



Women's career mobility and childbearing in Sweden

Evidence of a tradeoff?

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Department of Sociology

Abstract: Childbearing has long been considered inimical to women's careers, and occupational mobility may particularly reflect this dynamic. Swedish register data is used to explore how women's occupational mobility is linked to first, second and third birth transitions to observe the importance of career developments at different stages in the fertility career. This relationship may be weak in a context such as Sweden, where policies protect women's income and position in the labor market from heavy loss after childbirth as well as encourage fathers to share parental leave. Upward mobility was most common before entering parenthood and women delayed parenthood when they had been upwardly mobile. Career advancement continued but occurred less frequently after entering parenthood and still delayed or deterred second and third births. The negative relationship between career advancement and fertility behavior may be interpreted as evidence of a tradeoff women make in Sweden, even when policies support facilitation of work and family as well as both partners being earners and carers. Results also indicate that second and third birth transitions were related to mobility experiences relative to occupational statuses at the time of the previous birth instead of relative to early jobs in women's careers. This pattern implies that the class at which women enter the labor market in Sweden is not an important indicator of the joint determination involved in future career and childbearing plans; moreover, instead of being a stable characteristics, fertility decisions appear related to women's success in managing career advancement each step of the way.

Keywords: fertility, postponement, social mobility, occupational class, Sweden



Introduction

Women and men face a host of choices to navigate in their early adulthood, including career and family formation. The extent to which these two factors are linked and the nature of that relationship have long been studied. This study focuses on how the development of a woman's career is related to the timing of parenthood as well as having further children. Much research has informed us on the link between childbearing and whether women are in paid employment (e.g., Matysiak and Vignoli 2008; Stone 2007), but we know little about how career trajectories, and job mobility in particular, are related to childbearing. In contexts where the vast majority of women have paid positions in the labor market, which is increasingly the case across wealthy countries (Christiansen et al. 2016), the quality of labor market participation and not just having a paid job may be a better indicator of how closely decisions about family and work are intertwined and the extent to which there is a tradeoff between the two.

In the present study, how careers develop along with childbearing is considered from a life course perspective; trajectories and transitions are observed at multiple moments in time across women's early adulthood and fertility career and are considered in light of the specific social forces that shape that moment (Giele and Elder 1998; Moen & Sweet 2004; Erickson et al 2010). This approach puts heavy demands on data (Macmillan & Eliason 2003), which have generally prohibited scholars from exploring career progression or trajectories alongside fertility behavior. Being able to follow both career and family formation over time is essential because it reflects the assumption that joint decision-making is involved with both processes (Willekens 1991) and allows us to observe how choices are made in conjunction with each other. In addition, by assessing the importance of occupational mobility at each stage in a woman's fertility career, when and how the two processes are linked may be more clearly observed. This approach corrects the error in past research of summing up parity transitions into a completed fertility measure at a certain time (Bean & Swicegood 1979; Tien 1961; Stevens 1981; Boyd 1973; Berent 1952; Blau & Duncan 1967; Sobel 1985), which does not allow us to observe the order of events. Second, by analyzing parity transitions separately but in relation to each other and mobility from different starting points across the childbearing process, the fact that discrete childbearing events may be linked to each other in the decision-making process is taken into account.

This study is situated in Sweden, which is a unique setting for observing the relationship between career trajectories and fertility. The policy and welfare context, along

with the stratification system, are likely to play a role in how mobility is related to fertility. Sweden's long-term social and political emphasis on decreasing inequality has resulted in greater equality of income and access to social benefits, which reduces differences in monetary resources related to class. In addition, long and generous parental leave is provided in Sweden for both mothers and fathers, jobs are secure, and high quality publically-provided childcare is universally accessible. Women and men therefore receive strong institutional support for being both earners in the public sphere and carers in the private sphere (Billingsley & Ferrarini 2014). The Swedish context may therefore be a case in which the tradeoff between career and family is relatively weak. On the other hand, the relationship between career developments and fertility may appear strong in Sweden because the population of mothers in paid employment may be more diverse in Sweden than in other contexts. Sweden stands out as having low selection into both parenthood and employment; 85% of women become mothers (Andersson et al. 2009) and over 70% of women with children under three were employed in 2006 (this share would be considerably higher if mothers of infants were excluded), in contrast to 52% in the US and 31% in Germany (Aisenbrey et al. 2009). In contexts with less support to reconcile demands of family and paid employment, women who are less committed to a career may select themselves out of the labor market altogether during their childbearing years and women highly committed to a career may select themselves out of parenthood.

Using Swedish register data from 1996 to 2012, I assess whether there is evidence of a tradeoff between career development and children for women. Additionally, whether career developments are more relevant to childbearing decisions at certain stages in one's fertility career than others is explored.

Having it all: Careers and families

The idea that there may be a tradeoff between family and careers has a long history. At the end of the 19th century, Arsene Dumont explained falling fertility in France as a strategic choice made in the family to increase social mobility opportunities (Bejin 1989). Social mobility research in the 20th century developed this idea further by arguing that status enhancement aims suppress family size because resources are focused on careers instead of family (Westoff et al. 1963; Blau and Duncan 1967; Hope 1971; Bean and Swicegood 1979). These arguments are based on the assumption of how fertility decisions might influence career development. That the relationship between career and fertility behavior here is not argued to be causal is an important theoretical starting point.

These discussions revolved around men's occupational trajectories primarily, as paid employment for women was less common at the time. As women entered the labor market, the debate shifted to reflect the specific conflict mothers face in relation to participating in the labor market while still carrying the largest share of domestic responsibilities. A negative relationship between women's labor force participation and fertility across a wide range of countries emphasized the difficulties women face reconciling the demands of work and family (Brewster & Rindfuss 2000). Goode (1960) and Greenhaus and Beutell (1985) described the issue in terms of the strain that having multiple roles creates: resources and energy are not unlimited and if the demands of one role are expanded, the capacity to engage in another role is diminished. Because childrearing entails heavy responsibilities, fewer resources for paid employment are available.

The degree to which work and family commitments require a tradeoff varies according to four distinct factors. The first moderating factor is the institutional or policy setting. Changes over time in the relationship between labor force participation and fertility have implied that reconciliation issues can be minimized by policies and institutions that support the participation of mothers in the labor market (Hoem, 2005, 2008; McDonald, 2006; Brewster & Rindfuss 2000). Specifically, the indirect costs women bear when having a child can be compensated with policies providing earnings-related parental leave benefits. In addition, job protection when taking a leave and publically provided child care when returning to work can support women's dual roles. The degree of support for dual earner couples within Europe varies considerably and Sweden stands out as having a strong political commitment to mothers' employment (Billingsley & Ferrarini 2014).

