Title: **When Care Responsibilities Collide with Work: The Gendered Labour Market Effects of Raising a Disabled Child**

Introduction: Around 4% of children in Europe experience some form of functional limitation (Eurostat). Families raising a disabled child face substantial challenges in balancing care and employment responsibilities.

A large literature has explored the gender gap in labour force participation and earnings, linking it to the strong detrimental effect of parenthood for mothers, while fathers' labour participation and earnings trajectory show little to no impact (Kleven et al. 2019; 2020). Yet, a much scarcer literature has sought to understand how the 'child penalty', ie. the penalty that women's careers bear after childbirth compared to their male counterparts, behaves in the event of child disability.

Studies from Norway, Chile or Taiwan consistently find a stark, negative impact of having a disabled child relative to a non-disabled child on mothers' workforce participation, earnings and hours worked, commensurate with the severity of the disability. Fathers' work trajectories are no affected, except in the context of the most severe disabilities, and even then, only in terms of earning level (Cheung et al. 2023; Wondemu et al. 2022; Martínez et al. 2025).

The literature on this topic mostly relied on administrative data records. Yet, the understanding of the mechanisms around why the child penalty is starker for mothers of disabled children – is missing.

Research objectives: This paper examines the gendered labour market effects of having a child with disabilities in the French context and explores the potential mechanisms underlying these effects. By combining rich longitudinal survey data on work-life balance with administrative and employer information, this study provides new insights into this topic. It aims to contribute to the literature by identifying potential mechanisms behind the starker gender difference, and highlighting the role of workplace policies in mitigating these effects.

Data: We use data from the 2024 wave of the French longitudinal Families and Employers Survey (FamEmp), a nationally representative, linked employee–employer dataset of over 41,000 individuals and 9,000 firms (establishments). The survey contains detailed information on family history, retrospective information on employment since age 16, intra-household task division, caregiving patterns, and gender norms.

Studies on disability can be limited by small sample size issues and the difficulty to identify disabled children in administrative datasets. For this survey, households with disabled members have been over-sampled to ensure sufficient representation in the dataset.

Children's disabilities are identified using the Global Activity Limitation Indicator (GALI), which asks about long-standing limitations to daily life activities. Other questions on whether the child has an administrative recognition of disability, questions on types of functional limitations and pathologies, as well as questions on the type and frequency of caregiving will be used to further validate the identification of disability. Our data is also merged with administrative data which allows us to identify whether the household is a beneficiary of a disability allowance for children. This will be used to further validate our questions on disability for children and ensure we identify disabled children accurately.

Methods: Our analysis proceeds in two steps. First, we estimate the causal impact of the birth of a disabled child on parents' labour force participation. For working parents, we are also able to explore the quality of employment (ie, the intensive margin) with a set of questions on working patterns (full-time vs part-time, but also the level of responsibilities accepted at work after child birth, adjustment to working hours), experience of work-to-life conflict and reported wellbeing at the time of the survey. We employ an event-study framework with staggered treatment adoption to trace the dynamic evolution of employment before and after the child's birth (Roth et al., 2022). The main identifying assumption is that the occurrence of a child's disability is exogenous to parental labour supply prior to child birth. The control group in this setting includes parents of non-disabled children.

Second, we propose to explore the mechanisms driving the gender gap in the response to child disability. Two main hypotheses are tested. On one hand, faced with unforeseen circumstances such as the birth of a disabled child and higher care needs, traditional gender roles, and in particular, the association of caring responsibilities with women, might prevail. On the other hand, disability might result in higher costs incurred, resulting in a specialisation of partners based on their earnings' potential. To test these mechanisms, we exploit detailed

information on partners' education, gender norms and beliefs, income potential as proxied by education, division of unpaid labour, and access to family or institutional care.

In addition, the linked employer component of the dataset allows us to examine whether firm-level characteristics — such as flexible work policies, gender equality scores, or care-related benefits — mitigate the negative employment effects.

