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Abstract

This study analyses labour market transitions of women in the time around first childbirth. Two employment decisions are considered: exiting the labour force and a reduction in work hours. We assess change in these transitions in the Netherlands between 1970 and 2008. We test whether policy changes, in particular the introduction of unpaid parental leave, have changed the opportunity costs of specific work–family arrangements for women and their partners. We use detailed life-history couple data and estimate multinomial logit models. Our results show that over time, new mothers became less likely to exit the labour market and more likely to reduce their working hours. Eligibility for parental leave and public sector employment reduced the probability of exiting the labour market, but had no effect on reducing working hours. In the 1990s and for those eligible for parental leave, the likelihood that a working hour reduction was associated with a lower job level or an employer change decreased. New mothers with an occupational status at least as high as that of their male partner were less likely to reduce their labour supply. Policy changes did not alter the importance of partners' relative occupational resources.

Introduction

Women's massive entry into the labour market is considered one of the most significant social changes of the past decades (Goldin, 2006). By now, the majority of women are employed before having children. Among mothers of preschool children, however, labour force participation is markedly lower (Uunk *et al.*, 2005). Governments of most industrialized countries aim at increasing female labour force participation further, as reflected for instance in the 'Europe 2020' strategy (EU, 2010). Facilitating the continued employment of women after entering motherhood has been one of the key strategies in this regard because mothers of small children have been the main drivers of increased female employment rates in Western economies

(Gregory *et al.*, 2008). This study focuses on the employment of women around the time of first childbirth in the Netherlands. The Dutch setting provides an interesting case to assess the impact of policies on changing employment patterns of new mothers and should therefore be of interest to scholars in Europe and beyond. First, the institutional and cultural orientation of the country resembles the conservative welfare states in Western and Southern Europe, while the policies adopted over the past decades rely on part-time work, unpaid part-time parental leave, and shared parenting as the dominant work–family reconciliation strategy rather than on long leave schemes (Lewis *et al.*, 2008). This makes the Netherlands a 'least likely' or 'critical' case (Flyvbjerg, 2006; Gerring, 2007) when it

comes to assessing the effectiveness of these policies in strengthening the labour market attachment of new mothers. If these policies are effective in the Dutch setting, they are likely to be successful in other cultural settings as well. Second, different from other European leave schemes, the Dutch parental leave is unpaid and does not foresee a job guarantee. It therefore exemplifies a cost-efficient minimum standard of family policy that might serve as a model for policymakers in the liberal and post-socialist welfare regimes, where the debate is on granting more time and flexibility to new parents without creating high additional costs for governments and taxpayers (Wright et al., 2009).

The period studied in this article captures the Dutch transformation from a conservative work–family regime to a part-time economy and its medium-term consequences. It is the first study that tries to assess the effects of this transformation for new mothers. We contribute to the literature on policy effects on women's employment in several ways. First, by focusing on one institutional context over a relatively long period (1970–2008) and making use of detailed retrospective life-history data, we study the effect of policy changes on women's employment in close detail while holding other aspects of the context constant. The fact that our window of observation closes in 2008 enables us to study the long-term effects of the more recent policy changes in the Netherlands while controlling for the general time trend and cultural change. Second, we explicitly analyse reductions in working hours and thus part-time work. Thereby, we extend previous studies of Dutch mothers' employment, which did not take into account the number of working hours (Kenjoh, 2005; Vlasblom and Schippers, 2006; Fouarge et al., 2010). Our approach enables us to analyse whether granting parents the opportunity of part-time parental leave and providing policies improving the rights of part-time workers have been effective in enhancing job continuity of mothers. Third, we contribute to the small but growing number of studies that focus explicitly on employment changes at the transition to parenthood, as family policies have been found to be most salient in this phase of women's life course (Aisenbrey et al., 2009, Grunow et al., 2011). We focus on changes in mothers' careers in the period from 1 year before to 4 years after the first birth and analyse the monthly probability to be employed and the probability to reduce the number of working hours. Women's employment decisions are connected to the income of their partner. To correctly assess the relative impact of policy changes and individual characteristics on new mothers' decisions to continue working, we control for the occupational position of the male partner.

We aim to answer the following research questions:

1. How have new mothers' employment transitions around first childbirth in the Netherlands changed over time and in reaction to the introduction of part-time parental leave?
2. Did policies strengthening the right of part-time workers result in higher job continuity for mothers? In particular, do we find higher levels of job continuity for mothers who reduced their working hours?
3. Has the changing opportunity structure for mother's employment reduced the sex-specific division of paid work?

Background and Expectations

When a child is born, working mothers face different options: exiting the labour market, reducing the number of working hours, or continuing to work the same number of hours.[1] Following theories of labour supply and work–family fit (Voydanoff, 2005), we assume women's decision to exit the labour market or adjust work hours to be driven by the perceived fit between demands and resources occurring on four levels: individual, family, workplace, and institutional environment. The interplay of these levels, we argue, determines the opportunity costs of specific work–family arrangements. The individual level includes women's human capital and employment history. These aspects provide women with differential resources for managing their work and family roles and reflect their past and present commitment to paid work. The family level includes household composition (first- or higher-order birth), resulting care demands, and the male partner's labour market position (his employment and occupational status). The workplace level includes demands put on mothers as workers in different professions or occupations. Both workplace demands and family demands are influenced by resources provided by the institutional environment. The institutional environment includes family policies, such as the right to parental leave and the provision of day care, labour market policies, in particular working time restrictions, job protection and the right to reduce work hours, and cultural work–family models, which can impose constraints on maternal employment (Pfau-Effinger, 2012). For instance, policies that provide workers with the right to reduce their work hours might affect the sex-specific division of labour within households because these new policies provide mothers with more options to reach a good fit between their paid work and family life, and thus reduce the need to exit employment when care demands increase.

In this study, our main interest lies in examining how the fit between women's role as workers and the care responsibilities related to the birth of a child are conditioned by changes in the institutional environment. We focus in particular on the interplay between institutional environment, employment stability, and women's relative labour market resources. To contextualize our theoretical expectations, the Dutch background is briefly summarized in the next section. We subsequently discuss previous research and derive hypotheses.

