

**InGRID - Expert workshop 'non-take-up and coverage' of social benefits,  
Brussels 11-13 March 2020**

---

# **Parental leave take-up and non-take-up. Focus on the effect of workplace characteristics**

Marie Valentova and Merve Uzunalioglu



## The main research questions

- What role do work-place characteristics play in leave taking behaviour among mothers and fathers?
- Are there any observable differences in the role of workplace characteristics between mothers and fathers?
- How is parental leave up-take of a parent associated with their partner's workplace characteristics?



## Context – general description of parental leave

- Parental leave is an employee benefit that provides time off from work to care for a child. (Not to be confused with maternity leave).
- Parental leave schemes belong to the family of welfare policies facilitating reconciliation of family and work life.
- Parental leave represents a temporal career break that allows parents to dedicate some time to childcare, and at the same time, keep the right to re-enter their original job. As a consequence, men are encouraged to be more involved in child care and women to be in the labour market.



## Context – existing research

Parental leave-taking depends, among other things, on the **characteristics of the workplace**, in particular on the type of company (size and feminization level), its organizational culture, and the sector of the economy.

In general, parents working in the public sector (Gornick & Jacobs, 1998), large organizations, and female-dominated jobs and organizations (Anxo et al., 2007; Lapuerta et al., 2011) are more likely to benefit from the policy. Moreover, bargaining position at work may play a role, with seniority and stability of employment facilitating the use of leave (Lapuerta et al., 2011).

Male leave-taking rates are especially responsive to organizational culture (Anxo et al., 2007; KPMG, 2002).

Some authors argued that more attention should be paid to the work environment and employees' perception of management's opinions about leave take-up (Tremblay and Genin 2011). Within this scope, subjective characteristics of employers such as organisational and managerial culture have also been studied. Fathers are more likely to use their parental leave in “father-friendly companies” (Haas et Hwang 1995; Haas et al. 2002) and family-friendly companies (Escot et al. 2012). These findings are supported by Chung (2018) and Romero-Balsas et al. (2013) where they provide evidence that subjective insecurity perceptions (the fear to lose their job) are more relevant than objective contract status for the access to family-friendly arrangements at work.



## Gaps in the existing research – motivation for present paper

There is an extensive literature dealing with individual determinants of parental leave uptake among mothers and fathers, including individual workplace characteristics of mothers and fathers separately (see, Haas 1993; Haas and Hwang 1995; Brandth and Kvande 2002; Haas et al. 2002; Bygren and Duvander 2006; Hobson et al. 2006; Naz 2010; Escot et al. 2012; Romero-Balsas 2013; Trembeley and Dodeler 2015).

However, only little has been done on the relationship between relative partners' characteristics and parental leave up-take. Studies regarding the effect of workplace characteristics on leave take-up among women are scarce (Anxo et al. 2007; Lapuerta et al. 2011).



## Context – Luxembourg - policy properties

- Parental leave was introduced in 1999 (following the European Directive of 96/34/EC of 3 June 1996). It was a pass breaking policy effort because the remaining family policy arrangements back then were predominantly pro-familialistic.
- Parents are guaranteed the right to return to the same or an equivalent working position at the end of the leave.
- Either a block of six months full-time parental leave or a block of twelve months part-time leave.
- The leave can be used up to the 5th birthday of the child and is an individual entitlement: both parents have the right to leave (if they meet the eligibility conditions), they cannot transfer it.
- The first leave in a two-parent family must be taken immediately after the maternity leave. If the first parental leave is not taken immediately after the maternity leave the right to the leave is forfeited.



## Context – Luxembourg - policy properties

- Flat rate parental leave benefit = paid parental leave.
- In 1999 the rate of compensation started at 1496.11 EUR for the full-time leave and half of the amount for the part-time leave. The rate was adjusted for inflation in 2007 and increased to 1778.31 EUR. In 1 December 2016 it was reformed.
- The eligibility requirements for the leave are a minimum of one-year employment with the same employer before the start of the leave and a reduction of at least 50% of working hours in the case of taking the leave part-time.
- Single parents are entitled to only one parental leave. However, they do not have to take it immediately after the maternity leave necessarily.
- Self-employed persons are eligible for parental leave if they have been self-employed for at least one year for at least 20 hours per week.



## Context – Luxembourg – background on take-up

The parental leave take-up rate is higher among mothers than among fathers.

On average, the take-up rate between 1999 and 2007 among eligible women was 46.3 per cent compared to 10.6 per cent among eligible fathers.

The parental leave take-up has had an increasing tendency over the years, particularly among fathers.

The lowest take-up rates were reported in 1999 and 2000, i.e. immediately after the introduction of the policy.

On average, 34 per cent of fathers who took parental leave opted for the part-time mode, compared to 19 per cent of mothers.

Only about 1.5 per cent of mothers of a single child who took parental leave took the second parental leave, whereas among fathers it was 35 per cent.





