



Single and partnered mothers' labour market consequences of long family leave

Kathrin Morosow & Marika Jalovaara

To cite this article: Kathrin Morosow & Marika Jalovaara (30 Jul 2025): Single and partnered mothers' labour market consequences of long family leave, *Community, Work & Family*, DOI: [10.1080/13668803.2025.2535739](https://doi.org/10.1080/13668803.2025.2535739)

To link to this article: <https://doi.org/10.1080/13668803.2025.2535739>



© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



[View supplementary material](#)



Published online: 30 Jul 2025.



[Submit your article to this journal](#)



Article views: 209



[View related articles](#)



[View Crossmark data](#)

Single and partnered mothers' labour market consequences of long family leave

Kathrin Morosow^a and Marika Jalovaara^b

^aDepartment of Social Statistics, University of Manchester, Manchester, UK; ^bDepartment of Sociology, University of Turku, Turku, Finland

ABSTRACT

This study examines the heterogeneous labour market effects of family leave policies for single and partnered mothers. Longer family leave has been shown to weaken women's labour market positions and some studies have found heterogeneous effects across population groups. However, whether the effect differs by partnership status remains unexplored. Using Finnish register data from 1989 to 2014 (ca. 2.5 million person-years) and controlling for selection into single motherhood by comparing estimates from OLS and FE models, this study compares single and partnered mothers' unemployment and earnings consequent to extended family leaves. In line with predictions that single mothers may face greater work-family reconciliation issues or cumulative disadvantage leading to greater labour market penalties, the results showed that longer leave increases the length of unemployment for single mothers more than for partnered ones. This is not solely because of selection into single motherhood. Earnings penalties after family leave (net of employment status) are the same for single and partnered mothers. We conclude that similar long- lengths of family leave are penalised more among single mothers in terms of employment, which increases and reproduces social inequalities. This means that existing inequalities are reinforced by labour market absences supported by leave policies.

ARTICLE HISTORY



Received 5 November 2024
Accepted 11 July 2025

KEYWORDS


Single mothers; parental leave; family policy; unemployment; earnings; Finland

Introduction

A large body of literature shows that motherhood is associated with disadvantages in the labour market; mothers suffer penalties in terms of employment, wages, and earnings (Gangl & Ziefle, 2009; Harkness, 2016). One reason for the disadvantage is women's long labour market absences due to childbirth and subsequent childcare leave (Akgunduz & Plantenga, 2013; Stier et al., 2001). Although parental leave policies have been associated with higher employment continuity and lower poverty rates among mothers

CONTACT Kathrin Morosow  kathrin.morosow@manchester.ac.uk  Department of Social Statistics, University of Manchester, Oxford Rd, Manchester M13 9PL, UK

This article has been corrected with minor changes. These changes do not impact the academic content of the article.

 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/13668803.2025.2535739>.

© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

(Maldonado & Nieuwenhuis, 2015; Stier et al., 2001), a well-documented fact is that the consequences of paid family leave depend on the length of the leave, with extended leave leading to labour market disadvantages for mothers (Evertsson & Duvander, 2011; Pettit & Hook, 2005; Stier et al., 2001). In the Finnish context, the family leave available to mothers includes maternity and parental leave as well as subsequent cash-for-care benefits – adding up to a possible 36 months of leave. We define long leaves in relative terms to the Finnish convention. While having more children means longer leaves, a mother of 3 children could be on leave for 3 or 9 years. In Finland almost all mothers are on leave during the first year, hence for a mother of one child 1 year would be interpreted as standard and 3 years as longer leave. Research has suggested heterogeneous effects of longer family leave by education (Drange & Rege, 2013; Naz, 2004), region (Giuliani & Duvander, 2017), and migration status (Hardoy & Schøne, 2010). In this paper, we examine whether the labour market impact of long family leave also differs based on mothers' partnership status.

Single mothers are more likely to face disadvantages such as poverty, fragmented employment histories, and employment instability (Destro & Brady, 2011). Reducing negative labour market consequences for mothers, and especially single mothers, would have several benefits for them, their children, and wider society. However, if similar lengths of family leave penalise less privileged groups, such as single mothers, more than this has the potential to increase and reproduce social inequalities. We argue, therefore, that it is pertinent to know whether heterogeneous effects of longer family leaves by mothers' partnership status exist.

We propose competing hypotheses regarding how and why leave consequences may differ for single and partnered mothers. According to human capital theory (Becker, 1985), extended absences from the labour market due to childcare lead to depreciation of human capital, which negatively affects future employment outcomes. While this framework suggests similar impacts for both single and partnered mothers, research questions the assumption of equal skill deterioration. Drawing on signalling theory, scholars argue that the nature of employment interruptions – whether perceived as voluntary or involuntary – can influence employers' evaluations, resulting in divergent labour market consequences (Albrecht et al., 1999; Evertsson et al., 2016). While family leave is perceived as a voluntary employment interruption, other theories, such as cumulative disadvantage and work commitment perspectives also predict heterogeneous group effects within voluntary employment interruptions. For single mothers, who often have weaker labour market attachment and fewer resources, extended time out of the workforce may lead to the accumulation of disadvantages. Single mothers' greater challenges in balancing work and family may also further exacerbate the negative labour market effects of long leave. Partnered mothers, on the other hand, have more opportunities to reduce work commitment than single mothers, who are the sole breadwinner in their families, which may result in fewer labour market opportunities for partnered mothers. Finally, observed differences in single and partnered mothers' characteristics, such as variations in education, employment history, or socioeconomic status, may reflect underlying selection effects rather than causal impacts of leave duration.

To assess whether single or partnered mothers are more disadvantaged by longer family leave, we compare their unemployment and earnings consequences using high-quality Finnish register data for 1989–2014 and individual fixed-effects (FE) regression

models. Both measures capture different aspects of the labour market positions of mothers. Mothers in Finland do not have to leave the labour market upon childbirth but enjoy job-protected family leave, analysing re-entry following a family leave is therefore of less importance. Instead, unemployment assesses success in the labour market and examines the potential difficulties involved in obtaining and remaining in paid employment. Earnings, based on taxable wage, salary earnings and entrepreneurial income, on the other hand, encompass wage penalties conditional on being gainfully employed.

This study contributes to the literature on the consequences of labour market absence by comparing differential effects for single and partnered mothers. Research on the motherhood penalty has yielded mixed results by marital status (Budig & England, 2001; Gangl & Ziefle, 2009; Killewald & Gough, 2013), but does not compare between single and partnered mothers. This study contributes to the nexus of differential effects for partnered and single mothers, as it identifies labour market consequences for similar time out of the labour market. Although the results from one country cannot be directly generalised to other countries, they are relevant in a broader context. The results contribute towards the discussion of social and gender equality by providing knowledge on how extended labour market absences because of family leave can have heterogeneous consequences. There is also a surprising gap in the literature in terms of policy effects, as a lot of policy supports for maternal employment were introduced to reduce the risk of child poverty and welfare reliance among the growing share of single mothers (Hegewisch & Gornick, 2011; Kamerman et al., 2003). If similar lengths of family leave penalises single mothers more, then this has the potential to increase and reproduce social inequalities. This may be reflected in the accumulation of disadvantages across both life course and generations and means that existing inequalities are reinforced by labour market absences supported by leave policies.

Mothers' partnership status, work, and the heterogeneity of family leave effects

Single and partnered mothers' employment are largely affected by the same factors, such as educational attainment, age, and the number and ages of children in the household (Destro & Brady, 2011; Härkönen et al., 2016). Older and more highly educated partnered and single mothers and mothers with older and fewer children show higher employment rates and earnings capacities (Destro & Brady, 2011). Nevertheless, single and partnered mothers' circumstances differ. On the one hand, single mothers are sole breadwinners with greater incentives to be employed (Gonzalez, 2004). Yet as sole carers, they face greater challenges in balancing work and family. This implies that single mothers are more dependent on access to affordable (public) childcare (Destro & Brady, 2011; Misra et al., 2012), and, as they face greater work-family reconciliation issues, they may have to compromise on their career ambitions more than partnered mothers do (Harkness, 2016). Despite many nonresident fathers contributing to childcare, single mothers may encounter more limits in terms of working hours, distance to the workplace, job-related travel or shift work, which leads to negative labour market outcomes. Hence, they may need to accept precarious, low-paid and/or low-quality work or may have to turn down job opportunities (Nieuwenhuis & Maldonado, 2018). Overall, single mothers may be in greater need of employment, but also have poorer employment opportunities (Muller et al., 2020).