Female Labour Force Participation and Work Family Policies in the Netherlands

Up until the 1970s, the Netherlands were characterized by low female labour market participation and a conservative climate with regard to women's roles. In combination with high male wages, this resulted in the male breadwinner/female homemaker model as the standard division of labour in Dutch couples (Kremer, 2005). This legacy subsequently encouraged the take-up of part-time jobs rather than full-time participation when women's labour force participation rose quickly after the 1980s. Moreover, the high unemployment during the economic crisis of the 1980s resulted in the creation of jobs by using part-time work on a large scale. Female part-time participation was further encouraged by a limited supply of childcare below (pre)school age of 4 years. After increasing the investments in childcare in the 1990s, the Dutch government decreased expenditures in favour of marketization and higher contributions from employers and parents, sparking concerns about the educational quality (Kremer, 2005; Knijn and Saraceno, 2010). These concerns further contributed to the prevalence of attitudes that view attending formal childcare for >3 days a week as detrimental to the development of young children (Plantenga, 2002; Portegijs *et al.*, 2006). In the early 1990s, the statutory maternity leave was prolonged from 12 to 16 weeks, and an unpaid parental leave for both parents of 13 times the weekly working hours was introduced (Moors, 1995); see Table 1 for eligibility criteria.

While the Dutch provisions for parental leave are rather limited in terms of compensation and scope in comparison with other European countries (Plantenga and Remery, 2005), the legal entitlements for part-time workers and the control about working hours granted to employees are among the most extensive (Lewis *et al.*, 2008). Dutch legislation has been moving continuously toward an equal treatment of part-time and full-time workers (Plantenga and Remery, 2005). Since 2000, employees also have the right to request an upward or downward adjustment of the number of working hours in their current job once every 2 years (Fouarge and Baaijens, 2009). See Table 1 for overview of policy changes.

Expectations

Over the past decades, strong increases in new mothers' labour force participation have been noted in most industrialized countries. At the heart of this development are changes on the individual level, such as women's increased investments in education, later age at marriage and childbirth, and thus in general higher human capital at the moment of entering motherhood, which are well documented in the literature (Gutiérrez-Domènech, 2005; Smeaton, 2006). Changes on the institutional level in the form of parental leave and childcare policies have also contributed in many cases to increase the compatibility of paid employment with care responsibilities. As outlined above, the Netherlands combine structural constraints to maternal full-time employment, such as limited availability of formal childcare, with a strong emphasis on the superiority of maternal (or parental) care for small children. This cultural and institutional constellation imposes mothers part-time rather than full-time work as providing good work–family fit. The introduction of parental leave in the Netherlands has lowered the opportunity costs of staying employed after the birth of the first child because it enabled women to temporarily lower their number of working hours and care for their child at home while staying in their pre-birth job. In this sense, the Dutch parental leave policy facilitates the cultural perpetuation of the one-and-half earner model in which mothers take on the majority of care tasks. At the same time, attachment to the labour force is preserved because the leave is generally taken part-time and during a limited period, and leave of moderate duration has been shown to increase women's rate of return to work after childbearing (Pronzato, 2009). In our first hypothesis, we therefore expect that the work–family fit in the Netherlands has increased. More specifically, *eligibility for parental leave decreased new mothers' probability to exit the labour market and increased the probability to reduce the number of working hours when compared with women who were not eligible for parental leave (Hypothesis 1).*

A reduction in working hours however, while increasing work–family fit, has been frequently shown to come at a cost for the worker such as long-term wage penalties (Manning and Petrongolo, 2008; Fouarge and Muffels, 2009), occupational downgrading (Smeaton, 2006; Connolly and Gregory, 2008; Dex and Bukodi, 2012), and employer change (Euwals, 2001; Böheim

Table 1. Overview of policies regarding leave, part-time work, and childcare in the Netherlands

	Leave policies	Part-time work	Childcare
1970–1989	Maternity leave 12 weeks (100 per cent paid)	Continuous rise in part-time work following 'Wassenaar agreement' in 1982	Low availability and enrolment, especially for children 0–3
1990–1999	**1990:** Prolongation maternity leave to 16 weeks of which at least 4 before birth (100 per cent paid)	1993: Equal rights to statutory minimum wage and holiday allowance for part-time and full-time workers	1990: Law on childcare subsidy, availability and (part-time) enrolment increases to about 20 per cent enrolment of 0–3 year olds
	1991: Introduction parental leave of 13 times weekly work hours, eligible if ≥20 work hours/week and ≥1 year of tenure; to be taken as part-time leave in one period of 3 months within 4 years after birth (unpaid in private sector, 60–70 per cent paid in public sector)[2] **1997:** Flexibilization parental leave: workers with <20 work hours/week eligible if ≥1 year of tenure; take-up within 8 years after birth, option of taking full-time leave or reduce working hours	**1997:** Complete legal equality of full- and part-time work	1996: Law on co-financing of childcare by parents, employers, and state; state expenditures on childcare decreased
2000–2009	2009: Expansion parental leave to 26 times the weekly working hours and tax benefit of 50 per cent of minimum wage	**2000:** Right to adjust working hours once every 2 years, for all workers with job-tenure of >1 year	2005: Marketization of childcare; municipalities no longer provide childcare

and Taylor, 2004). The reason for this association of part-time work with negative career outcomes can be attributed to two theoretical mechanisms: first, women who try to increase work–family fit by combining part-time paid work with care tasks might opt for a less demanding job, both in terms of hours and job level (Filer, 1985); a second explanation for the existence of a 'part-time penalty' operates on the workplace level by means of employer discrimination: a reduction in working hours is interpreted by employers as reflecting a lower commitment to work, and women who wish to reduce their working hours are allocated to lower-level jobs (Gangl and Ziefle, 2009). Both mechanisms imply that women might (have to) change employer and job level to be able to work their desired lower number of hours and thus to improve their work–family fit. Because the growth of part-time work in the Netherlands has been accompanied by policy initiatives to increase access to and improve the quality of these jobs (see Table 1), new mothers presumably faced progressively fewer constraints and lower costs when reducing their work hours. More specifically, over time, new mothers should have had better opportunities to reduce their number of working hours in their pre-birth job, i.e. without having to take on a lower-level job or

change employer. We therefore expect in our second hypothesis that fewer women need to change employers to realize a good work–family fit. More specifically, we expect *the probability that a reduction in working hours is predicted by a change of employer (compared with the pre-birth employer) has decreased over time and in particular for those eligible for parental leave (Hypothesis 2a)*. Likewise, we expect that fewer women need to change to a lower occupation to attain work–family fit. More specifically, we hypothesize that *the probability that a reduction in working hours is predicted by occupational downgrading (compared with the pre-birth job) has decreased over time and in particular for those eligible for parental leave (Hypothesis 2b)*. While changes in the institutional environment improved the quality of and access to part-time work, these policies may have only limited effects on employer discrimination. An important development is the current labour market flexibilization, in particular the spread of fixed term contracts. Workers in such contracts often do not qualify for an adjustment in working hours or parental leave and are dependent on employer's goodwill. This means that for the growing group of women in these flexible employment relations, the career costs of a working hour reduction may remain high.