The extent to which policies alleviate the conflict between work and family for women also depends on how they support the division of care and paid work within the household (McDonald, 2000; Mills, 2010; Neyer, 2006; Neyer, Lappegard & Vignoli, 2011). Some policies actively support men taking a more involved role in the family such as parental leave benefits reserved for each parent (Billingsley & Ferrarini 2014). How the household functions is, therefore, the second moderating factor to the tradeoff women face as earners and carers. If fathers do more care and domestic work, women are less likely to feel overwhelmed by the demands of home and work. Fathers who support mothers' career development lighten the conflict women perceive between work and family (Beutell & Greenhaus 1982). The role of men and the division of household labor have been argued to be important forces behind record low fertility as a widespread recent phenomenon; because men have not shifted into the private sphere as much as women have moved into the public

sphere, the demands of a dual earner household are too high and women choose to have fewer children (Esping-Andersen & Billari 2015; Goldscheider et al. 2015; McDonald, 2000, 2013).

The third moderating factor is workplace. Family-friendly arrangements and work cultures that allow, for example, flexible working hours and autonomy over one's schedule may ease the pressure of fulfilling both caring and earning roles (Moen & Sweet 2004). These characteristics are more often found in the public sector than the private sector, which engages a high share of women in Sweden (Bihagen & Ohls, 2006; Gornick & Jacobs, 1998). Finally, personal factors such as the intensity of individual's aspirations and ability to manage role and time conflict can determine the degree to which sacrificing family or work on behalf of the other is perceived as necessary. Just as experiences of motherhood are diverse, how women adjust to the demands of new responsibilities is likely to vary. Aasve et al. (2007), for example, found evidence of this heterogeneity with nine different strategies that women use to organize their work and family roles.

This tradeoff has generally been conceptualized in terms of the choice to work or not, or the choice to work less (part-time employment). This distinction is increasingly less relevant in contexts such as Sweden where paid employment over 30 hours a week is the norm for mothers (Aisenbrey et al. 2009). As the timing of "critical career-building phases" coincides with women's childbearing years (Regan & Roland 1985, p.986), the notion of a tradeoff is extended to occupational class attainment during the years of childbearing, similar to Sørensen's approach (1983). All jobs are considered part of an individual's career path, even though jobs that do not provide possibilities for promotion can also be considered "non-career" jobs (Nilsen 2012).

Achieving upward mobility is interpreted as effective commitment and effort toward career progression (Turner 1960; O'Reilly & Chatman 1994; Ng et al. 2005). If upward mobility is negatively associated with childbearing, this can in turn be identified as evidence of a tradeoff. Conceptualizing mobility as evidence of a tradeoff comes with challenges, however, that also exist in the general research on paid employment: When women are not participating in the labor force, we rarely know whether they are striving to return. Likewise, those who show career stability (no mobility) are a heterogeneous group; in the case of mobility, they include those who have no desire to achieve a higher occupational status, those who may not yet have been successful at achieving a higher class and those who may already be working in the highest occupational class. Whereas methodological choices can address

the latter issue, the implications of having individuals who are still striving in the non-mobile group means that the average difference between the upward and non-mobile groups will be weaker than it would be if we could account for that source of heterogeneity.

Downward mobility likewise reflects diminished commitment to a career path or incapacity to maintain a career path. A positive association between downward mobility and childbearing may therefore also be evidence of a tradeoff. No association at all between childbearing and career progression indicates a weak or non-existent need for tradeoff, as would a positive relationship between career progression and childbearing.

The relationship between occupational class mobility and fertility can also be interpreted through other paradigms, as class location and mobility correlate with other important factors linked to childbearing decisions. For example, upward mobility is associated with an increase in income, which is argued to influence the rational cost calculation (Hotz et al. 1997) related to fertility. Alternatively, higher occupational classes include jobs that might alleviate the conflict between work and family and lead to synergy in the multiple roles women lead—although Begall & Mills (2011) argue that “better” jobs can lead to both more and less reconciliation difficulties. Another aspect of higher class occupations is that the jobs themselves may lead to greater ownership of and satisfaction with one’s work, which may make the conflict easier to bear. These correlated factors could create conceptual confusion related to upward mobility; however, they predict a positive relationship between upward mobility and fertility, whereas only a negative empirical relationship is interpreted here as evidence of a tradeoff. Only indirect costs related to higher earnings would produce a similarly negative relationship, which are not distinguishable from evidence of a tradeoff. In the case of Sweden, however, where leave benefits replace income up to 80%, or even 90% when employers top up the state benefits, opportunity costs are generally low.

In the next section, parity-specific considerations and issues related to each time period in this stage of women’s life course are outlined. First, the entrance to parenthood and early career developments are discussed and a discussion of careers and childbearing after women enter parenthood follows.

The entrance to parenthood

Because childlessness is relatively low in Sweden, the tradeoff between family and career for those without children is more about delaying parenthood than avoiding having children altogether. The effort required to acquire new skills and gain experience in the labor market

may leave little energy and resources available to also start a family. The time when careers are being established may therefore feel like an unfavorable time for entering parenthood. In order for a tradeoff to exist before entering parenthood, women must be cognizant of the fact that starting a family and progressing in one's career simultaneously may create conflict or a strain in roles. Some research suggests that women do indeed foresee the difficulties in combining parenthood and work even before they have a child (Bass 2014). This study also found that women were more likely than men to adjust their careers according to their family plans because of foreseen difficulties. Women who are upwardly mobile would not be expected then to be starting a family around the same time period.

As previously discussed, the tradeoff between career progression and childbearing may be moderated by certain factors; in addition, how these factors shape the tradeoff may vary across different stages in the life course. For example, before the first child is born, gender equality in the division of labor within a household is quite common (Evertsson & Grunow 2016). This household context may help women manage the combined roles related to career and family. The extent of the tradeoff after the birth of a child, based on how relationships and roles in the household change, may not be completely foreseen by women.

In the Swedish policy context, parental leave benefits are tied to earnings, which encourage women to delay parenthood until reaching a wage that is as high as can be expected in the near future. The implication of this trend is that much career progression takes place before entering parenthood in Sweden. It also implies that women may have a child rather soon after achieving upward mobility. If parenthood is delayed only up to this point, we may see that upward mobility is positively associated with the entrance to parenthood. Reinforcing this policy incentive is the "career-planning rationale" (Gustafsson 2001), which would suggest that women with no expectations of high wage growth would not postpone childbearing. Studies show that a timing tradeoff does in fact exist: delaying parenthood increases wages, net of the characteristics related to both career and childbearing aspirations (Miller 2011; Albrecht et al. 1999). This rationale proposes that women consider how the loss of income and human capital when caring for a child will influence their future earnings.

In sum, we can expect to see that women who are upwardly mobile postpone entering parenthood if a tradeoff exists at this point in the life course. But the difference between non-mobile and upwardly mobile may be weakened by the fact that those who are developing their career prospects but have not advanced yet will also postpone parenthood. In addition, women may wait only until reaching the highest income possible in the near future; arriving

at this point may be an incentive to start a family and generate a positive relationship between entering parenthood and upward mobility.