Labour market absences after childbirth are facilitated by family leave policies. Mothers generally have higher employment continuity in countries that provide support for employed mothers such as job-protected parental leave (Stier et al., 2001), but the positive impact of these leaves is contingent on its duration. Whereas short- to moderate-length leave predicts positive employment outcomes for mothers, extended labour market absences have opposite effects. The definition of a long leave varies by context and research design, but extended leave has been shown to have negative effects in terms of employment of mothers with young children (Pettit & Hook, 2005), employment entry (Rønsen & Sundström, 2002), the chance of upward occupational mobility (Evertsson & Duvander, 2011), and post-leave wages (Evertsson, 2016; Ruhm, 1998).

Effects of a long absence from the labour market because of childcare leave on employment also vary across groups of women, with women living in rural areas (Giuliani & Duvander, 2017) and immigrant women (Hardoy & Schöne, 2010) being disproportionately affected. Norwegian studies have found that highly educated women encounter stronger negative short-term effects on their working hours and labour supply (Naz, 2004; Rønsen, 2009), but only women with low education and low earnings suffer post-leave earning consequences until their children turn six or seven (Drange & Rege, 2013). Parental leave consequences are therefore not equal across all social groups (Hegevisch & Gornick, 2011). Instead, the negative employment and earnings consequences seem greater for more disadvantaged groups.

Why would leave consequences for partnered and single mothers differ?

It is possible that differences between single and partnered mothers' characteristics explain differences in unemployment and earnings after long family leaves, and that the causality of effects is at least partly questioned. Being a single mother is not random, instead it is associated with a number of sociodemographic factors. Single mothers are, for example, more likely to be lower educated (Härkönen et al., 2016) and to be younger at first birth (McLanahan, 2004). These differences between single and partnered mothers can explain labour market disadvantages rather than single parenthood per se (Destro & Brady, 2011; Harkness, 2016). This can be, on the one hand, the result of direct selection (i.e. reverse causality), where unemployment or financial difficulties increase the risk of being a single mother by increasing the risk of separation, for instance (e.g. Jalovaara, 2013). Indirect selection, on the other hand, refers to characteristics such as education or initial labour market position that influence the likelihood of becoming and remaining a single mother as well as labour market outcomes and thus explain the association among these factors, independent of the leave length. For example, mothers with an initially weaker labour market position may be more likely to be single mothers and face poorer labour market outcomes in terms of earnings and unemployment. *Consequently, single and partnered mothers' labour market consequences (unemployment and earnings) of similar leave length may differ because of selection into single motherhood (Hypothesis 1).*

Long family leave can harm women's labour market positions through lost human capital of experience or further training, signalling of lower productivity and commitment, or a loss of actual work commitment. Accounting for any differences between single and

partnered mothers' socioeconomic profiles (net of selection), should we still expect to find differential effects of long leave?

Human capital theory is used widely in debates on why extended childcare leave can have negative consequences on a mother's employment and earnings (Evertsson & Duvander, 2011). The long disruption of employment for any reason results in atrophy and reduced social and human capital (Gangl & Ziefle, 2009; Stier et al., 2001). This means that the longer women stay out of the labour market in favour of engaging in full-time childcare, the stronger the depreciation of their human capital. While it has been argued that the job security accompanying parental leave should prevent firm-specific human capital loss and lead to better career chances (Akgunduz & Plantenga, 2013; Ruhm, 1998), most findings suggest negative consequences of taking up parental leave for careers and earnings (Evertsson, 2016; Stier et al., 2001). Skill deterioration should thus increase with longer leave length, but should not vary by partnership status net of selection. *According to the human capital theory, single and partnered mothers who take similarly long family leave should face the same negative consequences on the labour market in terms of earnings and unemployment risk (Hypothesis 2).*

The assumption of equal skill deterioration has been questioned in a number of studies. US mothers' wage penalties for family-related work interruptions are greater than what would have been attributed to depreciated human capital (Mincer & Polachek, 1974). Occupational mobility (Weisshaar, 2018) and wage penalties (Albrecht et al., 1999) vary with the reason for leave as different leaves signal information about a job applicant's commitment to work. Empirical research, hence, challenges the universality assumption of the human capital theory.

Work commitment and productivity perspectives, in contrast, allow for heterogeneous group effects in labour market consequences. Research suggests that a partner's (economic) support enables mothers to reduce their work effort, spend more time at home, choose more mother-friendly jobs or make career sacrifices (Budig & England, 2001; Budig & Hodges, 2010). This is consistent with the idea that longer leave decreases work commitment on the part of mothers and thus reduces work productivity (Gangl & Ziefle, 2015). Whereas partnered mothers find themselves in a position in which they are able to reduce their work commitment – if they wish, single mothers do not have the same opportunity as they are sole breadwinners. Extensive family leave has also been argued to reinforce traditional gender roles, which in return weakens mother's labour market positions (Gangl & Ziefle, 2009). Yet, long family leaves can only promote a gendered division of labour if there is a partner in the home. *A work commitment perspective would, therefore, predict more negative labour market (especially earnings) consequences for partnered than for single mothers following a long labour market absence (Hypothesis 3).* If partnered mothers are more likely to refuse promotions, decline extra work or hours due to prioritisation of family, it would be predominantly their earnings that suffer. Partnered mothers' unemployment days may also increase, however, as they have a second income in the household to fall back on, which may take away the urgency to find a new job. We are unable to account for work commitment in our data and therefore have to assume that any residual effects not explained by the available control variables points to a lack of work commitment or productivity, as others before us have done (Budig & England, 2001).

In contrast, women just like men enjoy marriage or partnership premiums. Marriage and cohabitation allow women to better optimise earnings; in turn research questions

whether the motherhood penalty does differ by marital status (Killewald & Gough, 2013). Becker's (1991) economic theory suggests that mothers may be less productive at work than non-mothers due to the additional household and childcare duties that take away from a finite amount of energy. Given that partnered mothers have someone to share these duties with, Becker's theory would mean that single mothers are even less productive. No research is available however that supports the claim that single mothers are less productive.

Single mothers' labour market supply is more elastic, which means it is more responsive to wage changes (Bargain et al., 2014). An economic perspective suggests that higher wages lead to higher labour supply, yet single mothers are assumed to have higher reservation wages (Ross & Saunders, 1993). In other words, mothers are assumed to work only if the offered wages exceed their reservation wages, and their reservation wages can be affected, for example, by previous wages or benefits (Feldstein & Poterba, 1984). Thus, it has been suggested that generous social policies, especially those targeted at single parents, might create disincentives for single mothers to work for pay; however, the evidence is mixed as well (Destro & Brady, 2011).

Instead, long family leaves have been shown to increase the risk of poverty, particularly for single mothers (Misra et al., 2007). The long leave may undermine their labour force position and further exacerbate the weakened labour market positions of single mothers. Longer leave may, thus, add a layer to the structural and economic disadvantages that single mothers face, thus contributing to cumulative disadvantage. Cumulative advantage is a process where initial advantage becomes a resource that produces further gains, whereas cumulative disadvantage means that initial disadvantage produces further losses (DiPrete & Eirich, 2006; Rigney, 2010). Given the poorer labour market position and work-family reconciliation issues of single mothers, the negative consequences of long family leave are assumed to hit single mothers harder. This and the above argument on reservation wages implies that single mother's unemployment is especially affected by long family leave. *A cumulative disadvantage or productivity perspective would, therefore, predict more negative labour market (especially unemployment) consequences for single than for partnered mothers following a long labour market absence (Hypothesis 4).*

The Finnish case

Analysing heterogeneous effects of long labour market absence because of childcare requires a context in which family leave and relatively long family leave are offered and where nationally-representative panel data are available, which allow us to follow subgroups of women over time. Finland fulfils these criteria. The Finnish system offers maternity, paternity, and parental leave as well as cash-for-care (CFC) up to a child's third birthday, and the security of a parent being able to return to their jobs after family leave. During the study period earnings-related maternity and parental leave could be taken for approximately 11 months (approx. 4.5 and 6.3 months, respectively) (Salmi et al., 2018). The earnings replacement rate was about 70%, decreasing with higher earnings. In 2007, the replacement rate was increased to 90% for the first 56 days of maternity leave. Very low or no earnings are replaced with a minimum flat rate. Virtually all mothers used maternity leave. The subsequent parental leave could be divided between the parents, but almost all mothers took their full entitlement and only 2–3%

of fathers took parts of the gender neutral leave (Salmi et al., 2018). During the research period, a single mother could not use the paternity leave or father's quota¹ herself, hence a single mother was not entitled to longer leaves (Salmi et al., 2018).