Mothers' labour market transitions are of course embedded in the family context, as exemplified by the number of children and the job of the male partner. We focus on the family context and its interaction with the changing institutional environment. Until the 1980s, the male breadwinner model was dominant in the Netherlands, which implied a highly sex-specific division of labour (Kremer, 2005). Considering the changes in the institutional and historical context, we expect that the amount of sex-specific specialization decreased, as women's negotiation position was strengthened by improved opportunities for work–family compatibility. We define the division of labour as sex-specific if women reduce their labour supply around first childbirth even if their earning capacity is at least as high as that of their male partner. The assumption derived from the resource bargaining framework is that in a context with equal opportunities, the partner with higher resources, regardless of sex, will use these to avoid unpaid housework and as a consequence, the partner with the lower resources should be more likely to reduce the supply of paid work when an increase in unpaid work occurs (Bittman *et al.*, 2003). We expect in our last hypothesis that *over time and in particular when eligible for parental leave, a new mother whose occupational status is at least as high as that of her partner is increasingly less likely to exit the labour market or reduce working hours in the time around the first birth (Hypothesis 3).*

Method

Data and Sample

For our analysis, we combine four waves of the Family Survey of the Dutch Population (Familie-Enquête Nederlandse Bevolking, FNB) collected in 1998, 2000, 2003, and 2009. The FNB is a repeated cross-sectional survey administered in the Netherlands, covering the population aged 18–70 with an overrepresentation of couples (De Graaf *et al.*, 1998, 2000, 2003; Kraaykamp *et al.*, 2009). The FNB registers the complete life courses of primary respondents and their partners retrospectively by interviews and self-completion questionnaires.

The four harmonized waves of the FNB contain information from 8,858 individuals born between 1914 and 1990 (51 per cent female) of which 7,732 (87 per cent) were clustered in 3,866 couples. Our analysis is restricted to women with at least one child and, to capture enough variability in women's occupational status around first childbirth, to female respondents born in 1955 or later. After excluding cases with inconsistent reports on the dates of childbirth, women who were

<18 years at the interview, gave birth to their first child before they were 15 years old or before they had left secondary education, the sample contains data on 1,917 women and, if present in the household, their partners (1,821 partners were interviewed). In 1,626 cases (89 per cent of couples), the interviewed partner was also the first child's father. A dummy controlling for the presence of the partner is included in all models to preserve the 291 cases without information about the partner at the time of first childbirth. The final analytical sample was restricted to women who worked at least 16 h per week,[3] 1 year before their first child was born. This leaves us with a sample of 1,503 women (1,297 with partner information).

To analyse women's labour force transitions, a person-period file is constructed with 60 monthly observations for each woman (from 12 months before to 48 months after birth) containing relationship, birth, and job histories. To avoid collinearity issues, information about women's job characteristics referred to 12 months before the first birth. Respondents who were interviewed <48 months after the first birth ($n = 236$) are observed until the time of the interview.

Analytical Strategy

The monthly probability to be in paid work and the probability to reduce the number of working hours in the 60 months around first childbirth were analysed by estimating a multinomial logit model. The reference outcome was defined as no change in the number of working hours compared with the situation 1 year before the first birth. An additional logit model predicting a reduction in working hours (reference outcome no change, months out of work omitted) was also estimated. This included upward and occupational moves and employer changes as covariates. Because monthly observations from the same respondents are not independent, robust standard errors accounting for within-cluster correlation at the respondent level were obtained.

Measures

Dependent variable

The dependent variable is a categorical indicator differentiating each month between exiting employment, reducing work hours by at least 8 h[4] (compared with 1 year before the first birth), or no change. Because periods of maternity leave were not explicitly recorded during the interview, the maximum period of statutory maternity leave (1 month before to 3 months after the first birth) was excluded from the estimation.[5]

The model included a *categorical indicator of time before and after first birth* to account for non-linear trends in labour force participation around childbirth (see Table 2 for intervals).

The measurement of *historical* or *policy period* was based on the calendar year of first childbirth and included as a categorical indicator differentiating between the policy periods of interest: 1970–1985 (growing female labour force participation); 1986–1990 (recession and emergence of part-time work); 1991–1995 (introduction of parental leave, improvement of quality part-time work); 1996–2000 (flexibilization parental leave, further improvement part-time work, increasing childcare availability); and 2001–2008 (right to adjust work hours, flexibilization of labour market).

The *eligibility to parental leave* was defined in accordance with Dutch regulations (see Table 1). Women were regarded as eligible for parental leave if their first child was born after 1 January 1991 and they had worked for at least 1 year and at least 20 h per week in their present job 12 months before giving birth for the first time. For women who gave birth to their first child after 1 July 1997, the working hour restriction was eliminated from the eligibility criteria. This procedure presents a conservative estimate of eligibility because tenure and work hours were assessed 1 year before the first birth. This approach was chosen to avoid misspecification in the order of events. Misspecification might arise when assessing eligibility at the time of birth, as women who are not eligible might already have changed their employment status then. Of all women who gave birth after the introduction of parental leave in 1991, one fifth (19.6 per cent) were not eligible for leave.

To account for the macro-economic opportunity structure women faced over time, *yearly unemployment* (per cent population) was included.

The weekly working hours of the female partner 12 months before the first birth were coded to differentiate between working 16–20 h, 21–35 h, and >35 h (full-time).

