

Family-friendly working conditions and childbearing: A capability approach to fertility behaviour among young adult women in Sweden

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Work in progress!

Abstract

Previous studies have shown that working conditions, in terms of unsocial work hours, overtime and flexibility, influence men's and women's work-family conflict; however, the relationship between working conditions and childbearing have rarely been studied. This study addresses the impact of family-friendly working conditions and individual resources, on young adult women's capabilities to have children in Sweden, and whether these factors have different impact on childless women's and mothers' childbearing behaviour. The conceptual framework is inspired by the Capability Approach, which can deepen our understanding of how institutional context, work-place practices, and individual life situation shape women's capabilities to have children. Analysing data extracted from the Swedish panel survey YAPS, the study finds that especially the transition to the second child is associated with family-friendly working condition, while the partner's family-friendly working condition is associated with the transition to the first and the second births. The analyses also reveal that family-friendly working condition is most salient for the less educated and low income childless women's transition to motherhood, and for the lowly educated mother's second birth.

Introduction

Demographic changes, in terms of an ageing population and a decreased working population, are a major challenge in the EU. Furthermore, difficulties combining work and family life, partly caused by a shortage of childcare and inadequately flexible working conditions, are seen as main contributors to postponement of childbearing and low fertility rates in several member states (European Commission 2005). The new liberal economy puts constraints on workers regarding efficiency and availability at all hours, which makes it difficult to combine the role as workers and carers, especially for women. Hence, work schedule and flexibility has become an important factor regarding work–life balance (Fagan 2004), imprinted in EU-documents (see European Commission 2005; 2008).

A number of excellent studies have addressed the association between family policies and fertility (see Andersson et al. 2006; Björklund 2006; Chesnais 1996; Hoem 1993; Neyer and Andersson 2008), as well as the micro-level relationship between female labour force participation and childbearing (see Matysiak and Vignoli 2007; Bernhardt 1993; Brewster and Rindfuss 2000; Santow and Bracher 2001). Matysiak and Vignoli (2007) concludes that the micro-level relationship between women's work and fertility is closely related to institutional settings, and highlight the need for knowledge regarding the relationship between working conditions and childbearing, i.e. to what extent these conditions are associated with women's capabilities to have children. The relationship between women's employment and fertility has been widely recognised, but the relationship between work place practices and childbearing is less studied. However, previous studies have shown that long, irregular and unsocial work hours influence people's perceived work–family conflict (see Gallie and Russel 2009; McGinnity and Calvert 2009; Voydanoff 2005). It is therefore relevant to explore if these factors influence also childbearing behaviour. This article focuses on the relationship between young adult women's childbearing, in Sweden, considering (1) working conditions, and (2) individual resources. The issues addressed are; *to what extent are women's childbearing behaviour associated with family-friendly working conditions, and individual resources (education and income). Do these factors have different impact on childless women's and mother's childbearing behaviour.* The analytical framework applied to this study is inspired by Amartya Sen's *Capability Approach* (1992; 1993; 2006), an approach suitable for studying working women's capabilities to have children, which might be linked to structural obstacles in terms work-family reconciliation policies and workplace implementations and practices. The first section of this article presents the Swedish institutional context, followed by an outline of the *Capability Approach* and the rationale for applying this framework to the issue of childbearing. The second section discusses variations in flexibility and family-friendly working conditions. The third section presents the data, the method, and the results from the analyses. The article concludes with a discussion of the results and their implication for future research.

The Swedish context

In a European perspective, Sweden has rather high fertility rates and one of the highest female labour force participation rates in EU. In 2008 the total fertility rate (TFR) was 1.91 compared to EU27 average at 1.60 (Eurostat 2010). The Swedish female labour force has been among the highest in Europe since the late 1970s (OECD 2011a), with about 84 percent of women aged 25-49 years in employment in 2008, compared to an EU27-average of 73 percent (Eurostat 2011). Even mothers display high labour force participation. In 2008, about 72 percent of mothers with a child younger than three years, and about 81 percent of those with a child aged 3-5 years were in paid work in Sweden, compared the EU27 average of 53 percent and 64 percent respectively (OECD 2010).

In Sweden family-friendliness and gender equality are basic principles. Family-friendliness is built around the principles of reconciling employment with caring for children for mothers

and fathers. The family policies (parental leave program, earmarked paternity leave, subsidised public childcare and parents' legal right to work part-time when returning from the parental leave and during the pre-school years) support the dual-earner family model (Korpi 2000; Montanari 2003; Oláh and Bernhardt 2008). However, the entitlement to parental leave benefits is closely linked to previous employment and the level of earnings, which indicate that employment is a precondition for having children to receive a sufficient income related leave benefit (Fahlén and Oláh *forthcoming*).¹ The leave system also promote closer spacing of the children, a so called "speed-premium". Since 1986, a parent is entitled to the same level of benefit, without returning to work between births, for an additional child as for the previous one if the interval between the two births does not exceed 30 months (Hoem 1993).² Furthermore, previous Swedish studies also have revealed that a woman's labour force attachment and income are positively correlated with the timing of motherhood (Andersson 2000; Andersson and Scott 2005; Duvander and Olsson 2001). A consequence of the carer-earner policies is high levels of full-time or long part-time working mothers; hence workplace practices may play an important role in shaping women's capabilities to reconcile work and family life. It is therefore relevant to explore the linkage between family-friendly working conditions and women's capabilities to have children in Sweden. The dual-earner family model is well established in Sweden, as well as in other parts of the developed world. This poses new challenges in our understanding of women's fertility behaviours, which goes beyond the institutional level in terms of work-family reconciliation policies.

