How long is too long? Long-term effects of maternity-related job interruptions on mothers' income in ten European countries

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A key finding of previous literature is that **elderly women have lower pensions** than men and have **higher risks of being in poverty** in many western countries (Folbre et al. 2007).



- ▶ Job interruptions for childbearing, rearing and caring have been identified as possible 'culprights' of women's worse economic conditions in later life.
- However, much research has investigated the short- and medium- term consequences of job interruptions for mothers' income and employment opportunties.
- ▶ Less is known on the **long-term consequences** of job interruptions due to childbearing and rearing on elderly mothers **absolute and relative** earned income, especially in comparative perspective.

- ▶ Work interruptions for childbearing and rearing are known to have negative consequences on women's
 - \rightarrow labour force participation
 - $\rightarrow\,$ earnings, savings and pensions.
- ▶ Therefore, we test:
 - a) whether the absence from work due to childbearing and rearing impacts mothers' **absolute and relative earned income** at an older age.
 - b) whether long-term penalties differ among **gender** and **welfare regimes** (Esping-Andersen 1990; Korpi et al. 2013).

- ▶ To understand 'why the financial situation of many elderly women remains so precarious, it is essential to investigate how family histories, career histories and social policy interact'. (Peeters and De Tavernier, 2015: 1172).
- ► In particular how the **different lifecycles** of women and men are shaped by **national institutional characteristics**.

- ▶ The analyses are based on data from the Survey of Health, Aging and Retirement in Europe (SHARE).
- ▶ Rounds two (2006-7), four (2011-12) and five (2013) plus the retrospective wave (round three, 2008-2009).
- ▶ Ten European countries: Austria, Belgium, Denmark, France, Germany, Greece, Italy, the Netherlands, Spain and Sweden.

- ▶ 'Women's traditional patterns of unpaid care work tend to be linked with **fewer** average **years of paid work**, [...] high representation in **part-time work**, and **gender gaps in earnings and lifetime incomes**.' Jefferson (2009: 114).
- ▶ Especially among earlier generations, women were expected to retreat from the labour market when having children and were not necessarily bound to return (Peeters and De Tavernier 2015).
- Pension systems designed for male breadwinners households (Esping-Andersen 1990).

- From a theoretical perspective, long work interruptions are bound to have negative effects on mothers' long-term pensions and earnings.
 - \rightarrow A fragmented work history reduces contributions to both public and private pension plans, therefore leading to lower pension entitlements (Ginn 2003).
 - \rightarrow Longer work interruptions reduce:
 - ▶ Labour market attachment (Lalive and ZweimÃijller 2009)
 - ▶ Wages (Baum 2002; EjrnÃęs and Kunze 2013; Phipps et al. 2001)
 - ▶ Chances of promotion.

- ▶ Fathers tend to have higher incomes as they generally increase their work efforts when they become fathers to:
 - \rightarrow Fulfill the good provider role
 - $\rightarrow~$ Make up for the mother's income reduction
- ▶ Therefore, they are:
 - $\rightarrow\,$ Ameliorating their current income situation
 - $\rightarrow~$ Investing in their careers
 - \rightarrow Putting money into pension plans

Hypothesis 1

The longer a mother abstains from work due to maternal responsibilities, the lower her absolute (a) and relative (b) income in later life.

- National institutional and cultural features play a fundamental role in shaping women's labour market behaviour around childbirth:
 - Family policies
 - ▶ The duration and compensation of maternity and parental leave
 - Childcare availability
 - Legislation regarding job protection
 - Cultural norms regarding childrearing practices
- \rightarrow Work-family reconcilitions policies.
- \rightarrow Pension systems.

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	Leave	Pension			
	Generosity	Entry barriers	Income support		
Austria	++	Н	Н		
Belgium	—	Η	Η		
Denmark	+++	\mathbf{L}	Η		
France	++	Η	Η		
Germany	++	Η	\mathbf{L}		
Greece		Η	\mathbf{L}		
Italy		Η	\mathbf{L}		
The Netherlands	+	\mathbf{L}	Η		
Spain	—	Η	\mathbf{L}		
Sweden	+++	L	Η		
Sources: Comparative Family Policy Database. (1960-2010, Anne Gauthier, 2011)					

Sources: Comparative Family Policy Database, (1960-2010, Anne Gauthier, 2011) The Comparative Welfare Entitlements Dataset (1980-2011, Scruggs et al. 2014)

Hypothesis 2 - Reconciliation policies

- In countries where work-family reconciliation policies are generous, the long-term effects of work interruptions should be smaller.
- Denmark and Sweden and, to a smaller extent, Germany, France and Austria.

Hypothesis 3 - Pension systems

- In countries that have a high contribution years' criterion coupled with scant redistribution toward minimum income pensions, the long-term effects of work interruption should be greater.
- Italy, Spain, Greece and Germany.