Occupational status of both partners (for women referring to 12 months before the birth) was measured by the International Socio-Economic Index of Occupational Status (ISEI), ranging from 16–90, with higher values indicating higher occupational status (Ganzeboom *et al.*, 1992). Presence and labour force participation of the male partner were controlled for.

Relative resources

The relative economic resources of the couple were measured by a categorical variable, assessing whether the occupational status (ISEI) of the female partner was equal to or higher than her partners' status. Current occupational status of the male partner was compared with the ISEI of the female partner 12 months before giving birth, and an ISEI difference of up to two points was considered equal. In couples in which the male partner did not work or was not present, the occupational status of the female partner was coded as equal or higher, and presence and labour force participation of the male partner were controlled for.

The *highest educational attainment* of the female partner was coded in four categories: lower secondary or below, short upper secondary and short vocational education, upper secondary (vocational and theoretical), and tertiary education (professional and scientific).

Women's labour force experience was measured by the number of years in employment at the time of first birth. To control for the effect of potential availability of paid parental leave, a dummy variable indicating whether women worked in the (semi)public sector 12 months before giving birth was included.

Family structure was captured by monthly varying indicators of relationship status, distinguishing between dating/cohabitation and marriage, and the occurrence of a higher-order birth.

The logit model that assessed the probability of a reduction in work hours included two measures of *occupational mobility*: a change of employer and a change in occupational status. The latter was defined by a categorical indicator, differentiating between upward and downward occupational changes (absolute change in ISEI compared with the job held at 12 months before birth). In addition, a time-varying indicator of whether women had exited employment during the observation period was included.

Interaction effects

Interaction terms of family level (occupational status of male partner) and job continuity (occupational downward mobility and employer change) with the institutional environment (historical period and eligibility to parental leave) were tested. Improvement in model fit by adding the interaction terms was assessed using a Wald test.

Descriptive statistics and distributions of all variables are presented in Appendix A.

Results

The results of the analyses are presented in Tables 2–4 and Figures 1–3 and are discussed in relation to the hypotheses. The model with main effects of all covariates is presented in Table 2.

Table 2. Results of multinomial logistic regression of labour market transitions around first childbirth, reference outcome: no change compared with birth to 12 months

	Reduction in work hours				Exit from labour market			
	RRR	B/S.E.	AME	95 per cent CI	RRR	B/S.E.	AME	95% CI
Period of childbirth								
1970–1985	ref				ref			
1986–1990	1.67	1.91	0.07	[0.02, 0.12]	0.88	−0.66	−0.05	[−0.11, 0.01]
1991–1995	2.37	2.60	0.10	[0.03, 0.17]	1.09	0.35	−0.04	[−0.12, 0.04]
1996–2000	2.32	2.25	0.13	[0.05, 0.21]	0.71	−1.10	−0.11	[−0.20, −0.01]
2001–2010	2.12	1.97	0.14	[0.06, 0.23]	0.44	−2.37	−0.17	[−0.26, −0.07]
Eligibility parental leave								
No	ref				ref			
Yes	0.87	−0.68	0.02	[−0.04, 0.07]	0.56	−2.97	−0.08	[−0.14, −0.03]
Sector before birth								
Private	ref				ref			
(semi)Public	1.15	0.97	0.04	[0.01, 0.08]	0.67	−2.93	−0.07	[−0.11, −0.03]
Occupational status (ISEI) before birth	0.99	−2.38	0.00	[0.00, 0.00]	0.99	−2.50	0.00	[0.00, 0.00]
Labour force experience (years)	1.01	0.17	0.01	[0.00, 0.01]	0.65	−5.02	−0.02	[−0.02, −0.01]
Educational attainment (TVC)[a]								
Lower Secondary	0.94	−0.15	−0.07	[−0.16, 0.02]	3.05	3.53	0.18	[0.08, 0.27]
Short upper secondary/vocational	1.25	1.10	−0.05	[−0.10, 0.00]	3.85	7.03	0.15	[0.15, 0.25]
Upper secondary/ vocational	1.62	2.87	0.02	[−0.02, 0.07]	2.34	4.80	0.05	[0.05, 0.14]
Higher professional/tertiary	ref				ref			
Work hours before birth								
16–20 h/week	0.05	−8.15	−0.23	[−0.26, −0.20]	0.34	−5.40	−0.06	[−0.12, −0.01]
21–35 h/week	0.36	−6.52	−0.11	[−0.15, −0.08]	0.58	−3.65	−0.02	[−0.07, 0.02]
>35 h/week	ref				ref			
Male partner: Occupational status (ISEI) (TVC)[a]	1.01	2.53	0.00	[0.00, 0.00]	1.01	1.33	0.00	[0.00, 0.00]
Male partner								
In paid work	ref				ref			
Not in paid work	0.77	−1.32	−0.04	[0.09, −0.00]	1.14	0.75	0.04	[−0.02, 0.09]
Male partner								
Present	ref				ref			
No information	0.49	−2.86	−0.06	[0.1,2 −0.01]	0.58	−2.54	−0.05	[−0.11, 0.01]
Family context								
Married	ref				ref			
Dating/cohabiting	1.04	0.02		[−0.02, −0.07]	0.76	−1.67	−0.05	[−0.09, 0.00]
Family context								
One child	ref				ref			
Higher-order birth	1.37	2.76	0.01	[−0.02, −0.04]	1.77	5.17	0.07	[0.04, 0.10]
Time around first birth (TVC)[a]								
−12 to −2 months	0.04	−22.67	−0.20	[−0.22, −0.18]	0.06	−28.67	−0.29	[−0.31, −0.27]
+4 to +12 months	ref				ref			
+13 to +24 months	1.26	6.17	0.03	[0.02, 0.04]	1.14	4.09	0.01	[0.00, 0.02]
+25 to +48 months	1.42	4.13	0.05	[0.02, 0.08]	1.12	1.49	0.00	[−0.03, 0.02]
Per cent unemployed of labour force (yearly)[a]	1.01	0.15	0.00	[−0.01, 0.01]	1.04	1.25	0.01	[0.00, 0.02]

N months	76,050
N women	1,468
Log-pseudolikelihood	−60,205
Pseudo R-squared	0.24

Note: RRR = relative risk ratio (Exp(b)); AME = average marginal effect.

[a] Covariates marked TVC (time-varying covariate) can vary over analysis time.