The capability approach and childbearing

The *Capability Approach*, developed by Amartya Sen (see 1992; 1993; 2006) is a framework of thought for evaluating disparities in capabilities related to well-being (Robeyns 2003). It provides a multi-layered perspective that helps us to understand how the individual life situation, institutional and societal settings shape people's capabilities to realise valuable activities, to have children in this case, across and within different contexts (Hobson and Oláh 2006; Hobson and Fahlén 2009). The approach focuses on people's capabilities to achieve, and therefore diverge from utility or resource based approaches, which either regard achievements as utility-driven overlooking people's real freedom to achieve (Sen 1992), or the distribution of resources disregarding that people can vary in their capabilities to translate resources into achievements (Robeyns 2003). The distinction between *functionings* and *capabilities* are central components in research applying the approach (e.g. Anand et al. 2005; Bonvin and Farvaque 2006). *Functioning* is an achievement, while *capabilities* can be defined as people's *ability* to achieve (Robeyns 2003).

In this study childbearing is regarded as a valued functioning, given the fact that the vast majority want to have children and that intentional childlessness is a preferred ideal by a very small proportion of women in Europe (Fahey and Spéder 2004; Testa 2006³). Workplace practices, reflected in women's own and their partner's family-friendly working conditions, are can influence women's capabilities to be both earners and carers. What people are actually doing, in terms of their working conditions, do not always reflect what they would like to do if other options were available. Lee and McCann (2006) apply the Capability Approach to this issue and investigate the discrepancy between men's and women's actual work hours and preferred work hours (accounting for income implications of adjusted hours). They argue that

¹ The parental leave system currently provides a total of 480 leave days of which 390 days at a replacement level of approximately 80 percent of previous earnings. The additional 90 days are paid at a minimum level-benefit of 180 SEK (about 20€). A parent with no prior employment receives a flat-rate payment of 180 SEK (Försäkringskassan 2008; Moss 2009).

² The "speed-premium" was introduced 1980 with an interval between two births of 24 months which was extended to 30 months in 1986 (Hoem 1993).

³ The special Eurobarometer 65.1 conducted in 2006 reveals that 4 percent of women aged 15-39 within EU25 wants to remain childless and 11 percent have one child as the ideal family size, and the corresponding proportion for Sweden is 1 percent and 4 percent (Testa 2006).

this discrepancy reflects people's substantive freedom to adopt different working patterns (*working time capabilities*), and that people's working time capabilities are constrained by individual factors (such as income and gender), social norms and workplace practices (Lee and McCann 2006). Workplace practices and policies influence employees' ability to adjust their working arrangement to reconcile work and non-work life, or to utilise institutionally regulated work-family reconciliation policies (Den Dulk et al. 2011), i.e. working condition may therefore influence women's capabilities to start a family or to have additional children (besides biological constraints), in terms of the timing of childbearing. People's working conditions are shaped at different levels; at the institutional policy level (laws and regulations), implemented to various degree by employers at the workplace level (Fagan and Walthery 2011), suggesting that the laws and regulations may not always be translated into practices. For instance, the Swedish Discrimination Act (2008:567) states that an employer should help enable both female and male employees to combine employment and parenthood. To what extent this is implemented depends on its interpretation at the workplace organisational level. Furthermore, the law only applies to parents and not to those who have not entered parenthood. Nevertheless, institutional settings and working conditions coupled with individual resources may generate capabilities to combine work and family life (see Hobson et al. 2011; Drobnič and Gullién 2011), and achieve a valued functioning such as having children.

Educational attainment and economic situation constitute individual resources. From a capability perspective, resources are mainly means to achieve which do not automatically translate into capabilities to achieve (Robeyns 2003). Education not only reflects human capital but also a woman's prospects at the labour market; economic returns, employability, career opportunities, and risk of unemployment. However, economic theories on fertility assume that educational attainment, income and employment affect women's opportunity costs, that is decreased earning as a result of reduced work when having children, and forgone future earnings and job prospects which is negatively affected by career interruptions (DiPrete et al. 2003; Engelhardt and Prskawetz 2004). Consequently, highly educated women are anticipated to have lower fertility as a result of postponed childbearing. However, public policies can reduce the opportunity costs of having children, through relatively generous parental leave benefits and highly subsidised childcare services, as in Sweden, which increase women's capabilities to combine work and family life even when the children are relatively young (Oláh 2003). Oláh (2003) states that these policies may be even more gainful for the highly educated and those with higher income, due to income related leave benefits, and that more educated women may have easier access to public childcare as they often have more flexible working arrangement and less often work during unsocial work hours than are less educated women. Therefore, Oláh (2003) argues, the highly educated do not necessarily have to reduce their childbearing aspiration in Sweden. Educational attainment and economic resources increase one's capabilities to make claims for work-life balance (Hobson et al. 2011). For those with less individual resources, institutional and structural resources (laws and regulations) might enhance their capabilities to make such claims (Hobson et al. 2011), and to realise their potential childbearing aspiration. Differences in individual resources may therefore be relevant factors when studying the association between working conditions and fertility behaviour. Figure 1 shows the conceptual framework for analysing working conditions and childbearing:

