women now perceive their work as a fundamental aspect of their satisfaction in life and view their place of work as an integral part of their social world." As a consequence, both their income and substitution elasticities tend to decrease, as this transformation takes place. Still, policies like parental leave and part-time arrangements seem to strengthen mothers' attachment to the labor market even in countries with high levels of female participation to the labor market (Aaronson and French 2004, Baker and Milligan 2008, Blau and Kahn 2013, Booth and Van Ours 2008, Lalive and Zweimüller 2009, Schönberg and

Ludsteck 2007).[1] In this context, it is less clear how mothers would react to an expansion of the time children can spend in school or public childcare, as the evidence on these types of interventions is mostly confined to countries with relatively low levels of female labor force participation (Bauernschuster and Schlotter 2015, Baker, Gruber, and Milligan 2005, Berlinski and Galiani 2007, Cascio 2009, Fitzpatrick 2010, Gelbach 2002, Havnes and Mogstad 2011). In countries like France, where the proportion of active women is as high as 83 percent, above the OECD average, some mothers might simply substitute private care services for the public one, as suggested by Havnes and Mogstad (2011), without increasing their working hours. Others could decide to switch from part-time to full-time work. In this paper we are able to study these hypothesis.

To estimate mothers' labor supply response to this intervention, we choose to focus on mothers whose youngest child is between 6 and 11 years old and we compare the evolution of their employment decisions to that of mothers whose youngest child is between 12 and 14, in a difference-in-difference framework. To conduct this analysis we mainly use the quarterly data of the French Labor Force Survey from 2009 to 2014.

Our results show that treated mothers do react to the 2013 reform. In particular, their probability of working on Wednesday rises by 5 percentage points. However, there is no evidence that labor force participation is affected by this intervention. Moreover, neither weekly working hours nor the probability of working full-time rise in response to it. Overall, these findings imply that treated mothers reorganize their working time in accordance to their children's new school schedule, but that they do not react to the implicit wage subsidy this reform provides.

To better understand which mothers drive this response, we consider the role of different factors, such as the structure of the family or the characteristics of the job held, and we also study how these different spheres of a woman's life interact with each other. First, we investigate the importance of the family context. Traditionally, the literature on the impact of childcare policies on female labor supply has analyzed the response of single and

[1] Even though they can have negative effects on wages and career progression - though, not always persistent in the long-run.

married mothers separately. In this paper, we enrich this analysis by considering whether women's reaction depends also on the characteristics of the other components of the family, notably their children and their partner. Secondly, we add to the literature by studying whether the work environment influences women's response. In particular, we are interested in understanding whether their bargaining power at work and the cost of flexibility at work, as defined by Goldin (2014), play a role in defining their reaction. To measure a worker's bargaining power we consider the worker's tenure, whether the woman has a permanent or temporary contract, and whether she works in occupations that favor part-time contracts. To identify which professions reward more a regular and prolonged presence at work - or, in other words, impose a higher cost of flexibility - we exploit the O*NET classification of occupations. This online platform, created by the United States Ministry of Labor, regroups jobs on the basis of the skills used and activities performed at work. Following Goldin (2014), we focus on those characteristics which seem particularly relevant to measure the cost of flexibility, such as the degree of time pressure, the organization of the work schedule, and the importance of interpersonal relationships with co-workers.

This analysis delivers several results and two are particularly important. First, we find that women's bargaining power at work does influence their response. In detail, we show that the effect of the reform, in the first year of its implementation, is confined to women with permanent contracts, at least 1 to 5 years of tenure, and working in occupations where part-time contracts are prevalent. Secondly, we provide evidence that women do take into account that flexibility is costly when making their employment decisions. On the one hand, we show that women facing a higher cost of flexibility were already working longer hours before the reform. On the other hand, we observe that only women facing a low cost of flexibility are able to immediately react to the reform, by restructuring their working schedule in accordance to new timetable of their children. Therefore, these results show that to fully understand women's response to family-friendly policies and to the relaxation of institutional constraints, it is important to consider the characteristics of the work environment in which they operate.

To conclude our analysis, we also study fathers' reaction to the reform and find no evidence that this intervention affects their employment decisions. On the one hand, this result supports the findings of the recent strand of the literature establishing the importance of cultural norms as determinants of gender identity and women's employment decisions (Fortin 2005, Bertrand 2011, Fernandez 2011). On the other hand, it shows that, precisely because a strict division of roles within the household persists even in a context of high female labor force participation, limiting institutional constraints can help modify these cultural believes.

Overall, our findings have several policy implications. First, they prove that, even in mature economies, where female participation to the labor market is high, women are sensitive to family-friendly policies. Secondly, they show that to assess the overall impact of family policies, it is always important to consider how they affects all households members. Third, they suggest that both career's incentives and workers' bargaining power influence their reaction to institutional constraints. Finally, the fact that mothers do not react to the implicit wage subsidy offered by this reform provides some support to the hypothesis that women's wage elasticity might indeed be weaker in countries with high female labor market participation rates. However, it might also indicate that three additional hours of childcare are not enough to generate a substitution of work for leisure.

Importantly, so far we are estimating the short-run impact of this reform. In the long-run, its implications might change. First, more women might take advantage of the extracurricular activities to increase their working hours. In this respect, we have to take into account that it might take some time for contracts to be renegotiated, which implies that our results might be downward-biased. At the same time, this short-run analysis allows us to identify which category of workers can quickly react to changes in institutional constraints - namely those with enough bargaining power and working in occupations characterized by a low cost of flexibility. Secondly, a more regular working schedule might eventually affect the career path of mothers, by allowing them to perform more tasks and occupations, and by expanding their chances of receiving on-the-job training and promotions (Landers, Rebitzer, and Taylor 1996). Hence, it will be important to monitor the evolution of women's response. Finally, the general-

equilibrium effect of this reform will have to be considered. In particular, it will be interesting to analyze how mothers' response to this reform will affect their co-workers and the overall organization of their work environment.

The paper proceeds as follows. Section 1 gives a detailed description of the French primary school system and how this has been affected by the 2013 reform. Section 2 describes the data used to conduct this analysis. Section 3 introduces the identification strategy, the main results and robustness checks. Section 4 analyses potential channels and consequences of these results. Section 5 concludes.

1 The French primary school system

The French educational system is divided into three stages: elementary education, for children aged 6-11; secondary education - in turn divided into middle school (*collège*) and high school (*lycée*) - that terminates with the *baccalauréat*, normally taken at the age of 18. With this diploma pupils can access tertiary education. Education is compulsory since the age of 6 till 16. However, parents can send their children to public pre-kindergarten (*École pre-maternelle*) already when they are 2, or to kindergarten (*école maternelle*) at the age of 3. By now, 23 percent of 2 years old children and 95 percent of children aged 3 to 5 attend this pre-school stage (Goux and Maurin 2010). With the "*Loi d'orientation sur l'éducation*" or Jospin Law of 1989, primary school has been divided into three cycles. The first one, which comprises the first two years of nursery school is called "cycle of first learning"; the last year of kindergarten together with the first two years of elementary school form the "cycle of fundamental learning"; finally the last three years of elementary school constitute the "cycle of in-depth learning". Importantly, public primary schools are financed by municipalities. The private sector comprises mainly religious schools and enrolls 14 percent of all primary school pupils.

