

Labor Force Transitions after Childbirth Among Five Birth Cohorts in Sweden

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ABSTRACT: This article describes part-time work in Sweden and performs a multivariate analysis of the choice between part-time work, full-time work, and other activities in connection with childbirth among five birth cohorts of women. Results show that the combination of market work and family is common, but heterogeneity exists among women in the sample analyzed. Previous labor force participation proves important when it comes to returning to the labor market. The extent of previous labor force participation is also important, regardless of sector of, when it comes to the return to part-time or full-time work. Career orientation and social background also prove significant, some indicators probably working indirectly through higher education and different preferences.

KEY WORDS: fertility; gender; labor force transitions; longitudinal analysis; part-time work.

It is well known that the labor force participation of Swedish women is high in international comparison, particularly with respect to mothers of children under seven. In 2003, 76.1% of all women (16–64) were in the labor force. The corresponding figure for mothers with preschool children was 80.6%. However, high figures for labor force participation of Swedish women hide a high degree of part-time work and absence, especially time out for childcare. Thus the study of part-time work is of interest. Part-time work is also an important aspect of gender relations in the labor market, since most part-timers are females, and part-time work is often associated with less career orientation and assumed to be more in line with organizational culture and work in the less competitive female-friendly public sector.

The purpose of this article is to analyze part-time work in Sweden and to perform a multivariate analysis of the choice between part-time work, full-time work, and not working at all in order to evaluate mothers' labor force commitment following childbirth and how this has

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changed over time. Since part-time work is strongly connected with the presence of young children, the timing and extent of a mother's return to the labor market is interesting since it puts work orientation to a test. The multivariate analysis is restricted to 1966–1992/1993, which is an interesting period since it includes significant economic and institutional change.

First, part-time work is discussed and previous research is referred to. Different theoretical approaches help us understand the driving forces behind changes in part-time work and women's career orientation. Then, the data set and covariates are described. The labor market status 15 months after childbirth is discussed in relation to individual-specific determinants as the analysis focuses on the determinants of different strategies of combining career and family.

Part-time Work

Part-time work is often referred to as a phenomenon of the 1970s. Although statistical information on the extent of part-time work is limited before 1963, when the Swedish Labor Force Survey was first undertaken, there is reason to believe that part-time employment was prevalent before that time. Indications of this are for one, the debate on the issue and, for two, the appointment of official investigations looking into part-time work in particular and women's work in general. When it came to the public debate, several documents from the trade and employers' organizations discussed the pros and cons of part-time work and so did pamphlets and reports from women's organizations.

From the debates of the 1930s and 1940s it can be inferred that the opinion on female labor force participation varied to a high degree with the business cycle. It can also be inferred that part-time work was the same as half a day's work and, for women, a strategy to contribute to the family economy through the combination of market work and housework and childrearing. Part-time work was prevalent among men as well, but, for men, part-time work was characterized as a second shift and a way to earn extra money after ordinary hours.¹ Women's position in the labor market was clearly more marginal than men's.

Different sources indicate that the female part-timer in the 1930s and 1940s was more likely to live in urban than in rural areas, married with no young children in the household. This is in line with the fact that children and family-related issues, then, were private

matters to be taken care of within the private sphere. Public childcare arrangements were limited and efforts were mainly motivated by social reasons, not by a wish to increase female labor force participation and the compatibility between work and family responsibilities. Childbearing and childrearing were conceived as natural barriers to female labor force participation and it was up to each woman to solve the situation. However, public discourse on the subject matter indicates that, during the inter-war period, there existed several potential roles for women, from full-time homemaker to highly professional worker and, in between these two, a number of combinations between work and family (Frangeur, 1998).

During the 1960s and 1970s, part-time work expanded rapidly, decreased during the 1980s, and changed somewhat in character during the recession of the 1990s. It must be analyzed within a framework of the economic and political situation of different time periods, in which both demand for and supply of part-time work are investigated. Pettersson's (1981) comprehensive study of the economic and social aspects of part-time work and the living conditions of female part-time workers in the 1970s is supply-oriented in its analysis, while Tegle (1985) is demand-oriented in the analysis of macro-economic factors determining weekly working hours during the period 1963–1982. Sundström (1987) focuses on female part-time work in that she explains the development of part-time work within an economic theoretical framework. This study is also supply-oriented and concludes by stressing the importance of institutional change and social policy. Sundström (e. g. Rösen & Sundström, 1996, 1999; Sundström, 1991, 1997) has in a significant way contributed to our understanding of part-time work in Sweden and of the phenomenon in an international context.

