To publish or perish? Continued Childbearing among Academics and other Fast-Track Professionals in Sweden, 1991–2005

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Abstract

This study investigates continued childbearing within the group of highly educated professionals. The focus is on PhDs, medical doctors and law professionals, i.e., groups that face different career structures and work environments that may affect family life. The determinants of having a second or a third birth are analyzed multivariately using longitudinal data from population registers in Sweden, 1991-2005. Doctors, irrespective of gender, are the most likely to have a second or a third birth, once they have started childbearing. Lawyers have lower chances of having a second or a third birth, although for women work in the national courts administration seems more conducive to childbearing than work in private law firms. Work in the public sector is nevertheless not a guarantee for work-family compatibility. Even though a tenure track is not formally present in Swedish academia, academics have lower chances of continued childbearing for women as well as men. Even in a comprehensive welfare state with lots of work-family compatibility-enhancing support, some professional groups face more difficulties than others combining a professional career and children. This is related to rigid career structures, and a constant demand for production, which is especially hard to cope with in combination with childbearing.

1. Introduction

In many contexts women's progress in education and the labor market has been comprehensive during the last 40 years, not least among the professions. Today, a rather equal proportion of women and men are continuing for high-status degrees and enter fast-track professions as law, medicine, and academia. In Sweden, women earned 17 per cent of all PhDs in 1977, but 47 per cent by 2007. Similarly 24 per cent of all law school graduates and 35 per cent of those graduating from medical school were women in 1977 but the corresponding figures were 63 and 60 per cent by 2007. Generally, high levels of education and career orientation among women are related to delayed and reduced involvement in family life, indicating that professional gains may be offset by familial losses. One reason is that human capital investments, especially that of higher education, and starting a career as a professional, take time to undertake. Another reason is that, while women have made substantial inroads into the fast-track professions, the career paths of those jobs have changed little and are still rather inflexible, and therefore incompatible with having a family, especially for women who typically take on more care giving responsibilities than men.

Several studies indicate that, in the United States, one of the most difficult career tracks to pursue in combination with family life is that of academia where the tenure track coincides with the period of childbearing. 'To publish or perish' puts pressure on PhDs who opt for professorship, making them put off parenthood. Academics are, irrespective of gender, less likely than other fast-track professionals to have children (Wolfinger, Mason & Goulden, 2008), and tenure-track women are more likely to be childless than their male counterparts (Mason & Goulden, 2002, 2004). Recent evidence from the Scandinavian countries indicates, however, that the correlations between women's education, career, and fertility, more generally, are neither simple nor straightforward negative (e.g. Esping-Andersen, 2007). There are clearly more opportunities to

combine career and family in Scandinavia than in many other countries (Billari & Kohler, 2004), but the question is if this holds for all, even for academics and other fast-track professionals.

This study investigates continued childbearing within the group of highly educated professionals. Questions addressed are: what is the relationship between professional orientation and continued childbearing, and are there gender aspects hereof? Are work-family difficulties that academics face general and found in Sweden as well or are they specific to tenure track contexts? The analysis focuses on continued childbearing among couples of which at least one of the spouses has a PhD or a degree in medicine or law at the time of their first or previous birth. The determinants of having a second or a third birth during the period 1990–2005 are analyzed multivariately using longitudinal register data.

This study extends on previous research since it focuses on gender differences in the way educational/occupational choice affects continued childbearing. It contrasts with previous works that have focused on one occupational group, or on broad categories such as level of education, and typically studied women only. Moreover, it looks at another context than the Anglo-Saxon – the case of Sweden – that is interesting as it is the archetype of the Nordic welfare state model and has been in the forefront internationally when it comes to gender equality, active family policy, and a strong position of women in the labor market. Moreover, Sweden has a longstanding strong orientation towards work-family policies targeting men as well as women. If a new pattern is emerging in the combination of career and family among highly educated professionals in the contemporary Western world, Sweden is one of the places where this should be noticed first, thereby indicating what might be coming elsewhere.

The paper is organized as follows: a discussion on some theoretical considerations and previous research is followed by a presentation of data, variables and methods before turning to the empirical results and a concluding discussion of their implications.

2. Theory and previous research

Education, occupation, and fertility

Much interest has been devoted to the association between education and fertility, especially between that of educational *level* and fertility. Most studies have dealt with women only and assumed a negative relationship between women's education and fertility. This hypothesis is based on theoretically anticipated relationships between education and fertility as well as the interrelationship of career orientation, labor force participation and fertility (Becker, 1991). Apart from the direct costs associated with a child, there are also indirect costs, of which the most notable are the opportunity costs of mother's time (Mincer, 1963). Children result in forgone earnings, reduce the rate of return to investments in education, reduce chances of advancement, and depress women's lifetime income. Therefore extensive female labor force participation and childbearing is often supposed to be incompatible because women have the main responsibility for bearing and rearing children. As long as fathers are not expected to give up too much of their working time for child care, male labor force participation will not conflict to the same extent as female labor force participation, and the higher earnings of working men can be expected to be positively related to fertility.

More recently it has been shown that educational orientation may be a more important determinant of fertility than educational level (Hoem, Neyer & Andersson, 2006a, 2006b; Lappegård, 2002; Lappegård & Rönsen, 2005; Van Bavel, 2010). If there are systematic differences when it comes to career tracks, work demands and perceived work-life balance

between occupations or employment sectors, the investment in different kinds of higher education may be decisive for the individual's range of choices with respect to personal as well as professional life.

In Sweden, there is a long-standing high degree of educational as well as occupational segregation (Stanfors, 2003, chapter 6). Although women, more than men, have changed their educational and occupational choice over time, many women, irrespective of educational level, choose to get an education and work in typically feminine fields, such as teaching, health care, and other person-related service. In international comparison, there are relatively small shares of women holding top positions. On the other hand, men are dominating the fields of science, and technology, and are overrepresented in top positions. This potentially illustrates a response to the economic detrimental effects of children on careers that have received a lot of attention (e.g., Joshi, 1998). In some occupations the career structure is rigid and the job inflexible; production in a given number of years is highly important, hours are long, work-load is constantly high, and thereafter follows a more or less irrevocable decision on "up or out"; the tenure-track or making partner in a law firm are examples hereof. Moreover, skill depreciation is more of a problem in some occupations than in others. Expertise, firm-specific and technological skills tend to depreciate faster than general skills. The steeper earnings profiles and more career options among private sector employees exacerbate the effects on lifetime earnings in relation to the public sector. In some occupations the career structure is less rigid and working conditions are more flexible; those who work longer hours and produce more will naturally be promoted at a faster pace than other, but there are chances to adjust work-load and reduce work hours by slowing down, working part-time, or even stopping the "career-clock" in order to take time off to care. In order to cope, (potential) parents may choose occupations or alternative careers that accommodate family responsibilities (Polachek, 1981).

