

The child penalty in a central bank: the case of the Bank of Italy

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¹The views expressed in this paper are solely those of the authors and do not necessarily reflect those of the Bank of Italy or the Eurosystem.

Motivation

- Motherhood is the main cause of female-male gaps in the labour market, (Becker (1985); Becker (1991); Bertrand (2020); Olivetti and Petrongolo (2016)).
- The so-called *child penalty* is a global phenomenon (Kleven et al., 2023).
- What about single institutions? (Healy and Heissel, 2023)
- What the implications for HR?

What we do

- Bank of Italy personnel data
- We estimate the child penalty on average and by cohort (mothers vs fathers)
- We outline the role of the main determinants (hours, variable pay components, promotion gap; Hospido et al. (2022))
- We check the impact of some policies (childcare, father parental leaves, rules for promotion) on the reduction of the child penalty.

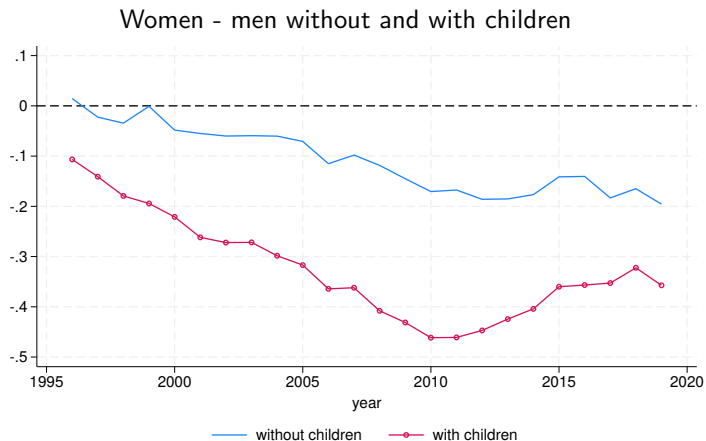
Preview of the main results

- Significant penalty in hours worked: -10% after 15 years.
- Significant penalty in earnings: six years after the birth of the first child and increases progressively, because of (i) hours worked; (ii) faster career progression of fathers.
- Two different cohorts: (1) hired btw 1996 and 2000 (2) and those hired from 2006 to 2010. The second group benefited the most from some significant interventions in family-friendly policies:
 - New childcare facilities: increase hours worked by mothers;
 - Increase in fathers' leave provision: increase hours worked by mothers;
 - New rules for promotions: no formal (internal) exam, but a commission. Increased probability of a mother to be promoted after the reform.

The data

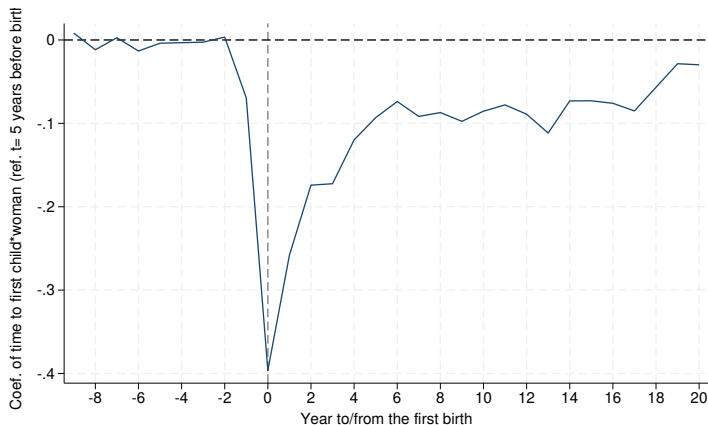
- Panel of around 40,000 observations from 1996 to 2019 (2021). Exclude those who leave the Bank;
- Hours worked per year (in FTE), annual earnings (by type: base wage (normalized), extra pay components (normalized), compensation for work outside the Bdl/business trips); hierarchical level; date of hiring; parental leave (paid, unpaid)
- Number of children; birth date; whether the person has a partner in Bdl and family code.
- ALL ANONYMIZED AND WITH RESTRICTED ACCESS!

Descriptive: The impact of children. Gender wage gap for workers with and without children (measured at age 45)

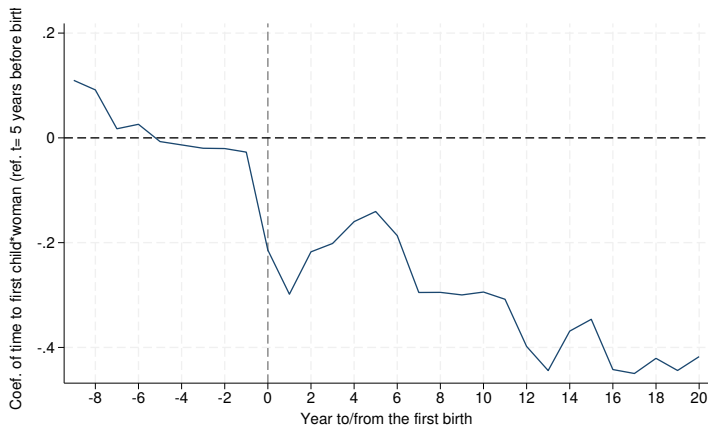


Note: Bank of Italy; administrative data. Normalized income, corrected for tenure.