With respect to the structure of the school calendar, France has always been one of the countries with the longest period of holidays, longest number of hours per year, and longest school day, in primary school. Since the introduction of compulsory primary education in

1882 (*Loi Ferry*) until the end of the 1960s, children spend 5 full days at school, with a break on Thursday and Sunday, for a total of 30 hours per week. In 1969, Saturday afternoon is abolished, the break in the middle of the week is advanced from Thursday to Wednesday, and two hours of physical activities are added to the school week. However, it is only with the development of the chronobiology in the 1980s that an intense debate on the optimal structure of the school schedule spreads out. Experts of this discipline point out that primary school children need more frequent holidays and a shorter day at school. As a consequence, the Jospin Law restructures the school year in 36 weeks over 5 periods, and reduces by one hour the weekly schedule. Moreover, in 1991, a ministerial decree gives municipalities the possibilities to adopt a 4-days schedule. Only a few choose this possibility. In 1995 it is the Ministry of education that relaunches this option by selecting a pool of pilot schools to experiment the 4-days school week. From that moment, several municipalities start to consider this option. Finally, in 2008, under an harsh debate, the 4-days schedule is extended to all primary schools in France and weekly hours are reduced from 26 to 24. Nonetheless, in 2013, under the pressure of chronobiologists, the Minister of Education reintroduces the 4.5-days school week.

In particular, with the 2013 reform, the school day is shorten by 45 minutes; in order to maintain invariant the total amount of weekly hours, an half-day is added, mainly on Wednesday morning, and exceptionally on Saturday; and municipalities are invited to provide free extra-curriculum activities for children, for a total of three weekly hours; these should compensate for the reduction of the daily instruction time. Importantly, municipalities are given the possibility to implement the new schedule either in the year 2013-14 or in 2014-15. 20 percent of them chose to do it in 2013; the rest adopts the new system only in 2014. Regarding private schools, these have the freedom to chose whether to implement the 2013 reform or not at all, and, by the end of the academic year 2014-2015, 15 percent of them, comprising 13.5 percent of French pupils attending a private school, adopt the new schedule.[2]

[2] In our data we cannot tell whether a family sends their child to a public or a private school. We can only observe the aggregate proportions of students enrolled in public and private schools every year and these remain stable over the years of implementation of the reform. In other words, it does not seem that some families are moving their children from one type of school to the other because of the reform. Overall, this

Finally, it is important to notice that both the 2008 and 2013 reforms affect only kindergarten and primary school children. In middle and secondary school, pupils have at least 24 hours and a half of classes per week, spread over 5 days, and this schedule has not modified since a long time.

2 Data description

Our study relies on the use of several databases. First, we use the 2009-2014 waves of the French Labor Force Survey (*Enquête Emploi en Continu*) or FLFS. This data set collects information on work-related statistics with quarterly interviews to a representative sample of the French population. From the FLFS we extract data on women's age, level of education, marital status, present and past labor market status, income, and the structure of the household in which they reside. Crucially, we exploit the information on the municipality of residence, the number of children women have, and their age.

Secondly, in order to identify the timing of the implementation of the reform across municipalities, we exploit the Enrysco database. This is an administrative data set that has been created by the French Ministry of Education and provides a precise description of the weekly teaching schedule for each school, in each municipality. To better measure the total time children can spend in school after the reform, we will integrate this database with the CNAF-AMF survey. This study was conducted by the National Agency of Family Transfers (CNAF) and the Association of French Mayors (AMF), in the spring of 2014, in order to collect information on the implementation of the extra-curricular activities (*nouvelles activités périscolaires*, or NAP). It was addressed to all municipalities, independently of the time they introduced the reform. It asked them to report whether they provided or not the NAP, if they charged parents for them, what schedule they adopted, and which type of activities they offered. 6,619 municipalities, representing the 28 percent of those having a public school, replied to the survey. Among them, 1,370 implemented the reform in 2013, and 5,249 did so in 2014.

implies that our estimates might be slightly downward-biased as around 12 percent of families in our sample are not affected by the reform (corresponding to the 87 percent of the 14 percent of children attending private schools.)

In contrast to the Enrysco database, it is clear that this survey does not give an exhaustive picture of how each municipality organized the extra-curriculum activities. However, taking into account that several municipalities adopted the same teaching schedule, we might assume that they also opted for the same organization of the NAP. Moreover, the information on the type of extracurricular activities provided gives us a crude measure of their quality. Eventually, we want to exploit this information to investigate to what extent mothers' response is driven by their perception on the quality of the new service available.

To construct an alternative proxy for the quality of the new extracurricular activities, we also collected the budgetary data of each municipality from the Ministry of Finance, for the years 2010-2013. This database contains detail information on the revenues municipalities collect each year for social services (*Redevances et droits des services à caractère social*) and extra-curricular activities (*Redevances et droits des services périscolaires et d'enseignement*). It also provides information on personnel cost for these services.[3] To obtain an ex ante measure of quality of care that cannot be affected by the reform, we consider the distribution of municipalities based on 2012 expenditures.

Finally, to better investigate the mechanisms that drive women's response to the reform, we use the United States Department of Labor's Occupational Information Network, or O*NET. This database, available online, classifies occupations on the base of the activities performed and skills used at work. There are 8 broad categories: abilities, interests, knowledge, skills, work activities, work context, work style, and work values. Following Goldin (2014), we focus on the work activities and work context, which comprise several aspects of the work environment that can help us understand women's reaction to the reform.

[3] These variables are available either at the municipality level, or at the municipality community-level (cluster of municipalities) and urban community-level (cluster of cities which count more than 50000 inhabitants). We individualize these measures at the municipality level using municipal boundaries within clusters and urban communities, and weighting them by the number of children attending school in each city.

3 Empirical analysis

3.1 Identification strategy

To identify how a change in children's school schedule influences their mothers' labor supply behavior, we adopt a difference-in-difference strategy. We define a woman as being treated if her youngest child is affected by the 2013 reform. Next, we choose to compare mothers whose youngest child is between 6 and 11, with those whose youngest child is between 12 and 14 - corresponding to the age-interval of middle school pupils. The graphical analysis of pre-treatment trends in the labor supply measures we have chosen, figure 3, supports this choice, as the employment decisions of the treatment and control group exhibit a comparable evolution.

We decide to exclude mothers with children aged 2 to 5 from the treatment group for several reasons. First and most importantly, even though the evolution of several labor supply measures is similar among mothers with children in kindergarten and those with older children, the level of the participation rate to the labor market, as well as several observable characteristics, vary substantially between these two groups, as shown in table 1. As a consequence, even if from an econometric point of view it would be correct to include mothers of children in kindergarten age in the treatment group, the interpretation of the results and mechanisms behind these would probably differ depending on the age of the youngest child. Secondly, mothers with children between 2 and 3 were already entitled to receive childcare subsidies prior to the introduction of the reform. As a consequence, contrary to mothers of older children, they might react to the reform by simply substituting one form of care for another.[4] Moreover, only 30 percent of women whose youngest child is 2 years old actually send him/her to kindergarten (Goux and Maurin 2010). For all these reasons, we prefer to exclude mothers with children in kindergarten age from the treatment group. However, in the appendix, we show that our main results do not change if we include them in the analysis.

[4] To study if this is the case, we plan to use the CNAF data set of recipients of childcare subsidies, which provides household levels data on the use of two subsidies: the CLCA (*Congé de libre choix d'activité*), an early childhood parental leave, and the CMG (*Complément mode de garde*), a standard childcare allowance for parents with children younger than 4.

Finally, in the main regressions, we restrict our sample to mothers living in municipalities that introduced the reform in 2013, for which we can already observe the response all along the first year of the new regime.[5]

On the basis of these choices, we run the following specification on mothers living in "2013 municipalities", whose youngest child is between 6 and 14 years old:

$$\begin{aligned} Y_{icmt} &= \gamma_m + \delta_t + \pi * X_{icmt} + \alpha * Yst\_Child\_btw\_6\_11_c \\ &+ \beta * Yst\_Child\_btw\_6\_11 * Post\_Sep\_2013_{ct} + u_{icmt} \end{aligned} \tag{1}$$

Here i stand for each interviewed woman, c for the age of the youngest child, m for the municipality of residence and t for the wave in which the woman is interviewed. Y_{icmt} represents the outcome considered. As anticipated, the main ones are labor force participation, the choice of working part-time or full-time, weekly working hours, weekly working days, and the decision to work on each specific day of the week.[6] The vector X_{icmt} includes all the individual variables that can affect women's labor supply decisions. These include age, age squared, level of education, number of children, marital status, and presence of other members

[5] The results on the sample of mothers living in municipalities that introduced the reform in 2014 are available upon request. We do not find any evidence that the reform has an impact on these mothers. However, it has to be noticed that, with the available data, we can observe the effect of the reform on this group for just on quarter.