Preliminary results: Our preliminary findings suggest that the negative labour market effects of motherhood are significantly amplified for mothers of disabled children. Women are more likely than men to have changed the nature of their work after their first child in terms of hours or responsibilities accepted; and this gendered effect is even more pronounced when the child is disabled (Table 2).

Further, aggregate average workforce participation over the life course shows a persistent gender gap for all individuals with children (relative to childless individuals), which is even more marked for individuals with a disabled child. Figure 2 further suggests that the employment level of mothers of disabled children never converges to the employment level of mothers. Event study estimates around the child birth confirm this finding and indicate a negative labour market effects of motherhood for when the child is disabled vs not disabled, but no significant effects for fathers.

Our data design means we have data for a wide range of parents from different generations which we observe at different points after the birth of their child. We can use that information to understand whether there is a cohort effect and infer, if sample size allows, some stylised statistics on trends by generations of parents. Although descriptive, this may be useful to understand whether legal changes in the design of caregiving leave in France in recent years have been associated with changes in the ability to combine caregiving responsibilities and employment.

Table 1: Summary statistics, analysis sample

	No children	**Children with no disability **	**Children with some form of disability**
Sample size	N = 13,454	N = 22,836	N = 1,989
Men	7,297 (55%)	10,531 (46%)	819 (41%)
Women	6,049 (45%)	12,255 (54%)	1,165 (59%)
Age at time of survey	34.9 (12.6)	48.5 (10.6)	50.1 (9.5)
In a relationship	5,573 (41%)	18,504 (81%)	1,480 (74%)
Employed	8,902 (66%)	16,435 (72%)	1,271 (64%)
Inactive or other	3,195 (24%)	5,100 (22%)	570 (29%)
Unemployed	1,357 (10%)	1,301 (5.7%)	148 (7.4%)
Number of children	0.0 (0.0)	2.1 (1.0)	2.5 (1.2)
2-4 years of higher education (HE)	3,864 (29%)	5,780 (25%)	436 (22%)
5 years or more of HE	2,585 (19%)	2,986 (13%)	177 (8.9%)
A-levels or lower degree	6,787 (50%)	13,582 (59%)	1,339 (67%)
Unknown education	217 (1.6%)	487 (2.1%)	37 (1.9%)

Note: Sample after exclusion of the individuals with missing or incomplete information on gender or respondents' information on their children. Final analysis sample size: 38 279 individuals. Survey weights are applied to all summary statistics. Source: Families and Employers 2024 survey

In further analyses, we seek to understand better the mechanisms or moderating factors. For instance, we plan to explore whether marital status of mothers, who might be more often single mothers, the differences in potential earnings in the couple *before* child birth as proxied by partner's diplomas, gender norms, family support in caregiving, income levels before the child birth, might have a mediating effect on the disabled child penalty.