After maternity and parental leave, the cash-for-care (CFC) benefit can be taken for children aged 9–35 months in lieu of a public childcare place up until a child's third birthday. The CFC benefit comprises a basic payment, a means-tested supplement, possible sibling supplements, and municipality top-ups (Salmi et al., 2018; Sipilä & Korpinen, 1998). In January 2019, CFC averaged €412 per recipient per month (Kela, 2019). Almost all families use this benefit for at least some amount of time, with the mother most likely to care for the child full-time (Salmi et al., 2018). Families rarely use CFC to pay a private caregiver or a private daycare provider, as that can be subsidised by another, more generous, allowance (Kosonen, 2014). Unlike maternity and parental leave, CFC use displays a strong educational gradient, with low-educated mothers being by far the most likely to use the allowance for longer periods of time (Lammi-Taskula, 2017). Despite broad support for maternal employment, the CFC is a widely used benefit that contradicts the Nordic model by discouraging maternal employment.

The proportion of single-parent families among all families with children has grown in many Western societies, including Finland (Härkönen et al., 2016). In 2016, almost 20% of all families with children were single-mother families (Statistics Finland, 2018). Arrangements for shared physical custody are rather rare (THL, 2019), and although Finland has a guaranteed child maintenance payment scheme, the payments are quite low and only cover a child's basic needs (Hakovirta & Jokela, 2019). Most single-mother families today are the result of separation or divorce, which is more likely among lower educated individuals (Jalovaara, 2013). Childbearing outside of coresidential partnerships is far more common among women with low levels of education (Jalovaara & Fasang, 2015). As a result, single mothers are, on average, lower educated than partnered ones, and this difference has increased significantly over the past few decades in Finland (Härkönen et al., 2016), as they have in most Western societies.

Finland is not representative of all Western countries for the same reasons that make it a good test of the impact of extended leave. Policy support is reflected in the high Finnish female employment rate of 71% (OECD, 2019a) and notably low proportions of women engaging in part-time work (OECD, 2019b). Many state policies, including strongly subsidised childcare and family leave have been targeted at promoting social and gender equality; overall, Finland is among the most gender-egalitarian nations in the world (World Economic Forum, 2018). Its overall level of income inequality is very low (OECD, 2020). Therefore, any group differences found in this paper would likely be greater in less equal markets such as the United States or the United Kingdom.

Data and methods

Data

We used Finnish administrative total population data for the period from 1989 to 2014, to analyse labour market outcomes for mothers after taking family leave. In these data, various administrative registers are linked by Statistics Finland, and include full histories of co-residential partnerships regardless of marital status (for rules of inference of

cohabitations, see Jalovaara & Kulu, 2018), histories of childbearing and completed educational degrees, as well as yearly data on income and employment. We focused on Finnish-born women who had their first child between 1991 and 2005, which enabled a follow-up of at least 10 years. We excluded women who were younger than 18 years at first birth. The follow-up started two years before the first birth to capture pre-birth labour market positions. An earlier start was not chosen because the time of entry into the labour market varied greatly based on educational background. About 30% of the mothers in our sample were unemployed before the first birth, with the proportion of those who ever became a single parent being larger (35%) than those who did not (25%). Observations were censored for women who had emigrated, had a twin birth, or were aged 60 years or above and students and disability pensioners were excluded. We further exclude mothers who became single mothers for the first time after they had used family leave to avoid biased results for leave effects due to the timing of single motherhood. The analyses covered 146,745 mothers (over 2.5 million person-years at risk), of which about 15% had ever experienced spells of single motherhood.

Key measures

Two dependent variables were used to assess labour market outcomes for mothers: unemployment days and earnings. We focused on these two outcomes as we expect different effects by partnership status and they measure different dimensions of mothers' labour market positions. Unemployment captures the demand and supply of work, as unemployed individuals were searching for jobs, but unsuccessfully, because of the lack of offers and/or suitable positions. Unemployed job seekers are not allowed to turn down a job offer without reason; otherwise they face cuts to their unemployment benefit (Kela, 2017). Thus, this measure signals an unstable, precarious, and potentially fractured employment history of the mother in a setting where being employed is the norm. Unemployment days are a yearly updated continuous variable. Data on unemployment originate from the Ministry of Labour's registers. According to the register, 'unemployed' persons are job seekers and are available for work (which are the prerequisites for receiving unemployment benefits). We calculated annual unemployment days through the start and end dates of unemployment spells in a given year, accumulating the days of multiple spells in a year.

Annual earnings are used to assess changes in labour-market income related to long leave. This variable is based on wage and salary earnings and entrepreneurial income that is liable to state taxation. Earnings are kept at absolute Euro amounts (deflated to 2011 values) to enable a more straightforward interpretation of the results and to include zero earnings for those that are not in employment. We also estimated models using logged earnings (zero earnings measured as 1), but the conclusions remained substantively the same. In the models we measure earnings net of employment status, hence we control for mothers being employed, unemployed or inactive. This means that earnings capture a different dimension of (dis)advantage compared to unemployment. While unemployment captures access to employment, earnings measure within-employment inequalities.

The key independent variables were partnership status and absence from the labour market measured through family leave length. First, partnership status was measured

as a dummy variable capturing whether a mother residing with child(ren) was in a coresidential partnership² in a given year. When identifying single mothers, we only consider those who first became single while on leave. This is because mothers who became single years after leave may not be affected by the same mechanisms as mothers who were single during leave. This measure captures mothers transitioning to single motherhood; but we also control for re-partnering as an additional dummy variable as well as for time spent as a single mother. This is necessary because single parenthood is not an absorbing state (Harkness, 2016), and single mothers re-partner at a high rate (Jalovaara & Andersson, 2018).

Second, the time a mother spent on family leave was captured as a time-varying measure of accumulated leave length, which was lagged by one year. Every mother has used maternity and parental leave in the first year following childbirth (Salmi et al., 2018), and hence the minimum leave length any mother can have is one year. A mother was categorised as having been on childcare leave following parental leave if she was eligible with regard to the youngest child's age (1–3 years) and received at least €4000 in CFC payments that year. The basic payment of CFC for a whole year would add up to about €4000. Given additional supplements, however, €4000 may mean a somewhat shorter leave than a full year as well. The leave length is therefore approximated and likely slightly overestimated (for further discussion, see Supporting Information B).

Control variables included time-varying measures of age and age squared, period, number of children, region of residence (urban, semi-urban, and rural), and a time-varying measure of the age of the youngest child (see Table 1). Education measured the highest degree attained by the end of the previous year and was categorised according to the ISCED levels as basic, upper secondary, and lower and higher tertiary. A mother's main economic activity was included in the models on earnings, indicating whether a woman was employed, unemployed, or otherwise outside the labour force. Economic activity is an annual measure that captures the situation in the last week of the year. We included a binary variable measuring whether a mother had been on family leave in a given year. A linear measure of time spent as a single mother was also included in the models.

Analytical strategy

Our sample included mothers who had their first child between 1991 and 2005, but we follow them from 1989 to 2014. To estimate the labour market outcomes for single and partnered mothers across different family leave lengths, we estimated non-FE and FE OLS models for the two outcome variables: annual unemployment days and earnings. While OLS models compared individuals, in the FE models, individuals served as their own referents, so an individual's outcomes before and after family leave were compared (Allison, 2009). This approach allowed us to control for time-constant unobserved individual differences that can affect both the likelihood of becoming a single mother and employment outcomes that can bias OLS estimates. This is a common technique used to determine the effect of the independent variable on labour market outcomes net of selection (Gangl, 2010). Hence, comparing OLS to FE models allows us to test *Hypothesis 1*. If stable unobserved heterogeneity explained single mothers' disadvantages, any differences

Table 1. Distribution of the covariates by partnership status for mothers who had a child between 1991 and 2005 and were followed from 1989 to 2014 in person-years.