Table 3. Main effects of occupational mobility; Wald test of interaction effects by period of birth and eligibility for leave on probability of reduction in work hour. Logistic regression, reference outcome: no change compared with birth to 12 months

	Reduction in work hours			
	OR	B/SE	AME	95% CI
Occupational status change				
No (TVC)[a]	*ref*			
Downward	5.16	6.64	0.24	[0.17, 0.32]
Upward	2.49	3.51	0.14	[0.06, 0.21]
Employer change				
No (TVC)[a]	*ref*			
Yes	3.59	5.32	0.19	[0.12, 0.26]
Controlled for other variables[b]	*yes*			
Wald test of interaction effects				
Downward change * Eligible for leave	Chi^2(1) = 3.57		†	
Upward change * Eligible for leave	Chi^2(1) = 1.00			
Employer change * Eligible for leave	Chi^2(1) = 1.35			
Downward change * 1986–1991	Chi^2(1) = 1.40			See Figure 2
Downward change * 1991–1995	Chi^2(1) = 3.50		†	See Figure 2
Downward change * 1996–2000	Chi^2(1) = 5.11		*	See Figure 2
Downward change * 2001–2008	Chi^2(1) = 2.11			See Figure 2
Downward change * period of 1st birth	Chi^2(4) = 6.68			
Upward change * 1986–1991	Chi^2(1) = 0.01			
Upward change * 1991–1995	Chi^2(1) = 0.15			
Upward change * 1996–2000	Chi^2(1) = 0.54			
Upward change * 2001–2008	Chi^2(1) = 1.92			
Upward change * Period of 1st birth	Chi^2(4) = 2.52			
Employer change * 1986–1991	Chi^2(1) = 3.50		†	See Figure 3
Employer change * 1991–1995	Chi^2(1) = 4.90		*	See Figure 3
Employer change * 1996–2000	Chi^2(1) = 4.24		*	See Figure 3
Employer change * 2001–2008	Chi^2(1) = 4.52		*	See Figure 3
Employer change * Period of 1st birth	Chi^2(4) = 5.39			

Note: †$P < 0.1$; *$P < 0.05$, **$P < 0.01$.

OR = odds ratio (Exp(b)); AME = average marginal effect.

[a]Covariates marked TVC vary over analysis time.

[b]See Table 2 for covariates.

Historical Change and Parental Leave (Hypothesis 1)

Our first hypothesis stated that eligibility for parental leave decreased new mothers' probability to exit the labour market and increased the probability to reduce the number of work hours. Table 2 presents the main effect of eligibility controlled for the period of first childbirth and human capital characteristics. The results show that women who were eligible for parental leave had on average an 8 per cent lower probability of leaving their job. The results show no effect on a reduction of hours. This main effect of eligibility compares all women who are not eligible (i.e. also in the period before parental leave was introduced) with the eligible women from 1990 onwards. To examine the differences between eligible and ineligible women within periods, an interaction between eligibility for leave and period of first childbirth was constructed. The results are presented in Figure 1 (see Appendix C for coefficients), which shows the predicted probability of each outcome

Table 4. Effect of couples' relative resources on labour market transitions around first childbirth, and Wald test of interaction effects by period of birth and eligibility for leave

	Reduction in work hours				Exit from labour market			
	RRR	B/SE	AME	95% CI	RRR	B/SE	AME	95% CI
Relative resources								
Man > woman	*ref*				*ref*			
Woman ≥ Man	0.63	−3.38	−0.04	[−0.08, −0.01]	0.70	−2.61	−0.03	[−0.06, 0.01]
Controlled for other variables[b]	Yes				Yes			
Wald test of interaction effects								
Woman ≥ Man * 1986–1991	$Chi^2(1) = 0.01$				$Chi^2(1) = 0.01$			
Woman ≥ Man * 1991–1995	$Chi^2(1) = 0.71$				$Chi^2(1) = 0.43$			
Woman ≥ Man * 1996–2000	$Chi^2(1) = 0.14$				$Chi^2(1) = 0.14$			
Woman ≥ Man * 2001–2008	$Chi^2(1) = 0.03$				$Chi^2(1) = 0.22$			
Woman ≥ Man * Period of 1st birth	$Chi^2(4) = 2.21$				$Chi^2(4) = 2.06$			
Woman ≥ Man * Eligible for leave	$Chi^2(1) = 0.00$				$Chi^2(4) = 0.20$			

Note: $^\dagger P < 0.1$; $^* P < 0.05$, $^{**}P < 0.01$.

RRR = relative risk ratio (Exp(b)); AME = average marginal effect.

[a]See Table 2 for covariates, occupational status was excluded from relative resource model.

Multinomial logistic regression, reference outcome: no change compared with birth to 12 months.
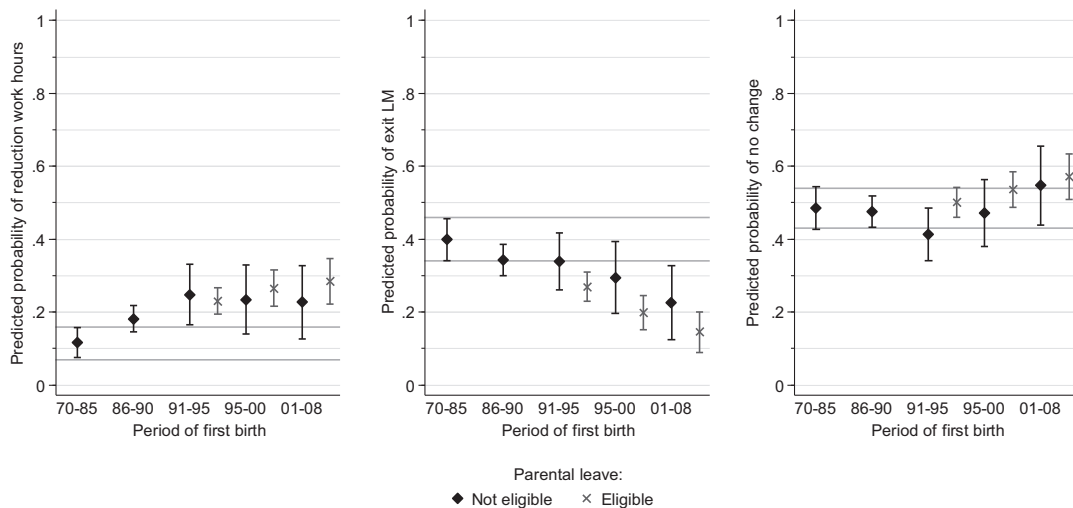
Figure 1. Average predicted probability of all labour market transitions by period of first childbirth with 95 per cent CI.