There are, however, few studies that have considered how career choice affects fertility. This is surprising since differences between occupations with respect to training periods, working conditions, schedules and potential wages, together with other career characteristics, are important. The studies available deal mainly with the situation in the United States and analyze census or survey data. Examples are the studies of gender differences in childbearing among academics (Mason & Goulden, 2004; Perna, 2001) and doctors (Boulis, 2004) that come to the common conclusion that women in the professions analyzed are less likely to have children than other women or their male peers. Cooney & Uhlenberg (1989), analyzing the situation in 1980, for women only, find that doctors have more of a family commitment and are more likely to have children than are lawyers and post-secondary teachers. In a study using data from the 2000 Census, Wolfinger, Mason & Goulden (2008) update and improve on Cooney & Uhlenberg (1989) as they analyze both men and women multivariately in order to explain differences in fertility by profession. They confirm that physicians have the highest rate of birth events, followed by attorneys and academics. Men have, within each profession, more birth events than women. The factors that explain fertility variation by profession for men (i.e. marital status, income, and spousal employment) only partially account for differences by profession for women. The authors acknowledge that this may be related to the more complex relation between family and career for women documented by many (e.g. Avellar & Smock, 2003; Bram, 1985; Budig & England, 2001; Goldin & Katz, 2008; Hewlett, 2002; Macunovich, 1996ab; Noonan & Corcoran, 2004; Waldfogel, 1997, 1998). Previous studies do not, however, inform us whether, or to what extent, men and women in different professions have children at different rates.

Career structure rigidity and work inflexibility are likely to affect men and women in the professions differently. They are legacies of organizational norms that developed in earlier times

when men, who were married to full-time homemakers, were the only ones to be fast-track workers, and the norms that set the scheme for when in life specific career achievements should be made rest upon expectations about work-related productivity applying to a worker without the responsibility to care for a home and a family. They will inevitably disadvantage women who typically take more responsibility for housework and childcare, and those of equal ability whose partners are also on the fast-track. If different social norms apply for men and women with respect to parenting, putting more pressure on women to be primary caregivers than on men, women in fast-track couples will face more difficulties. Moreover, biological differences restrict the time when women can have own children more than for men who are more able to postpone childbearing until after they have fulfilled their career achievements.

The degree of career-family compatibility also depends on the relation between partners. In traditional neoclassical economic models the division of household labor is assumed to be determined by the comparative advantages in market work and housework, and spouses specialize according to these comparative advantages (Becker, 1991). To account for differences in preferences between spouses different kinds of bargaining models have been developed, where the bargaining power of each spouse is assumed to be determined mainly by their relative resources and their respective threat points (Konrad & Lommerud, 1995; Lundberg & Pollak, 1996; Manser & Brown, 1980; McElroy & Horney, 1981). Resources of importance are education, income, occupational prestige, etc., which are used to negotiate a favorable division of labor. Although the standard economic approach to assess gender equality has been to indicate the proportion to which partners contribute to family finances, typically by income; it may very well be that educational homogamy is what provides the basis for equality in partnerships. Educational equality means shared norms and values in a wide range of fields important to both family life and working life. Educational homogamy with respect to level guarantees a certain

degree of common networks, shared interests, and mutual understanding.[1] These aspects may be further enhanced by educational homogamy with respect to orientation/occupational homogamy and affect both family life and the careers of the partners.[2] For example, Sweet & Moen (2004) find that academics that work at the same university report less stress and more satisfaction both when it comes to work and family life than do other dual-professional couples where one spouse works at a university and the other works elsewhere.

Differences between the professions

This study contrasts the patterns of family building among academics with that of men and women working in law or as doctors. There are differences in the professional development that follow upon a degree in law or medicine alternatively receiving a PhD that may affect involvement family life, in general, and parenthood, in particular.

Graduate school follows upon a bachelors' or Masters' degree and is supposed to take about four years. Few make it on schedule, because they become involved in teaching or other side projects. Men and women who go on to graduate school in order to get a PhD are generally 25–29 years old. Only about 10 per cent of all PhDs are rewarded to people under 30. In 2007, 41 per cent of all male PhDs were 30–34 years and 37 per cent of all female PhDs were in that age span. The majority of PhD students are employed on fixed-term contracts. After graduate school, they may either stay in academia or seek work elsewhere. The public sector, especially government, is employing a large part of the PhDs, except for those with a degree in the fields of science and technology that to a high degree find employment in the research-intensive industry. To a large

[1] Available studies (e.g. Edgell, 1980; Singy, 1996) indicate that educational homogamy leads to less role segregation in partnerships.

[2] It may even be that the education and career of one partner have positive spillover effects for the other since he/she may benefit from the partner's skills and experiences when it comes to contacts, promotions, tacit knowledge or implicit rules of conduct in a specific situation, but also when it comes to the transmission of knowledge and expertise (Benham, 1974; Bernardi, 1999). Some studies point to increasing gender equality, especially among dual-career couples, but not even women's professional careers seem to provide a sufficient context for an egalitarian household division of labor (Gregson & Lowe, 1993; Hardill et al., 1997).

extent, this has a gender bias in line with the pattern of gender-based occupational segregation discussed above. In academia, PhDs may continue as post-docs or assistant professors, to a large extent on short fixed-term contracts. Since the Swedish academic system has no tenure track, there is great variability among academic careers and the challenge to publish or perish within a six-year period is not applying to all (cf. Wolfinger, Mason & Goulden, 2008). There is no clear up-or-out decision as in the United States. For example, promotion from assistant to associate professor is only associated to individual accomplishment in doing research, and not associated to tenure. On the other hand, many full-time teachers have open-ended contracts early on, whereas others have casual contracts for long but the same few opportunities for career advancement. All full professors are, however, on permanent contracts. It should be noted that although not assured full job security, all academic staff is covered by the same social insurance benefits, basically the same unemployment benefits, and have the same opportunities to work part-time irrespective of contract and position. Wages, although subject to individual variation, improve with each step up the academic hierarchy, and are mainly related to academic proficiency and research production.

Law school is a four year university education and medical school comprises five years. Entry is highly restricted. After graduation, a more or less compulsory two-year training period as a clerk or an intern follows. The selection process to this training is very competitive, especially for law students, which leads to a heavy work load for students throughout law school. For graduates from law as well as medical school, it is often seen as a defining moment in terms of career opportunities when and where you get your internship.

The majority (60 per cent in 2007) are in the age span 25–29 when they graduate from law school, the average age being slightly higher for men than for women, which means that the majority are approaching 30 when they have finished their training as a clerk. Afterward there are

several career options. One is to join a law firm and spend five to ten years to make partner, which is often challenging and highly demanding when it comes to work hours. Becoming partner in a law firm is similar to getting tenure. It implies a less secure position in the company hierarchy, and a failure to make partner implies a significantly slower career development and perhaps a move to another law firm. Like the US tenure track, the requirements for making partner vary among more or less prestigious law firms. However, not all law graduates aspire to have high-powered corporate careers, and some settle with less competitive careers for example in the bank sector or in administration. Another option is to follow the career track in the national courts administration and aim to become a district attorney or a judge. This is also relatively competitive, as are all professional careers, but much less so than the private law firms, since it follows a more bureaucratic and standardized schedule for promotions long-standing in the public sector. As is the case in Swedish academia, there is no up-or-out decision and so it is possible to slow down or stop the career for a period of time when care giving demands are pressing. This means that mothers and fathers may become district attorneys and judges at a later point in life than colleagues that do not have similar family responsibilities but they are not out of the competition. There are however, wage differences that follow with the career choices since law practitioners in the private sector make considerably more than those who work in the public sector.[3]

