

Unintended Effects of a Family Friendly Law in a Segmented Labor Market

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Introduction

- In the light of the low fertility trends in many industrialized countries, and
- Given the increased relevance of women's labor force participation and their weight in the economic support of their families
- The introduction of family-friendly practices have recently received much attention from policy makers, practitioners and researchers.

Objective of family-friendly policies

- To promote gender equality in the workplace, and greater quality care for children and dependents.
- However, these policies may backfire if not all workers with access to them use them.
- Because these policies are costly to the employer, hiring practices may change at the detrimental of the potential eligible population who may end up using the policy.
- We find evidence that these unintended effects may indeed emerge.

Outline

- Economic and Institutional background and the family-friendly law
- Data
- Was the Law effective on the eligible population?
- Are there any unintended effects of the Law on the non-eligible population?
- Conclusion

Economic and institutional background

Spain is a traditional country...

- Despite a change in attitudes, reflected by females entrance into the labor force (female employment share has soared from 36% in 1990 to 63% in 2010), child care is still a woman's main responsibility in Spain.
- Asymmetry in the share of childbearing responsibilities across gender: on average 8.4 hours per day with their children, while fathers spend 5.7 hours (Marí-Klose *et al.*, 2010).

...but not family-friendly one

- ***Lowest female employment rates in the OECD.*** In 2002, 45% compared to 66% of the US and the UK, 67% of Canada, and 73% of Sweden.
- ***Shorter maternity leave.*** 9 weeks shorter than in most of the European countries (OECD, 2001).
- ***Below average use of formal child-care arrangements for children under 3.*** In 2001 only 9% in Spain, in sharp contrast with the European average of 25%.
- ***Non-participation of childbearing age women due to family responsibilities is high.*** In 2004, as many as 65% of women aged 45 and younger reported family responsibilities as their main reason for not participating in the labor market (LFS).
- ***Lowest fertility rate among the OECD countries.***
- ***Women delay marriage and fertility to securing a good job (with permanent contract).*** Ahn and Mira, 2001; Baizan, 2004; de la Rica and Iza, 2005; Gutierrez-Domenech, 2005; García Ferreira and Villanueva, 2007.

With a highly segmented labor market and low use of PT work

| | Incidence of female PT employment | Incidence of female temporary employment |
|--------------------|-----------------------------------|--|
| Australia | 37.7% | 5.9% |
| Belgium | 33.8% | 9.7% |
| Germany | 38.6% | 14.9% |
| The Netherlands | 59.9% | 20% |
| Norway | 30.8% | 11.1% |
| Spain | 21.1% | 31.2% |
| The United Kingdom | 37.7% | 6% |
| The United States | 17.8% | 4.2% |

Law 39/1999 (November 5th)

- Workers with children under 7 years have the right to ask for a reduction of $\frac{1}{3}$ to $\frac{1}{2}$ of the usual full-time schedule, with an equivalent reduction in their salary.
- The law declared a layoff invalid if the worker had previously asked for a work-week reduction due to family responsibilities.
- *De facto*, it only protected workers with permanent contracts, since employers who did not want to offer reduced work hours to workers with fixed-term contracts only had to wait for their contract to expire to terminate the employment relationship.
- This implies that the law gave rights to reduced work arrangements only to workers with permanent contracts.

Potential effects of the law on the eligible population

- ***Increase in the rate of PT work*** among mothers with children under 7 working with a permanent contract, but not for the other eligible groups (mothers with children under 7 years working with a fixed-term contract, and fathers with children under 7 years, regardless of their contract type).
- ***Increase permanent employment*** for eligible mothers, because this policy:
 - Protects them against any layoff, and
 - Allows them to keep their old job and work PT (before many had to quit if they wanted a PT job)
- ***Unclear effects on overall employment.***

Potential effects of the law on the *ineligible* population

- ***Reduce permanent employment*** among non-eligible childbearing-aged women (as the policy did not protect them from a layoff but there is a threat of them getting pregnant AND requesting work-week reduction) relative to childbearing-aged men (as eligible fathers did not access the new policy rights) or to older women (as there was no danger of them getting pregnant and potentially becoming eligible).
- ***Increase in employment*** as new workers need to cover the work-week time reductions taken by mothers of young children. ***Unclear which demographic group shall benefit, and whether it will be PT work or full-time work (or the contract type).***

The data

1993-2003 Labor Force Survey

- We exclude the year of implementation (the year 2000) to guarantee a clear cut before and after the law.
- Sample restrictions:
 - Private sector wage and salary workers
 - Men and women to be between 23 and 64 years old (exclude PT work by students)
 - Exclude individuals cohabitating with a grandparent
 - Exclude women who are NOT eligible at the time of the law but may have been

**Pooled cross-sectional data set with
642,291 observations**

Was the law effective on the
eligible population?