Note: Reference lines indicate 95 per cent confidence interval (CI) of average predicted probability for the period 1970–1985.

by the time period of the first birth interacted with eligibility for parental leave. We find a substantial overall decrease in the probability to exit the labour market after the first birth (centre panel) and correspondingly an increase in the likelihood that women switch to part-time (left panel) or continue to work the same number of hours (right panel). For none of the outcomes can we

observe that women who were eligible for parental leave were significantly more likely to experience a certain transition compared with their non-eligible peers within the same period, as indicated by the overlapping confidence intervals. When compared with women who gave birth to their first child between 1970 and 1990 (before the introduction of parental leave), women eligible for
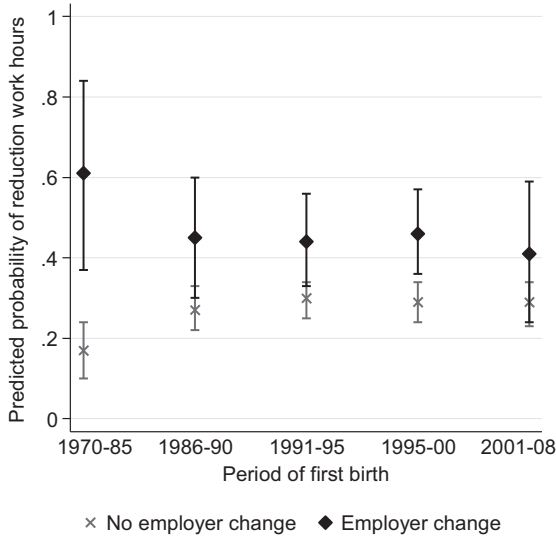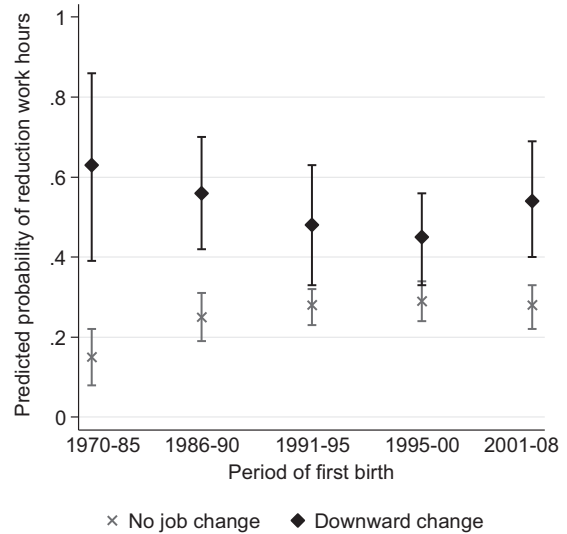
Figure 2. Average predicted probability of reducing work hours by change of employer and period of first birth with 95 per cent CI.

Figure 3. Average predicted probability of reducing work hours by downward occupational status change and period of first birth with 95 per cent CI.

parental leave were however less likely to exit the labour market and more likely to reduce their working hours. This difference is not found for non-eligible women. The relatively high and stable proportion of women (about 50 per cent) who continue to work the same number of hours (the reference category in all models and right panel of Figure 1) is remarkable. This may be because of the fact that the average number of hours Dutch women work before they become mothers is relatively low and has not increased over time. In our analytical sample of women who worked at least 16 h, 1 year before they gave birth to their first child, the average number of work hours was 37 among women who gave birth between 1970 and 1985 and decreased to 34 for the most recent period (2001–2008).

Job Continuity (Hypothesis 2)

In our second hypothesis, we expected that for women who reduce work hours, job continuity with regard to job level and employer should increase over time and be higher for those eligible for parental leave. Concerning the association of part-time work with employer change, we find that, in general, the probability of a work hour reduction was significantly elevated among women who experienced such a change (19 per cent more likely to reduce hours). Also with regard to occupational mobility, we find that women who changed job level were more likely to reduce their hours (24 and 14 per cent more likely, see Table 3). We can thus clearly observe a strong association between a working hour reduction and lower job continuity among new mothers. As the Wald tests in Table 3 indicate, this is

influenced by the institutional context (Hypothesis 2a), as the effect of employer change on a reduction in work hours did change over time, but not by eligibility for leave (full results available on request). The results of the interaction between a change of employer and the period of the first birth are shown in Figure 2. The probability that a working hour reduction was associated with an employer change decreased sharply between 1970 and 1985 but has stayed relatively stable since. Regarding Hypothesis 2b concerning downward occupational mobility, we find the expected decrease in the association with a work hour reduction over time and by eligibility. The relevant results of the interaction between occupational downgrading and the period of first birth are presented in Figure 3, which shows the average predicted probability of a work hour reduction over time for those who have moved down the job ladder and (for comparison) those who stayed in their pre-birth job. In the period 1991–2001, the probability of a reduction in work hours among those who experienced a decrease in occupational status was on average 15 per cent lower compared with the period 1970–1985 and did not differ between downgraded and stable women. In the most recent period however, the association between a working hour reduction and a downward job move was again comparable with the period 1970–1990.

In line with our hypothesis, we also find the association between a downward occupational move and a reduction in work hours to be weaker among women eligible for parental leave when compared with those who were not eligible. The difference in the probability of a

work hour reduction between eligible and ineligible women among those who experienced a decrease in occupational status was on average 14 per cent.

The Sex-specific Division of Work (Hypothesis 3)

In our third and final hypothesis, we expected that over time and for those eligible for leave, the division of paid work would be less driven by the male breadwinner model and more by the actual occupational resources of women. In Hypothesis 3, we expected that when the woman's occupational status was at least as high as her partner's, the probability of reducing her work commitment should have become smaller over time and among those eligible for parental leave. Our results do not support this expectation. Table 4 presents the main effect of the relative status measure and shows a smaller overall probability to reduce the work hours (4 per cent lower) and exit the labour market (3 per cent lower) compared with male-breadwinner couples. This effect is small and, contrary to our expectation, it did not become stronger over time when the institutional environment became more favourable towards working mothers (see Wald tests of interaction terms in Table 4; full results available on request).