The average age for finishing medical school is also 25–29, the average age being slightly higher for men than for women, which means that the majority are around 30 when they have finished their internship. After that they may continue as internists or go on with additional training for some specialties. All doctors are regularly employed during their residencies, the overwhelming

[3] See Stanfors (2009) for more information on the earnings of different professional groups.

majority in publicly run hospitals or health care centers.[4] Wages, although subject to individual variation, improve with each step up the hierarchical ladder. Due to limited supply of doctors and high demand for their competence, medical graduates can expect to rank among the top earning professional groups not only among those employed in the public sector but in society as a whole. There is nevertheless a gender wage gap among physicians as well, to some extent determined by internal segregation and different orientation with respect to men's and women's specialization. It should be noted that the female-to-male wage gap for physicians, of about 10 per cent, irrespective of age, is less than that for privately employed lawyers but larger than that for lawyers in the public sector. In sum, this means that many graduates from medical school will reach a rather secure position, both income-wise and career-wise, around 30 that is conducive for childbearing. Work-wise, job stability is good, although terms of contracts may vary. Irregular hours and night calls may be demanding, especially for parents with young children, but solved partly through the provision of childcare, to some extent available even at odd hours of the day.

The Swedish Case

Across countries, there is considerable variation in polices and institutions which may affect the possibilities to combine work and family. In many countries policies only deal with the reconciliation of women's double roles, whereas in other countries, like Sweden, institutional arrangements has a broader scope and addresses gender equality issues alongside the work–family balance for all parents. Institutions differ across countries when it comes to maternal/parental leave schemes, wages and working conditions of mothers/parents, the provision and pricing of childcare, and whether families or individuals are the subjects of taxation. All components are important, but most likely it is the combined effect of all these factors taken together that determines the degree of compatibility of family and career. Sweden is often seen as

[4] Doctors employed in the private sector are to a large extent self-employed and have their own practices. The allocation of such licences has been highly controlled and limited by the Swedish National Board of Health and Welfare. Doctors with their own practices are generally aged 45+.

a forerunner when it comes to family- and work-related policies, and Swedish women were among the first to combine work and family on a broader basis. Today, tendencies are beginning to show more of a combination of work and family among men as well (Dribe & Stanfors, 2009). On an aggregate level, it seems as if the institutional arrangements in Sweden are more supportive of childbearing (Billari & Kohler, 2004) than are conservative and liberal models with a more traditional approach to family and gender roles. Due to its universalistic and general design, all couples potentially benefit from the Swedish welfare state and its opportunities to combine work and family. In reality, however, the actual combination of work and family is a result of choices made at the individual and couple level concerning both career and childbearing (cf. Hakim, 2000).

When it comes to parenthood and the care of children, parental leave, introduced in 1974, targets both mothers and fathers. Men and women are granted equal rights to take time off from work to care for children. Nevertheless, women take up the major part of parental leave (about 80 per cent in 2007). Fathers' share has increased slowly over time both as a fraction of users and as a share of total leave. Presently, the Swedish parental insurance grants parents 480 days. With the exception of 60 days, leave can be shared between the parents without restrictions. The 60 days in question are reserved as a quota for either parent and if he or she does not use the time the benefit days will be forfeited. Benefits are related to previous earnings, and there is thus a strong incentive for both men and women to have labor market attachment before becoming parents. The replacement rate is high: 80 per cent of previous earnings up to a maximum for most of the period. In addition, public sector employees and many professionals in the private sector are almost fully compensated by their employers. The government otherwise finances the parental leave scheme. Thus, both mothers and fathers in Sweden are expected to be engaged and involved parents and take active part in the care and development of their children. Not all people

and workplaces agree with this opinion (Bygren & Duvander, 2006) and the gender wage gap still makes the opportunity costs for the woman's time at home less than for the man in most cases. This tends to counteract gender equality and reinforce a traditional division of labor between mothers and fathers.

Whereas parental leave is generous and flexible – days can be used on either full-time or part-time basis until the child turns eight – the major bulk of parental leave is nevertheless used when children are under two years. After that, day care centers provide care for several hours a day. In Sweden, nonparental child care is organized by the local authorities, it is easily accessible to parents and highly subsidized. About 80 per cent of all preschoolers were in day care in 2007. In many country contexts, finding and meeting the costs for quality child care is a challenge for parents with ordinary jobs, but less so for parents in fast-track jobs since their wages are high enough to cover the costs for child as well as other kinds of home care. In Sweden, the same rules apply to all parents and the money or quality aspects of child care are less of an issue. Nevertheless, the shortage of time and the sense of feeling rushed is an issue that applies to all fast-track parents, irrespective of country context.

Since 1971 income taxation has been based on individual, rather than family, income. This has favored married women's employment, by reducing their marginal tax rates, and helped create the two-earner household. The combination of work and family is further supported by legally granted part-time work, on same conditions as full-time work, for parents with children under 12.

Hypotheses

From the discussion above working hypotheses are generated. All couples in Sweden face a comparatively advantageous situation in terms of family-work compatibility, mainly as a

consequence of generous parental leave benefits that compensate for income loss, and extensive public provision of child care which reduces opportunity costs of having children following frequent and sustained career breaks. Based on the differences in career structure and professional development that follow upon educational orientation and occupational choice, differences within the professions studied are expected. Doctors are expected to be most likely to have a second or a third birth once they have started childbearing, irrespective of gender. They are followed by PhDs and law practitioners in the national courts system that are government employees. Lawyers working in the private sector are expected to be least likely to have either a second or a third birth once they have started childbearing, especially if they are women.

Considering spouse characteristics, the hypothesis is that educational homogamy is positively related to continued childbearing with respect to level as well as to orientation. Couples in which both partners have higher education and are professionals are equally likely to have a second or a third birth, once they have started to have children, compared to other couples. Couples in which both partners belong to the same profession are expected to have higher risks of second and third births since networks, shared interests, and mutual understanding are important for fast-trackers. Educational and professional homogamy should promote continued childbearing, especially for women.

3. Data and methods

Data

The data analyzed come from the Swedish population registers maintained by Statistics Sweden. From a dataset consisting of all individuals in the birth cohorts 1942–1989 who resided in Sweden at any time from 1961 onwards, individuals in heterosexual couples (married or cohabiting without being formally married) who are in their first partnership and belonged to the

professional groups studied at the time of their first birth are selected. The couples are followed from the birth of the first child (the registers only have information on non-marital cohabitation when the cohabitants have common children) to woman's age 45, the dissolution of the partnership, emigration, or the end of the study period in 2005. The data are derived from the multigenerational register (*Flergenerationsregistret*) which contains information on biological and adopted children to all index persons in the sampling frame (all individuals in birth cohorts 1942–1989 who resided in Sweden at some point in time after 1960). Due to frequent missing information on adoption dates, only biological children are included in the analysis.