Difference-in-differences methodology

- Analysis done separately by sex and type of contract
- **Treatment group:** parents 23 to 45 years old with children under 7 years old
- **Control group:** parents 23 to 45 years old with children 7 to 12 years old (for men, we expanded 7 to 16 years old, but results robust).
- Estimate the following linear probability model:

$$PART - TIME_{it} = \alpha_0 + \alpha_1 CHILD_{0-6i} + \alpha_2 AFTER_t + \alpha_3 (CHILD_{0-6i} * AFTER_t) + \alpha_4 t + \alpha_5 t * CHILD_{0-6it} + X'_{it} \beta$$

Policy interactions

- The 1999 tax reform increased the subsidies associated with the birth of a new child.
- Regional subsidies to promote permanent contracts.
- Regional preschool enrollment rates for 0 to 3 years old.

Descriptives statistics (1)

Descriptive Statistics of Mothers Prior to the Law , 1994-1999 LFS

| | <i>TREATMENT</i> | | <i>CONTROL</i> | |
|---|--|-----------------------|--|-------------------|
| | <i>With children less than 7 years old</i> | | <i>With children 7 to 12 years old^a</i> | |
| | <i>Women</i> | <i>Men</i> | <i>Women</i> | <i>Men</i> |
| Employed pre-Law | 24.46 (42.98) | 81.11 (39.14) | 27.73 (44.77) | 74.35 (43.67) |
| Employed post-Law | 36.61 (48.18) | 89.77 (30.31) | 39.68 (48.93) | 82.54 (37.96) |
| <i>Difference</i> | 12.16*** (0.54) | 8.66*** (0.41) | 11.95*** (0.81) | 8.19*** (0.58) |
| Permanent contract pre-Law | 16.08 (36.73) | 54.72 (49.78) | 17.50 (38.00) | 51.69 (49.97) |
| Permanent contract post-Law | 25.68 (43.69) | 64.84 (47.74) | 24.63 (43.09) | 57.43 (49.45) |
| <i>Difference</i> | 9.60***††† (0.49) | 10.12***††† (0.62) | 7.13*** (0.72) | 5.74*** (0.74) |
| PT rate in primary labor market pre-Law | 16.84 (37.42) | 0.74 (8.59) | 17.73 (38.19) | 0.68 (8.20) |
| PT rate in primary labor market post-Law | 19.35 (39.51) | 0.44 (6.61) | 18.59 (38.91) | 0.75 (8.64) |
| <i>Difference</i> | 2.52*** (0.91) | -0.30***† (0.12) | 0.86 (1.30) | 0.08 (0.19) |
| PT rate in secondary labor market pre-Law | 33.01 (47.03) | 2.93 (16.85) | 35.02 (47.71) | 4.03 (19.65) |
| PT rate in secondary labor market post-Law | 39.55 (48.91) | 2.84 (16.63) | 39.16 (48.84) | 3.73 (18.96) |
| <i>Difference</i> | 6.53*** (1.75) | -0.08 (0.44) | 2.31* (2.31) | -0.29 (0.59) |

Descriptives statistics (2)

| | | | | |
|--------------------------------------|------------------|------------------|------------------|------------------|
| Age | 32.67 (4.85) | 34.28 (4.92) | 37.10 (5.20) | 36.68 (7.13) |
| Household head | 6.29 (24.28) | 91.60 (27.73) | 7.45 (26.26) | 74.81 (43.41) |
| Married | 94.60 (22.60) | 95.93 (19.76) | 88.15 (32.32) | 76.23 (42.57) |
| Number of children | 1.84 (0.84) | 1.78 (0.82) | 1.84 (0.72) | 1.63 (0.69) |
| Children younger than 6 years | 100 | 100 | 0 | 0 |
| High-school dropout | 29.92 (45.79) | 32.31 (46.77) | 44.70 (49.72) | 40.50 (49.09) |
| High-school graduate | 61.35 (48.69) | 59.16 (49.16) | 49.05 (50.00) | 51.27 (49.98) |
| College graduate or above | 8.73 (28.23) | 8.53 (27.94) | 6.25 (24.22) | 8.23 (27.48) |
| Immigrant | 1.63 (12.66) | 1.36 (11.58) | 0.98 (9.83) | 0.59 (7.64) |
| Province unemployment rate | 21.52 (7.77) | 21.50 (7.75) | 21.12 (7.45) | 21.07 (7.38) |
| Sample size | 40,345 | 30,208 | 26,764 | 26,930 |