Data & Methods

Data

- ▶ Survey on Health, Ageing and Retirement in Europe (SHARE).
- ▶ Unique, cross-national and longitudinal dataset on the present and past lives of adults age 50 and above.
- ▶ 27 European countries plus Israel.
- ▶ Individuals and households have been surveyed biannually from 2004-2005 (Wave 1) to 2014-2015 (Wave 6).
- ▶ Wave 3 is retrospective and thus allows reconstructing the employment and childbearing histories of the mothers in our sample.

Sample

- ▶ Mothers age 45 and above who participated in Waves 2, 4 or 5 and for whom there is also retrospective information from Wave 3.
- $\blacktriangleright~N~7746$ mothers
- \triangleright N 5855 in a partnership
- Austria, Belgium, Denmark, France, Germany, Greece, Italy, the Netherlands, Spain and Sweden.

Dependent variable (1)

- ▶ Mothers' absolute earned income in later life.
- ▶ Includes three main source of income:
 - ▶ Income from employment (both employees and self-employed)
 - ▶ Income from pensions (public and private)
 - Income from a lump sum payment.
- ▶ The imputed net annual incomes are derived by averaging the multiple imputation of each round of data and by correcting for purchasing power parity index.
- Corrected for purchasing power parity index.

Dependent variable (2)

- ▶ Mothers' relative earned income in later life.
- ▶ This variable captures income differences between women and their partner, rather than absolute difference.
- ▶ The variable is built using the same income components as the previous one but this time it represents the mother's share of earned income relative to the sum of her income and her partner's income.

Independent variable

- Categorical variable that has five response categories regarding whether and for how long the mother stopped working at the birth of the first child:
 - \rightarrow No interruption (reference category)
 - $\rightarrow~$ Less than a year
 - $\rightarrow~{\rm Above}$ a year but eventually went back to work
 - $\rightarrow~$ Never returned to work
 - $\rightarrow~$ Was not employed at the time of the birth.

Controls

- ▶ The mothers' age (mean 63).
- ▶ Level of education (low education as reference, medium and high).
- ▶ Employment status (not employed as reference versus employed).
- ▶ The number of children ever had.
- ▶ The year of birth of the first child.
- ► The employment status of the male partner (no partner as reference versus retired, employed, other not employed).
- ▶ Wage at the birth of the child.

Models

Absolute income:

- Generalized linear model (GLM) with a log link (Model 1).
- This allows us to accommodate the skewed distribution of the variable without having to lose any observations as with a log transformation.

Relative income:

- Since the variable is constrained between 0 and 1, we use a GLM with a logit link and the binomial family with robust standard errors (Model 2).
- ▶ Models separately by country.

Results

Absolute and relative income



Absolute income (i)

	AT	BE	DE	\mathbf{FR}	NL
< 1	-0.078	0.393^{*}	0.141	0.007	-0.289+
	(0.102)	(0.163)	(0.091)	(0.070)	(0.168)
> 1	-0.195 +	-0.469	-0.072	-0.172+	-0.413^{**}
	(0.101)	(0.410)	(0.092)	(0.104)	(0.149)
Never	-0.543**	-0.238	-0.259+	-0.517^{*}	-0.807***
	(0.169)	(0.252)	(0.144)	(0.213)	(0.224)
Not emp	-0.256+	-0.294^{*}	-0.054	-0.178^{*}	-0.323*
	(0.132)	(0.146)	(0.140)	(0.079)	(0.145)
Constant	14.554	7.637**	7.898	6.272	6.162^{***}
	(17.947)	(2.646)	(13.770)	(3.818)	(1.637)
Ν	371	977	754	732	684

GLM results for mothers' absolute income

+p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001

Absolute income (ii)

	IT	ES	GR	SE	DK
< 1	-0.145	-0.060	-0.419***	0.163	0.070
	(0.101)	(0.118)	(0.116)	(0.140)	(0.067)
> 1	-0.750+	-0.329	-0.032	0.211	0.103
	(0.398)	(0.244)	(0.181)	(0.141)	(0.092)
Never	-0.668**	-0.288	-0.520+	-0.029	-0.140
	(0.256)	(0.363)	(0.305)	(0.213)	(0.144)
Not emp	-0.389***	-0.316^{**}	-0.483***	0.126	0.136 +
	(0.091)	(0.122)	(0.115)	(0.148)	(0.077)
Constant	7.081***	5.632^{***}	7.799***	7.746***	7.912***
	(0.982)	(0.702)	(0.867)	(0.650)	(1.570)
Ν	1071	859	1140	577	581

GLM results for mothers' absolute income

+p < 0.10, *p < 0.05, **p < 0.01, **p < 0.001

Predicted values of absolute income by country



Relative income (i)