## Data

- Extract from the **administrative social security records** (L' Inspection générale de la sécurité sociale -IGSS) covering the population of parents of a single child that was born between 1999 and 2007 in Luxembourg.
- Only eligible parents (i.e. those who comply with the conditions stipulated by law to benefit from the parental leave policy, i.e. those individuals who are legally entitled to obtain parental leave) were kept in the analysis as this is the base population for defining our main variable of interest, i.e. **take up variable**.
- The observation period: As the parental leave policy was introduced in 1999, this is the logical starting point of observation of the parental leave policy. Since eligible parents may take up parental leave until their child reaches five years of age, we could not include in our analysis children who were born after 2007. This is because we would not be able to observe whether their parents took parental leave or not within five years after childbirth and, thus, our results could be biased. Hence, the upper-limit year was 2007, because we could obtain information about the characteristics of their parents covering five years after childbirth (i.e. up to the year 2012)
- Sample: 9002 mothers and 9002 fathers. Among 9002 of mothers, there are 7208 of those who comply with our crude eligibility rule, i.e. who are eligible for parental leave (80.1% of all analyzed mothers). Out of 9002 fathers, 8209 (91.2 % of all fathers) are defined as eligible for parental leave.



## Method

Given the above definition of the parental leave take up (i.e. the number of beneficiaries divided by the number of eligible individuals (Bruning and Plantenga, 1999), we constructed an individual variable on parental leave-up. This variable was constructed separately for mothers and for fathers .

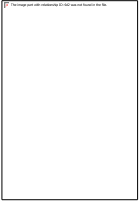
To answer the question on the determinants of mothers and fathers parental leave-taking, we estimate **binary logit regression** models, where the dependent variable (**parental leave take-up**) is a dummy variable, where value 1 is attributed to individual who took parental leave and 0 otherwise. It is estimated how the employers characteristics affect the odds of people's parental leave taking while controlling all other relevant observed characteristics.

We report the result of our analysis separately for mothers and fathers. In the presentation of the results we focus only on findings that are important and worth of noting.

Independent variables: Characteristics of the analyzed parent (mother or father): nationality, age of mother at the time of childbirth, self-employed or not, **sector (private/public), economy sector – NACE 2, size of the firm** (identifying self employed as a distinct category), number of hours worked per month, categorized monthly salary (wage + employers bonuses).

Partner's characteristics: nationality, age of father at the time of childbirth, self-employed or not, **sector (private/public), economy sector – NACE 2, size of the firm**, number of hours worked per month, categorized monthly income of the months before the childbirth (wage + employers bonuses), eligibility to parental leave, take-up of parental leave during 5 years following the childbirth.

Couple characteristics: being married or not, living with the father or mother of a child in the same household at the time of childbirth, difference between categorized salary of mother



## Descriptive analysis – leave taking behaviour

Modes of parental leave	Mothers	Fathers
Full -time parental leave	37,2%	7,0%
Part-time parental leave	9,1%	3,6%
Non-take up	53,6%	89,4%
Total (%)	100,0%	100,0%
Total (N)	7208	8209

<b>MOTHERS</b>		Beta	Standard	Expon	
		coefficient (B)	Error (S.E.)	Beta E	
Mother_Sector	Private (ref.)				
	Public	-,130	,141	,878	
	Missing	,386	1,131	1,472	
Mother_Size of Firm	0-4 (ref.)				
	5-9	,041	,137	1,042	
	10-49	,297	,100	1,346	
	50-99	,242	,131	1,273	
	100-499	,176	,098	1,193	
	500-999	,070	,139	1,073	
	>=1000	,003	,104	1,003	
Mother_NACE 2	Self-employed	-,621	,441	,537	
	Administration publique, defence, enseignement, sante humaine, action social (ref.)				
	Agriculture, sylviculture, peche	-,649	,475	,523	
	Industrie manufacturier, industrie extractive et autres	-,078	,151	,925	
	Construction	-,237	,206	,789	
	Commerce de gros et de detail, transports, hotels et restaurants	-,172	,076	,842	
	Information and communication	-,006	,177	,994	
	Activites financier, assurance	,191	,105	1,210	
	Activites immobilieres	-,364	,282	,695	
	Activites specialises, scientific et technique et activites de services administratifs	-,302	,097	,739	
	Autre	-,470	,142	,625	
	Missing	-,547	,418	,579	
	Father_Sector	Private (ref.)			
Public		,095	,113	1,100	
Missing		-,273	1,237	,761	
Father_NACE 2	Commerce de gros et de detail, transports, hotels et restaurants (ref.)				
	Agriculture, sylviculture, peche	-,044	,300	,957	
	Industrie manufacturier, industrie extractive et autres	-,042	,105	,959	
	Construction	-,229	,095	,795	
	Information and communication	-,344	,148	,709	
	Activites financier, assurance	,027	,123	1,027	
	Activites immobilieres	,245	,282	1,278	
	Activites specialises, scientific et technique et activites de services administratifs	-,193	,109	,824	
	Administration publique, defence, enseignement, sante humaine, action social	-,123	,092	,884	
	Autre	,400	,242	1,492	
	Missing	-,530	,652	,588	
	Father_Size of Firm	0-4 (ref.)			
		5-9	,018	,144	1,018
10-49		,302	,092	1,353	
50-99		,200	,125	1,221	
100-499		,330	,095	1,391	
500-999		,269	,141	1,308	
>=1000		,320	,106	1,378	
	Self-employed	,655	,660	1,924	