Family expansion

Despite women foreseeing some difficulties combining work and family, having a child and returning to work inevitably provides a learning experience (Brewster and Rindfuss 2000). Institutional and partner support, individual coping strategies and perspectives, as well as the specific demands of each child and career path form a unique constellation that delineate the extent of work-family conflict. In particular, a crystallization of gender roles takes place after entering parenthood, even among the most gender egalitarian couples (Levy et al. 2007; Grunow et al. 2012; Evertsson & Grunow 2016), which may leave women with less time and energy for their career than they anticipated.

In the Swedish context, parents have the right to take parental leave for 13 months and return to the same job, which means women's career attainment before entering parenthood is protected. While on leave, 80% of the salary in the previous year is guaranteed for all jobs and many firms top up this amount to 90%. Three months of this 13 are reserved for the other parent, which in practice supports men's leave-taking and active engagement in childrearing. After turning one year old, every child is guaranteed publically provided, high quality childcare. These policies aim to support women's attachment to the labor market during her childbearing years and protect against the indirect costs related to taking leave. In addition, Sweden has a policy often referred to as the "speed premium", by which women are guaranteed leave benefits based on earnings before the previous birth if they have the next birth within 30 months. This policy ensures that leave benefits stay consistent rather than are reduced due to lower income earned between births; this policy has had a marked impact on the spacing of births (Andersson et al. 2006). Coinciding with this policy incentive to have children within a relatively short time frame, the career-planning rationale (Gustafsson 2001) also encourages having a second child quickly to compress leaves and skill depreciation in order to smooth income loss.

Because the two child norm is very strong in the Swedish context, analyzing the transition to a second birth generally means studying its timing. In addition, generous policy support has generated a relatively homogenous pattern of leave taking and returning to work in Sweden, although variation does exist based on educational level and career prospects (Aisenbrey et al. 2009); in contrast to the wide range of strategies to combine work and family in many contexts (leaves of widely varying length, not participating in the labor force

for many years, varying hours worked upon returning to the labor force), variation in Sweden exists mostly in terms of how many months of leave and which months are used by the father instead of the mother.

Given the high proportion of women who will go on to have a second child and the short spacing between the first and second birth, we might expect very little mobility during this time period. In addition, the extent to which women with very young children are able to achieve upward mobility may be influenced by a motherhood status penalty (Looze 2014). In addition, while adjusting to the new demands of parenthood, Evertsson (2013) found that women's commitment to work is generally at a low point and Sorenson (1983) argued that mothers of young children may prefer stability and not want to change jobs because it would entail a new schedule and insecurity. Given these considerations, it may be mobility that occurs before entering parenthood that is related to family expansion. And those who are upwardly mobile after entering parenthood may be particularly career driven and less interested in having a second child at all or at that time. On the other hand, the negative relationship between upward mobility and family expansion may be mitigated by job conditions in higher occupational classes: Begall and Mills (2011) found that women working in jobs with higher levels of work control were significantly more likely to intend to have a second child.

Having a third child is much less common in Sweden than having a second and is more likely among highly educated women (Aisenbrey et al. 2009) although Heckman and Walker (1990) found that women's wages were negatively related to third births in Sweden. We might expect that most women's focus on career intensifies after having two children and returning to work. For this reason, as well as the fact that job tenure by this point has increased, we may see more mobility in this stage of women's life course. Nevertheless, a tradeoff might still appear in which those who are upwardly mobile are particularly unlikely to have a third child.

Data and method

The data in this study comes from administrative registers that are collected by Statistics Sweden: The Longitudinal Database for Health Insurance and Labor Market Studies and The Structure of Earnings Survey. This data is of very high quality and covers the entire population of Sweden. It contains background information as well as life course biographies, including detailed histories of working life and children born. Most histories are available from 1968-2012, but annual observation of occupations only begins in 1996. This provides

16 years in which career developments can be observed. But because occupations cannot be observed regularly before 1996, the data is left truncated. Therefore, the period during which an individual is at risk of a parity transition must begin at a moment in time that is uniform across all individuals. For this reason, the approach for studying the transition to parenthood is different from how second and third parity transitions are studied.

For first births, the 1976 birth cohort was selected for which we can observe from age 20 in 1996 to 36 in 2012. This research design entails a loss of first parity births happening before age 20 and after 36: 81 percent of this cohort entered parenthood during this age range, which is a negligible loss in relation to the share of women estimated to enter parenthood in general in Sweden (86%). By observing only from age 20 onward, we also miss any jobs held before that time. Although the majority of women were still studying at age 20, 43% of this population was observed working at this time.

Specific birth cohorts were not selected for the second and third parity transition samples, but rather all women who had the first or second birth, respectively, 1996 or later were selected. All women were observed until the following parity transition or they are censored due to emigration, death, age 45 or 2012. The outcome is measured 9 months prior to the parity event in order to assess relevant factors at time of conception rather than birth. The sample contains only those who were born in Sweden.

I implemented a discrete time hazard model (Allison 1982) with time-varying covariates, including age as the time-scale for the first birth model and years since the previous birth for second and third birth models. Dummies were included for educational level (two years of secondary education or less, 2-3 years of secondary education, three years of post-secondary education or less, and more than three years of post-secondary education), enrolled in education, marital status, metropolitan residence (Stockholm, Malmö or Gothenburg), and whether unemployment benefits were received. Age was also included in the second and third birth models and whether they were receiving parental leave benefits during the year.

To measure career developments, the occupational class of a job in a previous year (origin class) and in the current year (destination class) were included as well as mobility dummies that specify whether a current job is higher (upward mobility), lower (downward mobility) or the same class (no mobility) as the origin class. An additive approach can create identification issues because of perfect collinearity between origin, destination and mobility; this problem is avoided by constructing mobility categories that group together individuals from more than one origin and destination group (e.g., downward mobility includes anyone

who previously had a higher class) rather than subtracting destination from origin class and having numerical values. Another important issue is whether the effect of career development (mobility) can be isolated from the origin and destination class effects because mobile individuals contribute to the origin and destination effects; origin and destination effects may also include mobility effects to some extent. Diagonal reference models (Sobel 1981; 1985) have been argued to be the best strategy for studying the effect of a difference in two statuses along with the two statuses. This model, however, is only applicable to origin and destination states that are perfectly symmetrical, which does not allow an individual to have a destination status other than class. This is problematic in an analytical design that continually observes states over time and must account for important variation in destination status such as leaving the labor market. In an attempt to overcome this shortcoming, Billingsley et al. (2016) proposed different strategies and compared the estimates related to mobility effects produced in diagonal reference models and those in the approach used in this study. There was very little difference between the two, which implies that the approach used here is able to estimate mobility effects net of origin and destination class effects.