From 1990 onwards the Swedish population registers record non-marital cohabitation when there are common children (*RTB-families*). To make sure that the entire history of the couple is considered, from the birth of the first child onwards, only couples experiencing their first births after 1989 are included in the sample. For the individuals in these couples there is linked register-based information on place of residence, income, education (level and field), branch of employment, as well as demographic events (deaths, external migration, and changes in civil status).

As there is no information on non-marital cohabitation when there are no common children, it is only possible to follow non-marital partnerships (cohabitation) after the birth of the first child. Therefore, this study is not about the transition into parenthood, but instead it focuses on what happens after the birth of the first child and whether there are differences within the professions in this respect. Most likely there are important selection mechanisms in this process, implying that the partnerships formed might be selected among the more family oriented individuals, and the extent to which this kind of family orientation differ between subgroups (by education, income, etc.) observed differences in higher order fertility between groups might partly be a

result of this kind of selection (see Kravdal, 2001, 2007; Kreyenfeldt, 2002). However, given the aim of this study – to analyze continued childbearing among couples in which at least one of the partners has a PhD or a degree in medicine or law – this is not a major concern, because the focus of the study is rather on differences within the professions with respect to family life of actually formed partnerships with at least one child born, than on underlying educational differences in fertility more generally.

Methods

Most of the register-based information is available once a year while the demographic information is available on a monthly basis. Even though, in principle, it is possible to construct a dataset for fertility analysis that is continuous with monthly precision in terms of the events studied and the starting time of partnerships, such an approach creates a large number of tied observations because a majority of birth intervals are between two and three years, and thus most couples share a rather limited number of birth intervals. For this reason a discrete approach is chosen in the multivariate analysis, studying the probability of having a birth during the year conditioned on the values of the covariates at the beginning of the year. Multiple births during a year (i.e. twins or two separate births within the same calendar year) are counted as one delivery, but the number of previous births takes multiple births into account. For example, in the case of a twin birth as second birth only one birth event is created as an end point of the interval from the first to the second birth, and the interval between the second and third birth is not included, because it happened at the same time as the second birth. Thus, the interval 3–4 follows immediately upon the 1–2 interval.

Given the discrete approach, logit models of the transformed probability of having a birth during the year are estimated. Models are estimated separately for each birth interval (i.e. first to second births, and second to third births).

Variables

In order to study differences between couples in which either the man or the woman is an academic, law professional, or a doctor; a variable is constructed using a combination of educational and occupational codes (highest educational level obtained, field of that education, and branch of employment). *Own profession* is divided into five categories: lawyer working in a private law firm; law practitioner employed in the national courts and taxation system; medical doctor; post-secondary teacher (i.e., PhDs in academia). All have professional degrees and work as professionals at the time of their first (or second) birth but those who have shifted professional orientation, most likely by changing branch of employment, since their previous birth are left to the category 'other'.

In order to control for spousal educational and professional status, a variable is constructed according to both the highest educational level obtained and professional orientation. *Partner's educational status and professional orientation* is divided into four categories: (1) Secondary education or less that is basic education (up to nine years), and high school. (2) Higher education (universities, community colleges, nursing schools etc) comprises all fields except for the professional degrees in focus of our investigation. (3) Professional degree (PhD, law or medical degree), working in the relevant branch. (4) Professional degree and employment, identical with that of the partner.

Couple income is included to capture potential income effects on fertility. Total income include wages for employees and self-employed as well as benefits paid in connection to work, i.e. parental leave, pensions, unemployment benefits, and payment from sickness insurance. To enable comparisons over time, and thus eliminate the impact of inflation, we relate the annual income to the so called price base amount (hereafter simply called base amount) of the year. The base amount is set for each calendar year on the basis of changes in the Consumer Price Index (*KPI*). Its main purpose is to adjust different kinds of public benefits (pensions, student aid, sickness insurance, etc.) to account for inflation. In 2005, the base amount was 39,400 SEK and for the total population 20–64 the median income was about 220,000 SEK, which corresponds to about 5.5 base amounts. The 25th percentile corresponded to about 3.5 base amounts and the 75th percentile to about 7.5 base amounts. We also include a variable measuring the share of couple income earned by the woman as a proxy for her relative bargaining position in the partnership.

In addition to these variables, a number of covariates with a possible impact on continued childbearing are controlled for. A set of controls of standard demographic characteristics is included: man's age, woman's age, their square terms included to account for curvilinearity in relation to the likelihood of a birth, time since last birth, age of woman at first birth, cohort, and civil status (i.e. married or cohabiting). In addition, the character of the place of residence is controlled for, to capture more general differences in fertility levels between geographical areas. The categorization of municipalities from the Swedish Association of Local Authorities and Regions (SKL), which is common in regional analyses, is used. It captures both population density and character of the municipality. A variable measuring the country of birth of each of the partners is also included, distinguishing between native-born Swedes and those born in another country.

In the analysis the sample is limited by the exclusion of couples for whom there is no information on educational and/or professional status, and the sample is also truncated at eight years since previous birth. Tables 1a and 1b show the distribution of the covariates used in the analysis, by gender.

Tables 1a and 1b about here

Some differences by gender should be noted. The first is the differences in composition with respect to professional orientation. It is much more common for men to be PhDs employed in academia; whereas 19 per cent of the male sample belongs to that category, less than 10 per cent of the women are academics, indicating the fact that academia is one of the professional fields where feminization has been relatively slow. About half of both the male and female samples are physicians, a professional orientation that is more common among women than among men. The biggest gender difference relates to that of the law profession. It is obvious that male lawyers to a much larger extent aim for corporate careers in the private sector whereas women follow the career track of the national courts administration. Whereas men are equally distributed between private law and the national courts and taxation system, women are to a much larger extent employed in the courts administration than in private law firms (28.2 per cent and 8.6 per cent, respectively). Another difference by gender to be noted is the partner's educational status. Whereas the overwhelming majority of the men and women belonging to the professional groups studied have a partner with higher education, a somewhat larger share of the male focal persons have a partner with only secondary education or less. It is obvious that educational homogamy, not only with respect to level but also with respect to professional orientation, is common. Almost 38 per cent of the men have a partner who belongs to one of the professional groups studied and the overwhelming majority has a partner with identical education and professional

orientation. This holds, to an ever larger extent, to women as well. Almost 40 per cent of women who belong to the professional groups studied have a partner with identical education and professional orientation. These gendered patterns clearly illustrates a high degree of homogamy with respect to educational status but also the fact that female hypogamy is less common than male hypogamy.