Previous research indicates that part-time work is a gendered issue with women constituting the overwhelming majority of part-time workers. Moreover, part-time jobs have been, and still are, concentrated in typically female jobs, primarily in the service sector. Whereas female part-timers are concentrated in services, especially in the public sector, male part-timers are concentrated in industries such as mining, manufacturing, and construction that are industries sensitive to business cycle variations. Female part-timers are concentrated in a sector that is less sensitive to such variations. Female part-time work, more than male, is rather the result of structural change in the Swedish economy in the post-war era, notably from the 1960s and onward. In general, female part-time work is associated

with little career orientation and more family orientation (Barnett & Gareis, 2000).

The segregation of part-timers into different industries together with the highly gender-specific reasons for working part-time help us understand why women and men behave differently when it comes to part-time work. Economic analysis can contribute to the understanding of part-time differentials between women and men. A gender dimension can be added by incorporating gender aspects into existing theoretical approaches. In the case of part-time work, the demand for female labor is important together with the gender division of labor and various structures of constraint that limit female labor supply. Put into the context of the family and the gender division of labor, the primarily female responsibility for reproduction becomes an important point of departure since that is a basic condition for all female labor/leisure trade-offs.

Theoretical Considerations

To explain specific features of female part-time work and change over time, economics and sociology offer three broad theoretical perspectives.² One perspective focuses on the demand for part-time work and discusses the demand for female labor and how it has changed over time, together with economic structural change and the relative importance of different sectors and occupations. Another focuses on the supply of part-time work and relates to factors as educational expansion and increasing educational attainment among women, as well as changes in family formation, affecting the female life course. A third group of theories discusses policy and institutional arrangements that affect female part-time work through the facilitation of various combinations of family and work and social benefits.

According to demand-oriented explanations, the development of part-time work is related to economic structural change that changed labor demand and prompted an increase in the demand for female labor. Rapid economic growth between 1945 and the mid-1970s led to a strong demand for female labor, especially in the 1940s and after 1960. According to the reserve army hypothesis, part-time work was important for married women with children who wanted to combine work on a limited basis with family responsibilities.³ Economic structural change brought about a shift from manual industrial jobs to jobs in administration and services, which implied a change in skill structure. Rosenfeld and Birkelund (1995) state that the post-industrial

economy allows more jobs in the service sector to be provided part-time. Plantegna (1995) adds a gender dimension in implying that different sectors choose different strategies when it comes to work organization and schedules. In male-dominated jobs, the strategy is overtime among the existing personnel whereas in female-dominated jobs, the strategy is to hire additional workers part-time in times of expansion or as a solution to temporary bottlenecks.⁴ A high degree of occupational segregation can thus be maintained, if part-time work is conditional for female labor force participation. This may hold for the Swedish experience up to the late 1970s. However, after 1978/1979 parents with young children were given the legal right to reduce working hours and work part-time until the child is 12-years-old. This reform would have broadened the range of possible occupations for women and decreased occupational segregation had there not been discrimination and negative effects working through signaling as described by Albrecht, Edin, Sundström, and Vroman (1999).

According to supply-oriented explanations, the development of part-time work is related to increasing female educational attainment, changing career orientation across birth cohorts, and changes in fertility and the female life course. Swedish women have experienced increases in educational attainment across birth cohorts. According to standard human capital theory, women with higher and labor market relevant education are more likely to work over the life course than are women with little education. Better-qualified women are supposed to be more career oriented and more likely to work full-time. They are also more likely to return to work and to return faster than women with fewer qualifications. Bernhardt (1986, 1989) confirms this in her studies of women's home attachment at first birth as well as the choice of part-time work among one-child mothers born between 1936 and 1960. Although there are differentials according to educational level, there has been convergence over time, notably during the 1970s, when it comes to home attachment and the choice of part-time work among women with different levels of education. Part-time work has, according to Bernhardt, become a universal combination strategy of family and work and erased the distinction between homemakers and career women (Bernhardt, 1989; Hill, Mårtinson, Ferris, & Baker, 2004).

When it comes to changes in fertility, such as the postponement of family formation and the increasing importance of cohabitation, Sweden is documented to have led the way. These demographic aspects of socioeconomic change, most likely, interacted with the gender revolution and led to a re-evaluation of women's economic roles, increasing female part-time as well as full-time work. Increasing

female heterogeneity (Hakim, 1996, 2000) diminished the importance of the family cycle to female labor force participation.