The measures of occupational class and mobility come from Swedish-specific occupational codes, which are translated into three digit ISCO88 codes and then categorized into the European Socioeconomic Classification (EseC). This is based on the EGP class schema (Rose and Harrison 2006) and is widely used across Europe. Alternative class, status or prestige classifications were opted against because of the need for a categorical measure that can include non-labor force states and because the interest here is in positions in society that reflect employment relations, prospects for advancement and financial security. Originally, the schema consists of 9 classes, but two are lost because we do not have occupational information for small employers or the self-employed. The seven classes were collapsed into four to arrive at a schema that is more strictly hierarchical. The top class (EseC 1: referred to here as “high/low professionals and managers”) includes large employers; professional, administrative and managerial occupations; higher grade technician and supervisory occupations. EseC 2, “intermediate/low supervisors”, includes those with intermediate occupations and lower supervisory or lower technician occupations. EseC 3, “white-collar workers”, includes lower services, sales and clerical occupations and EseC 4, “blue-collar workers” includes lower technical occupations and routine occupations. For women, common job changes that would entail upward mobility would be from a position as a cleaner to a shop worker or from a government social benefit officer to a lawyer.

One limitation of the Swedish occupational register is that it is not complete. Private

firms in which there are less than 500 employees are sampled according to the size of the firm; larger firms are more likely to be sampled than smaller firms. The panel is therefore unbalanced. Because working in a small, private firm might entail unique characteristics, these missing spells were classified in a unique category rather than deleted them. When students were not considered, there was missing information for 49% of all person/years. Because occupational class is recorded in one moment during the year (generally in November) and employees on leave would not be counted, occupational information from the previous year was imputed when a woman recently had a child and received parental leave benefits. Around 16% of the missing information appeared to be related to taking leave. Previous class was also imputed when there was information about occupation in the prior year and no substantial change (less than 10%) in income was recorded. Finally, the sample was restricted to those who have been represented in the occupational registers in order to have an origin status at some point recorded.

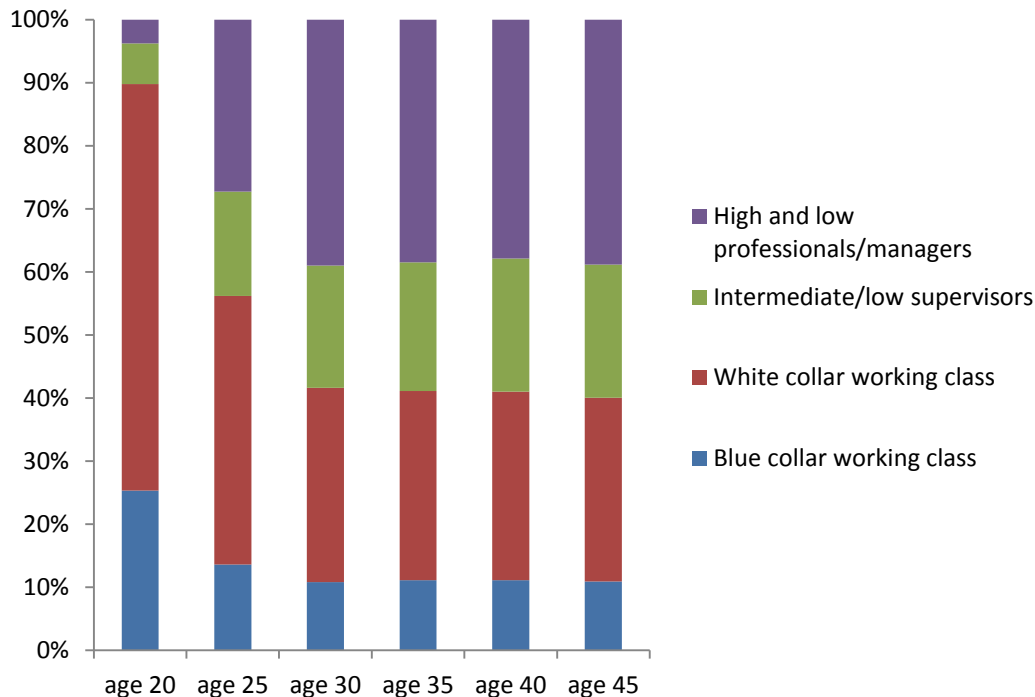
When individuals have occupational information for more than one job per year, the one with the highest class at that time was selected. When women are studying or not participating in the labor market (no work-related income), they are categorized as such and are not at risk of being mobile (they are categorized as not applicable/missing).

Results

Career trajectories are described first across age, then according to each parity. With no cohort restrictions, we can see how women sorted themselves into occupational classes at different stages in their early adulthood from 1996 to 2012. Figure 1 shows that around 90% of all 20 year olds who had a job at this age were working in jobs characterized as either blue or white collar working class. These include services and sales (65%) or lower technical or routine occupations (25%). By age 25, we already see a dramatic shift in the distribution, whereby almost half of all women with jobs are working in the top two classes: 27% as high/low professionals and managers and 17% in intermediate occupations. Much fewer women are working in blue collar working class jobs (14%), but a sizable share (43%) are still employed in white collar working class jobs. By age 30, class distributions reach a stable point and it appears that career paths have generally been set by this age. The share of women working in the lowest occupational class hovers around 11% until age 50 (the figure only displays up to age 45) and around 30% in the second to the lowest class. Around 20% are employed in the intermediate occupational class and around 39% in the highest. This implies that there is little mobility once women enter parenthood, which is around 28 on average

(Aisenbrey et al. 2009). What these distributions hide, however, that can be seen in later figures are women experiencing both upward and downward mobility during their childbearing years.

Figure 1. Occupational class distribution at ages 20 to 45, Swedish women from 1996 to 2012



The entrance to parenthood

As mentioned, the 1976 birth cohort was selected to observe the transition to parenthood because we can observe these women from age 20 to 36 in our data, which is where the majority of employment and childbearing developments occur. There are 42,739 women in our population and 34,469 (81%) entered parenthood during our window of observation. In total, 430,211 person/years are observed. Appendix A displays descriptive statistics for all our variables for this sample. Figures 2 and 3 show how origin and destination classes varied for this population. Origin class is the first job observed from age 20 onward and destination status can change every year after. The distributions refer to person/years in the sample on which hazard models are run; they therefore do not include observations after the first conception or censorship. If we look only at the first two columns, Figure 2 shows a general upward mobility trend, which we could expect after observing occupational class developments over the 20s. The third column reflects the destination class distribution when also including the other statuses women may take in this data from year to year, including

studying (22%), no activity (3%), or not applicable/missing (33%). Upward mobility was a frequent occurrence (10% of all person/years and 32% of person/years that exclude those not at risk of mobility due to non-class statuses). Downward mobility was less frequent before entering parenthood (2% or 6%, respectively).