Effect on PT work (for women)

Table 3.A. Part-Time Employment Effect of the Family Friendly Law on Eligible Women, LFS 1994-2003

| VARIABLES | Working with a Permanent contract | | | Working with a fixed-term contract | | |
|-------------------------------------|-----------------------------------|------------------------------|------------------------------|------------------------------------|-----------------------------|-----------------------------|
| Child <7 | 0.0283 (0.0184) | 0.0268 (0.0185) | 0.0203 (0.0186) | -0.0132 (0.0319) | -0.0132 (0.0318) | -0.0106 (0.0319) |
| Post 1999 | -0.0666*** (0.0228) | -0.0657*** (0.0237) | -0.0742*** (0.0241) | 0.0378 (0.0385) | 0.0291 (0.0418) | 0.0432 (0.0424) |
| Post 1999 * child < 7 | 0.0688** (0.0287) | 0.0672** (0.0287) | 0.0635** (0.0287) | 0.00325 (0.0511) | 0.00353 (0.0510) | 0.00603 (0.0511) |
| Trend | 0.0230*** (0.00404) | 0.0244*** (0.00440) | 0.0262*** (0.00454) | 0.0134** (0.00643) | 0.00653 (0.00764) | 0.00282 (0.00795) |
| Trend* child<7 | -0.0108** (0.00458) | -0.0104** (0.00458) | -0.00866* (0.00461) | 0.00183 (0.00795) | 0.00154 (0.00792) | 0.000847 (0.00794) |
| One child | | | -0.312 (0.215) | | | -0.366 (0.327) |
| Two children | | | -0.232 (0.154) | | | -0.271 (0.235) |
| Three children | | | -0.0898 (0.101) | | | -0.134 (0.152) |
| Post 2002 | | | -0.0272* (0.0161) | | | 0.0346 (0.0299) |
| Deduction 1 child | | | -2.83e-05* (1.51e-05) | | | -8.53e-06 (3.44e-05) |
| Deduction 2 Children | | | 9.21e-06 (1.64e-05) | | | 6.17e-05* (3.16e-05) |
| Deduction 3 Children | | | -6.15e-05** (2.43e-05) | | | -2.60e-05 (3.73e-05) |
| Deduction 4 children or more | | | -3.15e-05 (4.43e-05) | | | 1.59e-05 (6.49e-05) |
| Permanent Subsidy | | 1.96e-07 (6.99e-07) | 1.04e-06 (7.53e-07) | | -8.38e-07 (1.32e-06) | -1.81e-06 (1.38e-06) |
| Enrollment children <2 | | -0.0175** (0.00756) | -0.00827 (0.00788) | | 0.0292* (0.0164) | 0.0216 (0.0163) |
| Enrollment children = 2 | | 0.00955*** (0.00368) | 0.00540 (0.00382) | | -0.0106 (0.00789) | -0.00729 (0.00786) |
| Enrollment children = 3 | | -0.000434 (0.000444) | -0.000593 (0.000452) | | 0.000685 (0.000812) | 0.000945 (0.000831) |
| Observations | 16077 | 16077 | 16077 | 8698 | 8698 | 8698 |

Effect on PT work (for men)

Table 3 B. Part-Time Employment Effect of the Family Friendly Law on Eligible Men, LFS 1994-2003