Control Variables

With regard to the control variables related to women's individual- and family-level factors (see Table 2), we find that women with high education, more labour force experience, a public sector job, and higher occupational status before the first birth were less likely to exit the labour market. With regard to a reduction in working hours, the effects of the individual-level human capital indicators were less clear. Compared with women in the highest educational group, women with upper secondary or vocational education were more likely to reduce their working hours. No differences between the lowest educational groups and the highest educated were found. Women in jobs with higher occupational status were less likely to reduce their work hours. Labour force experience did not predict a reduction in work hours. Furthermore, the results showed that women who worked less than full-time before the first birth were much less likely to exit the labour market compared with women who worked full time ($\geq$35 h). Relationship status did not have an effect on women's labour market transitions and neither did the work status of the male partner. The occupational status of the male partner has no effect on mothers exiting the labour market, but we see a slightly higher probability to reduce the number of working hours the higher the male partner's status. However, the effect is small, as it amounts to an approximately 2 per cent increase in the

probability to work less hours for a 15 point increase (1 SD) in occupational status. Women who became pregnant with another child were more likely to lower their work hours or stop working completely. Differences in the probability to reduce labour supply over the 5 years around the first birth were most visible when comparing the time before and after birth. The probability to work less hours or exit was on average 20 per cent, respectively, 29 per cent lower before the first birth compared with 6 months after the first child was born but stayed relatively constant thereafter (see Table 2). The unemployment rate did not affect women's employment transitions.

Conclusion

This study aimed first at gaining more insight into how new mothers' employment transitions in the Netherlands have changed over time and after the introduction of parental leave. Second, we wanted to know whether policies strengthening the rights of part-time workers and working parents increased the job continuity of new mothers. Third, we assessed in how far sex-specific household strategies of dividing paid work have been affected by these developments. Our aims were motivated by the theoretical expectation that family policies have increased the opportunities for new mothers to reach a good work–family fit. The empirical results showed that leaving employment after the first birth has become less common in the Netherlands and that over time the probability that new mothers reduced their working hours increased substantially. This trend has been facilitated by three related policy developments: the introduction of part-time parental leave (reducing the exit probability), the strong growth in part-time jobs, and concurrent improvements in the labour market position of part-time workers (increasing the probability of a work hour reduction). Contrary to our expectation, we did not find the association between a reduction in work hours and employer change to weaken in the 1990s or with the introduction of parental leave. This result, however, appears to be in line with previous research, which has found that among the general Dutch working population, the right to adjust the number of working hours has not contributed to a higher probability to adjust the number of working hours in the present job (Fouarge and Baaijens, 2009). The likelihood that a reduction in working hours was associated with occupational downgrading decreased in the 1990s and more so among women eligible for parental leave. Contrary to our expectation, the association between occupational downgrading and working fewer hours increased again substantially in the 2000s. When we relate this result to

recent developments in the Dutch labour market, namely strong increases in temporary contracts and related forms of flexibilization, particularly common among (re-entering) women, young people, and minorities, a rather troublesome picture emerges: potentially, the Dutch part-time 'culture' might present a pitfall for vulnerable groups in the labour market, which are increasingly sorted into precarious and volatile careers and instable employment relations. These persisting or even growing career instabilities resulting from the switch to part-time work point to the role of employers in enabling women to make use of the policies in place.

Besides diverse individual-level indicators of human capital of the female respondents, we also included information about the male partner in our analysis and tested in how far the division of labour has changed over time. We found only weak effects of the male partner's job status, contradicting our expectation that the relatively conservative Dutch context would favour a sex-specific division of labour. Rather, Dutch couples appear to react 'rationally' to resource differences in the household, as we found that women in couples in which their occupational status was at least as high as their partners to be less likely to reduce their labour supply. We expected this resource-based strategy to become more prevalent over time, because of the more supportive institutional environment, but this was not confirmed by the empirical results.

Our findings may, of course, be constricted by limitations in our data. Our data source, even though suitable for this study in many respects, did not allow for registering small changes in women's labour supply in terms of hours (changes of <8 h) and duration (episodes of <3 months) and also did not explicitly contain information on periods of maternity leave. We could solve the latter problem by excluding the period of statutory maternity leave from our models. We could, however, not change the fact that we were only able to observe relatively large adjustments in women's employment. In this sense, a data source with more precise information might enable future researchers to observe more subtle changes, which may follow a different pattern. Related to this is the potential limitation formed by our conservative estimate of parental leave eligibility. Because respondents were not directly asked whether they were eligible for parental leave, we constructed the indicator based on eligibility criteria and the labour market position before the first pregnancy, which potentially underestimates eligibility in some cases. We nevertheless believe that this constructed measure of eligibility is useful and goes beyond a measure of the policy period based on the calendar year of childbirth, which we also included in our models.

In addition to the limitations discussed with regard to the empirical part of the study, the fact that we only look at one particular country might be regarded as a potential limitation. The question that arises in this context is in how far the Dutch example, or any single country for that matter, presents a typical or generalizable case for the area studied. The Netherlands are without doubt at the extreme end of the country distribution when the growth in female employment over the past decades and proportion of mothers working part-time is concerned. Both developments are, however, by no means unique to the Dutch context but comparable with, for instance, the United Kingdom, Germany, and Sweden. The same is true for policies adopted, such as the right to a work hour reduction, as comparable policies also exist in the United Kingdom, France, and Germany (Hegewisch, 2009). We have argued that the Netherlands represent a least likely case for the success of unpaid leave policies in a historically conservative setting. Our finding that these low-cost work-centred policies strengthened new mothers' labour force attachment should be informative to scholars and policymakers in other countries. Some liberal and post-socialist welfare regimes currently face the challenge of granting more time and flexibility to new parents, without intervening too strongly in market processes and the daily organization of work and care. While it goes without saying that specific policies cannot simply be transferred from one setting to another, the Dutch minimum standard of family policy shows that policies do not need to be invasive or expensive to efficiently increase the range of options for young families.

Notes

1. Of course, theoretically, women could increase the number of working hours after the birth of their first child, but this is theoretically improbable and empirically hardly ever observed.