As a result of the compositional differences noted above, a larger share of women than men are in couples with high total income. There is especially a difference with respect to the top income category (i.e. that exceeding 16 base amounts) in which a larger share of women (66.6 per cent) than men (60.2 per cent) are to be found. There is also a significant difference with respect to the woman's share of couple income: in the sample of male professionals, the woman's share of couple income is a mean 37.3 per cent whereas in the sample of female professional, the equivalent share is 49.2 per cent, which illustrates that women professionals are in a stronger relative position in their couple context than are women in unions with men belonging to the professional groups studied. Overall, the male and female samples are quite similar when it comes to demographic characteristics, the exceptions being a somewhat larger proportion of men being born outside of Sweden, and having a foreign-born partner. The mean age of woman at first birth is somewhat higher in the female sample than in the male sample

Tables 2 and 3 provide some descriptive measures relating to the births in the two samples of men and women with different professional orientation used in the analysis. A large majority of the births studied are second births, which is not surprising since the two-child norm is well-established and strong in Sweden. Third births are less common. In the sample of men being law professionals, physicians, or academics, the mean age at childbirth of the woman in the couple is 33.1 for second births, and 35.2 for third births. In the sample of women belonging to the same

professional groups, the mean age at childbirth is slightly higher: 33.7 for second births, and 35.8 for third births. Academics stand out as being older at childbirth in relation to the other professional groups, irrespective of gender, and parity. Among women professionals, lawyers in private law firms overtake the PhDs in the case of third births. The general impression is that physicians and law professionals employed in the national courts system are slightly younger at childbirth, which corroborates the assumption that working in professions with less rigid career structures, often found in the public sector, is more conducive to childbearing than are profession with more rigid hierarchies and more pressure on the individual, especially in the case of third births. It is known that women in high-power couples are older when giving birth at all parities than women in other couple contexts (Dribe & Stanfors, 2010). The fact that women belonging to the professional groups PhDs, physicians, and law professionals themselves, are older at childbirth than women partnered with men belonging to these professional groups, not only reflects late motherhood of the well-educated but also the postponement of childbearing due to career reasons and the relatively stronger position of the woman in the partnership when it comes to childbearing decisions.[5]

Table 2 about here

Table 3 about here

The mean birth intervals are between approximately 2.2 and 2.9 years for the sample of male as well as female professionals. It should be noted that couples in which both partners are highly educated in general do not have shorter birth intervals than other couples (Dribe & Stanfors, 2010). They do not seem to reduce their birth intervals by much despite being older when reaching each parity. There are, however, some differences in birth intervals with respect to

[5] This could be compared to the finding that among couples in which the spouses have different degrees of educational power, the mean age of mother, irrespective of parity, is higher in cases where the woman has higher educational power than the man (Dribe & Stanfors, 2010).

professional orientation that should be noted. Law professionals have the longest birth intervals; among men, lawyers employed in the national courts administration have the longest birth intervals at both second and third parity, whereas among women, lawyers employed in private law firms space their births more than others. That women in private law firms space their births longer in order to get back on the career track between births is understandable but it seems more puzzling why men in the national courts administration do so. The answer lies probably with the partner who very likely also is a law professional since this group is very homogamous, significantly more so than the other professional groups.[6]

4. Results

Tables 4 and 5 show the logit estimates for second and third births separately, by gender. In addition to own profession, partner's educational status, country of birth (own as well as partner's), and civil status, the regressions also control for man's age, woman's age, their square terms, age of woman at first birth, couple income and its square term, women's share of couple's income, time since last birth, cohort, and place of residence. The income controls render results in line with expectations and so do the demographic controls. The coefficients for age and age square confirm the quadratic pattern of birth timing, and the coefficients for time since last birth confirm a quite consistent spacing behavior irrespective of gender and parity (cf. Table 3).

From Tables 4 and 5, it is established that physicians have the highest chances of having a birth in relation to the other professional groups. This is true in both birth intervals, for women as well as for men. For third births it becomes even more clear that doctors are the most likely to

[6] Whereas 32 per cent of the male sample has a partner with identical educational status and professional orientation, 41 per cent of men employed in the national courts and taxation system have a partner with identical status. The second most homogamous group is that of lawyers in private firms, followed by academics and physicians. For women, even a larger share of the sample is matched with an identical partner (39 per cent). Among women, lawyers employed in private law firms are most likely to have a partner with identical educational status and professional orientation, followed by academics, law professionals in the public sector, and doctors.

continue childbearing once they have started a family. Among women, lawyers in private law firms seem to face the most difficulties combining a career and children since they are the least likely to experience a second and third birth. For women in law, employment in the public sector seems to be more conducive to continued childbearing, whereas this is not the case for men who are working as law professionals. Women in academia have less chances of having a second birth – they have equally low odds ratios as women working in private law firms. For third births their odds are elevated in relation to other professional groups, but they are still considerably lower than physicians, although the result is not statistically significant. It should be noted that men in academia also have lower odds ratios than some of the other groups – they are actually the second lowest group, yet more so in the case of second births than in the case of third births. The group 'other', which consists of professionals who belonged to one of the four professional categories at the time of their first birth, but has since then changed professional status (typically by changing employment) quite consistently place themselves between the two groups of law professionals, for both men and women, and have medium-low odds of experiencing a birth at both intervals. It is important to note that the relationship between professional orientation and childbearing does not depend on couple income, since regressions without controls for income generate more or less identical results.[7] It should also be noted that, in the case of third births, those who had achieved their professional status already at the time of their first birth have higher odds ratios than others, and this holds in particular for women.

Table 4 about here

Table 5 about here

[7] Results not shown but available for presentation at request.

When considering the educational status and professional orientation of the partner as well, it becomes obvious that, in line with previous findings (Dribe & Stanfors, 2010), couples where both partners have high educational status generally have higher chances of having a birth, which reflects that pursuing a higher education and a career is widely perceived as something compatible with family in Sweden. This is extremely obvious in the case of professional women, where the odds ratios of having a second as well as a third birth increase with the partner's educational status. Having a partner who belongs to one of the professional categories studied increases the risks of having a second as well as a third birth and having a partner with identical professional orientation also elevates the chances of continued childbearing. Given the high degree of homogamy among fast-track professionals it may very well be that the low fertility of female law professionals and academics in comparison to doctors can account for the low odds ratios of experiencing a birth among male lawyers.

Looking briefly at some of the control variables, country of birth matters in the sense that native-born Swedes are more likely to experience a second birth than are foreign-born women and men, and this holds for own as well as partner's ethnicity. For third births the pattern is less straightforward. For men, the results are not statistically significant (due to small numbers) but for women being born in another country than Sweden decreases the chances of having a third birth, whereas if the partner is foreign-born the chances of having a third birth actually increase.

In line with findings of many previous studies, formally married couples are more likely to continue childbearing, once they have started, than are cohabiting couples, and this is valid for both samples including men and women professionals. Married couples are generally considered more child-oriented than those in informal unions. This has to do with selection because even if non-marital cohabitation is widespread in Sweden, lifelong cohabitation is not common because

many cohabiting couples decide to formalize their unions and marry once they have entered parenthood (Bernhardt, 2002). Whereas about two-thirds of all first births are born to cohabiting parents, second and higher order birth, to a higher degree, take place within marriage. About 80 per cent of the men and women in our sample are married.

5. Discussion

This study shows that there are differences with respect to continued childbearing within the group of highly educated professionals in Sweden. The chances of experiencing a second or a third birth vary by profession and there are some differences between male and female professionals. In line with our expectations, physicians are more likely to go on to have a second or a third child once they have started a family in relation to law professionals and academics. This general pattern holds for men as well as women, but there are some variations with respect to gender. There is general support for the hypothesis that differences in career structure and the professional development that follow upon educational orientation and occupational choice, generate differences in continued childbearing within the professions studied. Those who are in a traditional fast-track hierarchy, with constant pressures of producing either client contracts or research results and publications, face more difficulties combining work and children than those who work in organizations where it is possible to step out of the rat race, temporarily, without too many career penalties. In line with this reasoning, it is found that among women, lawyers working in the private sector are least likely to have either a second or a third birth once they have started childbearing in relation to physicians, public law officials, and academics.