| VARIABLES | Working with a Permanent contract | | | Working with a fixed-term contract | | |
|-------------------------------------|-----------------------------------|--------------------------------|--------------------------------|------------------------------------|-----------------------------|-----------------------------|
| Child <7 | 0.000975 (0.00247) | 0.00101 (0.00246) | 0.000299 (0.00251) | 7.27e-06 (0.00850) | -0.000168 (0.00854) | 0.00162 (0.00865) |
| Post 1999 | -0.00482 (0.00381) | -0.00460 (0.00401) | -0.00562 (0.00401) | -0.0117 (0.0107) | -0.0108 (0.0115) | -0.0100 (0.0116) |
| Post 1999 * child < 7 | -0.000511 (0.00464) | -0.000523 (0.00465) | -0.000658 (0.00464) | 0.00861 (0.0134) | 0.00900 (0.0134) | 0.00942 (0.0134) |
| Trend | 0.00107* (0.000567) | 0.00102* (0.000617) | 0.00131** (0.000643) | 0.00243 (0.00168) | 0.000706 (0.00195) | 0.000910 (0.00199) |
| Trend* child<7 | -0.000470 (0.000693) | -0.000472 (0.000696) | -0.000284 (0.000706) | -0.00112 (0.00205) | -0.00110 (0.00206) | -0.00150 (0.00207) |
| One child | | | -0.00793 (0.0215) | | | -0.0227 (0.0420) |
| Two children | | | -0.00811 (0.0173) | | | 0.00125 (0.0303) |
| Three children | | | -0.0109 (0.0136) | | | 0.0239 (0.0216) |
| Post 2002 | | | -0.00242 (0.00217) | | | -0.0102 (0.00718) |
| Deduction 1 child | | | -3.74e-06** (1.82e-06) | | | 5.91e-06 (7.87e-06) |
| Deduction 2 Children | | | -1.02e-06 (1.54e-06) | | | 6.53e-06 (7.64e-06) |
| Deduction 3 Children | | | -3.38e-07 (1.57e-06) | | | -4.93e-06 (6.59e-06) |
| Deduction 4 children or more | | | -5.49e-06 (4.59e-06) | | | 4.66e-05** (2.35e-05) |
| Permanent Subsidy | | 8.65e-09 (8.71e-08) | 9.07e-08 (9.53e-08) | | -2.89e-07 (3.26e-07) | -1.42e-07 (3.32e-07) |
| Enrollment children <2 | | -0.000295 (0.000673) | 0.000518 (0.000791) | | 0.000325 (0.00373) | 0.00137 (0.00390) |
| Enrollment children = 2 | | 0.000139 (0.000306) | -0.000229 (0.000364) | | 0.000622 (0.00181) | 0.000136 (0.00188) |
| Enrollment children = 3 | | 2.13e-05 (5.96e-05) | -8.43e-06 (6.22e-05) | | 0.000300 (0.000211) | 0.000218 (0.000204) |
| Observations | 42963 | 42963 | 42963 | 19802 | 19802 | 19802 |

Effect on employment and type of contract

Table 4. Employment and Permanent Employment Effect of the Family-Friendly Law on Eligible Parents, LFS 1994-2003

| VARIABLES | Women | | | Men | | |
|--------------------------------|------------------------------|--|---|------------------------------|--|---|
| | <i>Employment</i> | <i>Permanent Unconditional on employment</i> | <i>Contract Conditional on employment</i> | <i>Employment</i> | <i>Permanent Unconditional on employment</i> | <i>Contract Conditional on employment</i> |
| Child <7 | -0.00197 (0.00639) | 0.0345*** (0.00591) | 0.0924*** (0.0183) | 0.0286*** (0.00771) | -0.0126 (0.00925) | -0.0170 (0.0106) |
| Post 1999 | 0.0449*** (0.00926) | 0.0127 (0.00888) | -0.0419* (0.0218) | -0.00731 (0.00886) | 0.0109 (0.0112) | 0.0123 (0.0125) |
| Post 1999 * child <7 | -0.00996 (0.0109) | 0.0285*** (0.0103) | 0.0782*** (0.0263) | -0.00874 (0.0109) | -0.0150 (0.0143) | -0.00882 (0.0157) |
| Trend | -0.00680*** (0.00175) | -0.000328 (0.00166) | 0.0121*** (0.00422) | -0.00174 (0.00168) | 0.000217 (0.00220) | -0.000727 (0.00247) |
| Trend* child<7 | -0.00434*** (0.00161) | -0.00568*** (0.00150) | -0.00939** (0.00431) | -0.00355** (0.00180) | 0.00380* (0.00225) | 0.00470* (0.00252) |
| Observations | 91238 | 91238 | 24775 | 78551 | 78551 | 62765 |

Multinomial logit: Relative Risk Ratios (for women)

Table 5. Labor Force Status Effect of the Family-Friendly Law on Eligible Mothers, LFS 1994-2003
Multinomial Logit: Relative Risk Ratios. (Baseline outcome is Working PT with a Fixed-Term Contract)

| <i>VARIABLES</i> | <i>Out of LF</i> | <i>Unemp.</i> | <i>FT fixed-term</i> | <i>PT permanent</i> | <i>FT permanent</i> |
|-------------------------------------|--------------------------|--------------------------|----------------------------|-----------------------------|--------------------------|
| Child <7 | 0.433*** (0.118) | 0.180 (0.123) | 0.0705 (0.141) | 0.660*** (0.174) | 0.533*** (0.136) |
| Post 1999 | -0.600*** (0.155) | -0.782*** (0.166) | -0.196 (0.179) | -0.720*** (0.208) | -0.237 (0.170) |
| Post 1999 * child < 7 | 0.285 (0.185) | 0.241 (0.196) | -0.0317 (0.216) | 0.705*** (0.249) | 0.294 (0.205) |
| Trend | 0.0986*** (0.0301) | 0.108*** (0.0314) | -0.00862 (0.0353) | 0.180*** (0.0410) | 0.00926 (0.0325) |
| Trend* child<7 | 0.0114 (0.0286) | 0.0165 (0.0300) | -0.00520 (0.0340) | -0.0929** (0.0409) | -0.0388 (0.0325) |
| Observations | 91238 | 91238 | 91238 | 91238 | 91238 |