According to theoretical explanations that emphasize the importance of institutions, the development of part-time work is related to the political and institutional setting which, to a different extent in different countries, has encouraged or suppressed labor demand and female labor supply (Gustafsson, Wetzels, Vlasbom, & Dex, 1996). Furthermore, Blossfeld and Hakim (1997) more or less follow Esping-Andersen's categorization in which countries cluster into well-defined groups of societies that have produced different patterns for female labor force participation. The Scandinavian countries have, unlike liberal and conservative welfare states, actively sought to integrate women in the labor market in the struggle to reduce class differentials and increase gender equality (Esping-Andersen, 1990). Through active employment and fiscal policy and institutional change regarding social benefits, the incentive structure of women and men has been altered in favor of the modern two-earner family. The Social Democratic welfare states have increased the public sector, which has served as both employer of women and provider of services vital to women with children and thus increased female labor force participation. According to Gustafsson et al. (1996), different breadwinner norms create different labor market attachment for potential mothers and affects women's labor force transitions in connection with childbirth. Swedish women rely on a number of institutions that enable them to combine work and family. They are more likely than mothers in Germany or Great Britain to work when their first child is 2-years-old. However, because of generous parental leave and limited supply of daycare facilities for children under one, Swedish women are not likely to work when the child is 6-months-old (Gustafsson et al., 1996). Conservative and liberal welfare states, with less comprehensive and generous family policies, lead to a sharper distinction between career oriented women, who return to the labor market on a full-time basis when their children are a few months old, and homemakers. Generally, women with higher education are more likely to combine work and family.

Labor Force Transitions in Connection with Childbirth

The general interest in the position of women in the labor market and their opportunities to combine a career with childbearing and childrearing makes it interesting to study female labor force transitions in connection with childbirth. When it comes to returning to the

labor force after childbirth, a number of factors influence the choice between working and not working and the choice between working part-time or full-time.

There are many American studies on women's return to work after childbirth (e.g., Blau & Robins, 1991; Joesch, 1994; Klerman & Leibowitz, 1990). These studies can be contrasted with studies on European data that more frequently discuss the effects of parental leave and public policy (e.g., Gianelli, 1996; Gustafsson et al., 1996; Joshi, Macran, & Dex, 1996; Rösen & Sundström, 1996, 1999). Sundström (1987, 1991, 1997) has done work on labor force transitions in a Swedish context and so have Bernhardt (1986, 1989), Gustafsson (1992), and Hoem (1992). This line of work has started out from the fact that Swedish women's part-time work is closely related to the family cycle and the presence of young children.

Previous research has emphasized either the timing of labor force transitions (Gustafsson et al., 1996; Rösen & Sundström, 1996, 1999) or the choice of activity at a specific point of time (Bernhardt, 1989; Hoem, 1992). The following analysis focuses on the latter. The distinction between part-time and full-time work has proved important when it comes to the comparison between the labor supply of different groups of women. Some explanatory variables are commonly used whereas others have been less explored. Our analysis aims at exploring the effects of women's degree of labor market attachment, sectoral position, and career orientation as well as the effect of birth order on the choice between part-time or full-time labor force participation in connection with childbirth.

When it comes to the determinants of the decision to work part-time or full-time or not work at all, cohort is important in the examination of the changing role of work in women's lives. Cohort effects are common to people who belong to, for example the same birth cohort, since they experience historical conditions and period events at a particular point of time. It is assumed that their lives are shaped in a specific way due to contemporary events and circumstances. It is plausible that women belonging to the same birth cohort respond to economic and institutional factors in a specific way, in some ways differently from women belonging to other birth cohorts. The impact of several other explanatory factors, however, may differ between birth cohorts.

Previous labor force participation enables childbearing, determines home attachment, and increases the propensity to return to the labor force 15 months after childbirth. Working part-time or full-time before childbirth can be seen as different degrees of family/work orientation. Work orientation and work experience are usually found to be

important determinants of the return to the labor market and labor force participation after childbirth (Joshi & Hinde, 1993; Rösen & Sundström, 1996; Shapiro & Mott, 1994). A higher degree of work orientation leads to a higher degree of on-the-job training and experience and indicates a higher degree of commitment to the job. Although part-time work in Sweden is paid the same wages as full-time work, women's earnings capacity may be negatively affected by part-time work in that it reduces women's work experience and the chances of getting promoted (Albrecht et al., 1999).

A crucial issue when it comes to part-time work is the importance of sector. Work in the public sector is often argued to be more woman-friendly than work in the private sector, and therefore the punishment for a discontinuous career is limited. However, evidence from Sweden since the 1970s, suggests that women with discontinuous work histories are not more likely to be in predominantly female public sector occupations than more continuously employed women, since the majority of women have adopted a combination strategy of work and family (cf. Abowd & Killingsworth, 1983; Corcoran, Duncan, & Ponza, 1986; Hill et al., 2004).