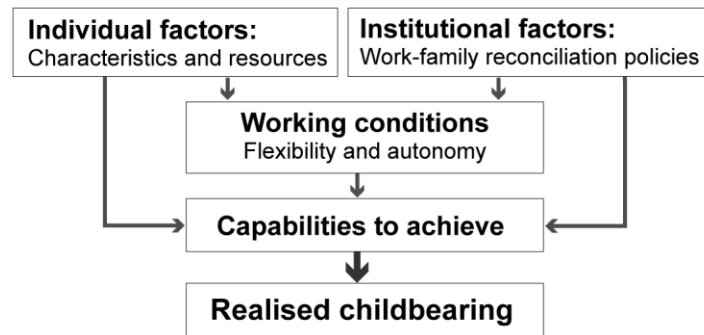


Figure 1: Conceptual framework for studying working conditions and childbearing in a capability perspective.

Note: The conceptual model builds upon Hobson and Fahlén (2009) and Hobson et al. (2011) and their application of the capability approach on parent's work-life balance.

The three components, *individual factors* (characteristics, human capital and resources), *institutional factors* (e.g. work-family reconciliation policies) and *working conditions* (flexibility and autonomy) are assumed to shape women's capabilities to have children. Institutional factors can increase women's capabilities to be both earners and carers and diminish the risks and costs of children (Hobson and Oláh 2006). Individual factors, especially educational attainment, influence a woman's prospects at the labour market and economic returns; resources which can be converted into capabilities. Working conditions can shape women's capabilities to have children, as flexibility and autonomy can increase women's ability to combine work and family life, whereas a lack of such working conditions can make such balancing act more difficult. In addition, family-unfriendly workplace practices can also affect women's sense of entitlement to make claims for work-life balance at the workplace (Hobson et al. 2011). The main dimensions of interest in this study of young adult women's childbearing are the interplay of individual resources and family-friendly working conditions.

Varieties of flexibility and family-friendly working conditions

The tension between family and professional life has received considerable attention at the EU level. European Commission (2005) states that this tension is partly due to insufficient flexible working condition and a lack of childcare, which contribute to a postponement of childbirth and low fertility. Furthermore, social partners play a crucial role in promoting flexible work arrangement to enable work-family reconciliation for men and woman (European Commission 2005). However, companies' need for flexibility to increase productivity does not always coincide with employees' needs for family-friendly working conditions. Flexibility can therefore be divided into *unstructured flexibility*, *structured flexibility* and *autonomous flexibility* (Purcell et al. 1999; Fagan 2004). With *unstructured flexibility* the employee has virtually no control over the working schedule, such as extra hours or overtime allocated according to productive needs of the company (Purcell et al. 1999; Fagan 2004). These conditions affect people's social life, their ability to participate in family activities and fulfil home responsibilities, and increases work-family conflict (e.g. Van der Lippe et al. 2006; Voydanoff 2005). Unstructured flexibility can thus be seen as relatively family-unfriendly. Regular but non-standard work schedule, such work during evenings, nights or weekends, can be defined as *structured flexibility*. The employee has more control over such working arrangements, as it is predictable and regular (Purcell et al. 1999; Fagan 2004). Non-standard work hours can be an alternative strategy for work-family reconciliation, as parents, or other family members, can take care of the children in shifts. This arrangement may be more prevalent in societies with a scarcity of childcare facilities (Fagan and Burcell 2002). Nevertheless, non-standard work hours not only interfere with personal and family life and increases work-family conflict (e.g. Gallie and Russel 2009; McGinnity and Calvert 2009; Voydanoff 2005); they are also associated with health problems

and can reduce women's ability to reproduce (Smith et al. 2003). This suggests that structured flexibility is relatively family-unfriendly as it might not be compatible with family life. Finally, *autonomous flexibility* refers to conditions in which the employee has the most control to adjust working times to his or hers needs; for instance formal flexi-time (Fagan 2004). Previous studies have shown that flexi-time decreases work–family conflict (Hill et al. 2001), and Gallie and Russel (2009) and McGinnity and Calvert (2009) found this to be especially true for women. This suggests that flexi-time is a family-friendly working condition.

These variations of flexibility; unstructured, structural and lack of autonomous flexibility may shape women's capabilities to have children, as family-friendly working conditions can increase women's ability to combine work and family life, whereas a lack of such working conditions can make such balancing act more difficult and therefore obstruct women's capabilities to enter motherhood or to have additional children, as the freedom to choose alternative working pattern may be constrained by individual factors, social norms and workplace practices, as suggested by Lee and McCann (2006).