In this respect, it is also important to consider the following. In principle, to identify the effect of the reform, we could exploit the variation over time and across municipalities in the implementation of the reform. In this way, we would compare mothers whose youngest child is in the affected age-range and live in municipalities that introduced the reform in 2013, with the same group of mothers who live in municipalities that postponed the implementation of the reform to 2014. However, we prefer not to adopt this strategy for two reasons. First, the comparison of the pre-trends in labor supply measures for these two groups of mothers – figure 4 – reveals that their dynamics seem to diverge before the implementation of the reform. Therefore, it is hard to claim that, absent the reform, the evolution of labor supply would have been the same across these groups. This concern is also confirmed by a formal test on the parallel trend assumption. In a regression model that compares the evolution of labor supply for these two groups of mothers, we include a battery of dummies taking value 1 for mothers "treated in 2013", in the three waves before September 2013. A test on their joint significance leads us to reject the null for all the outcomes considered. Secondly, by adopting this strategy we would be able to study only the impact of the reform in his first year of implementation, given that from 2014 onward, all municipalities adopt the new schedule. As it might take some time for its effect to manifest, we think that considering only its short-run impact would considerably limit the objectives of our analysis.

[6] To measure these outcomes we construct, respectively: a dummy equal to 1 if the woman belongs to the active population; a dummy equal to 1 if the woman works part-time, a continuous variable indicating the number of hours worked on average per week, one measuring the number of days worked per week, and a dummy equal to 1 if the woman works on a specific day of the week.

in the household. α measures the impact of having the youngest child in primary school age. The main coefficient of interest is β that should capture any deviation from a parallel evolution in labor supply between the treatment and the control group, due to the implementation of the new schedule in primary school. In all regressions we also include municipality of residence, γ_m, and wave of interview fixed effects, δ_t. Finally, in all specifications, standard errors are clustered at the municipality level to account for any correlation of the outcomes for women residing in the same municipality.

3.2 Main results

Tables 2 and 3 show the main results. As expected, the 2013 reform does not trigger any response at the extensive margin – table 2, column 1. Point estimates in table 2, column 2 and 3, suggest that, after the implementation of the reform, treated mothers are less likely to work part-time and tend to work more hours. However, these coefficients are not precisely estimated. In contrast, column 4 indicates that the reform has a significant impact on the number of days worked per week, as treated mothers work on average half a day more, from a pre-reform level of four days and half. In table 3, we can see that, accordingly, their probability of working on Wednesday increases by 5 percentage points, significant at 5 percent significance-level, while their likelihood of working on each other day of the week does not change with respect to the pre-reform period, in comparison with control mothers.[7]

Taken together, these results imply that mothers react to this intervention by adapting their working time to their children's new teaching time schedule, without increasing their overall labor supply. In other words, they do not take advantage of the implicit wage subsidy this reform gives them. We can think about several reasons why this is the case. First, it might take some time to renegotiate working contracts, which implies that the effect on hours worked and the incidence of part-time contracts might become visible only after the first year of implementation of the reform. Secondly, it might simply be the case that wage subsidy implicit

[7] It has to be noticed that, in the FLFS, the decision to work on each days of the week is measured only from 2013 onward. However, the fact that the reform has a significant impact also on the number of days worked per week shows that the effect on the probability of working on Wednesday does not merely depend on the span of time over which the outcomes are observed.

in the reform is not large enough to trigger a substitution effect of work for leisure. Third, the fact that some municipalities chose to concentrate the extracurricular activities in a few days, rather than spread them along the week might prevent mothers from taking advantage of them. Finally, at least in the first year of implementation, mothers might perceive the new extracurricular activities to be of low quality, when compared to the alternative after-school-care options. To investigate these last two hypothesis, we plan to exploit the CNAF-AMF survey providing, for a sub-sample of municipalities, the exact schedule of the extra-curricular activities and the type of activity offered to children, to understand if these elements influence mothers' response.

3.3 Robustness checks

For the difference-in-difference strategy to accurately identify the effect of interest, we need to assume that, absent the reform, the evolution of mothers labor supply would have been the same for the treated and control group (parallel-trend assumption). In other words, we should check that our estimates are not capturing the effect of other factors that affect treated and control mothers in a different way.

To support this assumption, besides the visual inspection of the pre-treatment trends in labor supply measures, we can conduct a series of robustness checks. Here we focus on the decision to work on Wednesday, as the outcome measuring the number of days worked per week is specular to this one. However, in the appendix, we report the robustness checks for this outcome as well. We start in table 4. In the first column we report the baseline estimates for the probability of working on Wednesday. The second column looks at the effect of the reform in its first year of implementation, 2013-14, in municipalities that postponed the introduction of the new schedule to the academic year 2014-15. In these municipalities, mothers having their youngest child in primary school are not more likely to work on Wednesday, compared to mothers whose youngest child is in middle school. Next, the third column shows the estimates of a triple difference model that exploits the municipalities that postponed the introduction of the reform as a third dimension of comparison:

$$
\begin{aligned}
Y_{icmt} &= \gamma_m + \delta_t + \pi * X_{icmt} + \rho * Mun2013 * Post\_Sep\_2013_{mt} + \\
&+ (\alpha + \theta * Mun2013_m + \mu * Post\_Sep\_2013_{ct} \\
&+ \beta * Mun2013 * Post\_Sep\_2013_{mt}) * Yst\_Child\_btw\_6\_11_c + u_{icmt}
\end{aligned} \tag{2}
$$

This specification should control for the influence of any other factor that affects treated and control mothers differently, but that is common across municipalities that introduce the reform at different points in time. Once again, the impact of the reform remains significant, as indicated by the p-value of the sum of *mu* and *beta*.[8]

In tables 5 and 6 we change the size of the treatment and control group to show that our results are not sensitive to the definition we adopted. Finally, figure 5 provides a graphical analysis of the treatment dynamics. In particular, it shows the coefficients of the leads and lags in the treatment, estimated with this regression:

$$
\begin{aligned}
Y_{icmt} &= \gamma_m + \delta_t + \pi * X_{icmt} + \alpha * Yst\_Child\_btw\_6\_11_c \\
&+ \sum_{k \geq t-4} \beta_k * Yst\_Child\_btw\_6\_11 * Leads\_Lags_{ck} + u_{icmt}
\end{aligned} \tag{3}
$$

The first thing to be noticed is that the coefficients on the leads are jointly insignificant. However, there is some evidence that mothers might have started to react to the reform as soon as it was announced, in the second quarter of 2013, as the coefficient on the first lag is individually significant.

Nonetheless, the dynamic response after the implementation of the reform suggests that it takes at least one quarter for the effect to become stable.

Overall, these tests seem to corroborate the validity of our identification strategy.

[8] These robustness checks deliver the same results when the outcome considered is the number of days worked per week, as shown in table 15. For this outcome, we can also check the impact of a placebo reform. In detail, in the fourth column of table 15 we exclude from the sample the post-treatment period and we pretend that the reform was implemented at the beginning of 2013. As we can see there is no evidence that this fake treatment affects women's working schedule.