2. Between 2003 and 2009, 10–15 per cent of agreements (covering 15–23 per cent of Dutch employees) contained some form of income compensation during parental leave (Beeksma and Junger-van Hoorn, 2010), usually in the (semi)public sector. Whether parental leave is paid or unpaid is strongly related to take-up: in the period 2006–2010, 66 per cent of workers eligible for paid leave took up some leave, whereas the corresponding figure among employees with unpaid leave was 21 per cent (Van der Mooren and Souren, 2010).

3. We limit the sample to women working at least 16 h (or 2 days) per week to avoid ceiling effects when a reduction of working hours is concerned

because the smallest reduction possible is 8 h (or 1 day). This restriction excludes 81 women from our analysis in which the female partner worked 1–15 h/week, 1 year before the first child is born.

4 The threshold of 8 h is chosen because changes in the number of working hours with the same employer were only recorded if the change concerned ≥ 8 h. Women who increase their working hours (2.4 per cent of the worked months) were coded as 'no change'. Results are robust to excluding these months.

5 Results were completely robust to including these months; these are available on request

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Appendix

Appendix A. Distribution of categorical variables over analysis time and individuals

Categorical Measures	N Months	%	N women	%
Employment transitions (TVC)				
No change	37,748	49.6	n.a.	n.a.
Reduction of hours	16,007	21.1	n.a.	n.a.
Exit Labour market	22,295	29.3	n.a.	n.a.
Time around first birth (TVC)				
−12 to −2 months	16,087	21.2	n.a.	n.a.
+4 to + 12 months	12,865	16.9	n.a.	n.a.
+13 to + 24 months	16,473	21.7	n.a.	n.a.
+25 to + 48 months	30,625	40.3	n.a.	n.a.
Period of childbirth				
1970–1985	12,750	16.8	228	15.6
1986–1990	17,797	23.4	317	21.7
1991–1995	18,401	24.2	330	22.6
1996–20.00	16,976	22.3	350	23.9
2001–2010	10,126	13.3	237	16.2
Eligibility parental leave				
No	39,474	51.9	737	50.4
Yes	36,576	48.1	725	49.6
Sector before birth				
Private	49,535	65.1	954	65.3
(semi)Public	26,515	34.9	508	34.8

(continued)

Appendix A. Continued

Categorical Measures	N Months	%	N women	%
Educational attainment (TVC)				
Lower Secondary	3,872	5.1	68	4.7
Short upper sec./ -vocational	25,772	33.9	482	33.0
Upper sec./ -vocational	25,944	34.1	512	35.0
Higher professional/tertiary	20,462	26.9	400	27.4
Work hours before birth				
16–20 h/week	7,756	10.2	149	10.2
21–35 h/week	18,702	24.6	371	25.4
>35 h/week	49,592	65.2	942	64.4
Male partner				
Not in paid work	11,421	15.0	235	16.1
In paid work	64,629	85.0	1,227	83.9
Male partner				
No information	10,963	14.4	200	13.7
Present	65,087	85.6	1,262	86.3
Relationship status				
Dating / cohabiting	18,350	24.1	555	38.0
Married	57,700	75.9	907	62.0
Family structure (TVC)				
Only one child	55,371	72.8	n.a.	n.a.
Higher order birth	20,679	27.2	n.a.	n.a.
Relative resources (TVC)				
Woman ≥ Man	49,784	65.5	n.a.	n.a.
Man > Woman	26,266	34.5	n.a.	n.a.
Total	76,050	100.0	1,462	100.0
Occupational status change (only months in employment)				
No change	45,355	84.4	n.a.	n.a.
Downward	4,305	8.0	n.a.	n.a.
Upward	4,095	7.6	n.a.	n.a.
Change of employer (only months in employment)				
No	70,659	92.91	n.a.	n.a.
Yes	5,391	7.09	n.a.	n.a.
Total	76,050	100.0		

Note: n.a. = not applicable because variable varies over analysis time.

TVC= time-varying covariate.

Appendix B. Distribution of continuous variables over analysis time and individuals

Continuous measures	N	Mean	Range	N	Mean	Range
Occupational status (ISEI) before birth	76,050	47.3 (14.3)	10–90	1,462	47.7 (14.4)	10–90
Labour force experience	76,050	8.2(3.9)	0.3–23.4	1,462	8.23	0.3–23.4
Male partner: occupational status (ISEI) (TVC) (working only)	59,082	49.1 (14.9)	16–88	1,135	48.7 (14.9)	16–88
Per cent unemployed of labour force (yearly)	76,050	5.8 (2.5)	1.8–10.6	1,462	6.1 (2.5)	1.8–10.6

Appendix C. Estimates of interaction effect between period of first childbirth and eligibility for parental leave; results of multinomial logistic regression of labour market transitions around first childbirth, reference outcome: no change compared with birth to 12 months

Eligible for leave?	Period of first birth:	Reduction work hours				Exit labour market			
		RRR	B/SE	AAP	95% CI	RRR	B/SE	AAP	95% CI
No	1970–1985	*ref*		0.12	[0.07–0.16]	*ref*		0.40	[0.34–0.46]
No	1986–1990	1.67	1.91	0.18	[0.14–0.22]	0.88	−0.66	0.34	[0.30–0.39]
No	1991–1995	3.00	2.79	0.25	[0.16–0.33]	1.11	0.35	0.34	[0.26–0.42]
No	1996–2000	2.22	1.78	0.23	[0.14–0.33]	0.75	−0.75	0.29	[0.20–0.39]
No	2001–2008	1.65	1.07	0.23	[0.13–0.33]	0.43	−1.95	0.23	[0.12–0.33]
Yes	1991–1995	1.97	2.37	0.23	[0.19–0.27]	0.61	−2.12	0.27	[0.23–0.31]
Yes	1996–2000	2.03	2.12	0.27	[0.22–0.31]	0.39	−3.30	0.20	[0.15–0.25]
Yes	2001–2008	1.96	1.91	0.28	[0.22–0.35]	0.25	−4.03	0.14	[0.09–0.20]
Controlled for other variables[a]		*yes*				*yes*			

Note: RRR = relative risk ratio (Exp(b)); AAP = average adjusted prediction.

[a]See Table 2 for covariates.