

# 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 5<sup>th</sup>)

- 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:

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

# 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<sup>§</sup></i>	
	<i>Women</i>	<i>Men</i>	<i>Women</i>	<i>Men</i>
<b>Employed pre-Law</b>	24.46 (42.98)	81.11 (39.14)	27.73 (44.77)	74.35 (43.67)
<b>Employed post-Law</b>	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)
<b>Permanent contract pre-Law</b>	16.08 (36.73)	54.72 (49.78)	17.50 (38.00)	51.69 (49.97)
<b>Permanent contract post-Law</b>	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)
<b>PT rate in primary labor market pre-Law</b>	16.84 (37.42)	0.74 (8.59)	17.73 (38.19)	0.68 (8.20)
<b>PT rate in primary labor market post-Law</b>	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)
<b>PT rate in secondary labor market pre-Law</b>	33.01 (47.03)	2.93 (16.85)	35.02 (47.71)	4.03 (19.65)
<b>PT rate in secondary labor market post-Law</b>	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)

<b>Age</b>	32.67 (4.85)	34.28 (4.92)	37.10 (5.20)	36.68 (7.13)
<b>Household head</b>	6.29 (24.28)	91.60 (27.73)	7.45 (26.26)	74.81 (43.41)
<b>Married</b>	94.60 (22.60)	95.93 (19.76)	88.15 (32.32)	76.23 (42.57)
<b>Number of children</b>	1.84 (0.84)	1.78 (0.82)	1.84 (0.72)	1.63 (0.69)
<b>Children younger than 6 years</b>	100	100	0	0
<b>High-school dropout</b>	29.92 (45.79)	32.31 (46.77)	44.70 (49.72)	40.50 (49.09)
<b>High-school graduate</b>	61.35 (48.69)	59.16 (49.16)	49.05 (50.00)	51.27 (49.98)
<b>College graduate or above</b>	8.73 (28.23)	8.53 (27.94)	6.25 (24.22)	8.23 (27.48)
<b>Immigrant</b>	1.63 (12.66)	1.36 (11.58)	0.98 (9.83)	0.59 (7.64)
<b>Province unemployment rate</b>	21.52 (7.77)	21.50 (7.75)	21.12 (7.45)	21.07 (7.38)
<b>Sample size</b>	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)
<b>Post 1999</b>	<b>0.0688**</b>	<b>0.0672**</b>	<b>0.0635**</b>	<b>0.00325</b>	<b>0.00353</b>	<b>0.00603</b>
<b>* child &lt; 7</b>	<b>(0.0287)</b>	<b>(0.0287)</b>	<b>(0.0287)</b>	<b>(0.0511)</b>	<b>(0.0510)</b>	<b>(0.0511)</b>
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			9.21e-06 (1.64e-05)			6.17e-05* (3.16e-05)
Children			-6.15e-05** (2.43e-05)			-2.60e-05 (3.73e-05)
Deduction 3			-3.15e-05 (4.43e-05)			1.59e-05 (6.49e-05)
Children						
Deduction 4						
children or more						
Permanent		1.96e-07 (6.99e-07)	1.04e-06 (7.53e-07)		-8.38e-07 (1.32e-06)	-1.81e-06 (1.38e-06)
Subsidy						
Enrollment		-0.0175** (0.00756)	-0.00827 (0.00788)		0.0292* (0.0164)	0.0216 (0.0163)
children <2		0.00955*** (0.00368)	0.00540 (0.00382)		-0.0106 (0.00789)	-0.00729 (0.00786)
Enrollment		-0.000434 (0.000444)	-0.000593 (0.000452)		0.000685 (0.000812)	0.000945 (0.000831)
children = 2						
Enrollment						
children = 3						
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)
<b>Post 1999</b>	<b>-0.000511</b>	<b>-0.000523</b>	<b>-0.000658</b>	<b>0.00861</b>	<b>0.00900</b>	<b>0.00942</b>
<b>* child &lt; 7</b>	<b>(0.00464)</b>	<b>(0.00465)</b>	<b>(0.00464)</b>	<b>(0.0134)</b>	<b>(0.0134)</b>	<b>(0.0134)</b>
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			-1.02e-06 (1.54e-06)			6.53e-06 (7.64e-06)
Children			-3.38e-07 (1.57e-06)			-4.93e-06 (6.59e-06)
Deduction 3			-5.49e-06 (4.59e-06)			4.66e-05** (2.35e-05)
Children						
Deduction 4						
children or more						
Permanent		8.65e-09	9.07e-08		-2.89e-07	-1.42e-07
Subsidy		(8.71e-08)	(9.53e-08)		(3.26e-07)	(3.32e-07)
Enrollment		-0.000295	0.000518		0.000325	0.00137
children <2		(0.000673)	(0.000791)		(0.00373)	(0.00390)
Enrollment		0.000139	-0.000229		0.000622	0.000136
children = 2		(0.000306)	(0.000364)		(0.00181)	(0.00188)
Enrollment		2.13e-05	-8.43e-06		0.000300	0.000218
children = 3		(5.96e-05)	(6.22e-05)		(0.000211)	(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)
<b>Post 1999</b>	<b>-0.00996</b>	<b>0.0285***</b>	<b>0.0782***</b>	<b>-0.00874</b>	<b>-0.0150</b>	<b>-0.00882</b>
<b>* child &lt; 7</b>	<b>(0.0109)</b>	<b>(0.0103)</b>	<b>(0.0263)</b>	<b>(0.0109)</b>	<b>(0.0143)</b>	<b>(0.0157)</b>
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)
<b>Post 1999 * child &lt; 7</b>	<b>0.285 (0.185)</b>	<b>0.241 (0.196)</b>	<b>-0.0317 (0.216)</b>	<b>0.705*** (0.249)</b>	<b>0.294 (0.205)</b>