4 Potential mechanisms and short-term implications

4.1 Main factors influencing women's response

To better understand our results, it is important to identify which type of mothers are most responsive to the reform. We can think about three factors that can influence mothers' response, namely the family context, women's bargaining power at work, and, following Goldin (2014), the cost of flexibility at work. With the expression "family context" we refer to the woman's marital status, but also to the characteristics of the other members of her family. Here, we focus in particular on the family income, proxied by the partner's level of education,[9] and the total number of children the woman has. A priori, the effect of each of these factors is ambiguous. On the one hand, single mothers, as bread-winners, might need to work more than married mothers, independently of the institutional constraints they face. On the other hand, they might be entitled to receive subsidies that can weaken their incentives to work. The employment decisions of married mothers surely depend on their husband' earnings, and total family income. On the one hand, the higher is the husband's income, the lower should be the incentives to work for the woman. On the other hand, an argument of assortative mating would suggest that high-skilled men will be more likely to be married to high-skilled women, and these, in turn, might have a strong taste for work, independently of their family resources. Finally, the larger is the number of children a woman has, the more difficult could be for her to manage family and work duties. However, raising children is costly, and the larger is their number, the stronger could be the incentives for mothers to work in order to sustain the family income. Traditionally, the literature that studies the effect of childcare expansions has focused only on the comparison between married and single women. Nonetheless, in light of all these arguments, we think that it is important to analyze whether the response is heterogeneous along all these dimensions spanning the family context.

Women's bargaining power at work is another factor that can affect their response to this reform, and to changes in family-friendly policies, in general. In particular, we can

[9] Unfortunately, labor and family earnings are very badly reported in the FLFS, and therefore we choose to rely on the level of education as an indirect measure of living standards.

think that this factor might influence the timing of the response, as some women may have the possibility to renegotiate their working schedule quicker than others. Several elements determine a worker's bargaining power. We focus on the type of contract the woman has, the length of her tenure, and the occupation she holds.[10] As for the latter, we assume that the frequency of part-time contracts for a certain occupation might be a good indicator of women's bargaining power in that profession. Therefore, we regroup occupations according to this criterion.[11]

Finally, we take advantage of this reform to test Goldin's theory (Goldin 2014) regarding the cost of flexibility at work. It is plausible to think that in some occupations working longer hours and/or a regular presence at work might be more rewarded than in others. This could be the case, in particular, in those professions where it is important to build solid relationships with co-workers, attend frequent meetings, take key decisions, and perform tasks under pressure. The continuous presence at work and the availability to work long hours should be particularly valuable in these contexts, or, in other words, the cost of a flexible working schedule might be especially high in these occupations. To identify how this factor affects women's employment decisions, we follow Goldin and exploit the O*NET database to construct a measure of this cost of flexibility. We consider five characteristics, namely: time pressure, which answers the question "How often does this job require the worker to meet strict deadlines"; frequency of decision making, referring to the incidence with which a worker is required to make decisions that affect other people, the financial resources, and/or the image and reputation of the organization; structured versus unstructured work, representing the extent to which the job is structured for the worker, rather than allowing her to determine tasks, priorities, and goals; contact with others, referring to the extent the

[10] In principle, the number of employees in the worker's firm might affect her bargaining power. Unfortunately, this variable is badly measured in the French Labor Force Survey, and therefore we cannot analyze its impact.

[11] In detail, in order to identify what we call part-time intensive occupations, we proceed in two steps. We looked first at the population of part-time women and we selected occupations that represented more than 5 percent of part-time workers. Secondly, we looked at occupations for which the part-time rate of women was the highest. Finally, we selected the seven occupations that were in both categories: intermediate health and social workers, middle management (business and firms), civilian members and public service employees, administrative business employees, commercial workers, employees who provide direct customer service, and craft unskilled workers.

job requires the worker to be in contact with others (face-to-face, by telephone, or otherwise) in order to perform it; establishing and maintaining interpersonal relationships, representing the importance of developing constructive and cooperative working relationships with others, and maintaining them over time. The importance of each of these aspects in every occupation is measured with a score ranging from 0 to 100. Our measure of the cost of flexibility is the average of the standardized scores of these five characteristics. In particular, we regroup women's occupations in two groups, depending on whether the average score is below or above the median for the entire sample.

Clearly, other aspects of a woman's career can influence the value of flexibility. We refer in particular to the woman's level of education, to the type of position held, being it managerial, intermediary or an elementary occupation, and to whether she works in the public or the private sector. All these different dimensions of a job are also strongly interrelated as shown in table 7.[12] Moreover, women's career choices are obviously connected with the composition of her family. In particular, a pattern of assortative matching is clearly evident in the sample studied.[13] The summary statistics reveal another important message. Table 8 describes women's employment decisions before the implementation of the reform. Clearly, women with a high level of education, working in managerial occupations, and with a high cost of flexibility are aware of the value that working longer hours has in their professions, as on average, they all work more than the other groups of women. This appears to be more important than a regular presence at work, as they are not more likely to work on Wednesday than other types of mothers.

The analysis of the heterogeneous response to the reform along all these dimensions, reported in tables 9, 10 and 11 provides further insights. First, women's bargaining power at work does influence their response. In detail, table 9 shows that only women working in permanent contracts, with one to five years of tenure, and working in occupations where part-time

[12] Here we inspect only the career choices and family composition of women with different levels of education. If we were to present these statistics starting from a different dimension, we would obtain a similar picture.

[13] We also recognize that women self-select into different occupations, work environments and family's structures. However, it is beyond the scope of this paper to distinguish to what extent women's response is truly driven by the factors we have listed with respect to their unobservable characteristics.

contracts are prevalent are able to re-organize their working schedule in accordance to the new school timetable of their children. Secondly, working in occupations characterized by a low cost of flexibility also helps women react immediately to the reform, as shown in table 10.[14] Accordingly to the pattern of correlations encountered in the descriptive analysis, the response to the reform is further driven by women working in elementary occupations, operating in the private sector - where women are less likely to occupy managerial positions - with secondary education, and a partner with a low education - as reported in table 11. We also find that the probability of working on Wednesday increases mostly for mothers with one child, which are also slightly more numerous among lower educated women.

Overall, these results have two implications. First, they show that it is important to take into account the characteristics of the work environment in which women operate to fully understand their response to family-friendly policies. Secondly, they show that none of the dimensions considered here enhances the probability to react to the implicit wage subsidy delivered by this reform. In other words, these results suggest that even for low-income households the wage subsidy might be too low to trigger any increase in women's labor supply.

4.2 Impact on fathers

In principle this reform might affect the employment decisions of both parents. Therefore, to identify all the implications of this intervention, we also analyze fathers' response. As shown in table 12, we find no evidence that men's employment decisions are influenced by a change in their children's school schedule. This result is to be considered together with the fact that, among parents in employment, 76 percent of fathers worked on Wednesday before the introduction of this reform, against 56 percent of mothers. These numbers show that even in a country in which a high proportion of women participate in the labor market, a strict division of roles persists within households with children, and that institutional constraints

[14] We also find evidence that these women work longer hours and are less likely to work part-time after the introduction of the reform. These results seem to suggest that the reform allows these women to catch up with those experiencing a high cost of flexibility. However, given that along the other dimensions of heterogeneity that are positively correlated with a low cost of flexibility, we do not find evidence of this reaction, we prefer not to put too much weight on these results.

bind only for women. As a consequence, removing barriers to work for women might play the double role of enhancing the attachment to the labor market, and of contributing to change gender identities.

4.3 Consequences

In table 13 we try to measure the short-term implications of a more regular working schedule. In particular, we investigate whether mothers might have higher chances of participating in training[15] or be more likely to change their position in their firm, when being present at work every day. Moreover, we check whether mothers increase at first their overtime hours, before renegotiating their regular schedule with their employer. We do not find evidence for these responses to take place in the first year after the implementation of the reform, and this is so in the entire sample, as in any subgroup considered.

However, we do not exclude that, in the long-run, a more regular presence at work might eventually affect these outcomes.

5 Conclusion

This paper brings several contributions to the literature on female labor supply, and three are especially insightful. First, our study shows that even in advanced economies, where female participation in the labor market is high, women are sensitive to family-friendly policies and are affected by the presence of institutional constraints. Secondly, it indicates that both career's incentives and workers' bargaining power influence women's response to government interventions and barriers to work. Third, it proves that institutional constraints bind only for women and that a strict division of roles within couples persist even in developed countries.

