

WORKING PAPER FORSCHUNGSFÖRDERUNG

Number 071, June 2018

German mothers' labor market re-entry after parental leave: Do parents' flexible working time arrangements help?

Yvonne Lott

The author:

Dr. Yvonne Lott is head of the Labor in Change unit at the Hans Böckler Foundation.

© 2018 by Hans-Böckler-Stiftung
Hans-Böckler-Straße 39, 40476 Düsseldorf
www.boeckler.de



„German mothers’ labor market re-entry after parental leave: Do parents’ flexible working time arrangements help?“ von Yvonne Lott ist lizenziert unter

Creative Commons Attribution 4.0 (BY).

Diese Lizenz erlaubt unter Voraussetzung der Namensnennung des Urhebers die Bearbeitung, Vervielfältigung und Verbreitung des Materials in jedem Format oder Medium für beliebige Zwecke, auch kommerziell. (Lizenztext: <https://creativecommons.org/licenses/by/4.0/de/legalcode>)

Die Bedingungen der Creative-Commons-Lizenz gelten nur für Originalmaterial. Die Wiederverwendung von Material aus anderen Quellen (gekennzeichnet mit Quellenangabe) wie z. B. von Schaubildern, Abbildungen, Fotos und Textauszügen erfordert ggf. weitere Nutzungsgenehmigungen durch den jeweiligen Rechteinhaber.

ISSN 2509-2359

Inhalt

Abstract.....	4
Introduction	5
Childbirth and mothers' work behavior in Germany	8
Flexible working time arrangements and mothers' work behavior.....	10
Empirical strategy.....	13
Data and sample	13
Events of interest	14
Time in parental leave	14
Explanatory variables	15
Control variables	15
Method.....	16
Results.....	18
Working time arrangements prior to parental leave	18
Mothers' return to the labor market.....	20
Mothers' return to the labor market with or without previous work hours	21
Robustness check for mothers' return to the labor market with or without previous work hours.....	23
Conclusion and discussion	25
References.....	28
Appendix.....	34

Abstract

Flexible working time arrangements can help combine work and family life and might therefore encourage mothers' labor market re-entry after parental leave – without a reduction in working time. The present study analyzes the role of flexible working time arrangements, namely flexitime, weekend work and night work, (1) for women's re-entry into the labor market and (2) for changes in mothers' contractual working time after parental leave in Germany. Since partners' lives are interrelated, mothers' might also profit from their partners' working time flexibility. Event history analyses based on the German Socio-Economic Panel Study (SOEP) in the years 2003 to 2013 show that mothers are more likely to re-enter the labor market when they have flexitime, but they do so mostly with reduced work hours. There is also some evidence that mothers are more likely to return to the labor market when they work weekends. Moreover, women's and especially their partners' night work has negative effects on mothers' work capacity. Interestingly, partners' flexitime is negatively related to mothers' return to the labor market. The present study indicates that public policy measures are needed to limit the prevalence and the extent of burdensome work arrangements like night work. Also, mothers who seem to extend the workweek in order to re-enter the labor market should be supported more in balancing work and family life during the regular work week. Furthermore, public policy measures should encourage the implementation of flexitime as a work-life balance measure and, at the same time, weaken the gendered use of flexible arrangements. The study, however, also indicates that policy measures are needed to support mothers' work capacity and to contribute to gender equality.

Introduction

In many European countries, mothers often reduce their working time or drop out of the labor market after childbirth (Anxo et al., 2007a; OECD, 2017¹). Because long career breaks and part-time work violate workplace norms, especially in an ideal worker culture (Williams et al., 2013), this has negative consequences for women's careers and life courses in terms of career progression and earnings (Leslie et al., 2012; Sigle and Waldfogel, 2007). Previous studies have attributed mothers' employment behavior after childbirth to their and their partners' economic position, gender role attitudes and worker identities (Hyde et al., 1993; Kaufman and Uhlenberg, 2000; Schober, 2013). The role of flexible working time arrangements for women's re-entry and work behavior after childbirth, however, has received less attention.

Flexible working time arrangements can help employees combine work and family life (Allen et al., 2013; Michel et al., 2011). Company-level arrangements such as flexitime give employees control over scheduling their workday and, at least to some extent, setting the daily working time duration. Thus, flexitime can be useful for managing the border between the work and family domains (Clark, 2000). Chung and Horst (2018) showed for the UK that flexitime can encourage mothers' labor market re-entry and that mothers with flexitime are more likely to maintain their work hours prior to childbirth. Flexitime, however, might be less crucial for the maintenance of work hours in countries with a legally enforceable right to work part-time and strong collective agreements. The UK is a liberal country with weak collective agreements where employers can reject an employee's request to work part-time due to business reasons and where institutional or group mechanisms do not support employees' requesting part-time (Brannen, 2005). As a consequence, 35% of British women in maternity leave fail to secure approval for part-time (Chung and Horst, 2018).

In European countries where the right to work part-time is a legally enforceable right and the conditions under which employers can reject the request are commonly set through collective agreements, the incentive for reduced work hours after childbirth might be stronger and mothers might be more successful in obtaining shorter hours. Flexitime might therefore be less relevant for mothers' work behavior in these countries. Moreover, the ethical discourse in which the support of working parents is seen as morally right is more dominant in European countries with le-

1 <http://www.oecd.org/gender/data/how-do-partners-in-couple-families-share-paid-work.htm> (retrieved on April 17, 2018)

gal rights to flexible working time, such as the Netherlands and Slovenia, than in liberal countries, such as the UK (den Dulk et al., 2011). In Germany, for example, where the right to work part-time is a legally enforceable right, supervisors mostly support mothers' wish to work shorter hours and even expect women to reduce their working time after childbirth (Lott and Klenner, 2016).

Furthermore, previous studies have mostly neglected the role of non-standard work schedules and partners' flexibility for women's re-entry into the labor market after childbirth. Due to the rise of 24/7 economies, a growing number of employees have nonstandard work schedules (Le Bihan and Martin, 2004; Täht and Mills, 2012). In Europe, one in five workers works at night and almost one in four workers works at the weekend (Boisard, 2003). In the light of increasing female employment and the rise of dual-earner couples, nonstandard work schedules are a means of organizing work and family demands (Craig and Powell, 2012; Pagan et al., 2011). Even though these arrangements can be burdensome, they can facilitate work-family balance (Bünning and Pollmann-Schult, 2016; Presser, 2003), e.g. night work and weekend work can help allocate more time for the family during the regular work week. Weekend work and night work might therefore support mothers' employment. Mothers with nonstandard schedules return to work sooner (Felfe, 2012), but whether they stick to their working hours prior to childbirth is unclear. Finally, since couples can use fathers' working time flexibility to facilitate mothers' work schedules (Han, 2004; Moen and Yu, 2000), men's flexibility might encourage women's employment.

The present study addresses the following research questions: Do women's and their partners' flexitime, weekend work and night work increase the chances of women's labor market re-entry after parental leave? And do these arrangements increase the likelihood that women maintain their previous work hours? The analysis is based on the German Socio-Economic Panel Study (SOEP) in the years 2004 to 2013. In contrast to (Chung and Horst, 2018), who applied cross-sectional analyses and compared women's employment status between two years, event history analysis is used for estimating German mothers' risk of returning to work and reducing their working time after childbirth. In Germany the right to work part-time was introduced as a legally enforceable right in 2001 and collective agreements which regulate various sectors in the German labor market determine the conditions for employer's rejection of employees' requests.

The article contributes to the existing literature in four ways: first, the effects of flexible working time arrangements on women's work behavior after childbirth are analyzed using longitudinal data. Instead of group

comparisons, adequate quantitative methods are applied to predict the event of mothers' labor market re-entry and maintenance of work hours over time. Second, the role of flexitime is analyzed for a country with a 'strong' legal right to work part time, powerful collective agreements in major labor market sectors and a dominant ethical discourse that supports working parents and – due to traditional gender norms – especially working mothers. Third, previous research is extended by taking various company-level arrangements, i.e. flexitime, weekend work and night work, into account. And fourth, not only women's, but also their partners' flexibility is considered.

The next section describes mothers' work behavior after childbirth and the institutional context in Germany. The role of flexible working time arrangements in work-family balance is then explored and the empirical strategy outlined. Finally, the results are presented and the article ends with a conclusion and discussion.

Childbirth and mothers' work behavior in Germany

In contemporary societies, the transition to parenthood highly impacts on couples' lives and often contributes to an unequal division of labor (Blossfeld et al., 2006). After childbirth, many women reduce their working time or do not return to the labor market (Paull, 2008; Schadler et al., 2017). In Europe, only 66% of women with children aged 0-14 are in employment. But differences in mothers' work behavior are considerable across Europe (OECD 2016²). Whereas mothers' employment rates are relatively high in Scandinavian countries such as Sweden (Anxo et al., 2007a), mothers' work participation is weaker in countries with lower gender equality like the UK and Germany (Anxo et al., 2007b; Figart and Mutari, 2000). Germany is a prime example of a conservative welfare state with weak full-time employment participation by women and a dominant model of the male breadwinner (Esping-Andersen, 2006; Sainsbury, 1999).