Expectations regarding working conditions and childbearing

In this study unstructured flexibility is operationalised as non-scheduled extra hours beyond the contracted hours (overtime); structural flexibility as work during evenings, nights and/or weekends, and a lack of autonomous flexibility is operationalised as the inability to adjust work situation to family life. The expectation is that; *women with family-friendly working conditions are more likely to enter motherhood, or have an additional child, than are women with family-unfriendly working conditions*. However, the partner's working arrangement might affect what the woman is able to do in terms of balancing work and family life, which in turn could have an impact on a couple's childbearing decision. It is therefore relevant to account for the potential impact on partner's family-friendly working conditions on the woman's timing of childbirth. The second assumption is: *Women whose partner has family-friendly working conditions are more likely to enter motherhood, or have an additional child, than women whose partner has family-unfriendly working conditions*. Educational attainment and income constitute a person's resources. As argued by Oláh (2003), strong support for working mothers can reduce the opportunity costs of children for women with more resources, hence high education and high income corresponds to strong means to achieve, or to have children in this case. Low educated and low income women may face greater difficulties reconciling work and family life because of economic uncertainties and weaker sense of entitlement to make claims for work–life balance, as suggested by Hobson et al. (2011). The third assumption reads: *low educated women or women with low relative income are less likely to enter motherhood, or have an additional child, than are highly educated women or women with high income*. However, Hobson et al. (2011) also suggest that women with less individual resources may be more dependent on institutional and structural support for work-family reconciliation. I therefore expect to find that *family-friendly working condition interact with individual resources*.

Data and method

The empirical analyses are based on data from the second wave of the Swedish panel survey on *Family and Working Life among Young Adults in the 21st century* (Young Adult Panel Study, YAPS), conducted in 2003. The YAPS is a mail questionnaire survey, augmented with register data on vital events including births, up to the 31st of December 2006.⁴ It is a nationally representative sample of men and women born in Sweden in 1968, 1972, 1976 and 1980. With an overall response rate of 70 percent it provides detailed information on family and working

⁴ For more information about the survey and the data, see http://www.suda.su.se/yaps/Index_en.html or <http://www.ssd.gu.se/?p=displayStudy&id=420&lang=en>.

life, plans, expectations and attitudes. In this study I focus on female respondents only, who have a partner. The working sample contains a total of 819 women, 48.1 percent of them are childless, 23.2 percent have one child, and 28.7 percent have two children. Number of events (child births) occurring during the observation period is 177 for childless women, 146 for one-child mothers, and 40 for two-child mothers.

The age distribution within each parity groups (i.e. number of children already born) is relatively uneven (Figure 1). For instance, women aged 34 years at the time of the survey represent a rather selective group among the childless women since the vast majority of women already have had their first child at that age. In the sample 13 percent of this age group was childless at the time of the survey, while 62.5 percent had two children. The opposite is true for the youngest age group. About 82 percent of the woman aged 22 years were childless, 14 percent had a first child, and nearly four percent had two children, at the time of the survey (Figure 1).

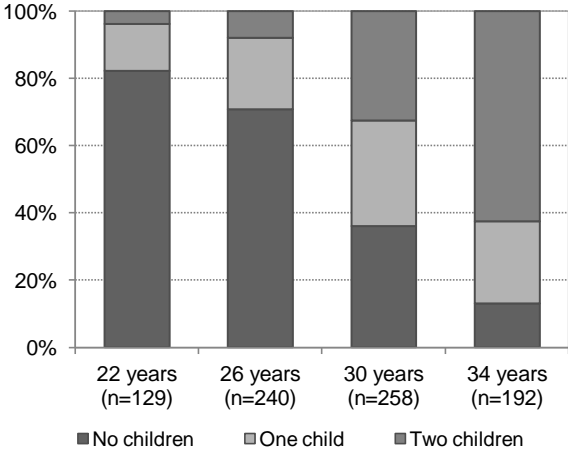


Figure 2: Number of children at the time of the survey by women's age (%).

Method

Focusing on women with a partner, I examine the association between family-friendly working conditions and childbearing for childless women, one-child mothers and two-child mothers. The tool of analysis is piece-wise constant hazard regression models computed, which can be described as an exponential hazard regression where the basic time variable is divided into predefined time periods, assuming that the hazard rate within each period is constant (see Guo 2010). To explore a potential interrelation between individual resources (education and income) and family-friendly working conditions, several interaction analyses are conducted. All results are presented in relative risks of giving birth to a child during the time of observation.

Variables

Childbearing (i.e. the birth of a child), is the event variable, based on register data on childbearing during the years after the survey (from inflow month of the responses in 2003 to 31st of December 2006). The variable is coded as 1 if an event (birth of a child) occurs during the observation period, and is right censored at the end of the observation period if an event does not occur. The baseline hazard for the childless women is women century month since 14th birthday. Women month prior to survey are left censored. The baseline hazard for one-child mothers is century month since birth of first child, and the baseline hazard for two-child mothers is century month since birth of second child. Months prior to the survey is left censored.