The next step will to study the long-run implications of our findings. In particular, it will be important to analyze whether a more regular working schedule will allow women to perform more tasks and occupations, expand their chances of receiving on-the-job training

[15] We define as training the participation to stages, conferences, individual classes, or cultural activities

and promotions, and affect their earnings profile. In parallel, the release of updated employer-employees data, the 2014 French DADS, will give us the possibility to study firms' and co-workers' reaction to this reform. Finally, it will be especially interesting to evaluate the impact of this intervention on children' school performance, as soon as the appropriate data to conduct this analysis will become available.

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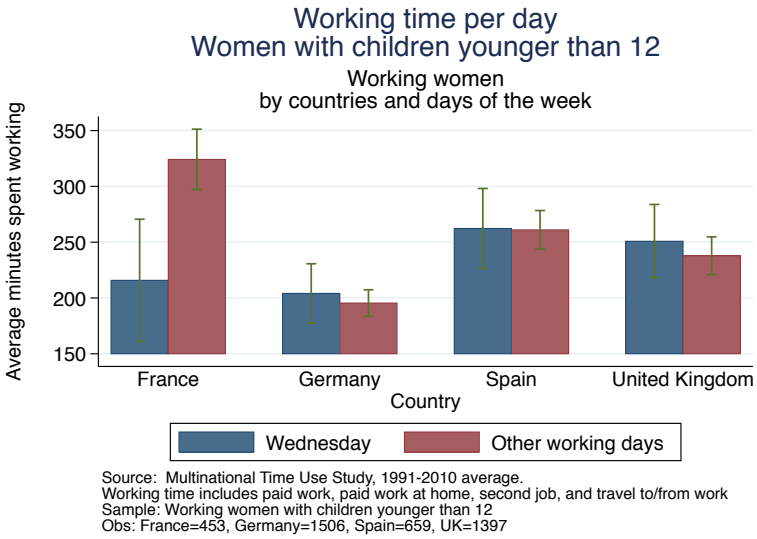
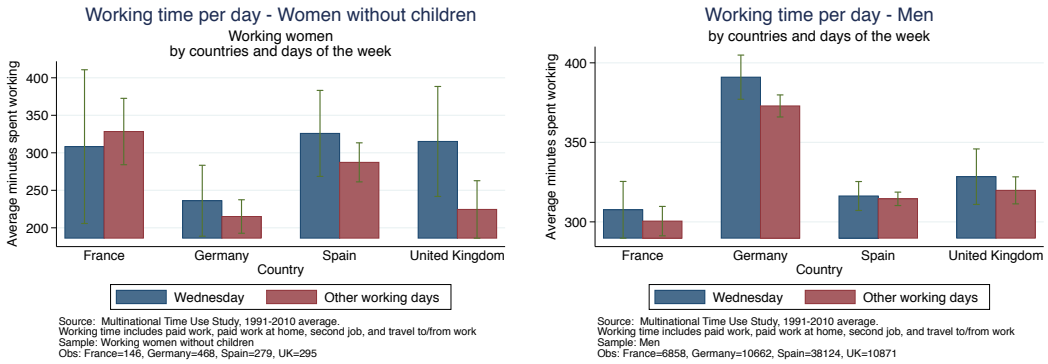
Tables and Figures

Figure 1: **Mothers' Time Use across European countries**



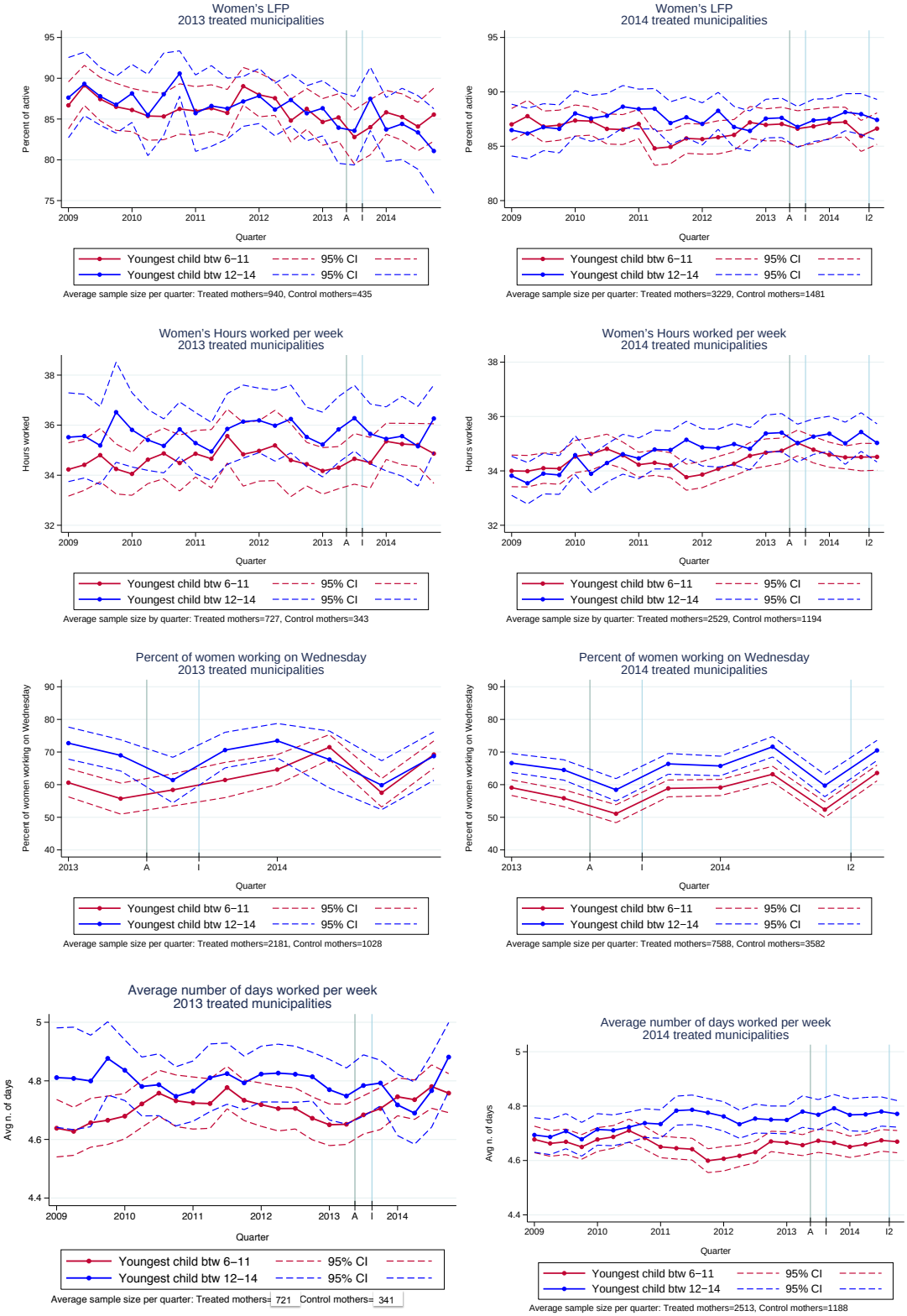
Note: the figure reports a bar graph representing the average number of minutes spent at work by mothers with children younger than 12 years old in France, Germany, Spain, and the UK. To highlight the peculiarity of the French case, we show separately the working time declared for Wednesday from that reported for the other days of the week. The graph is constructed using the 1991-2010 averages of the Multinational Time Use Survey. Finally, we computed 95 percent-confidence intervals using means and standards errors obtained after a regression of the outcome of interest on the treated category, clustering standard errors at the country level.