Figure 2. Origin and destination classes as a share of all person years, 1976 birth cohort, Swedish women from 1996 to 2012

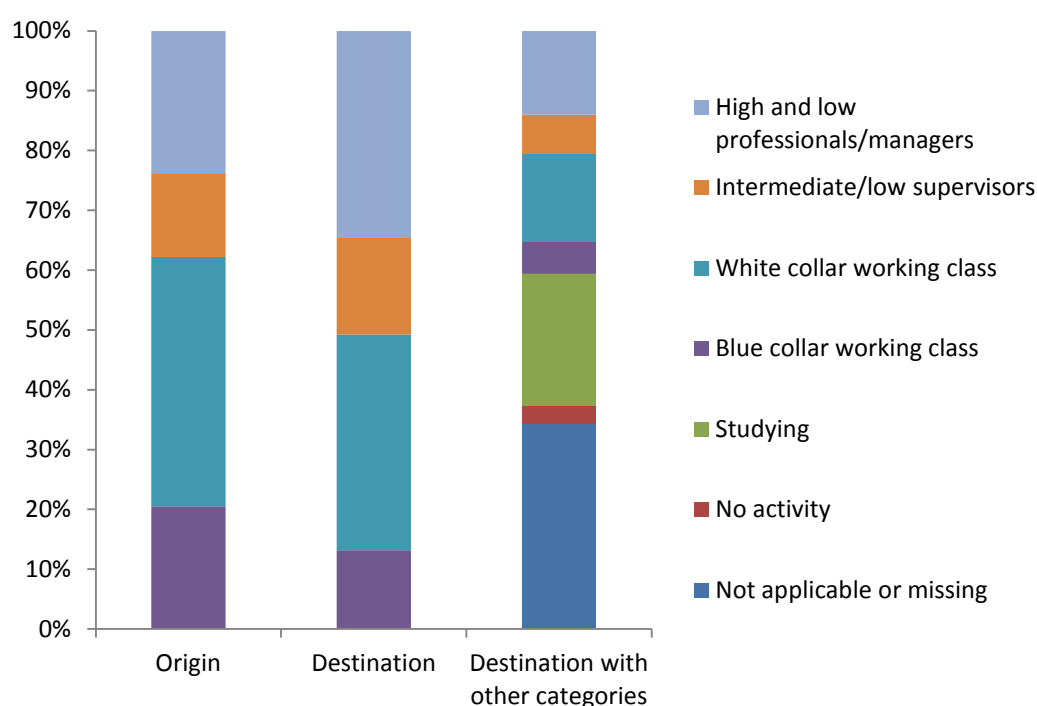


Table 1 presents the full results of discrete time hazard models. Women's transition to first birth was related to the time-varying covariates in expected ways. The highest intensity of entering parenthood was in the 28-31 age range, with a sharp decline thereafter. Despite the prevalence of non-marital childbearing in Sweden, women had heightened odds of entering parenthood after marrying. Women living in metropolitan areas postponed parenthood more than those living in small cities or rural areas. Women who were studying had a lower odds of entering parenthood and we see a curvilinear relationship with educational level: the highest odds of entering parenthood (1.57) was found for the women with the lowest educational level and women with the second lowest (2-3 years secondary education) and the highest level (more than 3 years of higher education) had the next highest odds (30% higher).

In relation to employment circumstances, small but higher odds of entering

parenthood were found for women who had received unemployment benefits in the last year. Those who had a first job recorded in either the highest or second highest occupational class had a similarly low odds (0.75 and 0.8, respectively) of entering parenthood relative to those in the most numerous class at this time (white collar workers). Workers in the lowest occupational class also had lower odds (0.9) of entering parenthood. This inverted U-shape relationship between first observed class and the timing of first birth transformed into a positive gradient for destination class, which is partly due to being moderated by age; in later professional or intermediate class spells, women more quickly entered parenthood (30% higher odds) whereas staying in the blue collar working class continued to be associated with a later entrance to parenthood than the white collar working class women.

These class associations are net of mobility effects. No association between the timing of parenthood and downward mobility was found. But those who were upwardly mobile had 15% lower odds of entering parenthood than those who were not mobile. In other words, those who positively develop their career in the years before entering parenthood are likely to wait to enter parenthood rather than quickly proceed to parenthood once they arrive in their new position.

Table 1. Discrete time hazard results for transition to first birth, 1976 birth cohort, Swedish women from 1996 to 2012

		Odds ratio		Standard error
Age	20-24	1		
	25-27	1.62	***	0.03
	28-31	2.33	***	0.04
	32-36	0.56	***	0.01
Civil status	Unmarried	0.18	***	0.00
	Married/registered partnership	1		
	Prior marriage/registered partnership	0.36	***	0.02
	Missing	0.16	*	0.12
Residence	Large city	0.84	***	0.01
	Rural or small city	1		
	Missing	0.20	*	0.14
Education	studying	0.73	***	0.03
	2 years secondary or less	1.57	***	0.04
	2-3 years secondary	1.31	***	0.03
	3 years higher education or less	1		
	more than 3 years higher education	1.33	***	0.03

	missing	2.02	***	0.15
Received unemployment benefits during the year		1.06	***	0.02
First observed occupational class	professional	0.75	***	0.02
	intermediate	0.80	***	0.02
	white collar workers	1		
	blue collar workers	0.90	***	0.02
Occupational class	professional	1.35	***	0.04
	intermediate	1.32	***	0.04
	white collar workers	1		
	blue collar workers	0.93	*	0.03
	studying	(omitted)		
	no activity	1.31	***	0.06
	missing	1.53	***	0.05
Social mobility	no mobility	1		
	downward	1.05		0.04
	upward	0.85	***	0.02
	not applicable/missing	0.57	***	0.02
Constant		0.27	***	0.01
Observations		430211		
Log likelihood		-104507		

* $p < .05$. ** $p < .01$. *** $p < .001$

From the first to the second child

In this section, women who had a first child between 1996 and 2012 are analyzed. Our population includes 441,481 women and 70% of them experienced a second birth before they were censored. Descriptive statistics are displayed in Appendix B. Figure 3 again tells us the class distribution we observed for this group of women. In this case, origin class refers to the job the woman had the year before or year of the first birth (rather than the first job ever recorded) and mobility is measured from this starting point. The distributions are again based on tFotal person/years observed until second conception or being censored. Focusing on how class changed from origin to destination class (excluding statuses not categorized as a class), we see fewer women working in the bottom two classes and more working in the top two classes. Of all the spells that can be classified with a mobility status, ten percent were upwardly mobile. We also saw about 5% were downwardly mobile. In this population of person/years, there is a high share of not applicable/missing, which is mostly due to the fact

that the first year observed after a birth consists of a greater share of all years observed in this population because the birth interval between the first and second child is relatively short in Sweden and it is not possible to be mobile in the first observation.