The main variables of interest are the woman's *family-friendly working conditions* (FFWC) and the *partner's family-friendly working conditions* (PFFWC). Both are time-constant variables measured at the time of the survey. To be able to capture more than one dimension of women's working conditions the FFWC is a summarised index including three items; overtime (hours exceeding contracted hours), non-standard work hours and work-family flexibility, based on whether the work involves: 1) *a lot of overtime work*, 2) *work at nights, in the evenings/and/or on weekends*, 3) *if the work provides good possibilities to adjust the work situation to family life*. Response alternatives are *applies completely*, *applies partially*, *doesn't apply at all*. After reversing the variables to match the same direction, a confirmative Principal Component Analysis was conducted extracting only one component explaining 52 percent of the variance. A scale analysis gave a Cronbach's alpha of 0.53, indicating a good scale consistency. To capture potential curvilinearity and to maximise the distance between the two extremes the index was divided into percentiles as close as possible to 25 percent, 50 percent and 75 percent of the total distribution: 1) low FFWC (reference category), 2) intermediate FFWC, and 3) high FFWC. A fourth category includes respondent who are in paid work but has not answered any of the items. The *partner's family-friendly working conditions* (PFFWC) are constructed in a similar way as FFWC; the survey questions had a similar design. This index is based on three items; if partner's work involves; 1) *overtime*, 2) *work at nights evenings and/or on weekends*, and 3) *if the job provides good possibilities to take parental leave and/or work part-time*. Response alternatives are the same as above. The Principal Component Analysis extracted only one component explaining 53 percent of the variance. The scale has a Cronbach's alpha of 0.54 indicating a good scale consistency. The index was divided in the same manner as FFWC (25 percent, 50 percent and 75 percent of the total distribution); 1) Low PFFWC (reference category), 2) Intermediate PFFWC, 3) High PFFWC. A fourth category includes "don't know" and missing answers. Additional time-constant variables, measured at the time of the survey, are included in the model. *Educational attainment* (primary level, secondary level, post-secondary level, and unknown). *Relative income*, i.e. categories based on the quartiles in the income distribution for the total sample (including the men) before taxes and transfers⁵: Low (0-25 percent), Medium (26-74 percent) and High (75-100 percent). *Age* is the basic time variable for childless women, but is time-fixed for mothers, measured at the time of the survey. A data limitation is that no information is available regarding changed in the respondent's life situation during the period of observation. People may change to a new workplace, break up with their partner, receive a wage raise or increase their education. However, given that the relatively short period of observation, plausible effects of these limitations are underestimations of the impact on childbearing.

Results

Descriptive statistics of the variables in the models display significant parity difference regarding the distribution of age, educational attainment and relative income, but no major difference regarding the woman's and her partner's family-friendly working condition (Table 1). The childless women tend to be younger and have higher educational attainment, compared to the mothers. Childless women have lower relative income than mothers. The majority of the women have rather family-friendly working conditions, however a slightly higher proportion of the childless women have less family-friendly working conditions compared to the mothers, while the two-child mothers tend to have the most family-friendly working conditions. This can be related to the fact that two-child mothers, who are in paid work, have already selected themselves into jobs that allow them to combine work and family life (Fagan and Rubery 1996; Grönlund 2007).

⁵ The rationale for using the income distribution in the whole sample is that income is related to the society as a whole. As women on average earn less than men, constructing a relative income variable on the women sample only would hide women's actual purchasing power.

Table 1: Descriptive statistics by parenthood status (%)

	<i>Childless women</i>	<i>One-child mothers</i>	<i>Two-child mothers</i>
Age at the time of the survey			
22 years	26.9	9.1	2.2
26 years	43.2	25.9	8.3
30 years	23.6	41.1	36.8
34 years	6.4	23.9	52.6
Education			
Primary level	7.9	21.3	28.5
Secondary level	39.6	39.6	30.3
Post secondary level	49.8	36.6	37.3
Unknown	2.8	2.5	-
Relative income			
Low income	28.2	7.6	4.4
Middle income	54.8	62.4	79.8
High income	17.0	30.0	15.8
Family-friendly working conditions			
Low family friendliness	14.7	12.7	11.0
Intermediate family friendliness	56.6	58.4	50.4
High family friendliness	28.4	28.4	36.4
DK/missing	0.3	0.5	2.2
Partner's family-friendly working conditions			
Low family friendliness	26.9	20.3	30.3
Intermediate family friendliness	37.3	40.6	35.5
High family friendliness	23.6	30.5	29.0
DK/missing	12.2	8.6	5.3
N	394	197	228

In regard to the partner's family-friendly working conditions, Table 1 shows that the majority have relatively family-friendly working conditions, and that family-unfriendly working conditions are more prevalent among the partners of two-child mother. This indicates that some men might face greater difficulties to make claims for work–life balance at the workplace and within the household, despite legal rights for work–family reconciliation also for fathers. For instance, if a two-child mother has exercised her right to reduce her work hours, it might be a necessity for her partner to work extra hours, or non-standard work schedule (with economic compensation for unsocial work hours) in order to contribute to the household income. Nevertheless, the descriptive statistics indicate that resources (education and income) and family-friendly working conditions vary within and across parity (children already born, if any).