In recent years, however, Germany has attempted to improve gender equality by increasing employees' ability to combine work and family life and by supporting fathers' involvement in childcare. In 2001, the Part-Time and Limited Term Employment Act (*Teilzeit- und Befristungsgesetz*) was passed and granted almost all employees the right to reduce their working time to provide childcare. This is a legally enforceable right which is further reinforced by collective agreements which regulate various sectors in the German labor market and determine the conditions for employer's rejection of employees' requests. In 2007, a reform of the parental leave system was passed that granted all employees the right to take up to three years of parental leave, but wage compensation (60% of the previous income with a maximum of 1,800 euro) is only paid for a maximum of twelve months after childbirth. A father's quota was also introduced with two additional months of wage compensation if both partners take up parental leave for at least two months. Employees have the right to work part-time (15 to 30 hours per week) during parental leave. Employees who work part-time during paid parental leave receive reduced wage compensation. Unpaid parental leave can be divided in several leave periods and a share of unpaid parental leave (a maximum of 12 months) can be taken until the eighth birthday of the child.

The consequences of these legal initiatives have been mixed. In 2014, the vast majority of mothers (96%) took parental leave, mostly for

2 https://www.oecd.org/els/family/LMF_1_2_Maternal_Employment.pdf (retrieved on April 17, 2018)

twelve months, whereas more than a third of fathers (34%) made use of parental leave, but only up to two months (destatis, 2014). More than 80% of part-time workers are female (destatis, 2016) and women's employment has risen considerably, but mainly in part-time (destatis, 2014). 24% of women with children younger than three years of age work in part-time and 51% still do not return to employment (destatis, 2017).

One reason for the gendered use of these rights and the reluctance of new mothers to return to work are traditional gender norms, especially the ideal mother norms, which strongly prevail at German workplaces (Lott and Klenner, 2016). Supervisors still expect mothers to prioritize family, take long career breaks for childcare, and return to work with reduced hours. At the same time, fathers are expected to limit parental leave to a maximum of two months and to prioritize business and personal career interests over time for childcare (Lott and Klenner, 2016). This contributes to the unequal division of housework and childcare among couples (Gershuny et al., 2005), which is another reason for mothers' work behavior. Disregarding increasing female employment rates, women mostly (have to) take over the lion's share of unpaid work (van der Lippe et al., 2011) and, as a result, (have to) adapt their work behavior more to family demands than men (Maume, 2006). The unequal division of unpaid work prevails in most contemporary societies, but is relatively high in Germany compared to other European countries (OECD, 2017).

Even though childbirth often evokes an unequal division of paid and unpaid labor, various other factors contribute to equality in couples. These include egalitarian gender role attitudes, a high commitment to gender equality and women's strong worker identities (Baxter et al., 2008; Sanchez and Thomson, 1997; Singley and Hynes, 2005). Especially fathers' egalitarian gender role attitudes are crucial for their involvement in childcare (Hyde et al., 1993; Kaufman and Uhlenberg, 2000). Moreover, women's economic position influences mothers' work behavior (Baxter et al., 2008) and women's higher wages contribute to an equal division of labor (Grunow et al., 2007; Sanchez and Thomson, 1997; Schober, 2013).

Flexible working time arrangements and mothers' work behavior

Work conditions have seldom been considered in research seeking to explain women's labor market behavior after childbirth. In particular, the role of flexible working time arrangements has been neglected. Flexibility in working time, however, is crucial for employees' ability to combine work and family in an early family stage (Erickson et al., 2010). Workers in the transition to parenthood must deal with unpredictability in the home domain and face contradicting time demands at work and at home (Clawson and Gerstel, Naomi, 2014). Job flexibility therefore is mostly beneficial for new parents (Erickson et al., 2010) and working time flexibility can contribute to a better work-family balance (Allen et al., 2013; Michel et al., 2011).

Surprisingly, most studies on flexible working time arrangements focus on work-life balance and well-being outcomes and often neglect their role in mothers' work behavior after childbirth. Chung and Horst (2018) showed that in the UK, company-level arrangements, i.e. flexitime, are essential for mothers' (full-time) employment after childbirth (Chung and Horst, 2018). The control over working time, i.e. flexitime, is a crucial company-level arrangement that lessens work-family conflict and improves time adequacy (Allen et al., 2013; Kelly et al., 2014; Lott, 2015), health (Ala-Mursula et al., 2004), and work commitment (Gallie et al., 2012). Workers with flexitime have control over the starting and ending times of their workday and can adapt their working time to unpredictable family demands (Clawson and Gerstel, Naomi, 2014). Thus, flexitime might encourage mothers to re-enter the labor market.

H1: Mothers with flexitime are more likely to return to the labor market after parental leave.

In the UK, flexitime also encourages women to maintain their work hours after childbirth (Chung and Horst, 2018). One reason for women's reluctance to reduce work hours is the ideal worker culture which contributes to the flexibility stigma of part-time workers (Williams et al., 2013). To avoid stigmatization, employees forgo part-time work if they can avoid it, e.g. when they have working time flexibility. The ideal worker culture dominates in liberal countries (Leslie et al., 2012; Williams et al., 2013) and also prevails at German workplaces (Lott and Klenner, 2016), with negative consequences for part-time workers (Allmendinger et al., 2012). However, in countries with legal rights to flexible working time, managers see the support of working parents as morally right and the

norms of the ideal worker are less dominant and stand in contrast to the ethical discourse of the country (den Dulk et al., 2011). Employees' outcomes with flexible working time arrangements depend on the institutional contexts (Gregory and Milner, 2009) and various studies (Brannen, 2005; Kirby and Krone, 2002; Wharton et al., 2003) have shown that governmental support is key for the take-up of working-time arrangements.

Even though employees working part-time are also stigmatized at German workplaces, supervisors' support for mothers' part-time work might be strong in Germany, where the right to reduce work hours is a rather 'strong' legal right that is reinforced through collective agreements. Moreover, traditional ideal mother norms, which also prevail at German workplaces, motivate supervisors to encourage mothers' working time reduction (Lott and Klenner, 2016). Finally, the relatively high gender inequality in Germany (OECD, 2017) might further foster mothers' choice of reduced work hours after childbirth – even when women can adapt their work schedule to family demands.

H2: Mothers are likely to reduce work hours after parental leave – whether they have flexitime or not.

Control over work hours can support employees, but it can also have adverse effects on their outcomes. Boundaries between work and home life can become blurred with self-controlled work arrangements (Schiemann and Glavin, 2008; Schiemann and Young, 2010). As a result, employees risk working longer and more intense hours (Godard, 2001; White et al., 2003). This, however, is the case mainly for men, who take on fewer responsibilities outside work and identify more strongly with work (Bielby and Bielby, 1989; Schiemann, 2006), and therefore tend to use flexibility to work longer and more intense hours or for reasons other than childcare (Clark, 2000; Clawson and Gerstel, Naomi, 2014; Hilbrecht et al; Sullivan and Lewis, 2001). Gasser (2017) showed that in Switzerland, fathers in higher-status positions who have self-controlled schedules without formal constraints, but with a time banking account, are less involved in childcare. Even though partners negotiate work and life strategies as a unit and sometimes take advantage of one partner's ability to obtain work flexibility (Moen and Yu, 2000), women are more likely to adapt to their male partner's work (Kanji and Samuel, 2017). Since men use flexibility more for activities other than childcare or for longer and more intense work hours, fathers' flexitime might discourage mothers' labor market re-entry.

H3: Mothers whose partners have flexitime are less likely to return to the labor market.

H4: Mothers whose partners have flexitime are less likely to maintain their work hours prior to parental leave.

Research on nonstandard work schedules has extensively focused on the division of labor and mothers' work capacity (Barnett and Gareis, 2007; Davis et al., 2006; Felfe, 2012; Presser, 2003). Nonstandard schedules such as weekend work and night work are stressful work arrangements which can have negative effects on marital stability, child development and well-being (Strazdins et al., 2004) and can increase work-family conflict (Eby et al.). They can also affect workers' involvement in family life and responsiveness to children (Bünning and Pollmann-Schult, 2016).

Nevertheless, several studies have shown that nonstandard work schedules are often a means for parents to meet childcare needs (Bünning and Pollmann-Schult, 2016). In couples with non-overlapping shifts, the division of unpaid work is more equal (Presser, 1994; Wharton, 1994). 'Off-shifting' is a strategy where one partner ensures childcare while the other is at work (Pagnan et al., 2011). Thus, nonstandard schedules seem to contribute to an equal division of childcare and labor. Fathers with nonstandard work schedules are more involved in childcare (Barnett and Gareis, 2007; Davis et al., 2006; Presser, 2003) and wives' non-standard hours foster fathers' involvement (Han, 2004; Wood and Regetti, 2004). When wives work at night, husbands are more likely to spend more time with children (Nock and Kingston, 1988). Since non-standard work schedules facilitate the division of childcare in couples, nonstandard work schedules are attractive for mothers, who have been found to return to work sooner from maternity leave when working evenings (Felfe, 2012). Nonstandard work schedules, i.e. women's and their partners' night work and weekend work, might therefore encourage women's return to (full-time) employment after childbirth.

H5: Mothers are more likely to return to work when they or their partners have weekend work or night work.

H6: Mothers are more likely to maintain their work hours prior to childbirth when they or their partners have weekend work or night work.

Empirical strategy

Data and sample

The present study makes use of the German Socio-Economic Panel (SOEP version 31; <http://www.diw.de/soep>), a representative panel study of German households. In the SOEP, more than 12,000 households and 32,000 persons are interviewed on a yearly basis. The SOEP started in the Federal Republic of Germany in 1984 and was expanded in 1990 to include the territory of the former German Democratic Republic (Haisken-DeNew and Frick, 2005).