Studies by Ornstein and Isabella (1990) and Smart (1998) show that women's work attitudes differ from that of men. One reason is that women do not adhere to the traditional model of male career development since they experience more interruptions, mainly because of childbearing and childrearing. Gender differences in work orientation may also depend on different life situations and differences in work roles (Gatton, Dubois, & Faley, 1999; Marsden, Kalleberg, & Cook, 1993). According to role constraint theory, gender differences in work attitudes are caused by differences in work roles (Sigmon, 1995). One view is that since women generally occupy lower level jobs and jobs with less career opportunities than men do, they become less work oriented and seek other meaningful life contents, such as family. However, in modern Sweden, most women work throughout the life course and are breadwinners. Despite little representation in top positions, our results show that most women take great pride in their work and consider their career an important part of their identity and life. Therefore, our measure of career orientation can be seen as a concept closely related to work orientation and labor force participation in connection with childbirth.

The economic and social situation in the parental home is one of the most important determinants of shaping a person's life and outlooks. Several studies have argued the importance of socioeconomic background when it comes to educational choice and human capital accumulation. Bernhardt and Hoem (1985) as well as Dryler (1998) argue

that social background is important for how much education a woman gets. Higher socioeconomic status generally leads to more education. Since education is an important determinant of female labor force participation as well as of childbearing, it is likely to be of importance when it comes to labor force transitions in connection with childbirth. One could expect that higher socioeconomic status would lead to a higher degree of career orientation and a higher propensity to return to the labor force on a full-time basis after childbirth (cf. Hill et al., 2004).

One could also expect that the presence of an educated and employed mother would be important in determining the choice of part-time or full-time work in connection with childbirth among daughters. Employed mothers are expected to serve as role models and shape their daughters in accordance with equal gender roles, thereby increasing their work orientation. However, there is not much empirical evidence to draw upon regarding employment status of the mother in the sample. It is neither known whether the mother worked part-time or full-time, nor in what occupation she worked. It is not known whether the mother worked because she wanted to fulfill herself or because she had to out of economic necessity. If the latter is the case, mother's employment may have a negative connotation rather than a positive and emancipatory one.

Another dimension of social background that has proved to be useful in demographic studies is religiousness, in the sense of whether the family of upbringing was religious or not. Previous studies indicate that religious women are more traditional when it comes to family formation and fertility (Blom, 1994). In this study, women from a religious background are assumed to be more family oriented and less career oriented than women from a non-religious background. They are more likely to work part-time, since that type of employment is more easily combined with traditional female responsibilities of home and family, in line with a historically established and well-known gender division of labor.

Data and Method

The main data source for the empirical analysis is the Swedish Family Survey, a retrospective survey made by Statistics Sweden in 1992/1993, including a large number of questions related to demographic and social aspects of household and family behavior. There were 6406 persons first sampled and 4983 persons participated and were successfully interviewed.⁵ In this study the focus is on women only and a sample of five birth cohorts that includes women born in

1949, 1954, 1959, 1964, and 1969 is used. In total the sample consists of 3317 individuals. Together, these women generated 4832 childbirths. A number of individuals had to be excluded since they had not been able to give sufficient information on what kind of activities they were involved in, in connection to childbirth. The remaining individuals generated 4091 childbirths, which make up the basis of the analysis.

The Swedish Family Survey contains individual-specific information on the family of origin and indicators of social and economic background of the respondents. The survey also provides information on civil status and number of children of the interviewees and dates of childbirths and transitions from one civil status to another. On a month-to-month basis, the education and employment history of each respondent is documented from the year in which she turned 17. Moreover, there are several indicators of attitudes and opinions concerning family and work as well as gender equality.

A multivariate analysis is undertaken regarding the choice between being and not being in the labor force 15 months after childbirth. Among those who return to work, the choice between part-time and full-time work is studied and the discussion concerns the determinants of the extent of labor force participation 15 months after childbirth of different birth order.⁶

The statistical model is logistic regression. The logistic model estimates the effects of various determinants on the transformed probability of working (part-time or full-time) or not working. The multiple-choice setting leads to the set up of a multinomial logit model that applies to individual-specific data. A set of coefficients corresponding to each outcome category (y) is estimated. In this case, the outcome categories are not working, working part-time, and working full-time. X is a vector of explanatory variables and β is a vector of estimated parameters. The set of parameters reflects the impact of changes in X on the transformed probability.

The multinomial logistic model can, in the case mentioned above, be written as:

$$\Pr(Y_i = j) = e^{\beta'_{jxi}} / \left(\sum_{k=0}^3 e^{\beta'_{kxi}} \right)^7. \quad (1)$$

The results are presented as odds ratios, that is, exponents of the estimated coefficients. The odds ratio represents the odds of having a particular labor market status in one group in relation to the odds of having the same status in the base category. An odds ratio of 1.50

TABLE 1
Activity 12 Months Before Childbirth, All Births and by Birth Order
(Percent)

Activity	All births	First births	Second births	Third births
Part-time work	22.9	10.4	35.0	34.5
Full-time work	48.6	72.0	28.6	26.9
Education	6.4	9.7	3.3	3.3
Other activities	22.1	7.9	33.1	35.3
Housework	16.9	1.4	30.5	29.9
N	4091	1951	1436	546

Source: The Swedish Family Survey.

implies that there is a 1.5-fold greater odds of working part-time in the group in question than in the reference category.⁸

Determinants of the Choice Between Part-time and Full-time Labor Force Participation After Childbirth

By using the Swedish Family Survey, it is possible to analyze women's productive and reproductive activities since 1966. The period analyzed is a period during the 20th century in which the economic and institutional context change. Important institutional change took place during the late 1960s and the 1970s regarding family policy and gender equality.