Hazard regressions

Table 2 displays the result from the multivariate analysis. Accounting for potential interactions between parity and working conditions, separate piece-wise constant hazard regression models are computed for different parity, based on parenthood status at the time of the survey, and given the fact that the event of interest had not yet occurred. The result shows that family-friendly working conditions (FFWC) matter the most for one-child mothers' timing of further childbearing, i.e. that one-child mothers with family-unfriendly working conditions are less likely to have an additional child within the time of observation, while this have no statistically significant impact on childless women's transition to motherhood, or two-child mothers' likelihood of having a third child (Table 2). However, the gradient is positive even for the latter groups. This result suggests that especially one-child mothers' capability to combine work and family life, reflected in family-friendly working conditions, also affects their propensity to have an additional child. A similar pattern is found for the partner's family-friendly working conditions (PFFWC). One-child mothers with a partner with family-unfriendly working conditions are less likely to have a second child than one-child mothers with more family-

friendly working conditions. For childless women, having a partner with a high level of family-friendly working conditions increases the propensity to have a child, compared to those whose partner have family-unfriendly working conditions. This association is not significant for two-child mothers. This result suggests that the partner's working conditions are a relevant component in the family building process for childless women and one-child mothers.

Table 2: Relative risk of child birth for young adult women in Sweden. Separate piece-wise constant hazard models according to previous childbearing status.

	2:1 Childless women	2:2 One-child mothers	2:3 Two-child mothers
Family-friendly working conditions			
Low family friendliness	1	1	1
Intermediate family friendliness	1.20	2.02 *	1.08
High family friendliness	1.21	1.82 (*)	1.15
Partner's family-friendly working conditions			
Low family friendliness	1	1	1
Intermediate family friendliness	1.24	1.74 *	1.05
High family friendliness	1.50 (*)	1.67 *	0.77
Education			
Primary level	1	1	1
Secondary level	1.63	1.12	0.55
Post secondary level	1.67	1.83 *	2.73 *
Relative income			
Low income	1	1	1
Middle income	1.16	0.73	1.13
High income	1.60 (*)	1.81 (*)	2.15
Duration in age (since the survey)			
22-23	1		
24-25	1.41		
26-27	2.10 (*)		
28-29	2.11 (*)		
30-31	3.48 **		
32-33	2.59 *		
34-35	2.45 (*)		
36+	0.74		
Duration in child's months (since the survey)			
0-24 months (0-2 years)		1	1
25-36 months (2-3 years)		2.43 ***	3.42 ***
37-60 months (3-5 years)		2.16 *	1.64
61-84 months (5-8 years)		1.86	4.26 **
108+ months (8+ years)		0.81	1.12
Age at the time of the survey			
22 years		0.98	4.26 (*)
26 years		1	1
30 years		0.61 *	0.38 (*)
34 years		0.28 ***	0.10 ***
<i>N</i>	394	197	228
<i>Observations</i>	931	590	754
<i>Time at risk</i>	12697	10474	19344
<i>Df</i>	18	18	18
<i>LR chi2</i>	45.31 ***	77.81 ***	56.16 ***

*** $p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$, (*) $p \leq 0.1$

Note: relative risks for DK/missing categories not shown

Table 2 also shows that high educated women have the highest likelihood of having a child during the observation period, but the effect is not statistically significant for childless women. Income level seems to influence childless women's and one-child mothers' childbearing, as those with high relative income are more likely to have a(nother) child during the observation period, compared to those with low income. Relative income is not statistically significant for two-child mothers, but the gradient is positive even for this group. Furthermore, model 2:1 displays that the propensity to have the first child is highest when the woman is around 30 years of age, consistent with the mean age at first birth for total Sweden, which was 29 years in 2006 (Statistics Sweden 2011). Among one-child mothers the likelihood to have an additional child is

highest when the first child is between 2-3 years. This result reflects the influence of the “speed-premium” on additional childbearing; that is a relatively close spacing of children, promoted by the parental leave system. A similar pattern is found for two-child mothers, with an additional peak when the child is between 5-8 years; however, this result is caused by random variation. The chance of having an additional child decreases with age for both one-child mothers and two-child mothers. The effect for the two-child mothers aged 22 years refers only to five cases and could therefore be regarded as a random effect. Furthermore, a very small proportion of women experience a third birth (40 cases) during the time of observation, confirming a prevalent two-child norm.

Interaction analysis

To explore the interrelation between individual resources (educational attainment and income) and working conditions, separate interaction analyses are conducted, accounting for the relative risk within educational and income groups. In this section I present results for childless women and one-child mothers only, as no interactions were found for two-child mothers. Furthermore, no major interaction effects were found between individual resources and partner’s family-friendly working conditions.