		Single % or mean	Partnered % or mean
Age (mean)		37.2	36.9
Age at 1st birth (mean)		28.3	29.3
Currently on leave (tv)	No	66.7	69.4
	Yes	33.3	30.6
Leave length in years (tv)	Before birth	0.6	6.5
	1	5.6	8.0
	2	13.7	13.2
	3	13.7	12.7
	4	22.1	18.8
	5	10.3	12.1
	6	10.8	11.4
	7	23.3	17.4
Accumulated Leave length in years (total by the end of the follow-up)	1	1.4	1.4
	2	8.3	6.8
	3	9.2	8.9
	4	20.2	19.7
	5	9.9	13.7
	6	12.5	15.7
	7	10.3	10.6
	8 and more	28.2	23.1
	Mean (total length)	6.0	5.8
Period (tv)	1987–1990	0.0	0.4
	1991–1993	1.6	3.5
	1994–1996	4.8	6.7
	1997–2000	12.3	13.8
	2001–2004	19.0	20.2
	2005–2009	30.4	28.0
	2010–2014	31.8	27.5
Education (tv)	Basic	17.6	6.5
	Upper secondary	44.9	36.3
	Lower tertiary	28.8	41.0
	Higher tertiary	8.7	16.2
Economic activity (tv)	Employed	79.9	86.3
	Unemployed	8.0	4.3
	Others outside labour force	12.2	9.4
Region (tv)	Urban municipalities	68.3	64.0
	Semi-urban municipalities	15.5	18.1
	Rural municipalities	16.3	17.8
Number of children (tv)	1 child	42.5	37.2
	2 children	37.9	46.2
	3 children	14.6	13.5
	4+ children	5.0	3.1
	Mean number of children	2.2	2.2
Age of the youngest child (tv)	0	9.8	13.0
	1–2	19.7	21.2
	3 or older	69.9	59.3
	no child yet	0.6	6.5
Annual unemployment days	Mean	27.1	14.7
Annual earnings	Mean	20,679	23,216
Total person-years	2,581,095	381,163	2,199,932
Total individuals ^a	146,745	24,835	121,910

Notes: tv = time-varying. All time-varying variables are lagged except for age, period, currently on leave, age of the youngest child and economic activity.

^aTotal individuals for single and partnered mothers is based on mothers who were ever single in the research period.

between single and partnered mothers in the OLS models should disappear in the FE models. We note, however, that these models only account for indirect selection and not for direct selection. We use lagged variables to minimise the bias from direct selection.

The models estimated how single and partnered mothers' predicted annual earnings and unemployment days were affected by family leave length by examining a two-way interaction between accumulated leave length and partnership status (both lagged by a year). Because the leave length varies with the number of children, we included a three-way interaction among partnership status, leave length, and number of children to show the robustness of our results. Including all interactions, we estimated the following FE model (Allison, 2009):

$$Y_{it} = L_{it}P_{it}C_{it} + \gamma X_{it} + \alpha_i + \varepsilon_{it}$$

where Y represents a labour market outcome (annual unemployment days or earnings) for mother i in year t , L represents the accumulated leave length for each year, P is the partnership status of a mother in each year, and C represents the number of children. A set of predictor variables that varied over time is represented by the vector X , α is the individual level fixed-effect, and ε is the error term. We compared FE and random-effects models using the Hausman test, which confirmed that these models were significantly different and that FE models should be applied (Allison, 2009). All models were run with robust standard errors to account for correlated terms of multiple observations of an individual in the panel. The full models including all controls and interaction effects are presented in margin plots, while the final model can be found in the Supporting Information A.

More negative consequences for partnered mothers, especially for annual earnings, would confirm *Hypothesis 3*. A steeper increase in unemployment days or a decrease in earnings for single mothers would confirm *Hypothesis 4*, while no difference between single and partnered mothers would support *Hypothesis 2*.

A number of additional analyses and validity checks were carried out to verify the robustness of our results and analytical strategy (see Supporting Information B: Tests of Robustness). First, we tested various models and sample specifications and control variables to ensure that the results are not driven by other underlying factors. All results were robust; amongst others, models were run that controlled for work experience, other work characteristics and unemployment prior to first birth. Second, we discussed and tested limitations concerning our measure of leave length. Third, we test a time-varying measure for partnership status instead of separate dummy variables for being single and repartnering. Using a time-varying variable instead of two dummy variables yields similar results. Fourth, we discussed and showed how our main and alternative models account for selection into single motherhood. Fixed effects models including group-specific slopes (FEGS) were also applied to account for possible selection based on differential growth, but results did not change. Finally, we examined whether single and partnered mothers' leave lengths differ and whether selection into different leave lengths affects our results. Again, we find no evidence of this being the case.

Results

Descriptive statistics are presented in [Table 1](#), including the outcome and control variables. Single mothers contributed approximately 16% of the person-years in the sample. Descriptively, single mothers did differ somewhat from partnered ones. Single mothers were, on average, one year younger at first birth, had a lower level of formal

education, and were less likely to be employed across the study period. In our sample – comprising partnered mothers and mothers who became single before or while using family leave – single and partnered mothers did not differ in their number of children or their family leave lengths overall. Single mothers had both lower average annual earnings by approximately €2500 and more annual unemployment days.

Consequences of family leave for single and partnered mothers

Unemployment

The interaction estimates for leave length and partnership status from the final OLS and FE regression models of the number of unemployment days are shown in [Figure 1](#). The full models can be found in the online Supporting Information A (Table S1). The OLS models compared single and partnered mothers and served as a point of reference for the FE models, where each mother served as her own comparison over time.

The results of the interaction effect between leave length and partnership status from the OLS model that included all control variables are shown as predictive margins in the left graph in [Figure 1](#). As all mothers were taken to be on leave in the first year, the zero

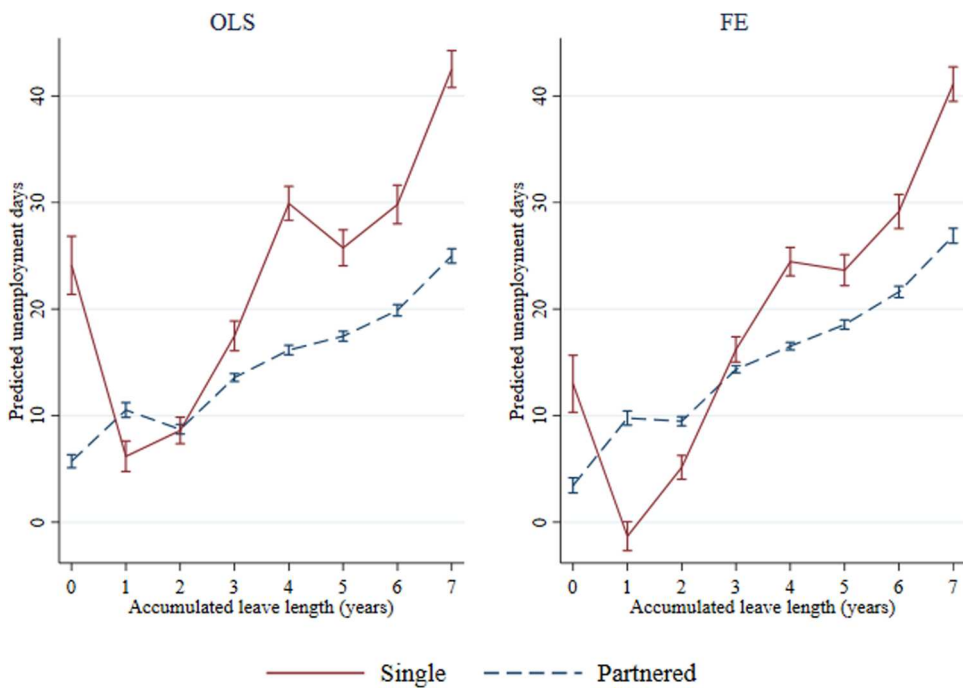


Figure 1. Predicted annual unemployment days for single and partnered mothers by family leave length (non-FE and FE OLS regression, predictive margins, 95% CIs). Source: Finnish register data, own calculations. Note: Full models in online supporting information A Table S1. Mothers who had a child between 1991 and 2005, were followed from 1989 to 2014, were partnered throughout or became firstly single mothers during leave take-up. Based on an interaction between family leave length and partnership status. Predictive margins controlling for age, age squared, period, education, region, number of children, age of the youngest child, currently on leave, repartnered, time spent as single parent.

category refers to the years preceding their first birth. The leave length of mothers was positively associated with annual unemployment days. This association was somewhat stronger for single mothers than for partnered mothers. For partnered mothers who were on family leave for approximately three years, predicted unemployment length was almost 15 days a year on average, whereas this figure rose to about 25 days if the mother had been on leave for approximately seven or more years. For single mothers, on the other hand, the model predicted approximately 18 days of unemployment after approximately three years of family leave and over 40 days of annual unemployment after approximately seven or more years of leave. This indicates that single mothers may be confronted with a more fragmented employment trajectory and insecurity after similar durations of family leave as partnered mothers, as they faced repeated or long-term unemployment. Hence, it seems that single mothers fared more poorly on the labour market than partnered ones who had been on family leave for about the same amount of time.