The sample for this study contains female respondents in heterosexual couples who were in parental leave after childbirth and who were employed before parental leave. Because German employees are allowed to work part-time between paid parental leave months and to divide the months of unpaid parental leave, employees can have several parental leave periods for one child. Since the focus is on mothers' work behavior after childbirth, I took only the first parental leave period after the first observed childbirth into account. The take-up of parental leave was measured monthly. I constructed a data set suitable for event history analysis. Parental leave is observed for each person on a monthly basis. Parental leave begins with the first month of parental leave after childbirth when mothers can return to gainful employment, i.e. after the mandatory maternity leave of eight weeks. The observations after the last month of parental leave were censored.

All female respondents in the analytical sample had contracted working hours and a labor income prior to childbirth. Employees without contracted hours, for whom formal working-time arrangements might be less important, were excluded from the analysis. The self-employed were also excluded from the analysis, because they have job control and working time control per se. In order to analyze the role of partners' working time arrangements, lone mothers were excluded from the analysis.

The sample has 9,567 person-months in the years 2003 to 2013. In the sample, 841 mothers with parental leave after childbirth were observed, of whom 261 returned to gainful employment after parental leave. Those who did not return to the labor market either have the status housewife, unemployed or in education. 126 maintained their previous work hours and 135 reduced their pre-childbirth work hours. Only 10 mothers increased their work hours after parental leave and they were included in the category for 'work hours maintenance'. For 50 mothers childbirth was observed, but no parental leave. The years 2003 to 2013

were chosen because the flexible working time arrangements were only observed in 2003, 2005, 2007, 2009, 2011 and 2012. For the years 2004, 2006, 2008, 2010 and 2013, the information about the flexible working time arrangements of the previous year was used. Due to the small number of observations for flexible working time arrangements, the analysis cannot be restricted to the first childbirth, but must take all childbirths into account. 46% of mothers had the birth of their first child, 33% of their second child, 13% of their third child and 7% of their fourth child or more. A control for the number of previous children was therefore introduced in the models as well as a control for whether mothers previously worked full-time or part-time (see below).

Events of interest

Two events are of interest in the present study: the return to gainful employment and – differentiating the previous event – the return to gainful employment with a reduction of previous contractual work hours or with the maintenance of previous contractual work hours. The variable for return to gainful employment has the value 0 when mothers do not return to the labor market after parental leave and the value 1 when they return to employment. The variable for return to gainful employment with or without contractual work hours is 0 when mothers do not return to the labor market, the value 1 when they return with shorter hours and the value 2 when they maintain their previous work hours. Work hours maintenance includes minor work hours reductions of up to two hours. Contractual work hours are considered instead of actual work hours, because the focus of the present study is on mothers' formal working time reductions. Also, workers with a contractual working time reduction might actually work longer hours (Kelliher and Anderson, 2010), in which case the information on actual work hours would bias the results. Table A1 shows all variables used in the analyses.

Time in parental leave

The duration variable of the analysis is time in parental leave in months. In order to include mothers in the sample who returned to the labor market directly after mandatory maternity leave, the time variable has the value 0 for the month before the first month of parental leave. All time periods start with the value 0. For mothers who directly re-enter the labor

market after maternity leave the time variable only has the value 0. The months where mothers had the status housewife in between a parental leave period were included in the parental leave period. Up to a period of nine months with the status 'housewife' that is preceded and followed by parental leave, months were counted as parental leave months. 187 mothers had the status housewife in between the parental leave periods.

Explanatory variables

The working time arrangements prior to childbirth are the main explanatory variables in the analysis. Chung and Horst (2018) found that these arrangements matter more for women's employment behavior than the arrangements at the time of the return to work. Also, in Germany, women must decide before childbirth about the take-up of parental leave. Thus, women must plan their parental leave and the timing of their return to work in the context of their work situation before parental leave.

Flexitime is measured by the survey questions on whether employees can determine their work schedule within a given time frame. The variable has the value 1 when employees have flexitime. Night work and weekend work are measured each by a variable with the value 1 for employees who either work daily, weekly, less or only if necessary at night or at weekends. Flexitime, night work and weekend work prior to parental leave were observed for women and their partners.

Control variables

Similar to the explanatory variables, information about women's job and socio-demographic characteristics before parental leave were taken into account. A higher job status is generally related to higher levels of job control (Kelly and Moen, 2007; Ortega, 2009; Schiemann, 2006). I therefore controlled for women's status, i.e. income, education and workplace position. Workplace position is measured by employees' job authority (0 = no job authority, 1 = management tasks, and 2 = extensive leadership). I also controlled for their status position using the ISCO classification with the following categories: (1) legislators, senior officials, managers, professionals (reference category), (2) associate professionals, technicians, (3) clerks, (4) service workers and (5) craft and similar jobs, plant and machine operators and assembly line operators, elementary workers. Education is measured by 1 = primary, 2 = secondary, and 3 = tertiary education. Income is measured by individual annual pre-tax labor

income (adjusted for price changes), including all wages and benefits. Status also depends on whether mothers worked full-time or part-time (Williams et al. 2013). I therefore controlled for 1 = full-time (35 hours and more), 2 = substantial part-time (35 to 21 hours), and 3 = marginal part-time (20 hours and less) prior to parental leave. I also included control variables for whether women had a so-called 'mini-job', i.e. a minor employment with a limited amount of salary (450 euro) and without insurance obligation, and for whether they had a second job, a permanent contract or worked in the public sector. To account for the segregation of the labor market, I controlled for the sector in which women worked based on the NACE 2-digit classification: i.e., retail; health/education; industry sector including metal, chemical and electronic industries; service industries; and insurance and banking sectors. Moreover, women might change employers if flexible working time arrangements are not favorable in their current employment. I therefore controlled for whether women changed employers during the twelve months before childbirth or during parental leave.

I also control for various household characteristics prior to parental leave, i.e. the partners' individual labor earnings, the number of children (0 = no children, 1 = one child, 2 = two children, and 3 = three or more children), the age of the youngest child (0-2 years and 3-4 years) in the household and marital status. Two variables for age and age-squared were used in the models. Finally, I controlled for the different samples and years that were included in the analysis as well as for the number of total parental leave periods for one child.

Method

I employed event history modelling techniques for the analysis of the timing of events (Blossfeld and Rohwer, 2002). Discrete-time logistic regression models were applied to estimate the risk of returning to the labor market and discrete-time multinomial logistic regression models were applied to estimate the competing risks of maintaining previous work hours as opposed to reducing previous work hours, dependent on time-invariant covariates. I performed the analysis in two steps, first estimating the hazard rate of entering gainful employment, followed by estimating the hazard rate of returning to work with or without reduced work hours. Separate models were estimated for returning to work/ reduce or maintain previous work hours, dependent on a) mothers' previous working time arrangements, b) their partners' previous work arrangements and c) mothers' and their partners' previous arrangements.

The results for mothers' labor market re-entry are shown in Table 2 and for changes in work hours in Table 3. Due to the small number of observations for flexible working time arrangements, the direction of non-significant effects will also be interpreted. A robustness check is shown in Table 4 where work hours maintenance is restricted to zero changes of the previous working time.

Results

Working time arrangements prior to parental leave

Around 16% of women and 18% of their partners had flexitime before parental leave (see Table 1). Night work and especially weekend work are more common, but mainly for men: 22% worked at night and 41% worked on weekends prior to mothers' parental leave. Whereas a third (32%) of women worked on weekends before parental leave, night work was the least used arrangement by women (around 10%).

Table 1: Mothers' and their partners' working time arrangements prior to parental leave

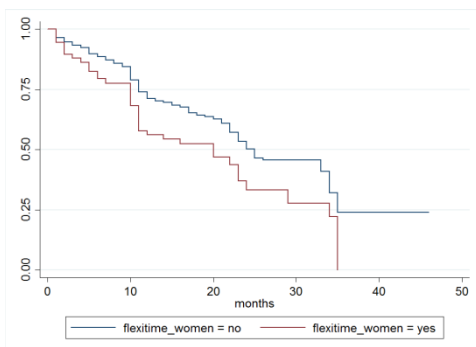
Previous working time arrangements	Percent
Flexitime	
Women	16.17
Men	18.31
Night work	
Women	10.58
Men	22.94
Weekend work	
Women	32.22
Men	41.85

Note: SOEP 2003-2013

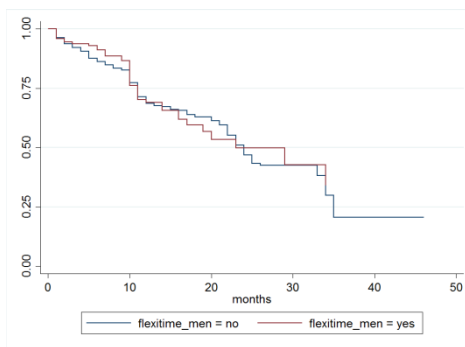
Figure 1 illustrates the survivor function of staying out of the labor market after childbirth for those who had at least one month of parental leave. All graphs show that mothers generally re-enter the labor market with time – especially after around one year and, again, after two years of parental leave. The graphs also reveal that survival in parental leave is affected by mothers' flexitime and weekend work. During the first year and even more often during the second and third year of parental leave, mothers with flexitime re-enter the labor market earlier than mothers without flexitime (Graph A). Weekend work does not affect mothers' labor market re-entry during the first year. But during the second and third year, mothers with weekend work re-enter the labor market earlier than their counterparts without weekend work (Graph C). With regard to men's working time arrangements, there is the tendency for mothers to return to work later when their partners have flexible arrangements (Graphs B, D and F). This tendency mainly exists for men's night work (Graph F).