Figure 3. Origin and destination classes as a share of all person years, Swedish women with one child born 1996 to 2012 and followed until 2012, second conception or censored

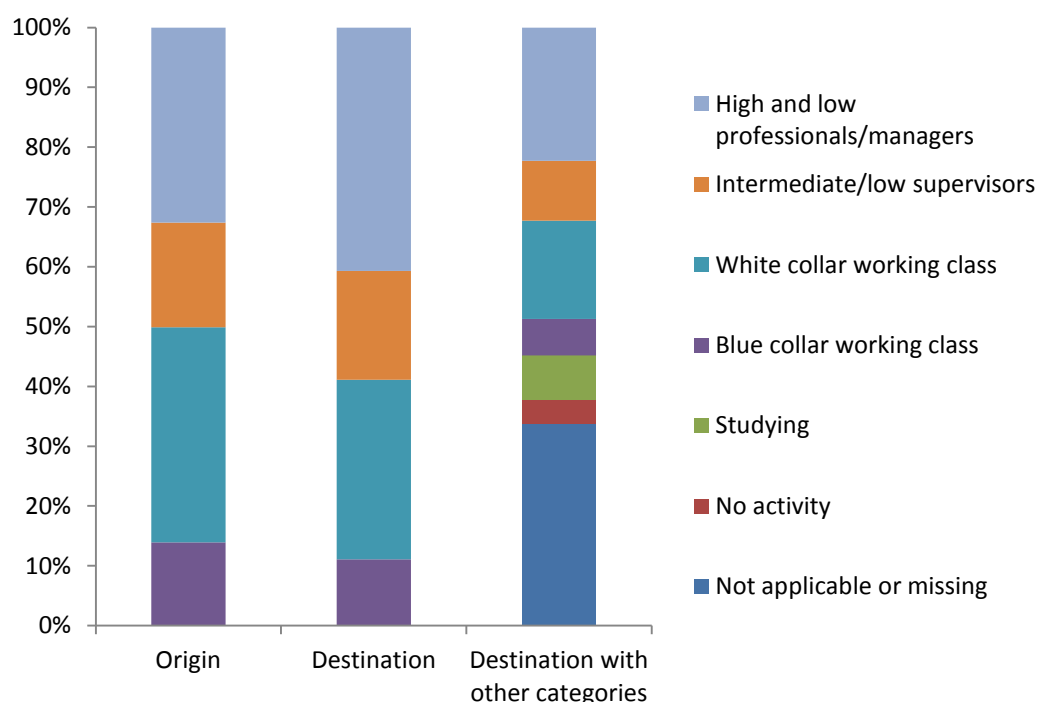


Table 2 presents results from regression models of the transition to the second birth. The most frequent time of conceiving the second child was when the first child was two years old, followed by three years old. The odds of second conception fall steadily beyond that point. The influence of age, civil status and residence was largely the same as for first births. In contrast, the educational gradient was clearly positive for second births and the effect of having received unemployment benefits was negative (albeit very small: OR of 0.98). Having received parental benefits was positively related to second births, but since taking parental leave is generally universal in Sweden, this effect likely shares the effect of having recently had the first child.

In relation to occupational class, origin status and mobility were assessed from two different points. First, origin class was kept the same as in the first birth model—the class of the first job recorded for each woman—and a mobility variable was generated on the basis of this origin class. In a separate model, origin class was designated as the job held the year

before entering parenthood. It is an empirical question whether the more relevant origin point is in the early labor market experience or the point a woman had achieved by the time she entered parenthood. The model fit according to AIC and BIC was substantially better for the model in which origin class was defined as the job held at the time of the first birth and mobility was considered from this point. Not only was the model in which “the first job” origin class a poor fit for the data, but no statistically significant relationships appeared between mobility and second conceptions. In contrast, mobility from the job at the time of the first birth was associated with second conceptions; upwardly mobile women had 4% lower odds of second conception. A positive gradient is shared across origin and destination classes. The professional class had the highest odds of second conception and blue collar workers had the lowest.

Table 2. Discrete time hazard results for transition to second birth, Swedish women with first child born between 1996 and 2012

		Odds ratio		Standard error
Age of youngest child	0	0.09	***	0.00
	1	1		
	2	1.68	***	0.01
	3	1.42	***	0.01
	4	0.95	***	0.01
	5	0.70	***	0.01
	6	0.54	***	0.01
	7	0.44	***	0.01
	8	0.37	***	0.01
	9	0.34	***	0.01
	10+	0.26	***	0.01
Age	20 or younger	0.41	***	0.02
	21-25	1		
	26-30	1.13	***	0.01
	31-35	1.02	**	0.01
	36-40	0.55	***	0.01
	41-45	0.13	***	0.00
Civil status	Unmarried	0.83	***	0.00
	Married/registered partnership	1		
	Prior marriage/registered partnership	0.48	***	0.01
	Missing	0.27	***	0.05

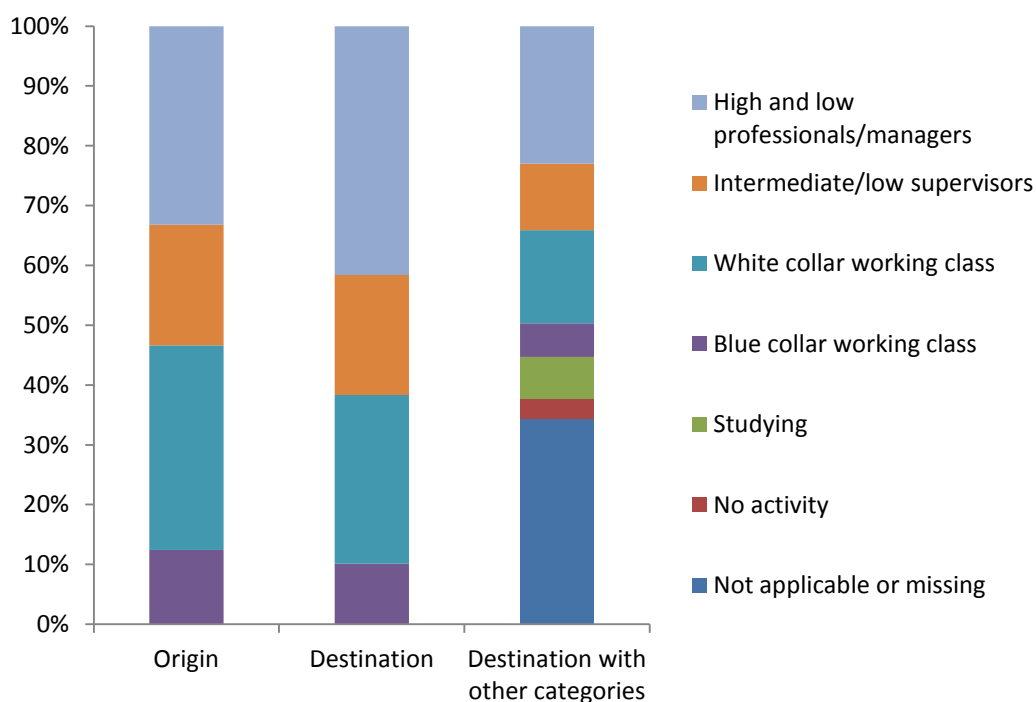
Residence	Rural or small city	1		
	Large city	0.95	***	0.00
	Missing	0.42	**	0.14
Education	studying	0.45	***	0.01
	2 years secondary or less	0.80	***	0.01
	2-3 years secondary	0.95	***	0.01
	3 years higher education or less	1		
	more than 3 years higher education	1.18	***	0.01
	missing	0.54	***	0.03
Received unemployment benefits during the year		0.98	**	0.01
Received parental leave benefits during the year		1.71	***	0.01
Occupational class at first birth	professional	1.08	***	0.01
	intermediate	1.01		0.01
	white collar workers	1		
	blue collar workers	0.90	***	0.01
Occupational class	professional	1.09	***	0.01
	intermediate	1.09	***	0.01
	white collar workers	1		
	blue collar workers	0.97	*	0.01
	studying	(omitted)		
	no			
	activity	0.61	***	0.01
	not applicable/missing	0.83	***	0.01
Social mobility	no mobility	1		
	downward	1.00		0.01
	upward	0.96	***	0.01
	not applicable/missing	0.92	***	0.01
Constant		0.24	***	0.01
		1,850,73		
Observations		9		
Log likelihood		-689935		