Controlling for unobserved time-constant characteristics, the FE models present a somewhat more precise picture of the effect of leave on unemployment days (right panel, [Figure 1](#)). Given the economic disadvantages that single mothers face, the increase in unemployment days may reflect that time-constant unobserved characteristics are associated with being a single parent (*Hypothesis 1*). However, while accounting for unobserved heterogeneity and comparing a mother to herself, the relationship between leave length and annual unemployment days remains positive. The effect weakens slightly when mothers are single but not when they are partnered, causing the estimates for single and partnered mothers to converge. Nevertheless, intra-individual comparisons reveal that longer leaves are still more disadvantageous when mothers are single than when they are partnered. About four years of family leave lead, on average, to almost 10 more unemployment days when mothers are single than when they are partnered, and the difference is over 15 days when mothers have been on leave for approximately 7 or more years. Very short leave seems to have a greater protective effect when mothers are single, as they show fewer predicted unemployment days than when mothers are partnered. A potential explanation is that a shorter leave length for single mothers signals stronger work commitment to the employer than a short leave of partnered mothers. It may be more likely, however, that this is because of reverse causality where mothers who are single at birth or become single shortly after take shorter leaves and return to work sooner to provide for their family.

Overall, our results indicate that pre-leave labour market differences and time-constant differences between single and partnered mothers do not fully explain the differential effect of long family leave (rejection of *Hypothesis 1*). Instead, single mothers fare worse while taking long family leave, independent of selection, supporting *Hypothesis 4*.

Extending the analysis to a three-way interaction of family leave length, partnership status, and number of children shows whether the leave length effect differs by number of children for single and partnered mothers ([Figure 2](#), regression coefficients in [Table S2](#)). Although the results above are net of the number of children, leave lengths are dependent on the number of children. The three-way interaction thus accounts for the leave length dependency and confirmed the results of [Figure 1](#). The x-axis of [Figure 2](#) changes with the number of children as every mother is assumed to take leave in the first year after a child's birth, hence a mother of three children will

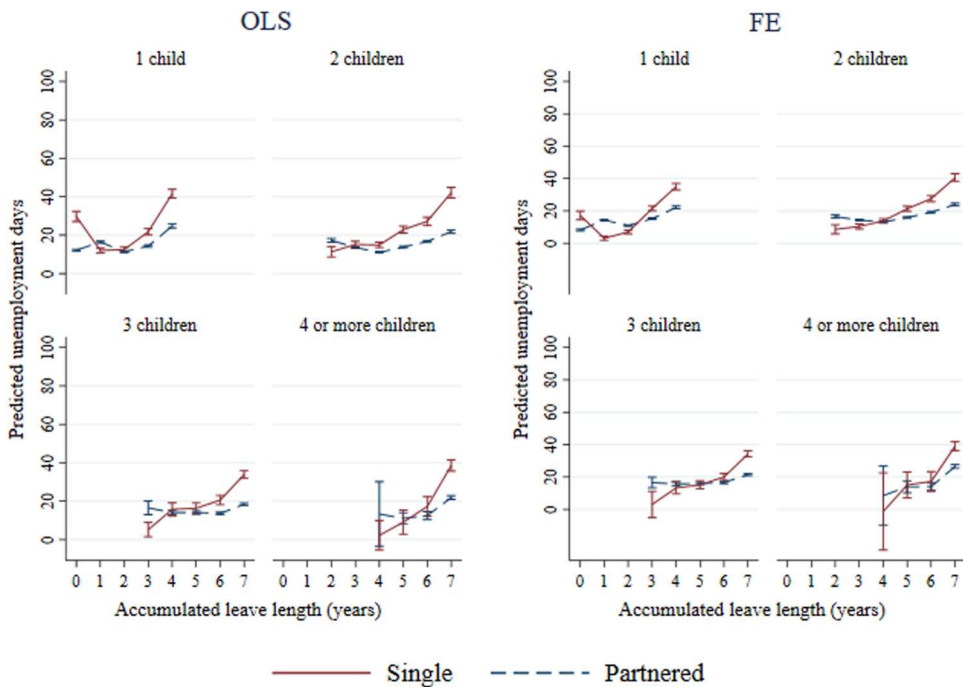


Figure 2. Predicted annual unemployment days for single and partnered mothers across family leave length by number of children (non-FE and FE OLS regression, predictive margins, 95% CIs). Source: Finnish register data, own calculations. Note: Full models in online supporting information A Table S2. Mothers who had a child between 1991 and 2005, were followed from 1989 to 2014, were partnered throughout or became firstly single mothers during leave take-up. Based on a three-way interaction among family leave length, partnership status, and the number of children. Predictive margins controlling for age, age squared, period, education, region, age of the youngest child, currently on leave, repartnered, time spent as single parent.

have at least three years of leave. For single and partnered mothers with one, two, or three children, [Figure 2](#) shows a difference in the effect of family leave on predicted unemployment days. Overall, comparatively long leave shows stronger penalties for single than for partnered mothers, independent of the number of children.

The FE results (right panel, [Figure 2](#)) confirm that for women with only one child, a leave length of approximately three years predicts increasing disadvantages for single mothers. For mothers with two children, the effects for single and partnered mothers start to diverge after approximately four years of family leave, whereas for mothers of three children, this divergence occurs after approximately six years of family leave. Only the longest leaves display differences when mothers have four or more children (which is relatively rare). That the protective effect of shorter leave for single mothers disappears for mothers of three and more children may speak for the explanation that mothers of fewer children that become single early decide to shorten their leave. Comparing the FE results with those of the OLS models verifies that unobservables explain a part of the association, but the differences remain. Thus, neither the selection into single motherhood nor their number of children fully explain the consistently higher predicted

unemployment days that single mothers face while having been on family leave for longer periods of time.

Results by educational status (see Figures L1 in Supporting Information B) reveal that single mothers across all educational groups show higher unemployment after longer leaves compared to partnered mothers. The result is particularly driven by basic and secondary educated women, however, indicating that cumulative disadvantage may explain the disproportional effects on single mothers.

Earnings

How does accumulated leave length affect the earnings of single and partnered mothers? The interaction estimates for leave length and partnership status from the OLS and FE models of annual earnings are shown as predictive margins in Figure 3 (regression coefficients in Table S3). For both the OLS and FE models, a negative linear association between leave length and annual earnings can be seen for single and partnered mothers with no differences when employment status is taken into account. Accounting for unobserved heterogeneity does not change this effect of leave length on annual earnings for both single and partnered mothers. Whereas the general interpretation, that there are no

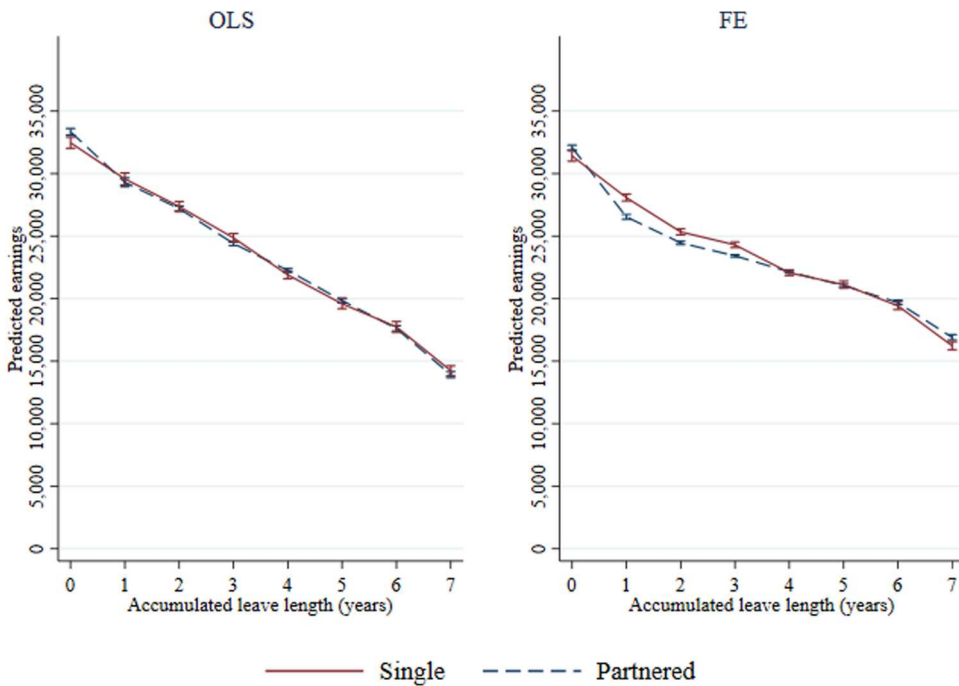


Figure 3. Predicted annual earnings for single and partnered mothers by family leave length (non-FE and FE OLS regression, predictive margins, 95% CIs). Source: Finnish register data, own calculations. Note: Full models in online supporting information A Table S3. Mothers who had a child between 1991 and 2005, were followed from 1989 to 2014, were partnered throughout or became firstly single mothers during leave take-up. Based on an interaction between family leave length and partnership status. Predictive margins controlling for age, age squared, period, education, main employment activity, region, number of children, age of the youngest child, currently on leave, repartnered, time spent as single parent.

great differences between single and partnered mothers in terms of earnings consequences, remains, shorter lengths of leave seem to be somewhat more negative for partnered than single mothers. These disappear, however, when contractual work hours, part-time work, sector and firm size are taken into account (see Figure B in Supporting Information B). This supports Hypothesis 3 stating that partnered mothers have better opportunities to decrease work commitment if desired. Still, these results indicate a dramatic drop in annual earnings for both partnered and single mothers when long family leave has been taken.