Even if women with higher education have a higher propensity to have a child during the observation period (see Table 2), Figure 2 shows that family-friendly working conditions seem to matter the most for lowly educated women. Having high FFWC increases the likelihood to have a first child nearly four times for childless women with low education, compared to the lowly educated childless women with low FFWC. The pattern is similar for one-child mothers, where a lowly educated one-child mother with high FFWC has 3.6 times a higher chance of having the second child, compared to lowly educated one-child mothers with low FFWC. The differences in the other educational levels are more modest, except for one-child mothers with secondary level of education and intermediate FFWC. These mothers are more likely to have an additional child than those with both high and low FFWC. The modest difference for childless women with higher education is related to an overall higher chance of having a first child regardless of the level of FFWC. The same is true for one-child mothers with post-secondary education. Nevertheless, the result suggests that less educated women’s fertility behaviour is more sensitive to the working conditions. Family-friendly working conditions increase their likelihood to have children during the observation period.

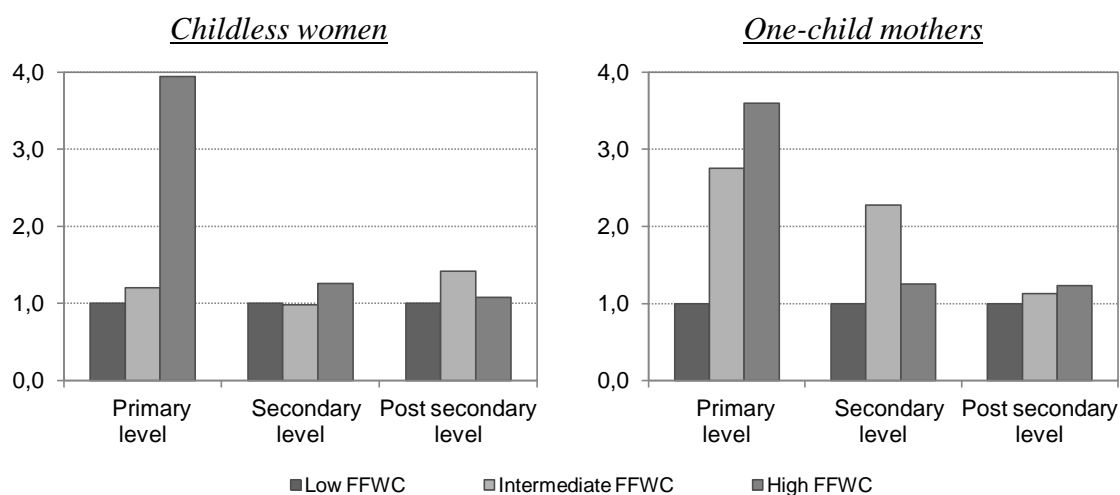


Figure 3: Interactions between women’s family-friendly working conditions and educational level on the chance of having a(nother) child (relative risks).

Note: Low FFWC is the reference category for each educational group. Standardised for income, PFFWC and basic time variable (age for the childless and age of the first child for the one-child mothers), and one-child mothers’ age.

As already noted, childless women and one-child mothers with high relative income have a higher propensity to have a child during the observation period (see Table 2). However, Figure 3 shows that FFWC interacts with income, and has the greatest impact on childbearing for childless women with low income, and for one-child mothers with middle and high income. That is, childless women with low income and high FFWC have about twice as high probability of having a first child, than lowly educated childless women with low FFWC. For childless women with high relative income, it is those with intermediate FFWC who are more likely to have a child. This could be related to the aspirations among the high income childless women to establish themselves on the labour market, in terms of their career, before having children coupled with higher work demands, either self imposed or company driven. This may result in a postpone childbearing among the high income childless women, despite relatively family-friendly working conditions. The pattern is reversed for one-child mothers' additional childbearing. Low income women have a similar propensity to have an additional child regardless of the level of family-friendly working conditions. Among one-child mothers with higher income we can observe that one-child mothers with higher FFWC have a higher chance of having an additional child than those with low FFWC.

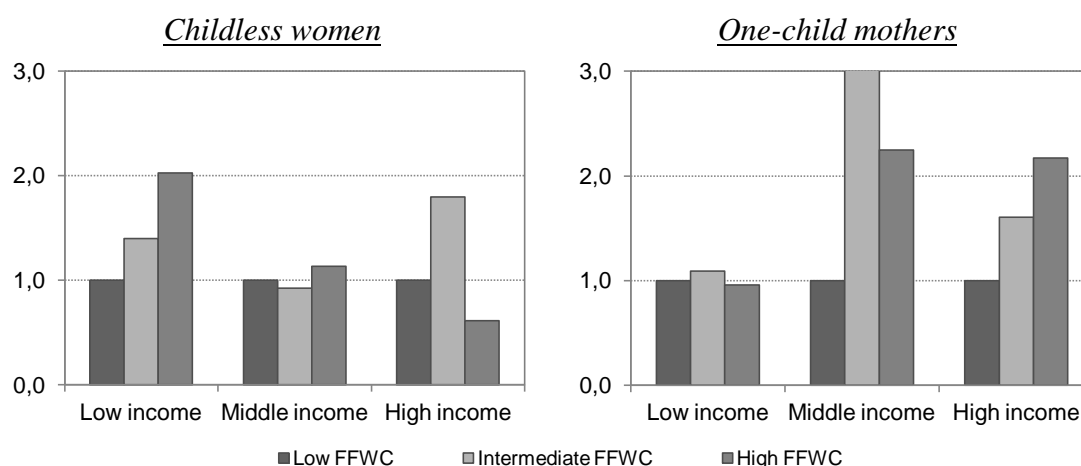


Figure 4: Interaction between women's family-friendly working conditions and income level on the chance of having a(n)other child (relative risks).