* $p < .05$. ** $p < .01$. *** $p < .001$

From the second to the third child

Our population of women who had a second child between 1996 and 2012 includes 396,964 women and third births were observed for 20% of them before they were censored. Descriptive statistics are displayed in Appendix C. Figure 4 shows that women have further consolidated their careers in the top two occupational classes. Twelve percent of women are working in the lowest occupational class when they have their second child (origin class), and 34% in the second to the lowest class (white collar workers). Twenty percent are employed in intermediate occupations and 33% in the professional class. The later job spells (destination class) show again the effects of upward mobility. Of all classifiable job spells, only 10% are in the lowest class and 28% in the second to the lowest. No change occurred in the intermediate class, but 42% of all job spells are in the professional class. Interestingly, upward and downward mobility occurrences were almost identical in the long time spans observed after the second birth (because fewer women go on to have a third child) as in the short time spans between the first and second births: 10.6% of job spells were upwardly mobile and 5.3% were downwardly mobile. This implies that women do not necessarily slow down their career growth during their childbearing years in Sweden.

Figure 4. Origin and destination classes as a share of all person years, Swedish women with a second child born 1996 to 2012 and followed until 2012, third conception or censored



The transition to a third conception is not as concentrated in time as it is for the second conception; the odds are highest in the third year after the second birth, but the heightened odds last from the second to the fifth year and are higher in later years than for the second conception. This different pattern may be somewhat related to new partnerships and the children that follow, which is confirmed by the higher odds of a third conception for those who have exited a marriage or registered partnership. We also see a pattern through the association of age, net of the re-partnering trend, indicating more third conceptions for women who start their fertility career early. In contrast to previous conceptions, a third conception is more likely in metropolitan areas in Sweden and having received unemployment benefits was not relevant. The educational gradient remains positive for this birth, however.

The regression results tell a similar story related to employment trajectories to what we have already learned. First, a comparison of model fit when defining origin class as first job ever observed, job at first birth, or job at second birth reveals that the most relevant origin point is once again the most recent one. Mobility defined from origin class at the time of the second birth once again showed that achieving upward mobility slows or deters the next parity transition (OR 0.89). Because having a third child is substantially less common than entering parenthood or having a second child, this odds ratio can be interpreted mostly in relation to whether a woman experiences the event.

Table 3. Discrete time hazard results for transition to third birth, Swedish women with second child born from 1996 to 2012

		Odds ratio		Standard error
Age of youngest child	0	0.14	***	0.00
	1	1		
	2	1.29	***	0.01
	3	1.39	***	0.02
	4	1.28	***	0.02
	5	1.20	***	0.02
	6	1.05	**	0.02
	7	0.91	***	0.02
	8	0.80	***	0.02
	9	0.74	***	0.02
	10+	0.56	***	0.01
Age	20 or younger	0.62	*	0.14

	21-25	1		
	26-30	0.79	***	0.02
	31-35	0.54	***	0.01
	36-40	0.27	***	0.01
	41-45	0.06	***	0.00
Civil status	Unmarried	0.83	***	0.01
	Married/registered partnership	1		
	Prior marriage/registered partnership	1.31	***	0.02
	Missing	0.89		0.15
Residence	Rural or small city	1		
	Large city	1.04	***	0.01
	Missing	0.11	***	0.07
Education	studying	0.59	***	0.01
	2 years secondary or less	0.90	***	0.01
	2-3 years secondary	0.89	***	0.01
	3 years higher education or less	1		
	more than 3 years higher education	1.36	***	0.02
	missing	1.09		0.10
Received unemployment benefits during the year		0.99		0.02
Received parental leave benefits during the year		1.33	***	0.01
Occupational class at second birth	professional	0.83	***	0.01
	intermediate	0.72	***	0.01
	white collar workers	1		
	blue collar workers	0.92	***	0.01
Occupational class	professional	1.25	***	0.02
	intermediate	1.08	***	0.02
	white collar workers	1		
	blue collar workers	1.01		0.02
	studying	(omitted)		
	no activity	0.71	***	0.02
	not applicable/missing	0.98		0.02
Social mobility	no mobility	1		
	downward	1.01		0.02
	upward	0.89	***	0.02
	not applicable/missing	1.06	***	0.02
Constant		0.07	***	0.00
Observations		2,872,516		
Log likelihood		-373339		

* $p < .05$. ** $p < .01$. *** $p < .001$

Discussion

The intersection of work and family life remains an integral topic in demographic and sociological research, but few studies have analyzed work and family trajectories alongside each other over the life course (e.g., Erickson et al. 2010). This study focused on most women's entire fertility career, encompassing the transition to parenthood as well as having a second and third child. This corresponds roughly to the ages between twenty and forty, which is a demographically dense period of life. To assess whether there seems to be a tradeoff between careers and childbearing, I analyzed whether there was a relationship between career mobility and parity transitions.

Looking first at our descriptive findings related to occupational class developments, young women (age 20) in paid employment overwhelmingly work in low occupational class jobs (white or blue collar working class). By age 25, careers have significantly developed and more than half of working women are employed in the professional or intermediate occupational class. Surprisingly, not many women seem to move out of the lower two classes after this age. This occupational class stability may be somewhat misleading, however, if we consider the upward and downward flows that occur between births. An analysis of the timing and frequency of mobility shows that between the first job and entering parenthood, 32% of women in an occupational class were upwardly mobile. After entering parenthood and before the second child was conceived, 10% were upwardly mobile, as were 11% after the second child was born. Less mobility between entering parenthood and having a second child was expected, as was a larger share achieving career growth after the second child because this would likely be a more convenient time in terms of less expectations to take another leave (substantially fewer women have a third child). This was not the case. The continual career development after entering parenthood may, on the one hand, be evidence that family policies in Sweden are assisting women in managing career growth and parenthood, while the lack of an increase in mobility after having two children may reflect that most women have achieved their career aspirations by this time or added difficulty in achieving upward mobility when having two children instead of one.

Across all moments in women's fertility career, upward mobility is associated with a lower likelihood of childbearing. For the first and second births, which are experienced by a very high share of women in Sweden, this finding may mean that these births are postponed and not necessarily foregone. In contrast, the lower likelihood of ever having a third child means upward mobility is linked to having fewer third births at any time in a woman's fertility career. The longitudinal approach applied here, which analyzes only women who

have not yet had the parity transition under consideration, entails observing different samples of women. However, the sample selection into parenthood and having a second child is minor because of the high share of women experiencing these events.