A three-way interaction among family leave length, partnership status, and number of children for the OLS and FE models is displayed in Figure 4 (regression coefficients in Table S4). The results show no differences between single and partnered mothers' annual earnings with increasing family leave length. This is independent of how many children the mothers had. Generally, mothers face notable earnings repercussions of relatively long leave, independent of the number of children and partnership status, supporting Hypothesis 2 stating that human capital depreciation should equally affect single and partnered mothers.

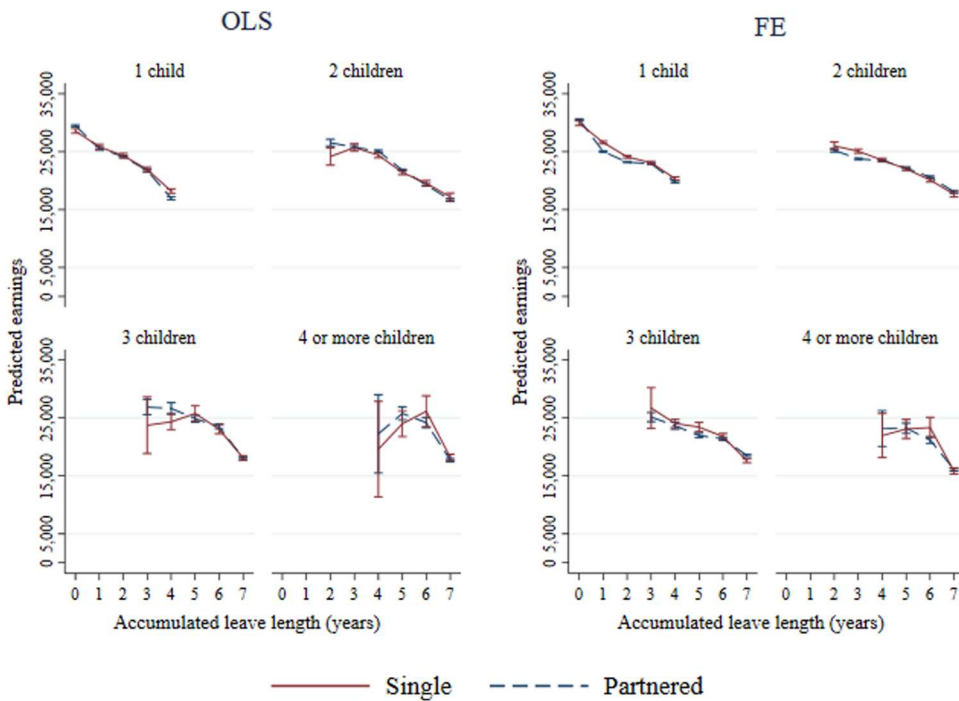


Figure 4. Predicted annual earnings for single and partnered mothers across family leave length by the number of children (non-FE and FE OLS regression, predictive margins, 95% CIs). Source: Finnish register data, own calculations. Note: Full models in online supporting information A Table S4. Mothers who had a child between 1991 and 2005, were followed from 1989 to 2014, were partnered throughout or became firstly single mothers during leave take-up. Based on a three-way interaction among family leave length, partnership status, and number of children. Predictive margins controlling for age, age squared, period, education, main employment activity, region, age of the youngest child, currently on leave, repartnered, time spent as single parent.

Results by educational status (see Figures L2 and L3 in Supporting Information B) show that the lower earnings for partnered mothers are particularly driven by higher educated mothers. However, controlling for part-time work, contractual hours, sector and firm size accounts for all differences, again suggesting that higher educated partnered mothers are able to reduce work hours.

Discussion and conclusions

Long paid family leave has been found to be detrimental to women's labour market positions because of either real or expected differences in productivity upon their return to paid work. Although increasing attention is paid to heterogeneous leave consequences in population subgroups, differential effects by partnership status remain unstudied. This study addressed this gap by comparing labour market outcomes after family leave when mothers are single or partnered. We argue that the labour market impact of long family leave may differ based on the mothers' partnership status. We present competing hypotheses, on the one hand single mothers may face greater post-leave disadvantages than partnered ones (especially in terms of unemployment) due to lower productivity or cumulative disadvantage. On the other hand, partnered mothers may face greater penalties (especially in terms of earnings) than single mothers when employed, due to weaker work commitment.

Comparing pooled cross-sectional and panel models for annual unemployment and earnings consequences, our study showed that partnership status predicted significant post-birth differences in unemployment but not in earnings. The unemployment differences begin to emerge with a leave of approximately three years, indicating that longer leaves may lead to more frequent or longer spells of unemployment for single mothers than for partnered ones. This is persistent across different numbers of children and indicates more fragmented, less stable employment trajectories for single mothers who take the same long leave as partnered ones.

The greater negative effects for single than for partnered mothers' unemployment when taking longer leave may suggest the accumulation of disadvantage where longer leaves exacerbate the already weakened labour market attachment of single mothers. Economic theory would suggest that productivity is lower among single mothers due to the accumulation of employment, household and childcare duties. It is also possible that employers may perceive single mothers to be less productive, as they are the sole carers for their children in the household. Similarly, single mothers may have less flexibility in terms of working hours and distance, which reduces their ability to take or hold certain jobs. We have, however, no way of directly testing these hypotheses, yet this would be an interesting avenue for future research. Finally, our results suggest that stronger labour market disadvantages following longer leave for single mothers are not merely because of selection. Instead, selection and stable unobserved heterogeneity only partly explain the stronger disadvantages that single mothers face in terms of unemployment. These differences, however, only hold for annual unemployment days and not for annual earnings net of employment status, where no differences were found.

Consistent with the human capital theory, both single and partnered mothers show steep earnings losses the longer they are out of the labour market, and almost no differences between the groups are observed. Earnings and unemployment are two different

dimensions of the labour market. While unemployment measures the chances of not finding or losing paid employment, earnings measure differences if they are employed. This finding implies that disadvantages for single mothers are found in the entry into employment, but once employed, single mothers do not differ greatly from partnered ones. This may be because earnings are affected by other factors than unemployment, especially job-related characteristics are important for earnings such as occupation, skill group and sector. Yet, earnings models show slightly lower earnings for partnered mothers than for single ones, for shorter leave. Robustness checks accounting for contractual hours, part-time work, sector and firm size erase these differences, suggesting that partnered mothers have better opportunities to reduce work hours and thus work commitment than single mothers do.

One limitation of this study is that leave length was derived from annually paid benefits (see a fuller discussion on the data and measurement error in Supporting Information B). Consequently, the leave length was approximated and has to be interpreted in relative terms. Future research should aim to use more detailed data on leave length. We are also not able to account for reverse causality; for example, if mothers decide to return to work earlier because of either becoming a single parent or financial necessity. We found lower unemployment risks for single mothers while using shorter leave. While this may speak for such an effect, it also indicated the necessity to study single mothers' heterogeneity.

Reducing negative labour market consequences for mothers, and especially single mothers, would have several benefits for them, their children, and wider society. Single mothers face poverty more often than do partnered mothers, and fragmented employment increases the likelihood of at least short spells of poverty through employment instability (Destro & Brady, 2011). Poverty has negative consequences for health, well-being, and future earnings. In addition to single mothers' well-being, their poverty and insecure employment situation tends to translate into negative outcomes for their children. An American study showed, for example, that children of mothers in bad jobs are more likely to repeat years in school, whereas mothers' unemployment increases the likelihood of their children dropping out of school (Kalil & Ziol-Guest, 2005). The Nordic welfare states show high social mobility and as such the influences of parental background on child outcomes can be weakened (Esping-Andersen & Wagner, 2012), yet previous research has also revealed socioeconomic disparities in child outcomes in these countries (see Kallio et al., 2016). When CFC was implemented, it was portrayed to be in the child's best interest (Hiilamo & Kangas, 2009), yet when mothers and, in particular, single mothers face labour market disadvantages following long leaves, this premise may be questioned.