That academics have lower chances of experiencing a second birth in relation to physicians is another indication of that career structure rigidity and work demands are important. Even though there is no formal tenure track in Swedish academia, PhDs go through a lengthy training period

and face a competitive environment immediately after graduating, especially if they are research-oriented and aim for an academic career and not just a teaching position. There is a *de facto* tenure track for the career oriented that put pressure on Swedish academics in a similar way as the US system does. This rather than other puts them in a relatively disadvantaged situation in relation to other professional groups. Another explanation could be that academics systematically have different views of family than doctors; that there is occupational selectivity with respect to personality, i.e. that some people chose certain professions, such as academia, because they are not very family oriented, and that others chose other professions, such as medicine, because they are family oriented. In my opinion this is not very plausible since we are dealing with continued childbearing and differences among professional groups among individuals who have already had one child. Moreover, complementary regressions on the chances of experiencing a divorce indicate that the professional groups that have lower birth risks also have lower divorce risks. Their lower fertility is thus not explained by the fact that they are less family committed and more prone to divorce than are other professional groups. The selectivity issue is probably more important when it comes to the choice of whether or not to start a family at all. When it comes to the decision whether to stay with one child or go on to higher parities, work-family compatibility issues become decisive.

Overall the opportunities to combine work and family are very good in Sweden compared to elsewhere. Parents have statutory rights to take time off to care, and are generously compensated during parental leave. Good quality day care services are available to all at low costs. This reduces the work-family issues for all parents – issues that often are pressing for parents in general in other country contexts but not so much of a problem for fast-track professional parents since they earn high enough incomes to cover the costs of quality care for children and other home care. However, in some respects the Swedish model with lengthy leaves and publicly

provided child care has limitations, especially for fast-track professionals, who may need more flexible solutions in order to accommodate work demands. The lack of alternatives may be more of a compatibility issue in the Swedish context, especially for fast-track professionals, and so may be the lack of home care services that make people devote more time and energy to housework and maintenance on a do-it-yourself basis and thereby spend less time and effort on market work and careers. Lately, there has been a tendency among private companies to accommodate workers who are parents with family friendly policies and flexible solutions, however this does not eliminate the fact that fast-track jobs in rigid hierarchies are inflexible; the volume of work produced still is vital for promotion, and the common response to this is longer work hours to further increase production. There are norms about when in life certain career achievements should be met and these are not designed around the primary caregiver but rather around a fulltime breadwinner with support from home. All else equal, workers who spend more hours on the job and devote more effort to their career will produce more, and mother (and fathers) who have family responsibilities and perhaps also a partner who have a demanding profession will be disadvantaged and put under pressure.

Compatibility issues are found in the workplace and the career structure of the profession in question, but in many senses the degree of career-family compatibility also depends on the relationship between partners. Considering spouse characteristics, the results support the hypothesis that educational homogamy is positively related to continued childbearing with respect to level as well as to orientation. Couples in which both partners have higher education and are professionals are generally more likely to have a second or a third birth, once they have started to have children, compared to couples with lower education. Couples in which both partners belong to one of the professional groups studied are even more likely to experience a second or a third birth, and if they have the same profession, this is also associated with elevated

chances of another birth. It seems as the assumed disadvantages and pressures are mediated by shared interests and networks, and a mutual understanding of each other's situation. The higher continued childbearing among homogamous professional couples can probably also be explained by more egalitarian attitudes and practices towards household division of labor and specialization in these couples. In dual-career households, in which both spouses have a high level of career involvement, both partners have access to economic resources and therefore a basis for negotiations. Moreover, competing preferences and stress can be mediated through a higher degree of understanding for each others' workload. When it comes to childrearing, couples with higher educational status and skills share more of the total parental leave benefits than those with lower educational status and skills and they make more use of public childcare. Taken together, a more egalitarian relation between the spouses can also be fertility enhancing through a more harmonious family life. Since the couples investigated also are stable in their relationships, it may very well be that the search and mating process for these partners takes longer time, the partnership is more thought over, and once the partners have started a family, the pros and cons of family formation have been thoroughly thought over, which enables them to cope with work-family related difficulties that arise.

The fact that foreign-born individuals are less likely to experience at least a second birth than are native-born Swedish women and men, indicate that ethnicity may complicate the work-family issue. The fact that it is the case for women as well as for men, although stronger for women, indicate that it may be that immigrants face discrimination and needs to work harder, and thereby have difficulties combining children and a career. This assumption is supported by the fact that own ethnicity has more of a negative association with continued childbearing than partner's ethnicity.

To conclude, this study offers new findings about the relationship between professional orientation and continued childbearing. Continued childbearing vary by profession. The patterns of variation are rather similar with respect to gender. It seems, however, as women are more negatively affected by their own situation and characteristics, exemplified by career structure rigidity of their own profession, and own ethnicity, but positively affected by partner's educational status. For men these associations are not as straightforward.

Academics, both men and women, have lower chances of another birth in relation to, not only physicians, but also other professional groups. This is most likely an effect of the academic career structure that at least part of the PhDs employed in academia face. In this respect, the work-family difficulties that academics face are quite similar to that of tenure track contexts. To publish or perish is a pressure for all academics and put them in a seemingly disadvantaged position with respect to family building in relation to other professional groups even in a family friendly setting like Sweden.

References

Avellar, S. & Smock, P. J. (2003). Has the price of motherhood declined over time? A cross-cohort comparison of the motherhood wage penalty. *Journal of Marriage and Family, 65*, 597–607.

Becker, G. S. (1991). *A treatise of the family.* Cambridge: Harvard University Press.

Benham, L. (1974). Benefits of women's education within marriage. *Journal of Political Economy*, 82, S57–S71.

Bernardi, F. (1999). Does the husband matter? *European Sociological Review,* 15, 285–300.

Bernhardt, E. M. (2002). Cohabitation and marriage among young adults in Sweden: Attitudes, expectations and plans. In J. Carling, (Ed.), *Nordic demography: Trends and differentials.* Oslo: Unipub/Nordic Demographic Society.

Billari, F. C., & Kohler, H-P. (2004). Patterns of low and lowest-low fertility in Europe. *Population Studies, 58*, 161–176.

Boulis, A. (2004). The evolution of gender and motherhood in contemporary medicine. *Annals of the American Academy of Political and Social Science, 596*, 172–206.

Bram, S. (1985). Childlessness revisited: A longitudinal study of voluntary childless couples, delayed parents, and parents. *Lifestyles: A Journal of Changing Patterns, 8*, 46–65.

Budig, M. & England, P. (2001). The wage penalty for motherhood. *American Sociological Review, 66*, 204–225.

Bygren, M. & Duvander, A.-Z. (2006). Parents' workplace situation and fathers' parental leave use. *Journal of Marriage and the Family, 68*, 363–372.