Figure 1: Estimated survivor curve for staying out of the labor market after childbirth

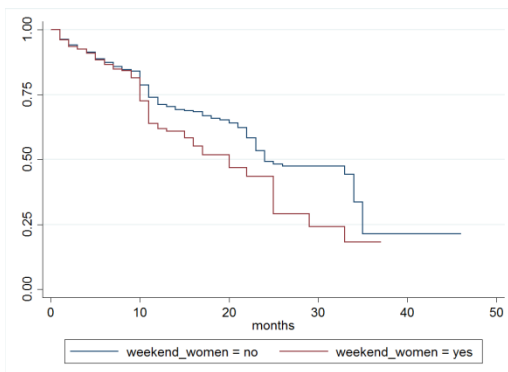
(A) Survivor curve for mothers with vs. without flexitime



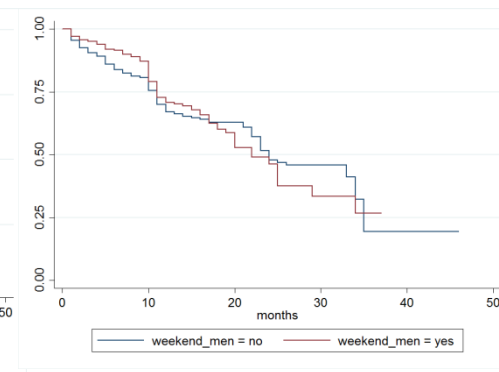
(B) Survivor curve for mothers with vs. without partners' flexitime



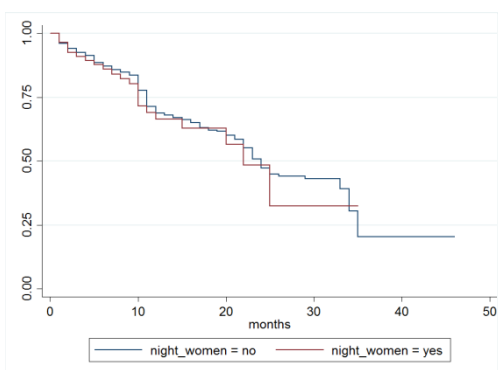
(C) Survivor curve for mothers with vs. without weekend work



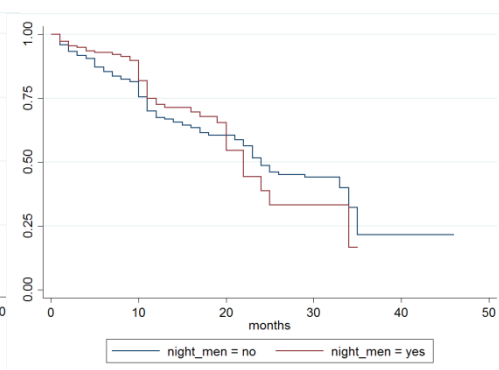
(D) Survivor curve for mothers with vs. without partners' weekend work



(E) Survivor curve for mothers with vs. without night work



(F) Survivor curve for mothers with vs. without partners' night work



Note: N = 9,517 (50 without parental leave excluded), Data source: SOEP 2003-2013

Mothers' return to the labor market

Flexitime is positively related to mothers' labor market re-entry after parental leave (Table 2, Model 1). The effect is statistically significant at the 95% confidence level and remains significant when their partners' working time arrangements are included (Model 3). The hazard ratio for flexitime is 1.602 in Model 2, i.e. the hazard for women with flexitime is 60 % higher than for women without flexitime. Hypothesis H1 is supported. Mothers with flexitime are more likely to return to the labor market after parental leave.

Table 2: Discrete-time event history analysis of mothers' risk of returning to employment after parental leave

	Model 1	Model 2	Model 2
Previous working time arrangements			
Flexitime women	1.461* (0.27)		1.602* (0.30)
Night work women	0.738 (0.19)		0.800 (0.21)
Weekend work women	1.248 (0.23)		1.387+ (0.26)
Flexitime men		0.911 (0.17)	0.780 (0.15)
Night work men		0.744 (0.15)	0.709+ (0.14)
Weekend work men		0.788 (0.15)	0.748 (0.15)
Duration of parental leave	1.041*** (0.01)	1.036*** (0.01)	1.039*** (0.01)
Constant	0.123 (0.34)	0.210 (0.57)	0.080 (0.20)
Pseudo R-squared	0.058	0.58	0.062
N	9567	9567	9567

Note: Discrete time logistic model; Hazard ratios; Hazard rate for the risk of returning to the labor market; Standard errors in parenthesis; Controlled for previous job characteristics (job authority, work hours, status position, individual annual labor income, marginal employment, sector, second job, permanent contract, change of employer before or during parental leave), previous socio-demographic characteristics (age, age squared and education) and previous demographic characteristics (age, age squared and education) and previous household characteristics (annual household income, marital status, number of children, age of youngest child), number of parental leave periods for one child, years and samples; Unweighted; Data source: SOEP 2003-2013;

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

Men's flexitime is negatively related to women's labor market re-entry (Models 2 and 3), but the effects are not statistically significant. Thus, there is only weak empirical evidence for hypothesis H3. Mothers whose partners have flexitime seem to be less likely to return to the labor market.

Mothers' and their partner's nonstandard working time arrangements have mixed effects on work behavior after parental leave. Men's nonstandard work hours have negative effects on mothers' return to the labor market. The effect of night work is statistically significant at the 90% level when women's arrangements are also considered (Model 3). The hazard ratio is 0.709, i.e. the hazard is around 30 % lower for mothers whose partners work at night than for women whose partners do not work at night. Women's night work is also negatively related to the return to work, but the effect is not statistically significant. Weekend work has a positive and, when controlling for men's arrangements, marginally significant effect (at the 90% confidence level). Without controlling for men's working time arrangements, women's weekend work is only significant at the 90% confidence level (Model 1). The hazard ratio is 1.387, i.e. the hazard for women with weekend work is 39% higher than for women without weekend work. Hypothesis H5 is only partially supported. Nonstandard work arrangements are less beneficial for mothers' work capacity – except for women's weekend work. Women benefit from weekend work in terms of work capacity.

Mothers' return to the labor market with or without previous work hours

Flexitime has a positive effect on the reduction as well as on the maintenance of previous work hours (Table 3, Models 4 and 6). The effect on the reduction of work hours is significant at the 95% confidence level when their partners' work arrangements are included (Model 6). The hazard ratio is 1.675, i.e. the hazard for mothers with flexitime is 67% higher than for mothers without flexitime. Flexitime is also positively related to women's maintenance of previous work hours and the hazard ratio is almost as high as for work hours reduction (1.618), but the effect is not statistically significant. These results indicate that flexitime has a positive effect on mothers' return to the labor market in general, but does not encourage the maintenance of previous work hours in particular. Hypothesis H2 is supported. Mothers are likely to reduce their work hours prior to parental leave – even when they have flexitime.

Table 3: Discrete-time event history analysis of mothers' risk of returning to employment after parental leave with and without previous work hours

	Model 4		Model 5		Model 6	
	Reduction	Maintenance	Reduction	Maintenance	Reduction	Maintenance
Previous working time arrangements						
Flexitime women	1.511 ⁺ (0.37)	1.506 (0.46)			1.675* (0.43)	1.618 (0.50)
Night work women	0.694 (0.25)	0.777 (0.32)			0.820 (0.28)	0.778 (0.33)
Weekend work women	1.266 (0.31)	1.254 (0.36)			1.515 (0.39)	1.274 (0.39)
Flexitime men			0.913 (0.24)	0.935 (0.29)	0.763 (0.20)	0.797 (0.26)
Night work men			0.510* (0.14)	1.036 (0.32)	0.470** (0.13)	1.016 (0.33)
Weekend work men			0.770 (0.19)	0.938 (0.30)	0.732 (0.18)	0.888 (0.30)
Duration of parental leave	1.075*** (0.01)	1.006 (0.01)	1.070*** (0.01)	1.002 (0.01)	1.073*** (0.01)	1.005 (0.01)
Constant	6.404 (25.59)	0.000* (0.00)	16.072 (65.23)	0.000* (0.00)	17.702 (69.49)	0.000* (0.00)
Pseudo R-squared		0.098		0.100		0.103
N		9567		9567		9567

Note: Time discrete multinomial logistic model; Hazard ratios; Hazard rate for the risk of returning to the labor market with previous work hours; Standard errors in parenthesis; Controlled for previous job characteristics (job authority, work hours, status position, individual annual labor income, marginal employment, sector, second job, permanent contract, change of employer before or during parental leave), previous socio-demographic characteristics (age, age squared and education) and previous household characteristics (annual household income, marital status, number of children, age of youngest child), number of parental leave periods for one child, years and samples; Unweighted; Data source: SOEP 2003-2013; ⁺0.10, *p<0.05, **p<0.01, ***p<0.001

Partners' flexitime, by contrast, has a negative effect on the reduction and maintenance of previous work hours (Model 5 and 6), but the effects are not statistically significant. There is only some empirical evidence for hypothesis H4. Men's flexitime seems to discourage mothers' labor market re-entry in general – whether they reduce or maintain previous work hours.