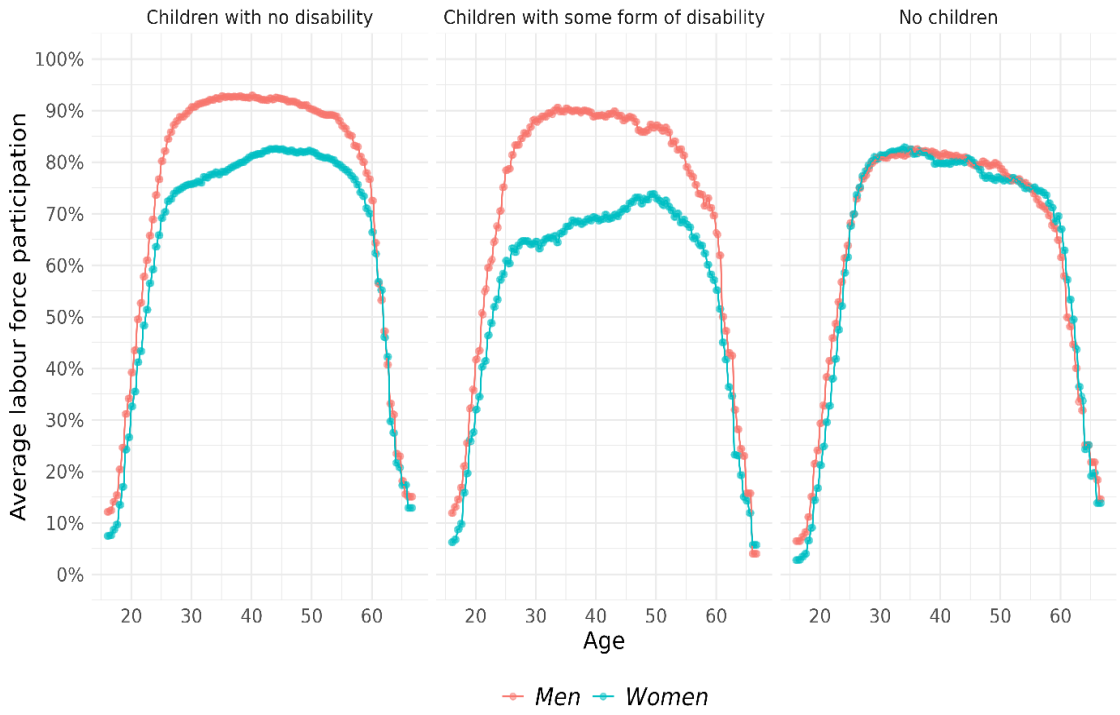
The findings will inform ongoing policy debates around family support, disability care, and the design of flexible work arrangements.

Table 2: Reported impact of the birth of their first child on employment status of parents

	** Children with no disability**		**Children with some form of disability**	
	Fathers	Mothers	Fathers	Mothers
Sample size	8,742	10,282	363	523
In employment before child birth:				
Changed employer	14%	15%	16%	16%
Changed working hours	5.6%	8.3%	8.2%	9.2%
Decrease hours/responsibilities	4.0%	14%	3.3%	18%
Increase hours/responsibilities	10%	5.5%	8.2%	5.6%
Went part-time	2.2%	15%	2.8%	16%
Went full-time	5.6%	8.2%	11%	7.7%
Became unemployed	5.8%	14%	14%	16%
Went on full parental leave	2.2%	17%	2.5%	16%
Stopped work	5.4%	14%	7.4%	23%
Had no change	66%	36%	56%	30%
Out of employment before child birth:				
Started a full-time job	35%	18%	44%	14%
Started a part time job	6.7%	9.7%	13%	6.6%
Looked for a job	36%	22%	22%	25%
Had no change in situation	26%	34%	40%	23%