Cooney, T. & Uhlenberg, P. (1989). Family-building patterns of women professionals: A comparison of lawyers, physicians, and post secondary teachers. *Journal of Marriage and the Family, 51*, 749–758.

Dribe, M. & Stanfors, M. (2009). Does parenthood strengthen a traditional household division of labor? Evidence from Sweden. *Journal of Marriage and Family, 71,* 33–45.

Dribe, M. & Stanfors, M. (2010). Fertility of Power Couples in Sweden, 1991–2005. A Longitudinal Register-Based Study of the Impact of Education and Income on Second and Higher Order Births. Fortcoming in *Demographic Research*.

Edgell, S. (1980). *Middle class couples: A study of segregation, domination and inequality in marriage.* London: Allen & Unwin.

Esping-Andersen, G. (ed.) (2007). *Family formation and family dilemmas in contemporary Europe.* Bilbao: Fundacion BBVA.

Goldin, C. & Katz, L. (2008). Transitions: career and family life cycles of the educational elite. *American Economic Review: Papers and Proceedings 2008, 98,* 363–369.

Gregson, N. & Lowe, M. (1993). Renegotiating the domestic division of labour? A study of dual-career households in North East and South East England. *Sociology*, 28, 55–78.

Hakim, C. (2000). *Work-lifestyle choices in the 21st century. Preference theory.* Oxford: Oxford University Press.

Hardill, I., et al. (1997). Who decides what? Decision making in dual-career households. *Work, Employment & Society*, 11, 313–326.

Hewlett, S. A. (2002). Executive women and the myth of having it all. *Harvard Business Review, 80,* 66–73.

Hoem, J. M., Neyer, G. & Andersson, G. (2006a). Education and childlessness. The relationship between educational field, educational level, and childlessness among Swedish women born in 1955–59. *Demographic Research, 14,* 331–380.

Hoem, J. M., Neyer, G. & Andersson, G. (2006b). Educational attainment and ultimate fertility among Swedish women born in 1955–59. *Demographic Research, 14,* 381–403.

Joshi, H. (1998). The opportunity costs of childbearing: more than mothers' business. *Journal of Population Economics, 11,* 161–183.

Konrad, K. A & Lommerud, K. E. (1995). Family policy with non-cooperative families. *Scandinavian Journal of Economics, 97,* 581–601.

Kravdal, Ø. (2001). The high fertility of college educated women in Norway: An artefact of the separate modelling of each parity transition. *Demographic Research, 5,* 187–216.

Kravdal, Ø. (2007). Effects of current education on second- and third-birth rates among Norwegian women and men born in 1964: Substantive interpretations and methodological issues. *Demographic Research, 17,* 211–246.

Kreyenfeldt, M. (2002). Time-squeeze, partner effect or self-selection? An investigation into the positive effects of women's education on second birth risks in West Germany. *Demographic Research, 7,* 15–48.

Lappegård, T. (2002). Education attainment and fertility pattern among Norwegian women. *Statistics Norway Document 2000/18*.

Lappegård, T. & Rönsen, M. (2005). The multifaceted impact of education on entry into motherhood. *European Journal of Population, 21,* 31–49.

Lundberg, S. & Pollak, R. (1996). Bargaining and distribution in marriage. *Journal of Economic perspectoves, 10,* 139–158.

Macunovich, D. J. (1996a). Relative income and price of time: exploring their effects on US fertility and female labor force participation. *Population and Development Review, 22S,* 223–257.

Macunovich, D. J. (1996b). A review of recent developments in the economics of fertility. In P. Menchik ,(ed.), *Household and family economics.* Boston: Kluwer Academic.

Manser, M. & Brown, M. (1980). Marriage and household decision-making: A bargaining analysis. *International Economic Review, 21,* 31–44.

Mason, M. A. & Goulden, M. (2002). Do Babies Matter? The effect of family formation on the lifelong careers of academic men and women. *Academe, 88,* 21–27.

Mason, M. A. & Goulden, M. (2004). Marriage and Baby Blues: redefining gender equity in the Academy. *Annals of the American Academy of Political and Social Science, 596,* 86–103.

McElroy, M. B. & Horney, M. J. (1981). Nash-bargained household decisions: Toward a generalization of the theory of demand. *International Economic Review, 22,* 333–349.

Mincer, J. (1963). Market prices, opportunity costs, and income effects. In C. Christ et al. (Eds.), *Measurement in economics.* Stanford: Stanford University Press.

Noonan, M. C. & Corcoran, M. E. (2004). The Mommy track and partnership: temporary delay or dead end? *Annals of the American Academy of Political and Social Science, 596,* 130–150.

Perna, L. (2001). Sex and race differences in faculty tenure and promotion. *Research in Higher Education, 42,* 541–567.

Polachek, S. W. (1981). Occupational self-selection: a human capital approach to sex differences in occupational structure. *Review of Economics and Statistics, 63,* 60–69.

Singy, F. de (1996). *Modern marriage and its costs to women: A sociological look at marriage in France.* Newark: University of Delaware Press.

Stanfors, M. (2003). *Education, labor force participation and changing fertility patterns. A study of women and socioeconomic change in twentieth century Sweden.* Stockholm: Almqvist & Wiksell International.

Stanfors, M. (2009). Family commitment among fast-track professionals in Sweden, 1991–2005. Paper presented at the Annual Meeting of the Population Association of America in Detroit, May 2009.

Sweet, S. & Moen, P. (2004). Coworking as a career strategy: Implications for the work and family lives of university employees. *Innovative Higher Education, 28,* 255–272.

Van Bavel, J. (2010). Choice of study discipline and the postponement of motherhood in Europe: the impact of expected earnings, gender composition and family attitudes. Forthcoming in *Demography.*

Waldfogel, J. (1997). The effect of children on women's wages. American Sociological Review, *62*, 209–217.

Waldfogel, J. (1998). The family gap for young women in the United States and Britain: can maternity leave make a difference? *Journal of Labor Economics*, *16*, 505–545.

Wolfinger, N. H., Mason, M. A. & Goulden, M. (2008). Alone in the ivory tower: How birth events vary among fast-track professionals. Paper presented at the annual meeting of the Population Association of America in New Orleans.

Table 1a. Descriptive statistics of the sample (men).

Education/professional orientation	%
Lawyer, employed in private sector	14.90
Lawyer, employed national courts admin.	14.35
Physician	51.79
PhD, employed in academia	18.96
Total	100.0
Partner's educational status	%
Secondary education or less	27.30
Higher education	35.10
Professional education and employment	5.25
Identical	32.35
Total	100.0
Couple income (base amounts)	%
No income	0.16
< 6	1.34
6-10	4.69
10-12	7.01
12-14	11.76
14-16	14.83
> 16	60.20
Total	100.0
Civil status	%
Cohabiting	20.10
Married	79.90
Total	100.0
Time since last birth	%
0.0-0.9	16.32
1.0-1.9	28.12
2.0-2.9	24.34
3.0-3.9	10.64
4.0-5.9	12.95
6.0-7.9	7.54
Total	100.0

Previous births	%
1	49.22
2	50.78
Total	100.0
Place of residence	%
Metro cities	26.60
Metro suburbs	20.84
Big cities	37.54
Other	15.02
Total	100.0
Country of birth (own)	%
Swedish born	85.63
Born elsewhere	14.37
Total	100.0
Country of birth (partner)	%
Swedish born	83.03
Born elsewhere	16.97
Total	100.0
Woman's age (mean)	35.12
Man's age (mean)	37.69
Woman's age at first birth	30.89
Wom. share of couple inc.	37.27
Births	5095
Observations	32397

Note: Birth histories have been truncated at eight years since last birth.
Source: Statistics Sweden, see text.