The gains of policies aimed at increasing maternal employment are distorted if they hamper women's career opportunities at the same time (Hegewisch & Gornick, 2011; Pettit & Hook, 2009); but such outcomes may also reflect varying policy effects on different social strata (Mandel & Shalev, 2009). Heterogeneous policy effects may indicate that privileged groups benefit more from some policy measures than do less privileged groups. Such a process clearly has the potential to increase and reproduce social inequalities. It also highlights the conflicting nature of family leave policies. Parental leave is often implemented to support women in combining work and family, yet extended childcare leave seems to negate the positive effects of parental leave. Policies supporting maternal

employment were also introduced to reduce the risk of child poverty and welfare reliance of single parents. Yet, very lengthy leave counteracts these aims when single mothers encounter greater labour market consequences while taking leave. When designing family policies, it would be important to help vulnerable groups combine work and family more successfully, and thereby tone down the reproduction of social inequalities across both life course and generations.

Notes

1. Fathers were entitled to three weeks' paternity leave (to be taken around the birth of the child), and since 2003, an ear-marked parental leave quota ('father's quota') that was gradually extended and made more flexible.
2. In our data, a cohabiting couple is defined as a man and a woman registered as domiciled in the same dwelling for over 90 days, who are not close relatives (siblings or a parent and a child, for instance) or married to each other, and whose age difference is no more than 20 years. The rule on age difference does not apply if the couple has shared children. For details on cohabitation, see Jalovaara and Kulu (2018).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by European Research Council [680958]; Research Council of Finland [369118]; Research Council of Finland [293103, 320162, 321264]; Strategic Research Council [364374]; Vetenskapsrådet [340-2013-5164, 349-2007-8701].

Notes on contributors

Kathrin Morosow is a Lecturer at the University of Manchester. Her general area of research expertise lies with Sociological Demography, situated at the intersection of policy-research and life-course analysis. Her research interests are the study of social and labour market inequalities combined with unintended consequences of social policies.

Marika Jalovaara is a Professor of Sociology, specialised in Demography, at the University of Turku. Her main research interests include links among family dynamics (cohabitation, marriage, childbearing), social inequalities, and the welfare state. She is the Principal Investigator (PI) and Director of the Consortium, 'Family Formation in Flux – Causes, Consequences and Possible Futures (FLUX)', funded by the Strategic Research Council (SRC/STN), established within the Academy of Finland. She is also Co-PI and Research Area Director (area: Demography and Life Course) in INVEST Research Flagship 'Inequalities, Interventions, and the New Welfare State'.

References

- Akgunduz, Y. E., & Plantenga, J. (2013). Labour market effects of parental leave in Europe. *Cambridge Journal of Economics*, 37(4), 845–862. <https://doi.org/10.1093/cje/bes052>
- Albrecht, J., Edin, P., Sundström, M., & Vroman, S. B. (1999). Career interruptions and subsequent earnings: A reexamination using Swedish data. *Journal of Human Resources*, 34(2), 294–311. <https://doi.org/10.2307/146347>
- Allison, P. D. (2009). *Fixed effects regression models*. Sage Publications.

- Bargain, O., Orsini, K., & Peichl, A. (2014). Comparing labor supply elasticities in Europe and the United States new results. *Journal of Human Resources*, 49(3), 723–838. <https://doi.org/10.1353/jhr.2014.0017>
- Becker, G. S. (1985). Human capital, effort, and the sexual division of labor. *Journal of Labor Economics*, 3(1, Part 2), S33–S58. <https://doi.org/10.1086/298075>
- Becker, G. S. (1991). *A treatise on the family*. Harvard University Press.
- Budig, M. J., & England, P. (2001). The wage penalty for motherhood. *American Sociological Review*, 66(2), 204–225. <https://doi.org/10.1177/000312240106600203>
- Budig, M. J., & Hodges, M. J. (2010). Differences in disadvantage: Variation in the motherhood penalty across white women's earnings distribution. *American Sociological Review*, 75(5), 705–728. <https://doi.org/10.1177/0003122410381593>
- Destro, L., & Brady, D. (2011). Does European-style welfare generosity discourage single-mother employment. In D. Brady (Ed.), *Comparing European workers part B: Policies and institutions (research in the sociology of work)* (pp. 53–82). Emerald Group Publishing.
- DiPrete, T. A., & Eirich, G. M. (2006). Cumulative advantage as a mechanism for inequality: A review of theoretical and empirical developments. *Annual Review of Sociology*, 32(1), 271–297. <https://doi.org/10.1146/annurev.soc.32.061604.123127>
- Drange, N., & Rege, M. (2013). Trapped at home: The effect of mothers' temporary labor market exits on their subsequent work career. *Labour Economics*, 24, 125–136. <https://doi.org/10.1016/j.labeco.2013.08.003>
- Esping-Andersen, G., & Wagner, S. (2012). Asymmetries in the opportunity structure. Intergenerational mobility trends in Europe. *Research in Social Stratification and Mobility*, 30(4), 473–487. <https://doi.org/10.1016/j.rssm.2012.06.001>
- Evertsson, M. (2016). Parental leave and careers: Women's and men's wages after parental leave in Sweden. *Advances in Life Course Research*, 29, 26–40. <https://doi.org/10.1016/j.alcr.2016.02.002>
- Evertsson, M., & Duvander, A. (2011). Parental leave – possibility or trap? Does family leave length effect Swedish women's labour market opportunities? *European Sociological Review*, 27(4), 435–450. <https://doi.org/10.1093/esr/jcq018>
- Evertsson, M., Grunow, D., & Aisenbrey, S. (2016). Work interruptions and young women's career prospects in Germany, Sweden and the US. *Work, Employment and Society*, 30(2), 291–308. <https://doi.org/10.1177/0950017015598283>
- Feldstein, M., & Poterba, J. (1984). Unemployment insurance and reservation wages. *Journal of Public Economics*, 23(1–2), 141–167. [https://doi.org/10.1016/0047-2727\(84\)90070-7](https://doi.org/10.1016/0047-2727(84)90070-7)
- Gangl, M. (2010). Causal inference in sociological research. *Annual Review of Sociology*, 36(1), 21–47. <https://doi.org/10.1146/annurev.soc.012809.102702>
- Gangl, M., & Ziefle, A. (2009). Motherhood, labor force behavior, and women's careers: An empirical assessment of the wage penalty for motherhood in Britain, Germany, and the United States. *Demography*, 46(2), 341–369. <https://doi.org/10.1353/dem.0.0056>
- Gangl, M., & Ziefle, A. (2015). The making of a good woman: Extended parental leave entitlements and mothers' work commitment in Germany. *American Journal of Sociology*, 121(2), 511–563. <https://doi.org/10.1086/682419>
- Giuliani, G., & Duvander, A. Z. (2017). Cash-for-care policy in Sweden: An appraisal of its consequences on female employment. *International Journal of Social Welfare*, 26(1), 49–62. <https://doi.org/10.1111/ijsw.12229>
- Gonzalez, L. (2004). Single mothers and work. *Socio-Economic Review*, 2(2), 285–313. <https://doi.org/10.1093/soceco/2.2.285>
- Hakovirta, M., & Jokela, M. (2019). Contribution of child maintenance to lone mothers' income in five countries. *Journal of European Social Policy*, 29(2), 257–272. <https://doi.org/10.1177/0958928717754295>
- Hardoy, I., & Schøne, P. (2010). Incentives to work? The impact of a 'cash-for-care' benefit for immigrant and native mothers labour market participation. *Labour Economics*, 17(6), 963–974. <https://doi.org/10.1016/j.labeco.2010.02.008>