Figure 2: **Time Use across European countries - Women without children and Men**



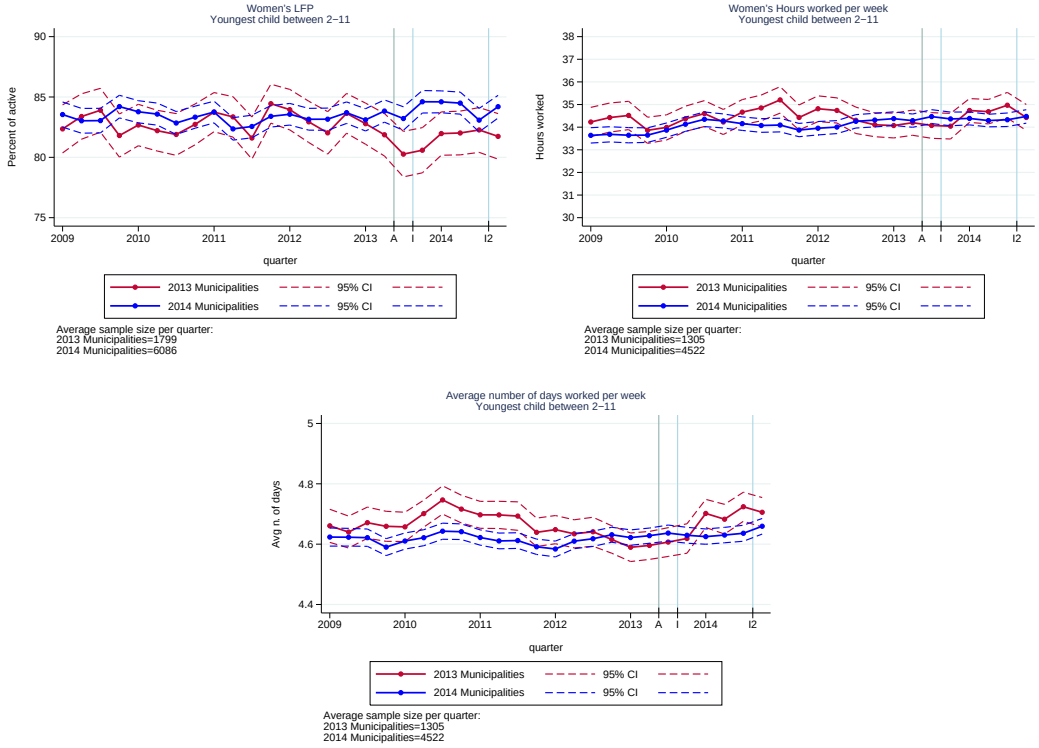
Note: the figure reports a bar graph representing the average number of minutes spent at work by women without children and men in France, Germany, Spain, and the UK. To highlight the peculiarity of the French case, we show separately the working time declared for Wednesday from that reported for the other days of the week. The graph is constructed using the 1991-2010 averages of the Multinational Time Use Survey. Finally, we computed 95 percent-confidence intervals using means and standards errors obtained after a regression of the outcome of interest on the treated category, clustering standard errors at the country level.

Figure 3: **Inspecting the parallel-trend assumption**



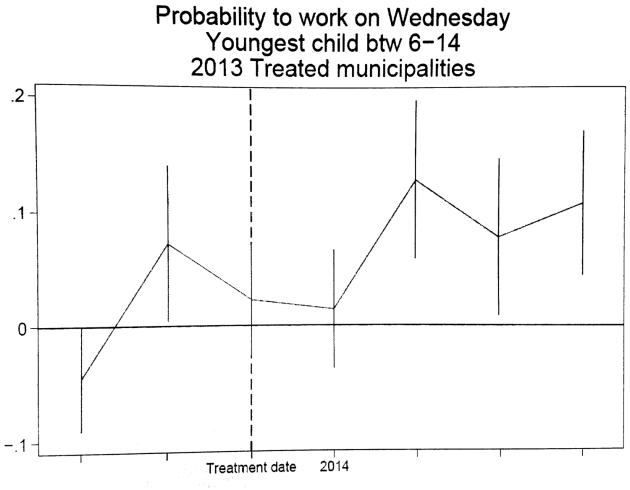
Note: the graphs show the evolution of different measures of labor supply over the period 2009-2014. In the graphs referring to 2013 municipalities, the sample is restricted to mothers living in municipalities that introduce the reform in 2013, and whose youngest child is between the age of 6 and 14. In the graphs referring to 2014 municipalities, the sample comprises instead mothers living in municipalities that introduce the reform in 2014, and whose youngest child is between the age of 6 and 14. We represent in red treated mothers, that is those whose youngest child is between 6 and 11 years old. Mothers whose youngest child is in middle school age, or control mothers, are represented in blue. The vertical bar named "A" corresponds to April 2013, when French municipalities announce in which year they will introduce the reform. The bar called "I" corresponds to September 2013, when 20 percent of municipalities implement the reform.

Figure 4: **Trends in mothers' labor supply measures across different municipalities**



Note: the graphs show the evolution of three labor supply measures between 2009 and 2014, for mothers whose youngest child is between 2 and 11 years old. We compare mothers living in municipalities that introduce the reform in 2013, in red, to those living in municipalities that postpone the implementation of the reform to 2014, in blue. The labor supply measures we consider are the proportion of active mothers, the number of hours worked per week, and the number of days worked per week. The vertical bar named "A" corresponds to April 2013, when French municipalities announce in which year they will introduce the reform. The bar called "I" corresponds to September 2013, when 20 percent of municipalities implement the reform.

Figure 5: **Dynamic response to the reform**



Note: in this graph we report the dynamic response to the reform concerning the decision to work on Wednesday. The coefficients are obtained from the estimation of regression 3 on the years 2013-2014. We also report 90-percent confidence intervals. The estimation sample includes all mothers living in municipalities that introduce the reform in 2013 and whose youngest child is between 6 and 14. The treatment date coincides with the last quarter of 2013. We also check the joint significance of, respectively, the leads and lags of the reform, and find that the former are jointly insignificant while the latter are jointly significant at 1 percent significance level.

Table 1: **Pre-treatment means in covariates and outcomes by age of the youngest child - 2013 municipalities**

	Ygst child 0-1	Ygst child 2-5	Ygst child 6-11	Ygst child 12-14	Ygst child 15-18
Age	31.1	34.4	40.4	44.8	47
	(5.4)	(5.5)	(5.4)	(4.7)	(4.3)
Married	0.52	0.56	0.60	0.63	0.64
	(0.50)	(0.50)	(0.49)	(0.48)	(0.48)
Immigrant	0.19	0.16	0.13	0.12	0.13
	(0.39)	(0.36)	(0.33)	(0.32)	(0.33)
High education	0.45	0.43	0.37	0.31	0.29
	(0.50)	(0.50)	(0.48)	(0.46)	(0.45)
Secondary education	0.37	0.37	0.42	0.45	0.45
	(0.48)	(0.48)	(0.49)	(0.50)	(0.50)
Low education	0.19	0.20	0.22	0.20	0.26
	(0.39)	(0.40)	(0.41)	(0.40)	(0.44)
Number of children	1.8	1.9	1.8	1.9	1.1
	(0.98)	(0.91)	(0.04)	(0.79)	(0.29)
Labor Force participation	0.64	0.79	0.86	0.87	0.86
	(0.48)	(0.41)	(0.34)	(0.34)	(0.35)
Part-time work	0.34	0.36	0.34	0.31	0.29
	(0.47)	(0.480)	(0.47)	(0.46)	(0.45)
Hours worked per week	34.3	34.1	34.6	35.7	36.2
	(9.9)	(10.4)	(10.8)	(11.2)	(11.4)
Days worked per week	4.6	4.6	4.7	4.8	4.86
	(0.93)	(0.89)	(0.87)	(0.87)	(0.85)
Working on Wednesday	0.48	0.52	0.56	0.67	0.67
	(0.5)	(0.5)	(0.49)	(0.47)	(0.47)

Note: the table presentes the means of the covariates included in the regressions and the outcomes considered in the analysis, computed for each age-interval of mothers' youngest child. These values are calculated for the period before the implementation of the reform, i.e. the last wave of 2013 and the 2014 waves are excluded from the sample. Moreover, the sample is restricted to those municipalities that introduce the reform in 2013.

