

The “Other” Child Penalty: Work Disability after Motherhood and How Paternity Leave Can Help

Authors: Sébastien Fontenay, Ilan Tojerow

Policy brief prepared by Basile Dabin

Overview >>

The paper summarized here provides a comprehensive view on how having children impacts a woman's professional career. As such, it builds on existing studies that highlight the impact of motherhood on gender inequalities in the labor market, often called “child penalties” (Kleven *et al*, 2019). These two researchers are the first to evaluate the child penalty in the Belgian context, which amounts to a 43% long-run reduction in their earnings for women up to 8 years after the birth of their first child.

The study also highlights the existence of “another” child penalty by showing that Belgian mothers are also more likely than fathers to experience work disability after entering parenthood. This long-run gap in work disability prevalence tends to increase with the number of children, suggesting that it could result from family arrangements detrimental to women.

Finally, the authors show that the provision of a two-week paternity leave can help lessen these “child penalties”. By exploiting a legislative reform in 2002, the researchers demonstrate that the introduction of paternity leave reduced the time spent by mothers on disability insurance by 21% over a period of 12 years.

Key contributions

- First estimation of the child penalty on a mother's **income** in the Belgian context. The arrival of children creates a **long-run gender gap in earnings of 43%**.
- Highlights “another” child penalty that links motherhood with an increased proclivity towards work disability. **Mothers are 40% more likely** than fathers to experience **disability** up to 8 years after childbirth.
- A **paternity leave** can be effective in order to tackle this effect. Mothers whose partner was eligible for a paternity leave spent on average **21% fewer days** on **disability** over 12 years.

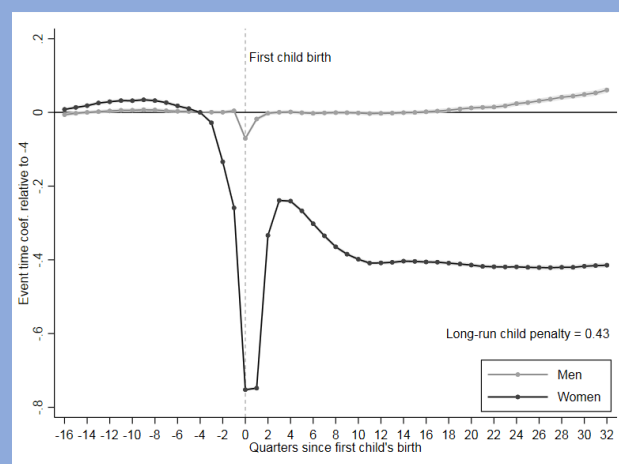


Figure 1: Impact of Children on Parents' Income

Introduction

The negative impact of motherhood on female earnings is extensively documented. In most countries, it is considered as the largest contributor to gender inequalities on the labor market. The term “child penalty” has been widely used in the economic literature to designate this phenomenon, i.e. the divergence of earnings between men and women that occurs after parenthood. This paper is the first to evaluate this effect in Belgium and demonstrates that female earnings drop by 43% up to 8 years after childbirth (see Figure 1). In other words, 8 years after giving birth, the average Belgian mother earns 43% less than before she had a child, while a similar trend is not observed for fathers. By comparison, a recent study estimates the child penalty in earnings to be 21% in Denmark, 43% in the UK and up to 61% in Germany (Kleven *et al*, 2019).

This paper also highlights the existence of a less-documented child penalty: childbirth is found to increase the probability of women to experience work disability. The authors are the first to evaluate this “other child penalty” in the long-run. Their research shows that Belgian mothers are 40% more likely than fathers to experience work disability up to 8 years after childbirth. This figure increases with the size of the family, as the gender gap rises when women have more than one child. The authors argue that this gap is more likely the result of family arrangements detrimental to women rather than because of physical problems related to giving birth. Based on these findings, this paper then focuses on determining whether the provision of a paternity leave can reduce this effect.

Empirical Methodology

In order to capture the long-term effects of a paternity leave provision on the probability of mothers to claim work disability, this paper analyses the cumulative effects over a period of up to 12 years after childbirth. Researchers exploit a legislative change in Belgium: paternity leave was only opened to fathers of children born after the 1st of July 2002. Assuming it is impossible for parents to select a precise date of birth, this change allows for a causal interpretation of the then new policy on the disability rate by comparing households who had a child right before and right after the legislative reform. This assumption holds following a series of robustness tests carried out by the authors; it is therefore possible to assert that the change in observed disability rates is due to the paternity leave provision.