Results on PT employment by education level (women)

Table 6. Part-Time Employment Effect of the Family Friendly Law on Eligible Women, By Education Level, LFS 1994-2003

| VARIABLES | Working with a Permanent contract | | | Working with a fixed-term contract | | |
|-------------------------------------|-----------------------------------|-----------------------------|-----------------------------|------------------------------------|----------------------------|---------------------------|
| | HS dropout | HS graduate | College | HS dropout | HS graduate | College |
| Child <7 | -0.00512 (0.0416) | 0.0232 (0.0236) | -0.0164 (0.0405) | -0.00787 (0.0525) | 0.0125 (0.0427) | -0.164 (0.140) |
| Post 1999 | -0.103* (0.0566) | -0.0817*** (0.0295) | 0.0342 (0.0500) | 0.117 (0.0745) | -0.0144 (0.0549) | 0.232 (0.169) |
| Post 1999 * child < 7 | 0.136* (0.0816) | 0.0592* (0.0356) | -0.0242 (0.0574) | 0.0153 (0.0931) | 0.0546 (0.0647) | -0.264 (0.198) |
| Trend | 0.0457*** (0.0107) | 0.0255*** (0.00579) | -0.00691 (0.00942) | 0.00793 (0.0140) | -0.000334 (0.0103) | 0.0155 (0.0307) |
| Trend* child <7 | -0.00855 (0.0113) | -0.0100* (0.00590) | 0.00951 (0.00918) | 0.000211 (0.0138) | -0.00553 (0.0104) | 0.0318 (0.0323) |
| Observations | 3151 | 10140 | 2786 | 2683 | 5293 | 722 |

Results on employment by education level (women)

Table 7. Employment Effects of the Family Friendly Law on Eligible Women, By Education Level, LFS 1994-2003

| VARIABLES | Employment | | | Permanent contract | | | | | |
|-------------------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|------------------------------|----------------------------|----------------------------|-------------------------------|----------------------------|
| | | | | Unconditional employment | | | Conditional employment | | |
| | HS dropout | HS graduate | College | HS dropout | HS graduate | College | HS dropout | HS graduate | College |
| Child <7 | -0.00501 (0.00892) | -0.00590 (0.00951) | 0.0351 (0.0273) | 0.0210*** (0.00782) | 0.0397*** (0.00874) | 0.0528* (0.0289) | 0.0816** (0.0343) | 0.101*** (0.0246) | 0.0942* (0.0493) |
| Post 1999 | 0.0270* (0.0153) | 0.0559*** (0.0128) | 0.0223 (0.0329) | -0.000632 (0.0147) | 0.0103 (0.0120) | 0.0216 (0.0356) | -0.0593 (0.0440) | -0.0504* (0.0276) | 0.0152 (0.0603) |
| Post 1999 * child < 7 | 0.00482 (0.0185) | -0.0243 (0.0148) | 0.0321 (0.0391) | 0.0186 (0.0164) | 0.0317** (0.0137) | 0.0275 (0.0412) | 0.0867 (0.0583) | 0.0905*** (0.0334) | 0.0259 (0.0680) |
| Trend | -0.00602* (0.00310) | -0.00784*** (0.00242) | -0.00314 (0.00670) | 0.000936 (0.00275) | 0.000464 (0.00230) | -0.00596 (0.00689) | 0.0108 (0.00874) | 0.0157*** (0.00549) | -0.00260 (0.0115) |
| Trend* | -0.00470* (0.00250) | -0.00301 (0.00229) | -0.0130** (0.00645) | -0.00525** (0.00216) | -0.00618*** (0.00213) | -0.00813 (0.00672) | -0.0130 (0.00869) | -0.0101* (0.00569) | -0.00843 (0.0113) |
| Observations | 29701 | 53545 | 7992 | 29701 | 53545 | 7992 | 5834 | 15433 | 3508 |

Were there unintended effects for
the law on the ineligible
population?