Table 2: **Youngest child btw 6-14 - 2013 Treated municipalities**

	Labor force participation	Part-time	Hours worked per week	Days worked per week
Treatment	0.00670	-0.0318	0.390	0.0956*
	(0.0160)	(0.0285)	(0.605)	(0.0505)
Observations	32901	25483	25483	25483
R^2	0.172	0.156	0.149	0.136
F	12.68	5.718	6.107	3.805
Pre-treatment mean	0.788	0.337	34.63	4.67

Note: this table shows the coefficients capturing the effect of the reform, obtained from the estimation of regression 1. The different columns refer to the outcome considered, being respectively labor force participation, column 1, the decision to work part-time, column 2, number of weekly hours, column 3, and number of days worked per week, column 4. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household. The estimation sample comprises all mothers whose youngest child is between 6 and 14 years old, and live in municipalities that introduce the reform in 2013. In column 2, 3, and 4, we consider only mothers who are employed at the time of the interview.
*** p<0.01, ** p<0.05, * p<0.1.

Table 3: **Working days - Youngest child btw 6-14 - 2013 Treated municipalities**

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Treatment	0.0174	0.00934	0.0578**	-0.00327	-0.00232	0.0198	0.0111
	(0.0309)	(0.0290)	(0.0258)	(0.0265)	(0.0293)	(0.0245)	(0.0165)
Observations	8282	8282	8282	8282	8282	8282	8282
R^2	0.098	0.105	0.117	0.102	0.101	0.173	0.142
F	4.282	2.936	3.070	4.675	3.529	2.794	1.5 20
Pre-treatment mean	0.7152	0.7807	0.5940	0.7568	0.7536	0.1852	0.0676

Note: this table shows the coefficients capturing the effect of the reform on the decision to work each day of the week. They are obtained from the estimation of regression 1. These outcomes are available only from 2013 onward. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household. The estimation sample comprises all mothers whose youngest child is between 6 and 14 years old, and live in municipalities that introduce the reform in 2013. We consider only mothers who are employed at the time of the interview.
*** p<0.01, ** p<0.05, * p<0.1.

Table 4: **Robustness checks - Decision to work on Wednesday**

	Main regression	2014 municipalities	DDD
Treatment	0.0579**	0.00789	0.0008
	(0.0258)	(0.0180)	(0.018)
Treatment in 2013 mun.			0.0424
			(0.0322)
Observations	8282	26035	33333
R^2	0.117	0.152	0.146
F	3.070	9.228	9.847
P-value DDD			0.061

Note: this table shows the results of different robustness checks for the effect of the reform on the decision to work on Wednesday. In column 1, we report the coefficient of the main specification, regression 1. Column 2 shows the coefficient of the impact of the reform in the year 2013/14, on mothers living in municipalities that postponed its introduction to the academic year 2014/15. In this column, we exclude mothers interviewed in the last quarter of 2014, as they are actually treated. Finally, column 3 reports the impact of the reform, estimated from a triple-difference model, as specified in regression 2. In this column, the sample size comprises all mothers whose youngest child is between 6 and 14, irrespective of their municipality of residence. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household.
*** p<0.01, ** p<0.05, * p<0.1.

Table 5: **Decision to work on Wednesday - Changing the definition of the treatment groups**

	6-14	7-14	8-14	9-14	10-14
Treated group 6-11	0.0579**				
	(0.0258)				
Treated group 7-11		0.0698**			
		(0.0271)			
Treated group 8-11			0.0547*		
			(0.0293)		
Treated group 9-11				0.0727**	
				(0.0282)	
Treated group 10-11					0.0961***
					(0.0348)
Observations	8282	7376	6457	5526	4565
R^2	0.117	0.126	0.134	0.149	0.161
F	3.070	2.641	1.903	2.841	3.004

Note: this table shows the coefficients capturing the effect of the reform on the decision to work on Wednesday. They are obtained from the estimation of regression 1. The first column reports the coefficient of the main specification, where the estimation sample comprises all mothers whose youngest child is between 6 and 14 years old, and live in municipalities that introduced the reform in 2013. From column 2 onward, we consider only treated mothers, whose youngest child is progressively older. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household.

*** p<0.01, ** p<0.05, * p<0.1.

Table 6: **Changing the definition of the control groups - Number of days worked per week**

	6-13	6-14	6-15	6-16	6-17
Control group 12-13	0.0528*				
	(0.0307)				
Control group 12-14		0.0579**			
		(0.0258)			
Control group 12-15			0.0574**		
			(0.0246)		
Control group 12-16				0.0479*	
				(0.0245)	
Control group 12-17					0.0481**
					(0.0228)
Observations	7325	8282	9180	10011	10775
R^2	0.127	0.117	0.113	0.104	0.099
F	2.802	3.070	3.939	4.288	5.117

Note: this table shows the coefficients capturing the effect of the reform on the decision to work on Wednesday. They are obtained from the estimation of regression 1. The first column reports the coefficient of the main specification, where the estimation sample comprises all mothers whose youngest child is between 6 and 14 years old, and live in municipalities that introduced the reform in 2013. From column 2 onward, we progressively enlarge the control group. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household.
*** p<0.01, ** p<0.05, * p<0.1.

Table 7: **Career choices and family characteristics by mother's educational level**

	Low	Middle	High
Managerial and professional occupations	0.01	0.02	0.33
Intermediary occupations	0.09	0.15	0.41
Elementary occupations	0.70	0.67	0.20
Low cost of flexibility	0.81	0.63	0.30
Public Sector	0.24	0.28	0.33
Permanent contracts	0.64	0.59	0.56
Tenure $\leq$ 1 year	0.10	0.09	0.04
Tenure 1-5 years	0.28	0.27	0.26
Tenure $\geq$ 2 years	0.61	0.64	0.69
Single	0.27	0.33	0.24
Low-educated partner	0.33	0.16	0.07
Middle-educated partner	0.42	0.46	0.24
High-educated partner	0.05	0.15	0.53
1 child	0.36	0.32	0.28
2 children	0.43	0.52	0.55
3 children or more	0.22	0.16	0.18

Note: this table shows the career choices and family structures of mothers with different levels of education. With low and high cost of flexibility, we refer to the composite score we assign to occupations depending on the importance of certain aspects for these professions, as defined by the O*NET online platform. In detail, the score is an average of the standardized scores given to five factors, namely time pressure, frequency of decision making, structured versus unstructured work, contact with others, establishing and maintaining interpersonal relationships. A detailed description of these characteristics and the score assigned to them is given in section 4. We regroup women's occupations in two groups, depending on whether the average score is below or above the median for the entire sample.

Table 8: **Pre-treatment means of selected outcomes by subgroups**

	Working on Wednesday	Hours worked per week
Higher education	0.60	36.18
	(0.49)	(8.82)
Secondary education	0.55	33.33
	(0.5)	(10.52)
Low education	0.66	31.25
	(0.47)	(11.31)
Managerial occupations	0.60	37.1
	(0.5)	(7.9)
Intermediary occupations	0.56	35.05
	(0.5)	(8.9)
Elementary occupations	0.56	32.56
	(0.5)	(9.9)
Low cost of flexibility	0.59	32.92
	(0.5)	(11.5)
High cost of flexibility	0.57	36
	(0.5)	(9.38)

Note: this table shows the means of two selected outcomes for different subgroups of mothers, in the period preceding the introduction of the reform. With low and high cost of flexibility, we refer to the composite score we assign to occupations depending on the importance of certain aspects for these professions, as defined by the O*NET online platform. In detail, the score is an average of the standardized scores given to five factors, namely time pressure, frequency of decision making, structured versus unstructured work, contact with others, establishing and maintaining interpersonal relationships. A detailed description of these characteristics and the scores assigned to them is given in section 4. We regroup women's occupations in two groups, depending on whether the average score is below or above the median for the entire sample.