The child penalty: hours. Gap of women with respect to men by time from the birth of the first child

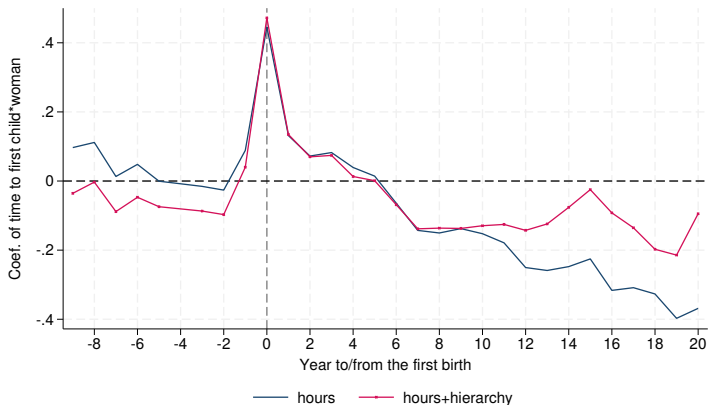


The child penalty: earnings. Gap of women with respect to men by time from the birth of the first child

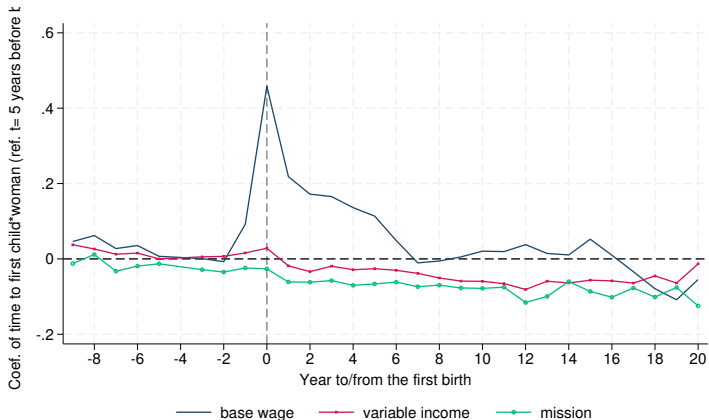


The child penalty: determinants of gaps in total earnings.

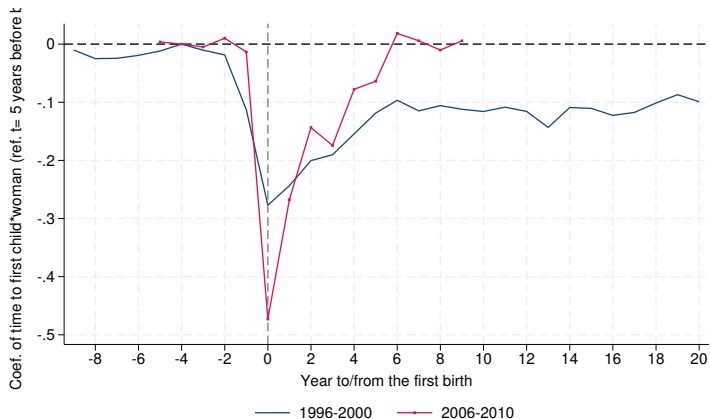
Controls: hours and hierarchy



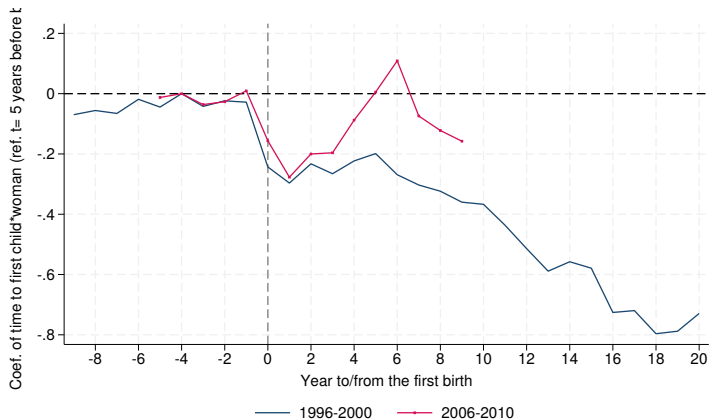
The child penalty: determinants of gaps in total earnings. By type of earnings



The child penalty: difference in hours worked by cohort



The child penalty: difference in earnings by cohort



The impact of new childcare in Rome centre

In 2009 a new opening of childcare services in Rome centre. Bdi has several buildings in the centre. We compare use and hours work of parents close to the new childcare service before/after the opening.

Table: Nursery use and hours worked.

	(1) childcare use	(2) hours worked (3 years)
woman	0.266** (0.075)	-0.497 (0.118)
work in city c. *nursery* post 2008	0.162** (0.081)	0.183 (0.124)
woman*work in city c*nursery*post 2008	0.069 (0.130)	0.665** (0.259)
N	1,083	1,083

Mothers' hours worked and fathers' leave. Couples working at the Bank of Italy.

Change in parental leave after 2012-2015: enlargement of fathers' parental leave, especially after age 6 of the child (unpaid).

	(1)	(2)	(3)
Father leave (total)	0.260 (0.302)		
Father leave (paid)		-0.264 (1.170)	
Father leave (unpaid)			1.045*** (0.288)
Fixed-effects	yes	yes	yes
N	203	203	203

First child born after 2010.

Probability of promotion in 7 years from hiring.

Women and men hired before/after a reform in promotion rules. After the reform: no more exams but decision of a Committee.

	(1)	(2)	(3)	(4)
womam	-0.108 (0.100)	0.065 (0.105)	0.057 (0.105)	0.178 (0.124)
woman* post reform	0.129 (0.169)	0.152 (0.177)	0.161 (0.177)	-0.012 (0.201)
sum of hours in 7 years		0.198*** (0.017)	0.199*** (0.017)	0.196*** (0.017)
kids \leq 3 y.o.			0.084 (0.089)	0.161 (0.113)
woman*kids \leq 3 y.o.				-0.376* (0.214)
woman*kids \leq 3 y.o.*post reform				0.539* (0.304)
N	1,236	1,236	1,236	1,236

THANK YOU VERY MUCH

References

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