Women's weekend work is positively, and their night work is negatively, related to the reduction as well as the maintenance of work hours (Models 4 and 6). Again, these arrangements do not increase or decrease the chance for mothers' work hours maintenance in particular.

Men's night work, however, has a negative and (at the 99% level, Model 6) significant effect on mothers' work hours reduction. The hazard ratio for mother's work hours reduction is 0.470, i.e. the hazard for mothers whose partners work at night is 53% lower than for mothers whose partners do not work at night. The effect for work hours maintenance is not statistically significant, but positive. Even though night work discourages women's labor market re-entry in general, this mainly applies to re-entry with reduced working time. Hypothesis H6 is only partially supported. Mothers are not more likely to maintain previous work hours when they or their partner have nonstandard work hours. The only exceptions are women's weekend work and men's night work which are positively related to women's work hours maintenance.

Robustness check for mothers' return to the labor market with or without previous work hours

In the above analysis, the category 'maintenance of work hours' includes changes in work hours of up to two hours. This is a rather loose definition of work hours maintenance. A stricter definition of work hours maintenance was applied in a robustness check, where the maintenance of work hours is defined as zero change of previous work hours. Table 4 shows the results of the robustness check. The directions and confidence levels of effects are similar compared to the previous models (Table 3) – with one exception. The effect of men's night work on work hours maintenance is negative (Models 8 and 9). Men's night work discourages mothers' work hours maintenance when minor reductions of work hours are also considered as reduced working time.

The robustness check supports most results. Mothers' labor market re-entry is more likely when women had flexitime prior to parental leave, but they are more likely to reduce their work hours. Weekend work is also beneficial for mothers in terms of work capacity, but it does not encourage work hours maintenance in particular. Men's flexitime, weekend work and, when zero change of work hours are considered, night work seem to discourage women's labor market re-entry with or without reduced work hours.

Table 4: Discrete-time event history analysis of the hazard rate for mothers' risk of returning to employment after parental leave with and without previous work hours

	Model 7		Model 8		Model 9	
	Reduction	Maintenance	Reduction	Maintenance	Reduction	Maintenance
Previous working time arrangements						
Flexitime women	1.514 ⁺ (0.36)	1.587 (0.54)			1.641* (0.41)	1.741 (0.63)
Night work women	0.673 (0.24)	0.603 (0.28)			0.771 (0.26)	0.615 (0.30)
Weekend work women	1.295 (0.32)	1.385 (0.44)			1.525 (0.39)	1.458 (0.50)
Flexitime men			0.964 (0.24)	0.933 (0.31)	0.813 (0.20)	0.778 (0.28)
Night work men			0.545* (0.15)	0.879 (0.30)	0.509* (0.13)	0.877 (0.32)
Weekend work men			0.791 (0.20)	0.907 (0.30)	0.757 (0.19)	0.815 (0.28)
Duration of parental leave	1.076*** (0.01)	0.987 (0.02)	1.071*** (0.01)	0.983 (0.02)	1.075*** (0.01)	0.986 (0.02)
Constant	1.710 (6.64)	0.000* (0.00)	1.710 (6.64)	0.000* (0.00)	4.062 (15.49)	0.000* (0.00)
Pseudo R-squared		0.100		0.100		0.105
N		9567		9567		9567

Note: Time discrete multinomial logistic model; Hazard ratios; Hazard rate for the risk of returning to the labor market with previous work hours; Standard errors in parenthesis; Controlled for previous job characteristics (job authority, work hours, status position, individual annual labor income, marginal employment, sector, second job, permanent contract, change of employer before or during parental leave), previous socio-demographic characteristics (age, age squared and education) and previous household characteristics (annual household income, marital status, number of children, age of youngest child), number of parental leave periods for one child, years and samples; Unweighted; Data source: SOEP 2003-2013; ⁺p<0.10, *p<0.05, **p<0.01, ***p<0.001

Conclusion and discussion

In previous research, flexible working time arrangements have received little attention for their role in explaining women's work behavior after career breaks for childcare reasons. Also, the role of the partners' working time arrangements for mothers' work capacity has been neglected. Do women's and their partners' flexitime, weekend work and night work increase the chance for women's labor market re-entry after parental leave? And do they increase the chance that women maintain their working time prior to parental leave?

The present study showed that women with flexitime are more likely to re-enter the labor market after parental leave. They come back to work earlier than their counterparts who do not have flexitime. However, they return to work primarily with reduced hours. The incentive for the reduction of work hours seems to be strong for mothers in Germany. In contrast to British mothers, who are likely to maintain their working time when they can flexibly adapt their work schedule to family demands (Chung and Horst, 2018), German mothers seem to opt for reduced work hours. In Germany, the right to work part-time is legally enforceable and reinforced by collective agreements. It might therefore be more effective than the right to request in the UK. Moreover, the 'strong' right to work part-time might be reinforced by traditional gender role attitudes which prevail at German workplaces, where supervisors often expect mothers to reduce their working time (Lott and Klenner, 2016).

Men's flexitime, by contrast, seems to discourage mothers' labor market re-entry. Mothers are less likely to come back to work when their partner has flexitime. This finding supports previous studies which showed that there is a gendered use of flexible work arrangements and that men use flexibility for purposes other than childcare (Clark, 2000; Clawson and Gerstel, 2014; Hilbrecht et al., 2008; Sullivan and Lewis, 2001). Due to the gendered use of flexible arrangements, women profit from their own, but not from their partners' flexitime in terms of work capacity.

Nonstandard working time arrangements have negative effects on mothers' work capacity. Nonstandard work schedules can increase work-family conflict (Eby et al., 2005) and can therefore affect mothers' work capacity. Men's night work seems to be especially problematic for mothers' labor market re-entry. One exception, however, is women's weekend work. The extension of the workweek seems to be a means for mothers to return to the labor market earlier.

These results have several policy implications. National-level policies as well as company-level policies should encourage the implementation

of flexible working time arrangements that give employees more control over the allocation of working time. In doing so, mothers' labor market participation can be increased. Also, policies should encourage men to use flexibility for family reasons. Fathers' involvement might also enable mothers to maintain previous work hours and to make use of flexible working time arrangements other than part-time for balancing work and family. For example, fathers could be addressed more explicitly at the company level with regard to making use of flexible arrangements in order to care for children. At the governmental level, the introduction of partner months in the German parental leave system might be a means of increasing fathers' involvement in child care. So far, the long-term effects of this reform in 2007 are unknown, but fathers' generally short and often timid take-up of parental leave and the headwind which they experience at the workplace indicate that social change has slowed in the recent years (Lott and Klenner, 2016). In 2015, an extension of parental leave, *Elterngeld Plus*, was introduced that offers financial incentives to parents when both reduce their work hours after parental leave. This policy might support a more equal use of flexible working time arrangements and greater equality in relationships, but there is insufficient empirical evidence about its take-up.

The present study also indicates that mothers who seem to extend the work week in order to re-enter the labor market should be supported more in balancing work and family life during the regular work week. This also has important implications for their health. Individuals who work on weekends and who must balance work and family demands during the week are likely to experience work intensification and work-family conflict and to lack sufficient time for recovery. Work intensification and work-family conflict can cause health problems (Burchell et al., 2002; Frone et al., 1998; Roxburgh, 2004) and work effort, work-family conflicts and health problems can accumulate when there is not adequate time for recovery (Bakker and Geurts, 2004; Geurts and Sonnentag, 2006). In addition, burdensome working time arrangements such as night work not only increase health risks (Costa et al., 2010), but, as shown in this study, negatively affect mothers' work capacity. At the company level, work should be organized in the way that minimizes the number and duration of night shifts as much as possible. This can be achieved by reallocating work tasks from night shifts to day shifts and by evaluating how much staff is needed to cover the necessary work tasks during the night.

The limitations of the present study should be mentioned. First of all, the number of observations is small – due to the relatively small number of observed childbirths and flexible working time arrangements. In future

research, more detailed longitudinal data on the take-up of parental leave and flexible work arrangements is needed. Also, a country-comparison between Germany and the UK would allow for analysis of cross-country differences in the impact of working time flexibility. This could not be done in the present study, because British longitudinal data, so far, is limited on this subject. Future research is needed to investigate the role of the institutional context on the effectiveness of flexible work arrangements, also with regard to gender inequality.

Despite these limitations, the present study contributes to research on mothers' work behavior by taking the workplace and flexible working time arrangements into account. Flexible working time arrangements affect mothers' return to the labor market. In addition, the present study indicates that legally enforceable rights which are reinforced through collective agreements are effective and support employees in their desire (and request) to work part-time. However, the present study also revealed that further policies at the governmental and company level that are strengthened through collective agreements are needed to encourage fathers' involvement in childcare and to support working parents, particularly working mothers, during the regular work week. These measures are necessary not only in terms of work-life balance and mothers' work capacity, but also in terms of gender equality.