The sample made use of proves a strong labor market attachment among Swedish women before childbirth. Table 1 indicates that labor force participation is, by far, the most common activity among Swedish women 12 months before childbirth. Only a few percent participate in some kind of education 1 year before childbirth, which indicates the strong link between labor force participation and childbearing in Sweden. This is much due to the design of social and parental leave benefits that are income-based, currently established at 80% of the gross pay, for most people. The income-based benefits are much more generous than the flat rate benefit that is given to people with insufficient previous work experience. However, there are large differentials with respect to childbearing of different parities. One year before the birth of the first child, 72% worked full-time or more, whereas only a good 10% worked part-time. One year before the birth of the second and third child, less than a third worked full-time. Part-time work, on the other hand, was more common before second and third childbirth

(about 35%). Table 1 also indicates that home attachment increases with the number of children. Thirty percent were involved in housework 1 year before second or third childbirth. This can be a sign of the so-called speed premium⁹ and the increasing inclination among Swedish parents to space their children rather closely. Some women stay at home with their young children and after parental leave they combine part-time work and housework or devote themselves to full-time housework.

When it comes to cohort differentials, there are few overall cohort differences, at least among the cohorts born in 1949, 1954, and 1959, when it comes to activity 12 months before childbirth. The cohorts born in 1964 and 1969 indicate an increased propensity to work full-time instead of part-time and an increased propensity to be involved in education or other activities. However, these women were rather young (28 and 23, respectively) at the time of the survey and the young mothers of these cohorts may give a distorted picture due to self-selection bias. Women born in 1969 could contribute little to the event studied since relatively few of them had given birth at the time of the study.

The picture becomes more correct when activity 12 months before childbirth is disaggregated by birth order. Full-time work is by far the most common activity before first childbirth, regardless of cohort, followed by education and other activities and part-time work. Full-time work, however, declines over time and for each cohort part-time work and education and other activities increase in relevance. This has to do with the expansion of education and the increasing educational attainment among women. Young women spend an increasing amount of time in education and are, as students, likely to work part-time. Part-time work can also be seen as an inroad into the labor market.

Women are much less prone to work full-time 12 months before second and third childbirth and the overall level of female employment has by then decreased. Instead, women are more likely to be involved in education and other activities, of which housework and childrearing make up the lion's share.

Descriptive statistics clearly indicate the combination strategy of work and family and that Swedish women experience multiple labor force transitions during their childbearing years. Full-time work before the first child is born is normative because it dramatically improves the economic well-being during maternity leave. One year after the birth of the first child, about 45% had returned to the labor market, rather equally distributed between part-time and full-time

employment. After another 3 months, more than every second woman had returned to the labor market, 28% on a part-time basis and 24% full-time. The gradual extension of parental leave as well as the introduction of the right to reduce working hours when having young children can be traced in the development pattern of the return to the labor market after childbirth across cohorts.

According to the sample used and the responses stated, Swedish women, seem very career oriented. Somewhat surprisingly, the sample indicates a decreasing career orientation across cohorts since 81.4% of women born in 1949 and 81% of women born in 1954 stated that their career was important or very important, whereas only 64.4% of women born in 1969 were of this opinion. Among women born in 1959 and 1964, the corresponding share was 77.1% and 71.8%, respectively. This may have to do with the design of the retrospective study in that the youngest cohorts are only on the verge of starting a career and have a hard time evaluating the importance of this concept, whereas older women have different life experiences and have entered a phase of the life course when work and career are central to their identity and self-fulfillment.

The Model

In the multivariate analysis of the determinants of labor force participation after childbirth, an empirical model is estimated using multinomial logit. This is a model of the optional outcomes of not working, working part-time, or working full-time. The event of interest is the degree of labor market attachment 15 months after childbirth. The optional outcomes were constructed by grouping the responses to the question on working hours. Short part-time (16–24 hours) and long part-time (25–34 hours) were grouped into the category part-time work, since the definition of part-time work according to the Labor Force Surveys is working less than 35 hours per week, and 35 hours and more were grouped as full-time work. Respondents stating that they were working on call were categorized as part-time workers.