Table 1b. Descriptive statistics of the sample (women).

Education/professional orientation	%
Lawyer, employed in private sector	8.59
Lawyer, employed national courts admin.	28.18
Physician	53.52
PhD, employed in academia	9.71
Total	100.0
Partner's educational status	%
Secondary education or less	21.91
Higher education	30.90
Professional education and employment	7.56
Identical	39.63
Total	100.0
Couple income (base amounts)	%
No income	0.09
< 6	0.62
6-10	3.60
10-12	5.18
12-14	9.97
14-16	13.98
> 16	66.57
Total	100.0
Civil status	%
Cohabiting	20.94
Married	79.06
Total	100.0
Time since last birth	%
0.0-0.9	16.72
1.0-1.9	28.85
2.0-2.9	25.03
3.0-3.9	10.41
4.0-5.9	12.29
6.0-7.9	6.70
Total	100.0

Previous births	%
1	49.90
2	50.10
Total	100.0
Place of residence	%
Metro cities	27.01
Metro suburbs	23.94
Big cities	33.82
Other	15.23
Total	100.0
Country of birth (own)	%
Swedish born	88.17
Born elsewhere	11.83
Total	100.0
Country of birth (partner)	%
Swedish born	89.15
Born elsewhere	10.85
Total	100.0
Woman's age (mean)	35.62
Man's age (mean)	37.58
Woman's age at first birth	31.46
Wom. share of couple inc.	49.15
Births	3328
Observations	20940

Note: Birth histories have been truncated at eight years since last birth.
Source: See Table 1a.

Table 2. Age of woman in couple at birth by parity and professional orientation of focal person.

	2nd births		3rd births	
Men	Mean	St.dev.	Mean	St.dev.
Lawyer, employed in private sector	33.68	3.36	35.52	3.04
Lawyer, employed in courts admin.	32.89	3.34	34.98	3.03
Physician	32.77	3.30	35.09	3.06
PhD, employed in academia	33.86	3.24	35.53	2.75
Total	33.10	3.33	35.18	3.02
Births	3978		1117	
Women	Mean	St.dev.	Mean	St.dev.
Lawyer, employed in private sector	34.58	2.91	37.24	2.62
Lawyer, employed in courts admin.	33.39	2.92	35.80	2.82
Physician	33.47	3.15	35.64	2.78
PhD, employed in academia	35.27	2.97	36.97	2.76
Total	33.70	3.11	35.82	2.81
Births	2624		704	

Note: Birth histories have been truncated at eight years since last birth.
Source: See Table 1a.

Table 3. Birth intervals (years) by parity and professional orientation.

	2nd births		3rd births	
Men	Mean	St.dev.	Mean	St.dev.
Lawyer, employed in private sector	2.27	1.14	2.91	1.55
Lawyer, employed in courts admin.	2.38	1.30	2.99	1.65
Physician	2.05	1.09	2.94	1.52
PhD, employed in academia	2.26	1.16	2.97	1.46
Total	2.16	1.15	2.95	1.53
Births	3978		1117	
Women	Mean	St.dev.	Mean	St.dev.
Lawyer, employed in private sector	2.41	1.12	3.36	1.56
Lawyer, employed in courts admin.	2.35	1.20	2.96	1.54
Physician	2.08	1.00	2.88	1.41
PhD, employed in academia	2.40	1.13	2.63	1.20
Total	2.20	1.09	2.92	1.45
Births	2624		704	

Note: Birth histories have been truncated at eight years since last birth.
Source: See Table 1a.

Table 4. Odds ratios from logit estimates of experiencing a birth, 1991-2005. Previous births=1.

	Men		Women	
Own profession	Odds ratios	P>|z|	Odds ratios	P>|z|
Other	0.766	0.001	0.718	0.000
Lawyer, private sector	0.807	0.002	0.668	0.000
Lawyer, courts admin	0.724	0.000	0.801	0.003
Physician	1	r.c.	1	r.c.
PhD, in academia	0.731	0.000	0.683	0.000
Partner's educational status				
Secondary education or less	1	r.c.	1	r.c.
Higher education	0.967	0.523	1.263	0.001
Professional	0.868	0.189	1.336	0.011
Identical	0.936	0.320	1.384	0.000
Country of birth (own)				
Sweden	1	r.c.	1	r.c.
Elsewhere	0.628	0.000	0.648	0.000
Country of birth (partner)				
Sweden	1	r.c.	1	r.c.
Elsewhere	0.669	0.000	0.706	0.000
Civil status				
Cohabiting	1	r.c.	1	r.c.
Married	1.260	0.000	1.145	0.025
Number of obs	15946		10450	
Wald chi2(76)	2139.41		1511.00	
Prob > chi2	0		0	
Pseudo R2	0.1694		0,1913	
Log pseudolikelihood	-7440.372		-4762.226	

Note: regressions also control for man's age, woman's age, their square terms, age of woman at first birth, couple income and its square term, woman's share of couple's income, time since last birth, cohort, and place of residence.

Table 5. Odds ratios from logit estimates of experiencing a birth, 1991-2005. Previous births=2.

	Men		Women	
Own profession	Odds ratios	P>|z|	Odds ratios	P>|z|
Other	0.620	0.000	0.577	0.000
Lawyer, private sector	0.812	0.056	0.585	0.012
Lawyer, courts admin	0.564	0.000	0.592	0.000
Physician	1	r.c.	1	r.c.
PhD, in academia	0.721	0.006	0.826	0.315
Prof. status already at first birth				
No	1	r.c	1	r.c.
Yes	1.049	0.600	1.334	0.007
Partner's educational status				
Secondary education or less	1	r.c.	1	r.c.
Higher education	1.001	0.992	1.160	0.212
Professional	1.351	0.066	1.409	0.048
Identical	1.332	0.005	1.254	0.080
Country of birth (own)				
Sweden	1	r.c.	1	r.c.
Elsewhere	1.012	0.925	0.683	0.019
Country of birth (partner)				
Sweden	1	r.c.	1	r.c.
Elsewhere	0.894	0.346	1.334	0.052
Civil status				
Cohabiting	1	r.c.	1	r.c.
Married	1.364	0.001	1.579	0.000
Number of obs	16969		10891	
Wald chi2(76)	595.75		465.94	
Prob > chi2	0.0000		0.0000	
Pseudo R2	0.0923		0.1097	
Log pseudolikelihood	-3847.7058		-2467.8164	

Note: regressions also control for man's age, woman's age, their square terms, age of woman at first birth, couple income and its square term, woman’s share of couple’s income, time since last birth, cohort, and place of residence.