- Harkness, S. E. (2016). The effect of motherhood and lone motherhood on the employment and earnings of British women: A lifecycle approach. *European Sociological Review*, 32(6), 850–863. <https://doi.org/10.1093/esr/jcw042>
- Härkönen, J., Lappalainen, E., & Jalovaara, M. (2016). *Double disadvantage in a Nordic welfare state: A demographic analysis of the single mother employment gap in Finland, 1987–2011* (Stockholm Research Reports in Demography No. 2016:11). Stockholm University.
- Hegewisch, A., & Gornick, J. C. (2011). The impact of work-family policies on women's employment: A review of research from OECD countries. *Community, Work & Family*, 14(2), 119–138. <https://doi.org/10.1080/13668803.2011.571395>
- Hiilamo, H., & Kangas, O. (2009). Trap for women or freedom to choose? The struggle over cash for child care schemes in Finland and Sweden. *Journal of Social Policy*, 38(3), 457–475. <https://doi.org/10.1017/S0047279409003067>
- Jalovaara, M. (2013). Socioeconomic resources and the dissolution of cohabitations and marriages. *European Journal of Population/Revue Européenne De Démographie*, 29(2), 167–193. <https://doi.org/10.1007/s10680-012-9280-3>
- Jalovaara, M., & Andersson, G. (2018). Disparities in children's family experiences by mother's socio-economic status: The case of Finland. *Population Research and Policy Review*, 37(5), 751–768. <https://doi.org/10.1007/s11113-018-9485-1>
- Jalovaara, M., & Fasang, A. E. (2015). Are there gender differences in family trajectories by education in Finland? *Demographic Research*, 33(44), 1241–1256. <https://doi.org/10.4054/DemRes.2015.33.44>
- Jalovaara, M., & Kulu, H. (2018). Separation risk over union duration: An immediate itch? *European Sociological Review*, 34(5), 486–500. <https://doi.org/10.1093/esr/jcy017>
- Kalil, A., & Ziol-Guest, K. M. (2005). Single mothers' employment dynamics and adolescent well-being. *Child Development*, 76(1), 196–211. <https://doi.org/10.1111/j.1467-8624.2005.00839.x>
- Kallio, J. M., Kauppinen, T. M., & Erola, J. (2016). Cumulative socio-economic disadvantage and secondary education in Finland. *European Sociological Review*, 32(5), 649–661. <https://doi.org/10.1093/esr/jcw021>
- Kammerman, S. B., Neuman, M., Waldfogel, J., & Brooks-Gunn, J. (2003). *Social policies, family types and child outcomes in selected OECD countries* (OECD Social, Employment and Migration Working Papers, No. 6). OECD Publishing. <https://doi.org/10.1787/625063031050>
- Kela. (2017). Right to unemployment benefits: If you decline offered work or training. <https://www.kela.fi/web/en/if-you-decline-offered-work-or-training>
- Kela. (2019). *Child care subsidies: Number of recipients and subsidies paid out* [e-application]. https://raportit.kela.fi/ibi_apps/WFServlet?IBIF_ex=NIT113AL&YKIELI=E
- Killewald, A., & Gough, M. (2013). Does specialization explain marriage penalties and premiums? *American Sociological Review*, 78(3), 477–502. <https://doi.org/10.1177/0003122413484151>
- Kosonen, T. (2014). To work or not to work? The effect of childcare subsidies on the labour supply of parents. *The BE Journal of Economic Analysis & Policy*, 14(3), 817–848. <https://doi.org/10.1515/bejeap-2013-0073>
- Lammi-Taskula, J. (2017). Fathers on leave alone in Finland: Negotiations and lived experiences. In M. O'Brien & K. Wall (Eds.), *Comparative perspectives on work-life balance and gender equality. Fathers on leave alone* (Life Course Research and Social Policies) (pp. 89–106). Springer.
- Maldonado, L. C., & Nieuwenhuis, R. (2015). Family policies and single parent poverty in 18 OECD countries, 1978–2008. *Community, Work & Family*, 18(4), 395–415. <https://doi.org/10.1080/13668803.2015.1080661>
- Mandel, H., & Shalev, M. (2009). How welfare states shape the gender pay gap: A theoretical and comparative analysis. *Social Forces*, 87(4), 1873–1911. <https://doi.org/10.1353/sof.0.0187>
- McLanahan, S. (2004). Diverging destinies: How children are faring under the second demographic transition. *Demography*, 41(4), 607–627. <https://doi.org/10.1353/dem.2004.0033>
- Mincer, J., & Polachek, S. (1974). Family investments in human capital: Earnings of women. *Journal of Political Economy*, 82(2, Part 2), S76–S108. <https://doi.org/10.1086/260293>

- Misra, J., Moller, S., & Budig, M. J. (2007). Work–family policies and poverty for partnered and single women in Europe and North America. *Gender & Society*, 21(6), 804–827. <https://doi.org/10.1177/0891243207308445>
- Misra, J., Moller, S., Strader, E., & Wemlinger, E. (2012). Family policies, employment and poverty among partnered and single mothers. *Research in Social Stratification and Mobility*, 30(1), 113–128. <https://doi.org/10.1016/j.rssm.2011.12.001>
- Muller, J. S., Hiekel, N., & Liefbroer, A. C. (2020). The long-term costs of family trajectories: Women’s later-life employment and earnings across Europe. *Demography*, 57(3), 1007–1034. <https://doi.org/10.1007/s13524-020-00874-8>
- Naz, G. (2004). The impact of cash-benefit reform on parents’ labour force participation. *Journal of Population Economics*, 17(2), 369–383. <https://doi.org/10.1007/s00148-003-0157-y>
- Nieuwenhuis, R., & Maldonado, L. C. (2018). *The triple bind of single-parent families*. Policy Press.
- OECD. (2019a). *Employment rate (indicator)*. <https://doi.org/10.1787/1de68a9b-en>
- OECD. (2019b). *Part-time employment rate (indicator)*. <https://doi.org/10.1787/f2ad596c-en>
- OECD. (2020). *Income inequality (indicator)*. <https://doi.org/10.1787/459aa7f1-en>
- Pettit, B., & Hook, J. (2005). The structure of women’s employment in comparative perspective. *Social Forces*, 84(2), 779–801. <https://doi.org/10.1353/sof.2006.0029>
- Pettit, B., & Hook, J. L. (2009). *Gendered tradeoffs: Women, family, and workplace inequality in twenty-one countries*. Russell Sage Foundation.
- Rigney, D. (2010). *The Matthew effect: How advantage begets further advantage*. Columbia University Press.
- Rønsen, M. (2009). Long-term effects of cash for childcare on mothers’ labour supply. *Labour*, 23(3), 507–533. <https://doi.org/10.1111/j.1467-9914.2009.00456.x>
- Rønsen, M., & Sundström, M. (2002). Family policy and after-birth employment among new mothers – a comparison of Finland, Norway and Sweden. *European Journal of Population/Revue Européenne De Demographie*, 18(2), 121–152. <https://doi.org/10.1023/A:1015532305179>
- Ross, R., & Saunders, P. (1993). The labour supply behaviour of sole mothers and married mothers in Australia: Evidence from the 1986 income distribution survey. *Australian Economic Papers*, 32(60), 116–133. <https://doi.org/10.1111/j.1467-8454.1993.tb00134.x>
- Ruhm, C. J. (1998). The economic consequences of parental leave mandates: Lessons from Europe. *The Quarterly Journal of Economics*, 113(1), 285–317. <https://doi.org/10.1162/003355398555586>
- Salmi, M., Närvi, J., & Lammi-Taskula, J. (2018). Finland country note. In S. Blum, A. Koslowski, A. Macht, & P. Moss (Eds.), *International review of leave policies and research 2018*. http://www.leavenetwork.org/lp_and_r_reports/
- Sipilä, J., & Korpinen, J. (1998). Cash versus child care services in Finland. *Social Policy & Administration*, 32(3), 263–277. <https://doi.org/10.1111/1467-9515.00102>
- Statistics Finland. (2018). *Families 2017*. https://www.stat.fi/til/perh/2017/perh_2017_2018-05-25_en.pdf
- Stier, H., Lewin-Epstein, N., & Braun, M. (2001). Welfare regimes, family-supportive policies, and women’s employment along the life-course. *American Journal of Sociology*, 106(6), 1731–1760. <https://doi.org/10.1086/321302>
- THL. (2019). *Lapsen elatus ja huolto sekä isyyden selvittäminen 2018*. terveyden ja hyvinvoinnin laitos, tilastoraportti 9/2019. <http://urn.fi/URN:NBN:fi-fe2019050914879>
- Weisshaar, K. (2018). From opt out to blocked out: The challenges for labor market re-entry after family-related employment lapses. *American Sociological Review*, 83(1), 34–60. <https://doi.org/10.1177/0003122417752355>
- World Economic Forum. (2018). *The global gender gap report*. http://www3.weforum.org/docs/WEF_GGGR_2018.pdf