The model contains a set of explanatory variables (covariates). Some covariates, such as a respondent's year of birth and indicators of social background and family of upbringing, are fixed, whereas other covariates vary with time. Cohort (1949, 1954, 1959, 1964, and 1969) is included to control for potential changes over time in women's labor market attachment and work orientation, and to control for

TABLE 2

**Multinomial Logistic Regression Estimates of Labor Force Participation
(Part-Time and Full-Time Work in Relation to not Working at all) 15 Months
after Childbirth**

	Part-time		Full-time	
	Odds ratio	<i>p</i> -Value	Odds ratio	<i>p</i> -Value
<i>Cohorts</i>				
1949	1.000	ref. cat.	1.000	ref. cat.
1954	1.225	0.044	1.044	0.692
1959	1.228	0.054	0.957	0.709
1964	0.911	0.493	0.978	0.877
1969	0.317	0.000	0.646	0.107
<i>Labor force participation</i>				
Not working	1.000	ref. cat.	1.000	ref. cat.
Part-time work in private sector	6.926	0.000	1.303	0.248
Part-time work in public sector	7.418	0.000	1.208	0.314
Full-time work in private sector	2.518	0.000	5.524	0.000
Full-time work in public sector	4.050	0.000	6.610	0.000
<i>Parity</i>				
Child one	1.000	ref.cat.	1.000	ref.cat.
Child two	0.930	0.455	1.441	0.000
Child three or more	0.810	0.087	1.488	0.003
<i>Career orientation</i>				
Career not important	1.000	ref.cat.	1.000	ref.cat.
Neutral	1.413	0.077	1.623	0.035
Important	1.867	0.000	1.988	0.001
Very important	1.773	0.002	2.486	0.000
<i>Father's employment</i>				
Blue-collar	1.000	ref.cat.	1.000	ref.cat.
White-collar	1.246	0.026	1.248	0.040
Farmer and self-employed	1.091	0.401	1.115	0.329
Other	1.331	0.042	1.083	0.615
<i>Mother's employment</i>				
Domestic	1.000	ref.cat.	1.000	ref.cat.
Employed	0.971	0.718	0.988	0.887
<i>Family religiousness</i>				
Religious	1.000	ref.cat.	1.000	ref.cat.
Non-religious	1.267	0.031	1.197	0.132
Observations	4091			
Log likelihood	-3790.089			
X^2	880.55			
Overall <i>p</i> -Value	0.000			

institutional change regarding family policy and the compatibility between employment and childbearing. An indicator of labor force participation before childbirth is constructed in a way that measures

labor force participation 12 months before childbirth and controls for work in different sectors. Labor force participation is divided into the categories part-time work in private sector, part-time work in public sector, full-time work in private sector, and full-time work in public sector. It is important to bear in mind that labor force participation is not only a competing alternative activity to childbearing, but a prerequisite to childbearing. Entering the labor market and starting a career can be seen as an important transition to adulthood and a first step in order to set up an independent and self-sufficient household before having children. Labor force participation and work orientation can also be seen as indicators of potential career orientation and opportunity costs due to absence and career breaks. Parity is included to control for the effects of the number of children (one, two, three, or more). Career orientation was constructed by grouping the responses to the question on how important work and career are. Career orientation is divided into four categories ranging from not important to very important. One should be aware of the endogeneity problem that career orientation potentially causes. Covariates are also included indicating father's employment, mother's employment, and whether the family of origin was actively religious or not.

Results

Table 2 displays the multinomial logit estimates (odds ratios) of working part-time or full-time 15 months after childbirth. The first thing to note is that the majority of covariates generates statistically significant effects. There are more statistically significant effects when it comes to part-time work after childbirth than when it comes to full-time work. Systematically, the covariate mother's employment generates no statistically significant effects at all.

The effect of cohort is only statistically significant when it comes to part-time work (with the exception of cohort 1964). The results indicate an increasing and then decreasing propensity among mothers to return to the labor force on a part-time basis, 15 months after childbirth. Women belonging to the cohorts 1954 and 1959 were more likely to return to the labor force on a part-time basis, than were women born in 1949, whereas women born in 1964 and 1969 were less likely to return to the labor force on a part-time basis than women born in 1949.

The birth of the first child is an important transition in which women, previously in the labor market, take time off in order to take care

TABLE 3

Labor Market Attachment 12 and 15 Months after First Childbirth by Birth Cohort (Percent)

	1949	1954	1959	1964	1969
<i>After 12 months</i>					
Part-time work	23.3	23.5	25.0	18.5	8.3
Full-time work	25.9	23.5	21.7	19.1	16.7
Education and other activities	50.8	53.0	53.4	62.4	75.0
<i>After 15 months</i>					
Part-time work	25.9	31.3	31.8	25.1	12.5
Full-time work	25.9	25.4	21.9	23.2	20.8
Education and other activities	48.1	43.3	46.4	51.7	66.7
<i>N</i>	1275	1186	983	532	115

Source: The Swedish Family Survey.

of their children. However, the propensity to be in the labor market 15 months after the birth of the first child is decreasing somewhat with each cohort. When it comes to mothers' propensity to return on a part-time basis, more women return to part-time work after the birth of their second child than after the birth of their first child (and for some cohorts even in comparison to after the birth of their third child). As indicated in Table 3, different cohorts show somewhat different preferences when it comes to the choice between part-time and full-time work in relation to other activities.