Difference-in-differences-in-differences methodology

- Analysis done separately by education level
- We exclude eligible mothers (or women who may have been eligible at some point in time but not at the survey date)
- All individuals between 23 and 64 (pooling men and women)
- **Treatment group:** Women between 23 and 45 years old without children under seven
- **Control group:** Men between 23 and 45 years old without children under seven
- Include men and women between 46 and 64 to control for any possible changes across sex over time
- **Outcomes of interest:** Employment, employment with a permanent contract, and PT employment rate.
- Estimate the following linear probability model

$$\begin{aligned} Y_{it} = & \alpha_0 + \alpha_1 WOMAN_i + \alpha_2 AGE_{23-45i} + \alpha_3 (AGE_{23-45i} * WOMAN_i) \\ & + \alpha_4 AFTER_t + \alpha_5 (WOMAN_i * AFTER_t) + \alpha_6 (AGE_{23-45i} * AFTER_t) \\ & + \alpha_7 (AGE_{23-45i} * WOMAN * AFTER_t) \\ & + \alpha_8 t + \alpha_9 t * CHILD_{0-6it} + X'_{it} \beta \end{aligned}$$

Descriptives statistics (1)

Table 8
Descriptive Statistics of Non-Eligible Childbearing Aged Women Prior to the Law, 1994-1999 LFS

| | <i>High-school dropouts</i> | | <i>High-school graduates</i> | | <i>College graduates</i> | |
|---|-----------------------------|-------------------|------------------------------|--------------------|--------------------------|--------------------|
| | <i>Women</i> | <i>Men</i> | <i>Women</i> | <i>Men</i> | <i>Women</i> | <i>Men</i> |
| Employed pre-Law | 25.29 (43.47) | 64.17 (47.95) | 41.52 (49.76) | 71.75 (45.02) | 43.27 (49.55) | 61.05 (48.77) |
| Employed post-Law | 36.78 (48.22) | 73.62 (44.07) | 55.00 (48.75) | 82.40 (38.08) | 60.81 (48.82) | 74.55 (43.56) |
| <i>Difference</i> | 11.49***†† (0.66) | 9.45*** (0.55) | 13.48***††† (0.44) | 10.64*** (0.30) | 17.54***††† (0.77) | 13.50*** (0.71) |
| Permanent contract pre-Law | 14.84 (35.55) | 35.89 (47.97) | 24.08 (42.76) | 45.14 (49.76) | 23.63 (42.45) | 43.99 (49.64) |
| Permanent contract post-Law | 21.07 (40.78) | 39.07 (48.79) | 34.39 (47.50) | 56.09 (49.63) | 38.41 (48.64) | 55.82 (49.66) |
| <i>Difference</i> | 6.23***††† (0.58) | 3.18*** (0.62) | 10.31*** (0.42) | 10.94*** (0.38) | 14.78***††† (0.77) | 11.83*** (0.82) |
| PT rate in primary labor market pre-Law | 22.79 (41.95) | 0.64 (8.01) | 11.33 (31.70) | 1.02 (10.07) | 8.36 (27.68) | 1.96 (13.96) |
| PT rate in primary labor market post-Law | 21.57 (41.14) | 0.84 (9.15) | 11.90 (32.38) | 0.95 (9.70) | 7.13 (25.73) | 1.99 (13.96) |
| <i>Difference</i> | -1.22 (1.23) | 0.20 (0.18) | 0.57 (0.51) | -0.07 (0.10) | -1.23 (0.82) | 0.03 (0.30) |
| PT rate in secondary labor market pre-Law | 32.70 (46.92) | 3.01 (17.09) | 23.12 (42.16) | 4.73 (21.22) | 22.25 (41.60) | 12.07 (32.58) |
| PT rate in secondary labor market post-Law | 33.53 (47.23) | 2.22 (14.74) | 25.16 (43.39) | 4.66 (21.08) | 23.72 (42.54) | 11.40 (31.79) |
| <i>Difference</i> | 0.83†† (1.78) | -0.79** (0.33) | 2.03***†† (0.89) | -0.07 (0.31) | 1.47 (1.48) | -0.67 (1.15) |

Descriptives statistics (2)

Table 8
Descriptive Statistics of Non-Eligible Childbearing Aged Women Prior to the Law, 1994-1999 LFS