Table 9: **Decision to work on Wednesday - Importance of bargaining power**

	Entire sample	Long term contracts	Prevalence of part-time contracts	1-2 years tenure
Treatment	0.0579**	0.0678**	0.0686**	0.1014***
P-Value	0.025	0.0446	0.0470	0.001
Pre-treatment mean	0.56	0.58	0.54	0.57
N	8282	8282	8282	8282

Note: this table shows the effect of the reform on the decision to work on Wednesday for different subgroups. Column 1 reports the estimated effect for the entire sample. Column 2 displays the effect for mothers with long-term contracts. Column 3 shows the effects for mothers working in occupations in which part-time contracts are prevalent, i.e. those occupations in which most women work part-time and where part-time workers are mostly represented. Finally, column 4 focuses on mothers who have been working for more than one but less than five years with the current employer. To conduct this analysis, we choose to estimate a regression on the entire sample in which all regressors are interacted with the subgroup considered, except for municipality fixed effects. Otherwise, all regressions include the standard covariates, namely age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household.
*** p<0.01, ** p<0.05, * p<0.1.

Table 10: **Decision to work on Wednesday - Importance of cost of flexibility**

	Entire sample	Low cost of flexibility	Elementary Occupations	Private sector	Secondary education
Treatment	0.0579**	0.0967***	0.1026**	0.0863***	0.0876***
P-Value	0.025	0.014	0.019	0.013	0.008
Pre-treatment mean	0.56	0.59	0.55	0.58	0.56
N	8282	8282	8282	8282	8282

Note: this table shows the effect of the reform on the decision to work on Wednesday for different subgroups. Column 1 reports the estimated effect for the entire sample. Column 2 shows the effect for mothers working in occupations characterized by a low cost of flexibility. With low and high cost of flexibility, we refer to the composite score we assign to occupations depending on the importance of certain aspects for these professions, as defined by the O*NET online platform. In detail, the score is an average of the standardized scores given to five factors, namely time pressure, frequency of decision making, structured versus unstructured work, contact with others, establishing and maintaining interpersonal relationships. A detailed description of these characteristics and the score assigned to them is given in section 4. We regroup women's occupations in two groups, depending on whether the average score is below or above the median for the entire sample. Next, column 3 indicates the effect for women working in elementary occupations. Column 4 refers to the impact on women working in the private sector. Finally, Column 5 reports the effect on mothers with secondary education. To conduct this analysis, we choose to estimate a regression on the entire sample in which all regressors are interacted with the subgroup considered, except for municipality fixed effects. Otherwise, all regressions include the standard covariates, namely age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household.
*** p<0.01, ** p<0.05, * p<0.1.

Table 11: **Decision to work on Wednesday - Influence of the family context**

	Entire sample	Low-educated partner	1 child
Treatment	0.0579**	0.105**	0.13***
P-Value	0.025	0.018	0.001
Pre-treatment mean	0.56	0.59	0.59
N	8282	6519	8282

Note: this table shows the effect of the reform on the decision to work on Wednesday for different subgroups. Column 1 reports the estimated effect for the entire sample. Column 2 shows the effect for mothers with low-educated partners. Next, column 3 indicates the effect for women with 1 child. To conduct this analysis, we choose to estimate a regression on the entire sample in which all regressors are interacted with the subgroup considered, except for municipality fixed effects. Otherwise, all regressions include the standard covariates, namely age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household.

*** p<0.01, ** p<0.05, * p<0.1.

Table 12: **Fathers with Youngest child btw 6-14 - 2013 Treated municipalities**

	Labor force participation	Part-time	Hours worked per week	Days worked per week	Working on Wednesday
Treatment	0.00333	-0.00671	-0.263	0.0142	0.006
	(0.0178)	(0.01)	(0.594)	(0.037)	(0.0284)
Observations	25255	22827	22827	22827	7587
R^2	0.123	0.128	0.198	0.169	0.080
F	2.886	1.401	5.894	1.518	2.458
Pre-treatment mean	0.96	0.04	42.2	5.05	0.76

Note: this table shows the coefficients capturing the effect of the reform on fathers' employment decisions, obtained from the estimation of regression 1. The different columns refer to the outcome considered, being respectively labor force participation, column 1, the decision to work parti-time, column 2, number of weekly hours, column 3, and number of days worked per week, column 4. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household. The estimation sample comprises all fathers whose youngest child is between 6 and 14 years old, and live in municipalities that introduce the reform in 2013. In column 2, 3, 4, and 5 we consider only fathers who are employed at the time of the interview. Finally, in column 5 the sample is further restricted to the years 2013 and 2014 as the decision to work on Wednesday is not available for the previous waves of the FLFS.
*** p<0.01, ** p<0.05, * p<0.1.

Table 13: **Short-term consequences of the reform**

	Task change	Training in the last quarter	Overtime hours
Treatment	0.00603	0.0225	0.00315
	(0.0297)	(0.0220)	(0.0184)
Observations	25483	25451	25017
R^2	0.148	0.170	0.076
F	5.559	20.69	4.341
Pre-treatment mean	0.15	0.14	0.06

Note: this table shows the effect of the reform on additional outcomes, such as the probability of changing task or position at work, the probability of engaging in training, and the probability of working overtime hours. The estimation sample comprises all mothers whose youngest child is between 6 and 14, and who live in municipalities that introduce the reform in 2013. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household.
*** p<0.01, ** p<0.05, * p<0.1.

Appendix

Table 14: **Youngest child btw 2-14 - 2013 Treated municipalities**

	Labor force participation	Part-time	Hours worked per week	Days worked per week	Working on Wednesday
Treatment	0.00333	-0.0182	0.278	0.0814*	0.0605***
	(0.0163)	(0.0271)	(0.594)	(0.0487)	(0.0223)
Observations	53461	39249	39249	39249	12867
R^2	0.180	0.121	0.123	0.108	0.081
F	25.31	8.782	12.2	6.836	6.742
Pre-treatment mean	0.79	0.34	34.6	4.68	0.56

Note: this table shows the coefficients capturing the effect of the reform, obtained from the estimation of regression 1. The different columns refer to the outcome considered, being respectively labor force participation, column 1, the decision to work parti-time, column 2, number of weekly hours, column 3, and number of days worked per week, column 4. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household. The estimation sample comprises all mothers whose youngest child is between 2 and 14 years old, and live in municipalities that introduce the reform in 2013. In column 2, 3, 4, and 5 we consider only mothers who are employed at the time of the interview. Finally, in column 5 the sample is further restricted to the years 2013 and 2014 as the decision to work on Wednesday is not available for the previous waves of the FLFS.

*** p<0.01, ** p<0.05, * p<0.1.

Table 15: **Robustness checks - Number of days worked per week**

	Main regression	2014 municipalities	DDD	Placebo
Treatment	0.0956*	-0.0425	-0.0424	0.0332
	(0.0505)	(0.0305)	(0.0305)	(0.0573)
Treatment in 2013 mun.			0.158***	
			(0.0607)	
Observations	25483	85186	109685	20400
R^2	0.136	0.187	0.177	0.162
F	3.805	8.824	10.34	4.714

Note: this table shows the results of different robustness checks for the effect of the reform on the number of days worked per week. In column 1, we report the coefficient of the main specification, regression 1. Column 2 shows the coefficient of the impact of the reform in the year 2013/14, on mothers living in municipalities that postpone its introduction to the academic year 2014/15. In this column, we exclude mothers interviewed in the last quarter of 2014, as they are actually treated. Column 3 reports the impact of the reform, estimated from a triple-difference model, as specified in regression 2. In this column, the sample size comprises all mothers whose youngest child is between 6 and 14, irrespective of their municipality of residence. Finally, column 4 reports the estimated effect of a placebo reform. In this column the sample is restricted to mothers interviewed in the period before the implementation of the reform. All regressions include age and age square, marital status, number of children, a dummy for immigration status, municipality and wave fixed effects, dummies for the level of education, and a dummy for the presence of other members in the household. *** p<0.01, ** p<0.05, * p<0.1.