Note: Low FFWC is the reference category for each income group. Standardised for education, PFFWC and basic time variable (age for the childless and age of the first child for the one-child mothers), and one-child mothers' age.

The interaction analyses have revealed that women's family-friendly working conditions have an impact on childbearing, however the combined effect of individual resources and women's family-friendly working conditions affect childless women's and one-child mothers' childbearing behaviour differently.

Discussion and conclusions

The aim of this study has been to investigate the impact of family-friendly working conditions and individual resources (education and income) on young adult women's childbearing behaviour in Sweden. Family-friendly workplace practices (i.e. schedule off regular hours, overtime and difficulties to adjust the work hours to family life) can reduce the conflict between work and family domains, and the assumption is that working arrangements also have an impact on the timing of childbearing. An additional issue addressed has been whether a woman's own family-friendly working conditions, her partner's family-friendly working conditions, and her individual resources (education and income) have a different impact on childbearing for childless women and mothers. The analysis the multivariate piecewise constant hazard analysis

reveals parity differences in the propensity of having a child during the period of observation. The experience of family-unfriendly working conditions primarily obstructs one-child mothers' transition to the second birth. I also expected that the partner's family-friendly working conditions would have a positive impact on the woman's childbearing behaviour. This assumption is supported for childless women and one-child mothers. The results indicate that not only the woman's work situation but also her partner's situation plays a part in their childbearing decisions. This reflects norms and expectations that men should be actively involved parenting, a goal in the Swedish parental leave system with two months of leave earmarked for fathers. Furthermore, the Swedish Discrimination Act, i.e. that employer should help enable parents to combine employment and parenthood, is important for employee's capabilities to make use of the regulated work-family reconciliation policies (Den Dulk et al. 2011; Hobson et al. 2011). Lower propensities to have a second child among mothers working under family-unfriendly conditions, or have a partner with similar working conditions, can be interpreted as insufficient implementation of reconciliation policies at the workplace, which obstruct capabilities to have an additional child.

Considering individual resources (education and income), I expected to find a positive effect of educational attainment, or income, on childbearing. The results from the first analysis (Table 2) show that educational attainment matters the most for mothers' additional childbearing, as highly educated mothers have the highest likelihood of having an additional child during the period of observation. Furthermore, childless women and one-child mothers with high relative income are more likely to have a child, compared to those with low income. The results suggest that the Swedish family policies (parental leave benefits and public childcare) reduce the opportunity costs of children that highly educated might experience, in terms of forgone earnings and future career prospects, as suggested by Oláh (2003).

Family-friendly working condition interacts with individual resources in regard to childbearing, as assumed, but for childless women and one-child mothers only. The result indicates that the lowly educated women's capabilities to have children is more dependent upon their working conditions. They are more likely to have a child within the period of observation if their working conditions are more family-friendly. This suggests that the working conditions for lowly educated women, who have weaker prospects at the labour market and higher risk of unemployment, increase their capabilities to be both earner and carers. Also the income level interacts with working conditions. The results reveal that especially low income childless women with family-friendly working conditions are more likely to enter motherhood during the time of observation, than those with family-unfriendly working conditions. The results suggest that the impact of weaker resources on childbearing is diminished by family-friendly practices at the workplace, which in turn enhance women's capabilities to make claims for work-life balance (Hobson et al. 2011), reflected in higher chance of giving birth. Moreover, the combination of family-friendly working conditions and higher income increase one-child mothers' likelihood to have an additional child. This indicates that potential higher work demands and time pressure, usually accompanied with higher relative income, can be mitigated if accompanied with implemented family-friendly practices at the workplace, which in turn create greater capabilities and opportunities for one-child mothers to combine work and family life. The interaction analysis also reveals that low income one-child mothers have similar propensity to have an additional child regardless of their working conditions. Weaker resources may be accompanied with greater economic uncertainty, which can obstruct their capability to make claims for work-life balance, as this would result in even lower income, or even the risk of unemployment.

This study has shown the importance of accounting for actual working conditions at the workplace, not only labour force attachment, to deepen our understanding of women's childbearing behaviour. The advantage of applying the Capability Approach is that it imposes multi-dimensional analytical lenses; by acknowledge the link between institutional context (laws

and regulations), individual's entitlements, and workplace practices, when studying childbearing behaviour. This study has shown that individual decisions to have children are intertwined with a broader social context in terms of institutional factors and working conditions as well as individual factors. These factors shape women's capabilities to enter motherhood or to have additional children, as women's expectations, aspirations and sense of entitlement to make claims for work–life balance are embedded in opportunities and constraints related to these factors. However, more comparative research is needed on the relationship between working conditions, individual resources and childbearing, across countries with various institutional support for work-family reconciliation.

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