Results

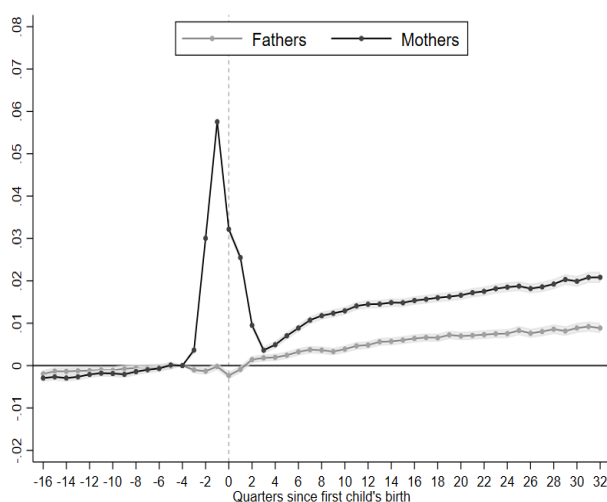


Figure 2 : Impact of Children on Disability Receipt (relative to 4 quarters before birth)

Figure 2 shows how childbirth increases the likelihood of women to suffer from **work disability**, while it does not affect fathers. This difference still appears 8 years after the first child’s birth, where this gender gap is estimated at 40% in Belgium. The gap is also found to be larger for families with more than one child.

The paper argues that this gender gap stems from the fact that women are often required to devote more time than men to household chores and childcare. As it has been shown by previous studies that fathers are more involved in childcare after they have taken a paternity leave, this study analyses whether a policy which provides a paternity leave could eventually lead to a reduction in the disability rate of mothers.

The authors show that the provision of a two-week **paternity leave** decreased the number of days mothers spent on disability by **21%** on average up to 12 years after the child was born, while it did not increase the disability rate of the fathers. The effect of the paternity leave is particularly striking for women who are on disability insurance for more than 12 months (33% reduction), and for first-time mothers who are younger than 30 years old (47% reduction).

The paper also highlights the impact of paternal leave on the **timing of birth**. The authors show that when a paternity leave was provided to the father, couples took more time before having another child. This mechanism could well explain why a woman whose partner was eligible for a paternity leave experienced fewer days on disability insurance, as studies have shown that spacing childbirths is beneficial to the mother's health.

As a whole, the study points out the existence of a second child penalty for Belgian mothers related to disability rates. In addition, the paper argues that providing a paternity leave can be an effective way to mitigate this effect, as couples are more likely to take more time before having another child and due to the fact it may also increase the father's participation in childcare.

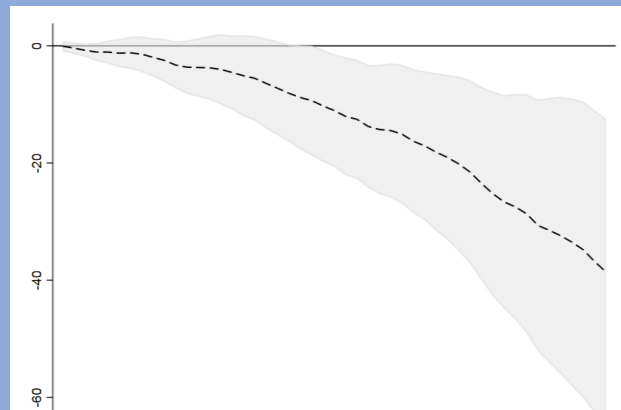


Figure 3: Cumulative Effects of Paternity Leave Reform on Mothers' Disability Days for First-time Mothers.

Policy implications

As the number of women receiving disability benefits is steadily rising in Belgium, these results could carry importance in finding ways to curb this trend. In particular, they could provide a helpful insight in the context of discussions over a new paternity leave reform in Belgium, where propositions include an extension of the existing leave from 10 to 25 days and making it mandatory. This paper shows the provision of a paternity leave could well be a relevant policy to implement in order to tackle gender inequalities on the labor market, as it strikingly reduced the number of days on disability for women on the long-term disability program. In addition, the provision of paternity leave could be quite cost-effective as it reduces public spending on disability insurance programs.

References

Fontenay, Sébastien & Tojerow, Ilan. (2020). Work Disability after Motherhood and How Paternity Leave Can Help. [IZA Discussion Paper No. 13756](#).



Authors, personal sites:

[Sébastien Fontenay](#)
[Ilan Tojerow](#)



Related Studies:

- Kleven, H., Landais, C., & Sjøgaard, J. E. (2019). Children and gender inequality: Evidence from Denmark. *American Economic Journal: Applied Economics*, 11(4), 181-209.
- Kleven, Landais, Posch, Steinhauer & Zweimüller (2019) Child penalties across countries: Evidence and explanations. *AEA Papers and Proceedings*, 109, 122-26.



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Département d'Économie Appliquée de l'ULB (DULBEA),
Solvay Brussels School of Economics and Management
CP140, Avenue Franklin Roosevelt 50,
1050 Bruxelles (Belgium)

Tel +32.2.650.41.11
<https://dulbea.ulb.be>
dulbea@ulb.be