References

- Ala-Mursula L, Vahtera J, Pentti J and Kivimäki M (2004) Effect of employee worktime control on health: a prospective cohort study. *Occupational environmental medicine* 61: 254–261.
- Allen TD, Johnson RC, Kiburz KM and Shockley KM (2013) Work–Family Conflict and Flexible Work Arrangements: Deconstructing Flexibility. *Personnel Psychology* 66: 345–376.
- Allmendinger J, Giesecke J, Hipp L, Leuze K and Stuth S (2012) *Mehr Jobs oder nur mehr schlechte Jobs?: Die Entwicklung atypischer Beschäftigung in Europa*. WZBrief Arbeit no. 13, 2012. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Anxo D, Boulin J, Fagan C, Cebrian I and Moreno G (2007a) Patterns of Labour Market Integration in Europe - A Life Course Perspective on Time Policies. *Socio-Economic Review* 5(2): 233–260.
- Anxo D, Fagan C, Letablier T, Perraudin C and Smith M (2007b) *Part-time work in European companies: Establishment survey on working time 2004-2005*. Dublin, Ireland: European Foundation for the Improvement of Living and Working Conditions.
- Bakker AB and Geurts SA (2004) Towards a Dual-Process-Model of Work-Home Interference. *Work and Occupations* 31: 345–366.
- Barnett RC and Gareis KC (2007) Shift work, parenting behaviors and children's socio-emotional well-being: A within-family study. *Journal of Family Issues* 28: 727–748.
- Baxter J, Hewitt B and Haynes Michel (2008) Life Course Transitions and Housework: Marriage, Parenthood and Time on Housework. *Journal for Marriage and Family* 70: 259–272.
- Bielby WT and Bielby DD (1989) Family Ties. Balancing Commitments to Work and Family in Dual Earner Households. *American Sociological Review* 54: 776–789.
- Blossfeld H, Mills M and Bernardi F (2006) *Globalization, uncertainty, and men's careers: An international comparison*. Cheltenham, UK, Northampton, MA: Edward Elgar.
- Blossfeld H and Rohwer G (2002) *Techniques of Event History Modeling*. New York/London: Psychology Press.
- Boisard (2003) *Time and Work: Duration of Work*, 2003. Luxembourg: Eurofound.
- Brannen J (2005) Time and the Negotiation of Work-Family Boundaries. Autonomy or illusion? *Time & Society* 14(1): 113–131.
- Bünning M and Pollmann-Schult M (2016) Parenthood, child care, and nonstandard work schedules in Europe. *European Societies* 18(3): 295–314.

- Burchell B, Ladipo D and Wilkinson Frank (2002) *Job insecurity and Work intensification*. London: Routledge.
- Chung H and Horst, M van der (2018) Women's employment patterns after childbirth and the perceived access to and use of flexitime and teleworking. *Human Relations* 71(1): 47–72.
- Clark SC (2000) Work/Family Border Theory: A New Theory of Work/Family Balance. *Human Relations* 53: 747–770.
- Clawson D and Gerstel, N (2014) *Unequal Time: Gender, Class, And Family in Employment Schedules*. New York: Russel Sage.
- Costa G, Haus E and Stevens R (2010) Shift work and cancer – considerations on rationale, mechanisms, and epidemiology. *Scandinavian Journal of Work, Environment and Health* 36(2): 163–179.
- Craig L and Powell A (2012) Dual-earner parents' work-family time: the effects of atypical work patterns and non-parental childcare. *Journal of Population Research* 29: 229–247.
- Davis K, Crouter AC and McHale SM (2006) The implication of shift work for parent-adolescent relationships in dual-earner families. *Family Relations* 55: 450–460.
- den Dulk L, Peper B, Sadar NC, Lewis S, Smithson J and van Doorne-Huiskes A (2011) Work, Family, and Managerial Attitudes and Practices in the European Workplace: Comparing Dutch, British and Slovenian Financial Sector Managers. *Social Politics* 18(2): 300–329.
- destatis (2016) Erwerbstätigkeit von Müttern: Deutschland über EU-Durchschnitt [mothers' employment: Germany has higher average rate compared to EU-average]. Available at: https://www.destatis.de/Europa/DE/Thema/BevoelkerungSoziales/Arbeitsmarkt/Erwerbstaetige_Muetter.html.
- destatis (2017) Bei Paaren mit kleinen Kindern ist eine Vollzeittätigkeit für Mütter die Ausnahme [Mothers' full-time work is an exception in couples with small children]. Available at: https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2017/03/PD17_077_122.html (retrieved April 24, 2018).
- Eby LT, Casper WJ, Lockwood A, Bordeaux C and Brinley A.
- Erickson JJ, Martinengo G and Hill JE (2010) Putting work and family experiences in context: Differences by family life stage. *Human Relations* 63(7): 955–979.
- Felfe C (2012) The Willingness to Pay for Job Amenities: Evidence from Mothers' Return to Work. *ILR Review* 65(2): 427–454.
- Figart DM and Mutari E (2000) Work Time Regimes in Europe: Can Flexibility and Gender Equity Coexist? *Journal of Economic Issues* 34(4): 847–871.

- Frone MR, Russell M and Cooper ML (1998) Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupation and Organizational Psychology* 70: 325–335.
- Gallie D, Zhou Y, Felstead A and Green F (2012) Teamwork, Skill Development and Employee Welfare. *British Journal of Industrial Relations* 50(1): 23–46.
- Gasser M (2017) Time Spent on Child Care by Fathers in Leadership Positions: The Role of Work Hours and Flexitime. *Journal of Family Issues* 38(8): 1066–1088.
- Gershuny J, Bittman M and Brice J (2005) Exit, Voice, and Suffering: Do Couples Adapt to Changing Employment Patterns? *Journal for Marriage and Family* 67(656–665).
- Geurts SA and Sonnentag S (2006) Recovery as an explanatory mechanism in the relation between acute stress reactions and chronic health impairment. *Scandinavian Journal of Work, Environment and Health* 32: 482–492.
- Godard J (2001) High performance and the transformation of work? The implications of alternative work practices for the experience and outcomes of work. *Industrial and Labor Relations Review* 54(4): 776–805.
- Gregory A and Milner S (2009) Editorial: Work-life Balance: A Matter of Choice? *Gender, Work and Organization* 16: 1–13.
- Grunow D, Schulz FS and Blossfeld H (2007) Was erklärt die Traditionalisierungsprozesse häuslicher Arbeitsteilung im Eheverlauf: soziale Normen oder ökonomische Ressourcen? *Zeitschrift für Soziologie* 36: 162–181.
- Haisken-DeNew JP and Frick J (2005) *Desktop Companion to the German Socio-Economic Panel (SOEP)*.
- Han W (2004) Nonstandard work schedules and child care decisions: Evidence from the NICHD study of early child care. *Early Childhood Research Quarterly* 19: 231–256.
- Hilbrecht M, Shaw SM, Johnson LC and Andrey J (2008) 'I'm Home for the Kids: Contradictory Implications for Work-Life Balance of Teleworking Mothers. *Gender, Work and Organization* 15: 454–476.
- Hyde JS, Essex MJ and Horton F (1993) Fathers and parental leave: Attitudes and experiences. *Journal of Family Issues* 14(4): 616–641.
- Kanji S and Samuel R (2017) Male Breadwinning Revisited: How Specialization, Gender, Role Attitudes and Work Characteristics Affect Overwork and Underwork in Europe. *Sociology* 5(2): 339–356.

- Kaufman G and Uhlenberg P (2000) The influence of parenthood on the work effort of married men and women. *Social Forces* 78(3): 931–947.
- Kelliher C and Anderson D (2010) Doing more with less? Flexible working practices and the intensification of work. *Human Relations* 63(1): 83–106.
- Kelly E and Moen P (2007) Rethinking the clockwork of work: why schedule control may pay off at work and at home. *Advances in Developing Human Resources* 9: 487–506.
- Kelly EL, Moen P, Oakes JM, Fan W, Okechukwu C, Davis KD, et al. (2014) Changing Work and Work-Family Conflict: Evidence from the Work, Family, and Health Network. *American Sociological Review* 79(3): 485–516.
- Kirby EL and Krone KJ (2002) "The Policy Exists But You Can't Really Use It": Communication and the Structuration of Work-Family Policies. *Journal of Applied Communication Research* 30(1): 50–77.
- Le Bihan B and Martin C (2004) Atypical working hours: Consequences for childcare arrangements. *Social Policy and Administration* 38: 565–590.
- Leslie LM, Park T and Mehng SA (2012) Flexible Work Practices: A Source of Career Premiums or Penalties? *Academy of Management Journal* 55(6): 1407–1428.
- Lott Y (2015) Working-time flexibility and autonomy: A European perspective on time adequacy. *European Journal of Industrial Relations* 21: 259–274.
- Lott Y and Klenner C (2016) *Ideal Workers and Ideal Parents. Working-time norms and the acceptance of part-time and parental leave at the workplace in Germany*. WSI Working Paper no. 204, 2016. Düsseldorf.
- Maume DJ (2006) Gender differences in restricting work efforts because of family responsibilities. *Journal of Marriage and Family* 68: 859–869.
- Michel JS, Kotrba LM, Mitchelson JK, Clark MA and Baltes BB (2011) Antecedents of Work–Family Conflict: A Meta Analytic Review. *Journal of Organizational Behavior* 32: 689–725.
- Moen P and Yu Y (2000) Effective Work/Life Strategies: Working Couples, Work Conditions, Gender, and Life Quality. *Social Problems* 47(3): 291–326.
- Nock SL and Kingston PW (1988) Time with children. The impact of couples' work-time commitments. *Social Forces* 67: 59–85.
- OECD (2017) *Dare to Share: Germany's Experience Promoting Equal Partnership in Families*, 2017. Paris: OECD Publishing.