	AT	BE	DE	\mathbf{FR}	NL
< 1	-0.460	0.036	0.033	-0.121	-0.152
	(0.290)	(0.166)	(0.161)	(0.113)	(0.217)
>1	-0.519^{*}	0.219	-0.279	-0.356**	-0.063
	(0.257)	(0.200)	(0.151)	(0.122)	(0.150)
Never	-1.487^{***}	-0.731^{*}	-1.088^{***}	-1.222^{***}	-0.379*
	(0.437)	(0.286)	(0.175)	(0.244)	(0.165)
Not emp	-0.609	-0.841^{***}	-0.876***	-0.601^{***}	-0.157
	(0.392)	(0.159)	(0.194)	(0.124)	(0.155)
Constant	18.518	-2.239**	11.963	-24.816	-5.493^{***}
	(39.326)	(0.800)	(27.406)	(18.566)	(0.682)
Ν	200	704	551.000	649	551

GLM results for mothers' relative income

+p < 0.10, *p < 0.05, **p < 0.01, **p < 0.001

Relative income (ii)

	IT	ES	GR	SE	DK
< 1	0.074	0.388	-0.320	-0.177	-0.088
	(0.142)	(0.339)	(0.249)	(0.341)	(0.088)
> 1	-0.630*	0.320	-0.387	-0.279	-0.045
	(0.284)	(0.491)	(0.410)	(0.341)	(0.112)
Never	-0.933***	-0.387	-0.759+	-0.499	-0.101
	(0.251)	(0.515)	(0.440)	(0.426)	(0.148)
Not emp	-0.739***	-0.514+	-1.034^{***}	-0.075	-0.023
	(0.121)	(0.273)	(0.247)	(0.348)	(0.102)
Constant	14.917	-15.270	-5.995	-19.163	2.462
	(24.755)	(37.471)	(37.197)	(22.116)	(15.467)
N	742	601	686	481	619

GLM results for mothers' relative income

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Predicted values of relative income by country



Conclusion

Summary

Absolute income

- Short work interruptions (below 1 year) do not appear to have negative effects on long-term income anywhere.
- ▶ Longer work interruptions and especially never returning to work have negative consequences in continental and southern countries, but not in northern ones.
- Relative income
 - ▶ Results are similar: longer work interruptions penalize long-term income, but not in northern European countries.

These results supports our hypotheses that the negative effect of work interruptions would be more modest in countries with work-family reconciliation policies and comprehensive pension systems.

Contribution

- 1. Move beyond prior studies that focused on the short- and medium-term effects of job interruptions on employment and income.
- 2. Comparative approach goes beyond single-country studies.
- 3. We explore two different aspects of income inequality:
 - ► Absolute income → analysing the risks that older mothers face in terms of deprivation and poverty
 - ▶ Relative income → balance of earnings and power dynamics of a subpopulation that is not often object of studies of gender inequalities.

Limitations

- 1. Retrospective data \rightarrow recall bias (income!).
- 2. Relatively small sample sizes \rightarrow uncertain estimates.
- 3. Results on a sub-sample of countries \rightarrow hardly generalizable.

Conclusions

- Population ageing
- Decreased fertility
- Shrinking family size
- Decreasing pension income

- $\rightarrow~{\rm Changing}$ the demographic structure
- \rightarrow Threatening the social sustainability of welfare systems

Implications

- Women are both **passive** beneficiaries of social benefits and **active** pivotal elements of intergenerational families.
- Ensuring adequate economic support to older mothers in later life, through a correct calibration of family and pension policies, is a task that welfare states cannot avoid.

Thank you!

Public funded childcare coverage ratio

	mid 80' (a)	mid 90' (b)	early 2000 (b)
	0-3 years	0-2 years	0-2 years
Austria	-	_	8(c)
Belgium	20	20	20
Denmark	48	48	74
France	3	20	20
Germany	3*	2	5
Greece	4	-	-
Italy	5	5	6(c)
the Netherlands	2	2	17
Spain	-	-	5(c)
Sweden	_	32	48

Source: a: Moss, 1990; b: Gornick, Meyers and Ross, 1997; c: Boeckmann et al., 2012

Overview of reconciliation policies and pension schemes

	Reconciliation policies	Pension schemes	
Denmark Sweden	Early development and generous support	Highly redistributive and low entry barriers	
France Belgium	Generous support: child care BE, and maternity leave FR	Entry barriers and substantial income support	
Austria the Netherlands	Early and generous development of maternity leave, limited investment on child care	Highly redistributive and limited entry barriers	
Germany Italy Spain	Generous and long maternity leave only	High entry barriers and limited minimum income support	
Greece	Very limited, both maternity and child care	Strict access but substantial income support	