| | <i>High-school dropouts</i> | | <i>High-school graduates</i> | | <i>College graduates</i> | |
|---|-----------------------------|-------------------|------------------------------|--------------------|--------------------------|--------------------|
| | <i>Women</i> | <i>Men</i> | <i>Women</i> | <i>Men</i> | <i>Women</i> | <i>Men</i> |
| Employed pre-Law | 25.29 (43.47) | 64.17 (47.95) | 41.52 (49.76) | 71.75 (45.02) | 43.27 (49.55) | 61.05 (48.77) |
| Employed post-Law | 36.78 (48.22) | 73.62 (44.07) | 55.00 (48.75) | 82.40 (38.08) | 60.81 (48.82) | 74.55 (43.56) |
| <i>Difference</i> | 11.49***†† (0.66) | 9.45*** (0.55) | 13.48***††† (0.44) | 10.64*** (0.30) | 17.54***††† (0.77) | 13.50*** (0.71) |
| Permanent contract pre-Law | 14.84 (35.55) | 35.89 (47.97) | 24.08 (42.76) | 45.14 (49.76) | 23.63 (42.45) | 43.99 (49.64) |
| Permanent contract post-Law | 21.07 (40.78) | 39.07 (48.79) | 34.39 (47.50) | 56.09 (49.63) | 38.41 (48.64) | 55.82 (49.66) |
| <i>Difference</i> | 6.23***††† (0.58) | 3.18*** (0.62) | 10.31*** (0.42) | 10.94*** (0.38) | 14.78***††† (0.77) | 11.83*** (0.82) |
| PT rate in primary labor market pre-Law | 22.79 (41.95) | 0.64 (8.01) | 11.33 (31.70) | 1.02 (10.07) | 8.36 (27.68) | 1.96 (13.96) |
| PT rate in primary labor market post-Law | 21.57 (41.14) | 0.84 (9.15) | 11.90 (32.38) | 0.95 (9.70) | 7.13 (25.73) | 1.99 (13.96) |
| <i>Difference</i> | -1.22 (1.23) | 0.20 (0.18) | 0.57 (0.51) | -0.07 (0.10) | -1.23 (0.82) | 0.03 (0.30) |
| PT rate in secondary labor market pre-Law | 32.70 (46.92) | 3.01 (17.09) | 23.12 (42.16) | 4.73 (21.22) | 22.25 (41.60) | 12.07 (32.58) |
| PT rate in secondary labor market post-Law | 33.53 (47.23) | 2.22 (14.74) | 25.16 (43.39) | 4.66 (21.08) | 23.72 (42.54) | 11.40 (31.79) |
| <i>Difference</i> | 0.83†† (1.78) | -0.79** (0.33) | 2.03***†† (0.89) | -0.07 (0.31) | 1.47 (1.48) | -0.67 (1.15) |

Employment and permanent employment

Table 9. Employment Effects of the Family Friendly Law on Non-Eligible Childbearing-Aged Women, By Education Level, LFS 1994-2003

| VARIABLES | Permanent contract | | | | | | | | |
|-------------------------------|------------------------------------|------------------------------------|----------------------------------|-----------------------------------|--------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|
| | Employment | | | Unconditional on employment | | | Conditional on employment | | |
| | HS dropout | HS graduate | College | HS dropout | HS graduate | College | HS dropout | HS graduate | College |
| woman | -0.0406*** (0.00237) | -0.107*** (0.00420) | -0.0661*** (0.00918) | -0.0273*** (0.00250) | -0.106*** (0.00467) | -0.0804*** (0.00950) | -0.000741 (0.00711) | -0.0135 (0.00928) | -0.0112 (0.0149) |
| age_23_45 | 0.0176*** (0.00383) | -0.0494*** (0.00439) | -0.0779*** (0.00840) | -0.0237*** (0.00424) | -0.0823*** (0.00520) | -0.0763*** (0.00936) | -0.00538 (0.00694) | -0.0385*** (0.00655) | 0.0210** (0.0104) |
| age_23_45* | -0.0629*** (0.00536) | 0.0196*** (0.00638) | 0.00350 (0.0133) | 0.0187*** (0.00538) | 0.0791*** (0.00675) | 0.0340** (0.0133) | -0.00190 (0.0158) | -0.00942 (0.0133) | -0.0341 (0.0225) |
| Woman Post 1999 | -0.00456 (0.00389) | -0.0425*** (0.00597) | -0.0346*** (0.0111) | 0.00653 (0.00457) | -0.0397*** (0.00694) | -0.0202 (0.0124) | -0.00276 (0.00913) | -0.0445*** (0.00840) | -0.0345** (0.0142) |
| Post 1999* Woman | -0.00903*** (0.00321) | 0.0165*** (0.00584) | -0.0122 (0.0127) | -0.00696* (0.00373) | 0.0237*** (0.00658) | 0.0100 (0.0138) | 0.0229** (0.0107) | 0.0137 (0.0130) | 0.0218 (0.0204) |
| age_23_45* Post 1999 | -0.0101* (0.00524) | 0.0145*** (0.00520) | 0.0287*** (0.00947) | -0.0277*** (0.00625) | 0.0381*** (0.00615) | 0.0311*** (0.0107) | 0.00373 (0.00873) | 0.0561*** (0.00681) | 0.0528*** (0.0108) |
| age_23_45* Post 1999*woman | 0.00479 (0.00975) | 0.00996 (0.00966) | 0.0127 (0.0199) | 0.00162 (0.0102) | -0.0416*** (0.0105) | 0.0103 (0.0204) | -0.0863*** (0.0249) | -0.0782*** (0.0184) | 0.00901 (0.0309) |
| Trend | -5.69e-05 (0.000670) | 0.00412*** (0.000950) | 0.00184 (0.00198) | 0.00414*** (0.000742) | 0.00962*** (0.00109) | 0.00724*** (0.00211) | -0.000741 (0.00711) | -0.0135 (0.00928) | -0.0112 (0.0149) |
| Trend* age_23_45*women | 0.00251** (0.00122) | -0.000126 (0.00124) | 0.00547** (0.00246) | 0.00436*** (0.00120) | 0.00160 (0.00128) | -0.000941 (0.00241) | -0.00538 (0.00694) | -0.0385*** (0.00655) | 0.0210** (0.0104) |
| Observations | 280034 | 241592 | 61911 | 280034 | 241592 | 61911 | 89891 | 138877 | 33136 |