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)
<b>Post 1999</b>	<b>0.136*</b>	<b>0.0592*</b>	<b>-0.0242</b>	<b>0.0153</b>	<b>0.0546</b>	<b>-0.264</b>
<b>* child &lt; 7</b>	<b>(0.0816)</b>	<b>(0.0356)</b>	<b>(0.0574)</b>	<b>(0.0931)</b>	<b>(0.0647)</b>	<b>(0.198)</b>
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)
<b>Post 1999</b>	<b>0.00482</b>	<b>-0.0243</b>	<b>0.0321</b>	<b>0.0186</b>	<b>0.0317**</b>	<b>0.0275</b>	<b>0.0867</b>	<b>0.0905***</b>	<b>0.0259</b>
<b>* child &lt; 7</b>	<b>(0.0185)</b>	<b>(0.0148)</b>	<b>(0.0391)</b>	<b>(0.0164)</b>	<b>(0.0137)</b>	<b>(0.0412)</b>	<b>(0.0583)</b>	<b>(0.0334)</b>	<b>(0.0680)</b>
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)
child <7	(0.00250)	(0.00229)	(0.00645)	(0.00216)	(0.00213)	(0.00672)	(0.00869)	(0.00569)	(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>
<b>Employed pre-Law</b>	25.29 (43.47)	64.17 (47.95)	41.52 (49.76)	71.75 (45.02)	43.27 (49.55)	61.05 (48.77)
<b>Employed post-Law</b>	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)
<b>Permanent contract pre-Law</b>	14.84 (35.55)	35.89 (47.97)	24.08 (42.76)	45.14 (49.76)	23.63 (42.45)	43.99 (49.64)
<b>Permanent contract post-Law</b>	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)
<b>PT rate in primary labor market pre-Law</b>	22.79 (41.95)	0.64 (8.01)	11.33 (31.70)	1.02 (10.07)	8.36 (27.68)	1.96 (13.96)
<b>PT rate in primary labor market post-Law</b>	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)
<b>PT rate in secondary labor market pre-Law</b>	32.70 (46.92)	3.01 (17.09)	23.12 (42.16)	4.73 (21.22)	22.25 (41.60)	12.07 (32.58)
<b>PT rate in secondary labor market post-Law</b>	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>
<b>Employed pre-Law</b>	25.29 (43.47)	64.17 (47.95)	41.52 (49.76)	71.75 (45.02)	43.27 (49.55)	61.05 (48.77)
<b>Employed post-Law</b>	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)
<b>Permanent contract pre-Law</b>	14.84 (35.55)	35.89 (47.97)	24.08 (42.76)	45.14 (49.76)	23.63 (42.45)	43.99 (49.64)
<b>Permanent contract post-Law</b>	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)
<b>PT rate in primary labor market pre-Law</b>	22.79 (41.95)	0.64 (8.01)	11.33 (31.70)	1.02 (10.07)	8.36 (27.68)	1.96 (13.96)
<b>PT rate in primary labor market post-Law</b>	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)
<b>PT rate in secondary labor market pre-Law</b>	32.70 (46.92)	3.01 (17.09)	23.12 (42.16)	4.73 (21.22)	22.25 (41.60)	12.07 (32.58)
<b>PT rate in secondary labor market post-Law</b>	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	Employment			Permanent contract					
				Unconditional on employment			Conditional on employment		
	HSdropout	HSgraduate	College	HSdropout	HSgraduate	College	HSdropout	HSgraduate	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	-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	-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)
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*	<b>0.00479</b> <b>(0.00975)</b>	<b>0.00996</b> <b>(0.00966)</b>	<b>0.0127</b> <b>(0.0199)</b>	<b>0.00162</b> <b>(0.0102)</b>	<b>-0.0416***</b> <b>(0.0105)</b>	<b>0.0103</b> <b>(0.0204)</b>	<b>-0.0863***</b> <b>(0.0249)</b>	<b>-0.0782***</b> <b>(0.0184)</b>	<b>0.00901</b> <b>(0.0309)</b>
Post 1999*woman	-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	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)
age_23_45*women	280034	241592	61911	280034	241592	61911	89891	138877	33136
Observations									

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	-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	-0.00413 (0.0113)	0.0129 (0.0119)	-0.0421** (0.0186)	0.0650*** (0.0220)	0.0219 (0.0415)	-0.148 (0.125)
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)
Post 1999	<b>-0.0825***</b> <b>(0.0277)</b>	<b>-0.0274*</b> <b>(0.0161)</b>	<b>0.0256</b> <b>(0.0264)</b>	<b>-0.0143</b> <b>(0.0411)</b>	<b>-0.0696</b> <b>(0.0452)</b>	<b>0.160</b> <b>(0.130)</b>
Post 1999*woman	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	0.0146*** (0.00393)	0.00383** (0.00177)	0.00107 (0.00315)	-0.00602 (0.00535)	0.0127*** (0.00295)	0.00146 (0.00629)
age_23_45*woman						
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...