One interpretation of the regression results, together with the descriptive statistics of labor market attachment after childbirth, is that institutions matter. It is, for example, possible to trace effects on different cohorts of women when it comes to the gradual extension of the parental leave and the increasing opportunities to reduce weekly working hours, in that they serve as determining factors of labor market attachment in connection with childbirth. The two-child norm is probably the explanation for why birth order two renders insignificant results when it comes to the return to part-time work. It is simply the most common behavior among Swedish mothers and other factors are of importance in determining that labor force transition. The two-child norm and the fact that most women stop having children after two (or maximum three births) explains the significant results of parity of two and three or more on the transition to full-time work 15 months after childbirth.

Women born in the 1940s turned away from previous ideals and gender roles, focusing instead on greater female independence and

agency. Women's productive as well reproductive roles were questioned in the late 1960s and early 1970s and changed as women experienced significant advances in education and oriented themselves towards market work instead of housework.

The combination strategy and its universalism are indicated by the results generated by the covariate previous labor force participation. The likelihood of returning to part-time work 15 months after childbirth exceeds by far the likelihood of returning on a full-time basis, if the woman in question worked part-time before childbirth. There is, however, little effect of sector, since women previously employed part-time in the public sector are only marginally more likely to return to work on a part-time basis than are women previously employed part-time in the private sector. There are somewhat bigger differentials when it comes to the likelihood of returning to work on a full-time basis. Women who previously were employed full-time, in either the private or the public sector, are much more likely to return to work within 15 months after childbirth than those with no previous labor force experience. Previous full-timers are more likely to return on a full-time basis than on a part-time basis, and the ones most likely to return to full-time work are women previously employed full-time in the public sector. This could be an effect of the so-called woman-friendly working conditions in the public sector that enables a woman to combine full-time work with the presence of young children. This could also be an effect of the stronger work orientation of full-timers, regardless of sector. The results indicate that the extent of labor force participation before childbirth is an important determinant of labor force participation 15 months after.

The majority of women in the sample held their career as important or very important and thus the majority can be characterized as career oriented. However, the commonality of the combination strategy is indicated by the fact that even those women, who were neutral with respect to the importance of their career, are more likely to return to part-time work within 15 months than are women who rated their career as not important and who are even more likely to return to full-time work. Overall, the relationship between career orientation and full-time work is stronger than that between career orientation and part-time work. The differential increases with increasing career orientation and the women most likely to return on a full-time basis are those who held their career as very important.

When it comes to the effects of social background, the results are not straightforward. As in other studies using the Swedish Family Survey, the effects of social background seem to be less influential and less

consistent. For both part-time and full-time work 15 months after childbirth, the effect of father's occupation is that women with a white-collar father are more likely to return to the labor force than are women with a blue-collar father. Other employment groups do not render statistically significant results. The effect of having a white-collar father may be an indirect result of higher educational attainment, as hypothesized above, since women from white-collar families are more likely to have higher education than are women brought up in families with other social status. There is no statistically significant effect of mother's employment on returning to part-time work or full-time work in relation to not working at all. This is somewhat surprising since it is expected that an employed mother would encourage her daughter to also be employed and more emancipated. Probably, this is a result of the fact that female labor force participation has become increasingly common over time and thus affects different cohorts differently. Whereas more than every second woman born in 1949 had a domestic mother, the experience of having a full-time homemaking mother has become less common over time. Among women born in 1964 and 1969, only about 30% had a domestic mother whereas the rest had employed mothers. The lack of significance of mother's employment indicates that several other factors also matter.

Finally, the effect of religiousness is in line with the hypotheses inferred from previous studies. Women with a religious background seem to have a more traditional outlook on life and are more prone to adopt a traditional female role with greater home attachment and less work orientation. In our sample, about 17% of the respondents were raised in a religious family and 83% in a non-religious family. Women brought up in a non-religious family are more likely to return to part-time work than are women from a religious background.

Overall, the results indicate differences as well as similarities among women belonging to different birth cohorts when it comes to labor force transitions in connection with childbirth. Many of the differences observed among different groups of women, regarding their decision to return to the labor market after childbirth, are possibly rooted in the gender division of labor and the way it has changed during the post-war period. Historically, men specialized in productive work, whereas women were engaged in productive as well reproductive work. This also holds for the gender division of labor of today, especially in households with young children. Economic structural change after World War II brought about dramatic changes in the Swedish economy with a high demand for female labor and gender equalization in several aspects of labor force participation.