- Ortega J (2009) Why do employers give discretion? Family versus performance concerns. *Industrial Relations: A Journal of Economy and Society* 48: 1–26.
- Pagan CE, Lero DS and MacDermid Wadsworth SM (2011) It doesn't always add up: examining dual-earner couples' decision to off-shift. *Community, Work & Family* 14(3): 297–316.
- Paull G (2008) Children and Women's Hours of Work. *The Economic Journal* 118(526): F8-F27.
- Presser HP (1994) Employment schedules among dual-earner spouses and the division of household work. *American Sociological Review* 59: 348–364.
- Presser HP (2003) *Working in a 24/7 economy: Challenges for American families*. New York: Russel Sage.
- Roxburgh S (2004) 'There Just Aren't Enough Hours in the Day': The Mental Health Consequences of Time Pressure. *Journal of Health and Social Behavior* 45(2): 115–131.
- Sanchez L and Thomson E (1997) Becoming Mothers and Fathers: Parenthood, Gender, and the Division of Labor. *Gender and Society* 11(6): 747–772.
- Schadler C, Rieder I, Schmidt E, Zartler U and Richter R (2017) Key practices of equality within long parental leaves. *Journal of European Social Policy*: 1–13.
- Schiemann S (2006) Gender, Dimensions of Work, and Supportive Coworker Relations. *The Sociological Quarterly* 47: 195–214.
- Schiemann S and Glavin P (2008) Trouble at the Border?: Gender, Flexibility at Work, and the Work-Home Interface. *Social Problems* 55(4): 590–611.
- Schiemann S and Young M (2010) Is There a Downside to Schedule Control for the Work-Family Interface? *Journal of Family Issues* 31(10): 1391–1414.
- Schober P (2013) The Parenthood Effect on Gender Inequality: Explaining the Change in Paid and Domestic Work When British Couples Become Parents. *European Sociological Review* 29(1): 74–85.
- Sigle RW and Waldfogel J (2007) Motherhood and Women's Earnings in Anglo-American, Continental European, and Nordic Countries. *Feminist Economics* 13(2): 55–91.
- Singley SG and Hynes K (2005) Transitions to Parenthood: Work-Family Policies, Gender, and the Couple Context. *Gender & Society* 19(3): 376–397.

- Strazdins L, Korda RJ, Lim LL, Broom DH and D'Souza R (2004) Around-the-clock: parent work schedules and children's well-being in a 24-h economy. *Social Science & Medicine* 59: 1517–1527.
- Sullivan C and Lewis S (2001) Home-based Telework, Gender, and the Synchronization of Work and Family: Perspectives of Teleworkers and their Co-residents. *Gender, Work and Organization* 8(2): 123–145.
- Täht K and Mills M (2012) Nonstandard work schedules, couple desynchronization, and parent-child interaction: A mixed-methods analysis. *Journal of Family Issues* 33(8): 1054–1087.
- van der Lippe T, Ruijter J de and Ruijter ERW de (2011) Persistent Inequalities in Time Use between Men and Women: A Detailed Look at the Influence of Economic Circumstances, Policies, and Culture. *European Sociological Review* 27(2): 164–179.
- Wharton AS, Chivers S and Blair-Loy M (2003) Use of Formal and Informal Work-Family Policies on the Digital Assembly Line. *Work and Occupations* 25(3): 327–350.
- Wharton CS (1994) Finding time for the "second shift": The impact of flexible work schedules on women's double days. *Gender and Society* 8: 189–205.
- White M, Hill S, McGovern P, Mills C and Smeaton D (2003) 'High-performance' Management Practices, Working Hours and Work-Life Balance. *British Journal of Industrial Relations* 41: 175–195.
- Williams JC, Blair-Loy M and Berdahl JL (2013) Cultural Schemas, Social Class, and the Flexibility Stigma. *Journal of Social Issues* 69(2): 209–234.
- Wood JJ and Repetti RL (2004) What gets dad involved? A longitudinal study of change in parental child caregiving involvement. *Journal of Family Psychology* 18(1): 237–249.

Appendix

Table A1: Variables of the analysis (N=9,567)

Variable	Percent (Mean)	Std. Deviation	Min	Max
Return to work	2.72		0	1
Reduce previous work hours	1.44			
Maintain previous work hours	1.28		0	1
Duration of parental leave	(8.60)	7.74	0	46
Duration of parental leave (log)				
Previous job characteristics				
Flexitime women	16.17		0	1
Flexitime men	18.31		0	1
Night work women	10.58		0	1
Night work men	22.94		0	1
Weekend work women	32.22		0	1
Weekend work men	41.85		0	1
<i>Job authority</i>				
No job authority	88.70		0	1
Management tasks	10.58		0	1
Extensive leadership	0.07		0	1
<i>Work hours</i>				
Full-time	59.69		0	1
Substantial part-time	17.12		0	1
Marginal part-time	23.18		0	1
Marginal employment	8.08		0	1
<i>Status position</i>				
Legislators, etc.	26.63		0	1
Associate professionals, etc.	32.46		0	1
Clerks	15.33		0	1
Service workers	18.54		0	1
Craft and similar jobs, etc.	7.01		0	1
Public sector	14.14		0	1
Service sector	5.58		0	1
Health and education sector	28.06		0	1
Retail sector	14.03		0	1
Insurance and banking sector	5.35		0	1
Industry sectors	4.75		0	1

Second job	8.56		0	1
Permanent contract	65.51		0	1
Individual annual labor income women	(23,936.53)	16,804.38	250	106,496.30
Individual annual labor income men	(39,662.94)	24,814.85	0	168,232.50
Change of employer before or during parental leave	22.94		0	1
Previous socio-demographic characteristics				
Age	(31.60)	4.64	19	44
Age squared	(1020.66)	294.89	361	1936
<i>Education</i>				
Low	12.12		0	0
Middle	57.55		0	0
High	30.32		0	0
Previous household characteristics				
Married	82.63		0	1
<i>Number of children</i>				
No child	45.77		0	1
One child	33.29		0	1
Two children	13.55		0	1
Three and more children	7.37		0	1
Ages of youngest child 0-2	12.72		0	1
Ages of youngest child 2-4	17.00		0	1
Number of parental leave for one child	(1.62)	1.38	1	12

Note: SOEP 2003-2013

Table A2: Discrete-time event history analysis of mothers' risk of returning to employment after parental leave

	Model 1	Model 2	Model 3
Previous working time arrangements			
Flexitime women	1.461* (0.27)		1.602* (0.30)
Night work women	0.738 (0.19)		0.800 (0.21)
Weekend work women	1.248 (0.23)		1.387+ (0.26)
Flexitime men		0.911 (0.17)	0.780 (0.15)
Night work men		0.744 (0.15)	0.709+ (0.14)
Weekend work men		0.788 (0.15)	0.748 (0.15)
Duration of parental leave	1.041*** (0.01)	1.036*** (0.01)	1.039*** (0.01)
Previous job characteristics			
<i>Job authority</i>			
No job authority	ref	ref	ref
Management tasks	1.046 (0.24)	1.050 (0.24)	1.037 (0.24)
Extensive leadership	2.408 (2.08)	2.338 (2.02)	2.267 (1.87)
<i>Work hours</i>			
Full-time	ref	ref	ref
Substantial part-time	1.066 (0.22)	1.107 (0.22)	1.151 (0.24)
Marginal part-time	1.495+ (0.32)	1.507* (0.31)	1.483+ (0.31)
Marginal employment	0.879 (0.30)	0.892 (0.29)	0.850 (0.28)
Individual annual labor income women	1.000*** (0.00)	1.000*** (0.00)	1.000*** (0.00)
Individual annual labor income men	1.000*** (0.00)	1.000** (0.00)	1.000* (0.00)
<i>Status position</i>			
Legislators, etc.	ref	ref	ref
Associate professionals, etc.	0.715 (0.15)	0.682+ (0.14)	0.695+ (0.15)

Clerks	0.722 (0.19)	0.679 (0.19)	0.684 (0.19)
Service workers	0.549* (0.15)	0.519* (0.15)	0.534* (0.15)
Craft and similar jobs, etc.	0.382* (0.15)	0.333** (0.13)	0.360* (0.14)
Public sector	1.241 (0.23)	1.216 (0.22)	1.197 (0.22)
Service sector	0.988 (0.39)	1.072 (0.42)	1.001 (0.40)
Health and education sector	0.872 (0.16)	0.766 (0.14)	0.851 (0.16)
Retail sector	0.890 (0.23)	0.840 (0.21)	0.868 (0.22)
Insurance and banking sector	1.063 (0.33)	1.062 (0.33)	1.072 (0.32)
Industry sectors	1.273 (0.41)	1.179 (0.39)	1.235 (0.41)
Second job	2.016** (0.53)	2.044** (0.53)	2.052** (0.54)
Permanent contract	1.611** (0.27)	1.668** (0.28)	1.552* (0.26)
Change of employer before or during parental leave	1.486** (0.23)	1.473** (0.22)	1.510** (0.23)
Previous socio-demographic characteristics			
<i>Education</i>			
Low	ref	ref	ref
Middle	0.802 (0.18)	0.768 (0.18)	0.821 (0.19)
High	0.732 (0.22)	0.738 (0.22)	0.745 (0.22)
Age	0.881 (0.16)	0.845 (0.15)	0.854 (0.15)
Age squared	1.002 (0.00)	1.002 (0.00)	1.002 (0.00)
Previous household characteristics			
Married	0.792 (0.15)	0.859 (0.17)	0.815 (0.16)
<i>Number of children</i>			
No child	ref	ref	ref
One child	1.493 (0.38)	1.453 (0.36)	1.458 (0.37)