Additionally, mobility from the first job observed was not relevant to childbearing after entering parenthood. This implies that first jobs are considered temporary and the class at which women enter the labor market in Sweden is not an important indicator of the joint determination involved in future career and childbearing plans. In contrast, career advancement from the point reached at the time of the first birth was relevant to second births; likewise, mobility from occupational class at the second birth was more strongly linked to whether a woman had a third child than mobility from occupational class at the first birth. This overall pattern may imply that fertility behavior is more related to women's success in managing career advancement each step of the way than to a long term joint determination that is stable since the beginning of one's career.

The negative relationship between upward mobility and parity transitions may reflect a tradeoff between childbearing and careers. This effect is net of counteracting forces related to income effects and jobs that provide more satisfaction and better work-family conflict reconciliation. The relationship is likely weakened by the heterogeneity of the non-mobile group of observations, which inevitably contain women who have not yet achieved upward mobility but are doing the hard work required to achieve it. No evidence that downward mobility is related positively to childbearing appeared, which may be surprising given that it would seem to be the opposite side of the same coin. However, experiences in which women felt they needed to step back from their career path may also indicate uniquely severe work-family conflict, which could lessen the interest in having another child.

In sum, this study finds evidence that a tradeoff between childbearing and careers exists in Sweden. The tradeoff appears strongest at the beginning (before entering parenthood) and end of the fertility career (after the second child is born), but because these are somewhat different samples the size of the relationship cannot be directly compared (Mood 2009). But this smaller effect size would not be surprising in the cases of Sweden, where the normative and policy setting structure the transition to a second child to a degree that may render all other factors less relevant.

Whether this tradeoff would be stronger and childbearing more related to class attainment in contexts where policies are less supportive of dual-earner and dual-carer households remains to be seen. Likewise, how men's mobility in general and in relation to their female partner's careers may matter to childbearing in Sweden may provide a more

complete picture of career dynamics and fertility. The relationship between mobility and childbearing is a promising area of further research for learning more about the conditions influencing work and family processes in contexts where women are heavily engaged in the labor market.

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Appendix A. Descriptive Statistics for 1976 birth cohort, parity 0 to 1 transition

P01	Total	Share of all women	Share of all observations (women/years)
Women	42739		
Women/years	430211		
Number of events	34469	80.7	7.8
Age	20-24		46.3
	25-27		22.3
	28-31		19.8
	32-36		11.7
Civil status	Unmarried		79.3
	Married/registered partnership		16.8
	Prior marriage/registered partnership		1.1
	Missing		2.9
Residence	Large city		38.9
	Rural or small city		58.2
	Missing		2.9
Education	studying		27.3
	2 years secondary or less		7.7
	2-3 years secondary		30.5
	3 years higher education or less		8.6
	more than 3 years higher education		23.2
	missing		2.8
Received unemployment benefits during the year			17.3
First observed occupational class	professional		23.8
	intermediate		14.0
	white collar workers		41.7
	blue collar workers		20.5
Occupational class	professional	14.0	34.5
	intermediate	6.6	16.3
	white collar workers	14.7	36.1
	blue collar workers	5.3	13.2
	studying	22.1	
	no activity	3.0	
	missing	34.3	
Social mobility	no mobility	20.1	62.7
	downward	1.8	5.5
	upward	10.2	31.8
	not applicable/missing	68.0	

Note: the additional column of percentages next to occupational classes is calculated on the basis of all those who were categorized in a given class (i.e., excludes the studying, no activity and missing categories listed in the adjacent column).

Appendix B. Descriptive statistics for population of women with one child born between 1996 and 2012, parity 1 to 2 transition

		Total	Share of all women	Share of all observations (women/years)
Women		441,481		
Women/years		1,850,739		
Number of events		301,276	70.0	20.0
Age of youngest child	0			23.9
	1			22.2
	2			15.9
	3			9.9
	4			6.7
	5			5.0
	6			3.9
	7			3.1
	8			2.5
	9			2.0
	10+			5.1
Age	20 or younger			1.2
	21-25			12.9
	26-30			30.8
	31-35			30.1
	36-40			16.8
	41-45			7.4
Civil status	Unmarried			38.5
	Married/registered partnership			56.6
	Prior marriage/registered partnership			4.7
	Missing			0.2
Residence	Large city			38.9
	Rural or small city			62.2
Education	studying			7.4
	2 years secondary or less			22.3
	2-3 years secondary			26.5
	3 years higher education or less			12.7
	more than 3 years higher education			30.6
	missing			0.5
Received unemployment benefits during the year				14.8
Received parental leave benefits during the year				82.5
Occupational class at first birth	professional			32.6
	intermediate			17.5
	white collar workers			36.0
	blue collar workers			13.9
Occupational class	professional		22.3	40.7

	intermediate	10.0	18.2
	white collar workers	16.4	30.0
	blue collar workers	6.1	11.1
	studying	7.4	
	no activity	4.0	
	not applicable/missing	33.9	
Social mobility	no mobility	39.7	85.2
	downward	2.5	5.4
	upward	4.4	9.5
	not applicable/missing	53.4	

Note: the additional column of percentages next to occupational classes is calculated on the basis of all those who were categorized in a given class (i.e., excludes the studying, no activity and missing categories listed in the adjacent column).

Appendix C. Descriptive statistics for population of women with second child born between 1996 and 2012, parity 2 to 3 transition

	Total	Share of all women	Share of all observations (women/years)
Women	396,964		
Women/years	2,873,344		
Number of events	90,977	20.0%	3.2%
Age of youngest child	0		13.8
	1		13.1
	2		11.9
	3		10.5
	4		9.3
	5		8.1
	6		7.0
	7		6.0
	8		5.0
	9		4.1
	10+		11.1
Age	20 or younger		0.1
	21-25		2.8
	26-30		15.9
	31-35		33.5
	36-40		32.3
	41-45		15.5
Civil status	Unmarried		24.4
	Married/registered partnership		69.7
	Prior marriage/registered partnership		5.8
	Missing		0.1

Residence	Large city	33.5	
	Rural or small city	66.5	
Education	studying	7.0	
	2 years secondary or less	25.8	
	2-3 years secondary	23.9	
	3 years higher education or less	14.9	
	more than 3 years higher education	28.3	
	missing	0.2	
Received unemployment benefits during the year		13.0	
Received parental leave benefits during the year		80.2	
Occupational class at second birth	professional	33.2	
	intermediate	20.2	
	white collar workers	34.2	
	blue collar workers	12.4	
Occupational class	professional	23.0	41.6
	intermediate	11.1	20.1
	white collar workers	15.6	28.2
	blue collar workers	5.6	10.1
	studying	7.0	
	no activity	3.4	
	not applicable/missing	34.3	
Social mobility	no mobility	41.7	84.0
	downward	2.7	5.3
	upward	5.3	10.6
	not applicable/missing	50.3	

Note: the additional column of percentages next to occupational classes is calculated on the basis of all those who were categorized in a given class (i.e., excludes the studying, no activity and missing categories listed in the adjacent column).

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Demography Unit