Nonetheless, the gender division of labor and the gender-specific roles of Swedish women and men, continued in a modified way as people adapted to the new economic and social situation. During the 1960s and 1970s, fundamental institutional change made the importance of the family cycle decline, since the expansive welfare state took over previously female family-related responsibilities and, at the same time, encouraged and supported female labor force participation. The comprehensiveness of public policies, in concert with economic structural change and a high demand for female labor, made the combination strategy of paid work and different degrees of home attachment more or less universal among Swedish women born in the late 1940s, the 1950s, and the early 1960s. The effects on women born in the late 1960s and early 1970s are yet to be investigated.

Conclusion

Part-time work is an important aspect of women's labor force participation in Sweden and an important aspect of gendered work as well as of labor force transitions in connection with childbirth. It is also a building brick of the combination strategy through which Swedish women combine work and family responsibilities during childbearing years.

Part-time work is not a recent phenomenon although the most rapid rise took place during the 1970s. In times of high demand for female labor, part-time work became the inroad into the labor market for previously non-employed groups of women or women with little previous labor market experience. These groups of women had a higher propensity to work part-time due to their primary responsibilities for home and family. These women also took part in an important phase of the change in Swedish women's socioeconomic roles. This is still going on as a cohort process. It did not and does not affect all women simultaneously and to the same extent, but it has changed gradually both educational attainment and labor market attachment of each successive younger cohort to an increasing extent.

The results of the multivariate analysis show that the combination strategy of market work and family has become more common among women in the sample analyzed. Some women combine children and family responsibilities with part-time work whereas others combine it with full-time work. Women born in 1949 and onwards were encouraged to get an education and work. At the same time, part-time work has changed in character from a strategy that once enabled mothers

and housewives to work on a limited basis, to one, which allows working women to reduce their weekly working hours when they have young children. Women born in 1954 and 1959 became increasingly inclined to combine work and family by working part-time in comparison with women born in 1949. The effect of previous labor force participation proved important, since women with work experience were more inclined to return to the labor market 15 months after childbirth. Women with part-time work experience were more inclined to return on a part-time basis, but some returned to full-time work. Women with full-time work experience were most inclined to return to full-time work. Interestingly to note, these effects were generated regardless of sector.

Career orientation and some indicators of social background also proved significant in determining the choice between part-time and full-time work. In general, women who held their career as important or very important were more likely to return to work after 15 months and they were more likely to return to full-time instead of part-time work. When it comes to social background, having a white-collar father had an effect, probably working indirectly through higher education and different preferences. In general, women from a non-religious background were more likely to return to part-time work than women brought up in a religious family.

In the early 20th century, marriage was the major reason for women leaving the labor market. Today, the major reason is the birth of the first child and the transition is a temporary career interruption. When it comes to labor force transitions in connection with childbirth, the choice between part-time and full-time work is an important aspect that indicates the necessity of analyzing female labor supply within the context of the family and the contemporary gender division of labor.

Notes

1. Examples given are salespersons working evenings and teachers tutoring or teaching evening classes.
2. This section draws upon Blossfeld and Hakim (1997, chapter one) in which the grouping of theoretical perspectives can be found.
3. There are other groups that find part-time work attractive, for example students and older people that want to combine work with other activities. There is an interesting gender dimension since male part-timers are either young students or older men approaching retirement age; female part-timers are women with young children and/or homemaking responsibilities. Thus, it seems as if male part-time

- work is a road into or out of the labor force whereas female part-time work is a combination strategy, closely related to reproduction and the family cycle.
4. This is in line with the reasoning of Esping-Andersen (1990) in that the increase in female part-time work in the 1960s and 1970s was a parallel process to the growth of the Swedish welfare state and the public sector expansion.
 5. For a fuller description of the survey and its design and an analysis of the attrition process, see Statistics Sweden, 1996: 1.
 6. As the ultimate limit of parental leave, 15 months is chosen (introduced in 1989).
 7. This is to be compared to the standard logistic model that can be written as: $\Pr(y=1) = e^{\beta x} / (1 + e^{\beta x})$.
 8. Odds ratios, unlike relative risks, must be transformed in order to allow an understanding of the probabilities involved.
 9. The speed premium was first introduced in 1980 and has since then had a documented impact on the spacing of children. It encourages people to space births closely after the first one since they are allowed to keep their previous benefit level if another child is born within a certain interval. In 1980, the birth interval was set to 24 months. In 1986, the interval was extended to 30 months. The design of the speed premium has been somewhat altered over the years.

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