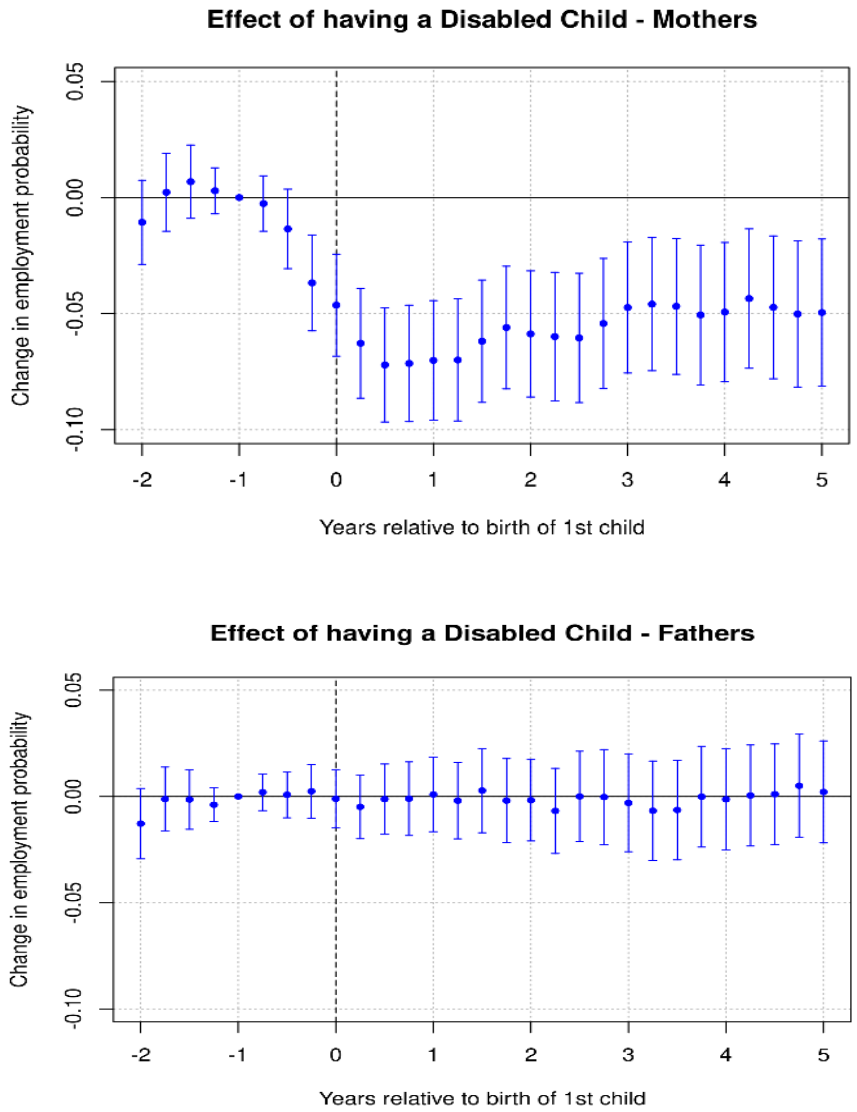
Note: Respondents could choose more than one answer. Summary statistics on a sub-sample of men and women between 20 and 49 years at the time of the survey for whom additional questions on birth and fertility intentions were asked. Source: Families and Employers 2024 survey

Figure 2: Average employment rate over the life cycle, by gender and children's disability status



Source: Families and Employers 2024 survey. Final analysis sample size: 38 279 individuals. Survey weights are applied to all summary statistics.

Figure 3: Event study analysis of the average labour force participation before and after childbirth, for parents of disabled relative to parents of non-disabled children



Source: Families and Employers 2024 survey. Children's disability is identified using the GALI – Global Activity Limitation Indicator - corresponding to a moderate or severe limitation to activities of daily life.

References

Cheung, T. Terry, Kamhon Kan, and Tzu-Ting Yang. 2023. 'The Long-Term Impact of Child Disability on Parental Labor Supply'. *SSRN Electronic Journal*, ahead of print. https://doi.org/10.2139/ssrn.4448923.

Kleven, Henrik, Camille Landais, and Jakob Egholt Søgaard. 2019. 'Children and Gender Inequality: Evidence from Denmark'. *American Economic Journal: Applied Economics* 11 (4): 181–209. https://doi.org/10.1257/app.20180010.

Martínez, Claudia, Raimundo Smith, and Marcela Perticará. 2025. *The Double Gap: Gender and Disability in Parental Employment Outcomes*. Inter-American Development Bank. https://doi.org/10.18235/0013418.

Melentyeva, Valentina, and Lukas Riedel. 2023. 'Child Penalty Estimation and Mothers' Age at First Birth'. *University of Bonn and University of Cologne, Reinhard Selten Institute (RSI), Bonn and Cologne*, ECONtribute Discussion Paper, vol. 266: 1–45.

Roth, Jonathan, Pedro H. C. Sant'Anna, Alyssa Bilinski, and John Poe. 2022. 'What's Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature'. Version 3. Preprint, arXiv. https://doi.org/10.48550/ARXIV.2201.01194.

Wondemu, Michael Yisfashewa, Pål Joranger, Åsmund Hermansen, and Idunn Brekke. 2022. 'Impact of Child Disability on Parental Employment and Labour Income: A Quasi-Experimental Study of Parents of Children with Disabilities in Norway'. *BMC Public Health* 22 (1): 1813. https://doi.org/10.1186/s12889-022-14195-5.