Two children	1.607 ⁺ (0.45)	1.628 ⁺ (0.46)	1.679 ⁺ (0.47)
Three and more children	2.231 ^{**} (0.66)	2.138 ^{**} (0.63)	2.291 ^{**} (0.69)
Ages of youngest child 0-2	0.936 (0.29)	0.925 (0.28)	0.993 (0.31)
Ages of youngest child 2-4	0.798 (0.21)	0.776 (0.20)	0.820 (0.21)
Number of parental leave period	1.156 ^{**} (0.06)	1.173 ^{***} (0.06)	1.163 ^{**} (0.06)
Constant	0.123 (0.34)	0.210 (0.57)	0.080 (0.20)
Pseudo R-squared	0.058	0.58	0.062
N	9567	9567	9567

Note: Discrete time logistic model; Hazard ratios; Hazard rate for the risk of returning to the labor market; Robust standard errors in parenthesis; Unweighted; Data source: SOEP 2003-2013; *p<0.05, **p<0.01, ***p<0.001

Table A3: Discrete-time event history analysis of mothers' risk of returning to employment after parental leave with and without previous work hours

	Model 4		Model 5		Model 6	
	Reduction	Maintenance	Reduction	Maintenance	Reduction	Maintenance
Previous working time arrangements						
Flexitime women	1.511 ⁺ (0.37)	1.506 (0.46)			1.675* (0.43)	1.618 (0.50)
Night work women	0.694 (0.25)	0.777 (0.32)			0.820 (0.28)	0.778 (0.33)
Weekend work women	1.266 (0.31)	1.254 (0.36)			1.515 (0.39)	1.274 (0.39)
Flexitime men			0.913 (0.24)	0.935 (0.29)	0.763 (0.20)	0.797 (0.26)
Night work men			0.510* (0.14)	1.036 (0.32)	0.470** (0.13)	1.016 (0.33)
Weekend work men			0.770 (0.19)	0.938 (0.30)	0.732 (0.18)	0.888 (0.30)
Duration of parental leave	1.075*** (0.01)	1.006 (0.01)	1.070*** (0.01)	1.002 (0.01)	1.073*** (0.01)	1.005 (0.01)
Previous job characteristics						
<i>Job authority</i>						
No job authority	ref	ref	ref	ref	ref	ref
Management tasks	1.359 (0.43)	0.755 (0.28)	1.459 (0.46)	0.762 (0.27)	1.371 (0.44)	0.754 (0.28)
Extensive leadership	2.383 (2.64)	2.581 (2.63)	2.448 (2.62)	2.539 (2.63)	2.328 (2.32)	2.490 (2.56)
Individual annual labor income women	1.000* (0.00)	1.000*** (0.00)	1.000* (0.00)	1.000*** (0.00)	1.000 ⁺ (0.00)	1.000*** (0.00)
Individual annual labor income men	1.000** (0.00)	1.000 ⁺ (0.00)	1.000* (0.00)	1.000 ⁺ (0.00)	1.000 ⁺ (0.00)	1.000 (0.00)
<i>Work hours</i>						
Full-time	ref	ref	ref	ref	ref	ref
Substantial part-time	1.198 (0.36)	0.868 (0.27)	1.275 (0.38)	0.850 (0.26)	1.356 (0.40)	0.877 (0.27)
Marginal part-time	0.648 (0.22)	2.804*** (0.84)	0.648 (0.22)	2.795*** (0.83)	0.624 (0.21)	2.812*** (0.84)

Marginal employment	1.087 (0.63)	0.679 (0.29)	1.123 (0.61)	0.692 (0.29)	1.040 (0.58)	0.675 (0.29)
<i>Status position</i>						
Legislators, etc.	ref	ref	ref	ref	ref	ref
Associate professionals, etc.	0.559 ⁺ (0.17)	0.904 (0.31)	0.505* (0.15)	0.889 (0.31)	0.523* (0.16)	0.873 (0.30)
Clerks	0.505 ⁺ (0.18)	1.107 (0.47)	0.449* (0.16)	1.084 (0.47)	0.446* (0.16)	1.083 (0.46)
Service workers	0.396* (0.16)	0.823 (0.35)	0.338** (0.14)	0.803 (0.34)	0.357* (0.15)	0.811 (0.35)
Craft and similar jobs, etc.	0.134** (0.09)	0.952 (0.53)	0.099*** (0.07)	0.894 (0.49)	0.112** (0.08)	0.936 (0.52)
Public sector	1.268 (0.34)	1.337 (0.38)	1.202 (0.32)	1.363 (0.38)	1.196 (0.32)	1.316 (0.37)
Service sector	1.042 (0.58)	0.996 (0.55)	1.100 (0.57)	1.087 (0.58)	1.104 (0.59)	0.989 (0.55)
Health and education sector	0.950 (0.25)	0.709 (0.19)	0.811 (0.20)	0.633 ⁺ (0.17)	0.915 (0.24)	0.702 (0.19)
Retail sector	0.417* (0.16)	1.614 (0.58)	0.370** (0.14)	1.529 (0.55)	0.378* (0.15)	1.586 (0.58)
Insurance and banking sector	1.112 (0.47)	0.939 (0.42)	1.077 (0.49)	0.951 (0.41)	1.155 (0.51)	0.926 (0.41)
Industry sectors	1.048 (0.43)	1.363 (0.70)	0.865 (0.37)	1.269 (0.69)	0.915 (0.40)	1.321 (0.70)
Second job	1.483 (0.56)	2.577** (0.88)	1.602 (0.63)	2.525** (0.85)	1.606 (0.63)	2.558** (0.87)
Permanent contract	1.199 (0.28)	2.335** (0.64)	1.240 (0.28)	2.452** (0.68)	1.126 (0.26)	2.333** (0.65)
Change of employer before or during parental leave	1.844** (0.41)	1.328 (0.30)	1.738* (0.39)	1.321 (0.30)	1.814** (0.41)	1.334 (0.31)
Previous socio-demographic characteristics						
<i>Education</i>						
Low	ref	ref	ref	ref	ref	ref
Middle	0.510* (0.16)	1.289 (0.51)	0.479* (0.16)	1.231 (0.49)	0.535* (0.17)	1.290 (0.52)

High	0.375*	1.460	0.354*	1.492	0.376*	1.465
	(0.17)	(0.71)	(0.16)	(0.73)	(0.17)	(0.72)
Age	0.685	1.270	0.643 ⁺	1.239	0.635 ⁺	1.273
	(0.18)	(0.36)	(0.17)	(0.34)	(0.16)	(0.36)
Age squared	1.006	0.996	1.007	0.996	1.007 ⁺	0.996
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Previous household characteristics						
Married	0.822	0.763	0.933	0.800	0.878	0.752
	(0.22)	(0.23)	(0.27)	(0.24)	(0.26)	(0.23)
<i>Number of children</i>						
No child	ref	ref	ref	ref	ref	ref
One child	1.137	2.483*	1.135	2.378*	1.106	2.430*
	(0.46)	(0.96)	(0.45)	(0.92)	(0.45)	(0.95)
Two children	1.960 ⁺	1.416	2.173*	1.341	2.174*	1.423
	(0.72)	(0.65)	(0.80)	(0.62)	(0.78)	(0.66)
Three and more children	0.706	5.707***	0.789	5.094***	0.812	5.605***
	(0.42)	(2.42)	(0.42)	(2.15)	(0.46)	(2.39)
Ages of youngest child 0-2	0.622	1.211	0.578	1.197	0.658	1.241
	(0.31)	(0.50)	(0.28)	(0.49)	(0.32)	(0.51)
Ages of youngest child 2-4	0.508	1.066	0.494 ⁺	1.037	0.537	1.080
	(0.21)	(0.37)	(0.21)	(0.37)	(0.23)	(0.38)
Number of parental leave period	1.130	1.127*	1.149 ⁺	1.142*	1.143 ⁺	1.128*
	(0.09)	(0.06)	(0.09)	(0.06)	(0.09)	(0.06)
Constant	6.404	0.000*	16.072	0.000*	17.702	0.000*
	(25.59)	(0.00)	(65.23)	(0.00)	(69.49)	(0.00)
Pseudo R-squared	0.098		0.100		0.103	
N	9567		9567		9567	

Note: Discrete time multinomial logistic model; Hazard ratios; Hazard rate for the risk of returning to the labor market with reduction or maintenance of previous work hours; Robust standard errors in parenthesis; Unweighted; Data source: SOEP 2003-2013; ⁺p<0.10, *p<0.05, **p<0.01, ***p<0.001

Flexible working time arrangements can help combine work and family life and might therefore encourage mothers' labor market re-entry after parental leave – without a reduction in working time. The present study shows that flexible working time arrangements affect mothers' return into the labor market. Further policy measures, however, are needed to support mothers' work capacity and to contribute to gender equality in relationships and at the workplace.