<b>FATHERS</b>		Beta coefficient nt (B)	Standar d Error (S.E.)	Exponenti Exp(B)
Mother_Sector	Private (ref.)			
	Public	,749	,179	<b>2,115</b>
	Missing	,508	1,155	<b>1,662</b>
Mother_Size of Firm	0-4 employees (ref.)			
	5-9	,030	,222	<b>1,030</b>
	10-49	,529	,141	<b>1,698</b>
	50-99	,348	,191	<b>1,416</b>
	100-499	,097	,149	<b>1,101</b>
	500-999	,291	,201	<b>1,338</b>
	>=1000	,175	,153	<b>1,191</b>
Mother_NACE 2	Self-employed	,961	,776	<b>2,614</b>
	Administration publique, defence, enseignement, sante humaine, action social (ref.)			
	Agriculture, sylviculture, peche	-1,231	,811	<b>,292</b>
	Industrie manufacturier, industrie extractive et autres	-,437	,260	<b>,646</b>
	Construction	,023	,293	<b>1,023</b>
	Commerce de gros et de detail, transports, hotels et restaurants	-,128	,116	<b>,880</b>
	Information and communication	-,116	,258	<b>,890</b>
	Activites financier, assurance	-,134	,148	<b>,874</b>
	Activites immobilieres	-1,274	,739	<b>,280</b>
	Activites specialises, scientific et technique et activites de services administratifs et de soutien	-,259	,152	<b>,772</b>
	Autre	-,241	,228	<b>,786</b>
	Missing	-,693	,749	<b>,500</b>
Father_Sector	Private (ref.)			
	Public	-,150	,173	<b>,860</b>
	Missing	3,233	1,358	<b>2,346</b>
Father_NACE 2	Commerce de gros et de detail, transports, hotels et restaurants (ref.)			
	Agriculture, sylviculture, peche	,907	,334	<b>2,477</b>
	Industrie manufacturier, industrie extractive et autres	-,357	,157	<b>,700</b>
	Construction	-,415	,145	<b>,660</b>
	Information and communication	-,201	,228	<b>,818</b>
	Activites financier, assurance	-,502	,192	<b>,605</b>
	Activites immobilieres	,151	,369	<b>1,163</b>
	Activites specialises, scientific et technique et activites de services administratifs et de soutien	,055	,154	<b>1,056</b>
	Administration publique, defence, enseignement, sante humaine, action social	-,252	,134	<b>,778</b>
	Autre	-,398	,371	<b>,672</b>
	Missing	,915	,847	<b>2,497</b>
	Father_Size of Firm	0-4 employees (ref.)		
5-9		,396	,191	<b>1,485</b>
10-49		-,052	,139	<b>,949</b>
50-99		,083	,188	<b>1,086</b>
100-499		,313	,141	<b>1,367</b>
500-999		,524	,195	<b>1,689</b>
>=1000		,347	,161	<b>1,415</b>
Self-employed	-,347	,856	<b>,706</b>	



# Conclusions – individual work-place characteristics

## Mothers

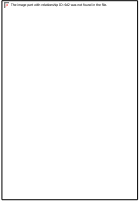
- Lower take-up when working in the public sector, the effect of firm size is relatively small (effect increases when working at the firms of 10-100 employees), higher odds of take-up among those who work in finance and insurance sector
- Partners' sector has a negligible effect. Lower odds of take-up if the partner works at construction or information and communication sectors. Notably higher odds of leave take-up if the partner is self-employed.

## Fathers

- Lower odds of take-up when working in the public sector, in manufacturing, construction, real estate, finance and insurance sectors. Notably high odds of take-up if working in agriculture.
- Odds of leave take-up of fathers are higher if their partner is working in public sector or self-employed.

## Similarities

The following factors increased the probability of both analyzed mothers as well fathers to take parental leave: working in the private sector and partner being self-employed



## Further research using Multilevel approach

How do these characteristics relate to strategies employed by couples taking parental leave jointly?

We will use the administrative data linking information about a child, parents and companies where parents have been employed. This data will have employer household- employee multi-level structure, where employed parents will be nested under employers



THANK YOU

Corresponding author: Marie Valentova, contact at  
[marie.valentova@liser.lu](mailto:marie.valentova@liser.lu)