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Part-time employment rate

Table 10. Part-Time Employment Effect of the Family Friendly Law on Non-Eligible Childbearing-Aged Women, By Education Level, LFS 1994-2003

| VARIABLES | Working with a Permanent contract | | | Working with a fixed-term contract | | |
|-------------------------------|--------------------------------------|------------------------------------|----------------------------------|------------------------------------|-----------------------------------|--------------------------------|
| | HS dropout | HS graduate | College | HS dropout | HS graduate | College |
| woman | 0.245*** (0.00697) | 0.110*** (0.00851) | 0.0946*** (0.0145) | 0.368*** (0.0130) | 0.357*** (0.0296) | 0.256*** (0.0861) |
| age_23_45 | 0.0100*** (0.00346) | 0.00411 (0.00329) | 0.0143** (0.00636) | 0.0518*** (0.00723) | 0.0864*** (0.0154) | -0.00217 (0.0654) |
| age_23_45* | -0.0914*** (0.0164) | -0.0298*** (0.0111) | -0.0462** (0.0197) | -0.0727*** (0.0242) | -0.231*** (0.0320) | -0.164* (0.0907) |
| Woman Post 1999 | -0.00846* (0.00468) | -0.0138*** (0.00308) | -0.000706 (0.00688) | -0.00918 (0.00902) | -0.00451 (0.0127) | -0.0535 (0.0654) |
| Post 1999* Woman | -0.00413 (0.0113) | 0.0129 (0.0119) | -0.0421** (0.0186) | 0.0650*** (0.0220) | 0.0219 (0.0415) | -0.148 (0.125) |
| age_23_45* Post 1999 | 0.00655*** (0.00253) | 0.00134 (0.00231) | -0.00133 (0.00504) | 0.00191 (0.00564) | 0.00115 (0.0111) | 0.0279 (0.0606) |
| age_23_45* Post 1999*woman | -0.0825*** (0.0277) | -0.0274* (0.0161) | 0.0256 (0.0264) | -0.0143 (0.0411) | -0.0696 (0.0452) | 0.160 (0.130) |
| Trend | 0.00366*** (0.00105) | 0.00318*** (0.000671) | 0.000173 (0.00158) | 0.00304 (0.00211) | 0.00339** (0.00171) | 0.00865* (0.00525) |
| Trend* age_23_45*women | 0.0146*** (0.00393) | 0.00383** (0.00177) | 0.00107 (0.00315) | -0.00602 (0.00535) | 0.0127*** (0.00295) | 0.00146 (0.00629) |
| Observations | 59385 | 92083 | 23246 | 30506 | 46794 | 9890 |

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Conclusion

Was the law effective?

- The law was successful in that it increased the rate of PT work among eligible mothers working with a permanent contract—that is, those with children under seven—by 39%.
- No effect on eligible fathers or eligible mothers working with a fixed-term contract.
- Heterogeneity analysis reveals that this effect is driven by less-educated women.

Where there any unintended effects among the non-eligible population?

- We find evidence that, after the law, employers avoided hiring childbearing-aged women under permanent contracts:
- The law significantly decreased by 17% the likelihood of being employed with a permanent contract, while increasing their likelihood of having a fixed-term contract job by 30%.
- This is particularly concerning as more than half (55%) of women between 23 and 45 years in Spain are high-school graduates.

Increasing flexibility in the labor market: Boon or Bane?

- Our paper highlights the importance of institutions when policies aiming at adding flexibility in the labor market
- Overall, it shows that well intended policies may be perverse
- Problem is the duality of the labor market
- And that not *all* access it...