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## LABOUR FORCE PARTICIPATION AND CHILDBEARING: THE IMPACT OF THE FIRST CHILD ON THE ECONOMIC ACTIVITY OF SWEDISH WOMEN

by

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#### Abstract

Swedish women have become increasingly inclined to take up a part-time job after the birth of their first child. The degree of home attachment has decreased considerably, at the same time as we observe a growing popularity of part-time work among women who take up employment again after having entered motherhood (but before the birth of their second child). Even women who start their post-birth labour market activity with full-time work have shown an increasing tendency to switch to part-time work. On the other hand, the propensity of one-child mothers who have taken up a part-time job to "escalate" hours of work has remained at a very low level. Most women working part-time continue to do so up to the birth of their second child. The length of prior work life experience, i e before the arrival of the first child, is positively related to part-time work. Somehow, an "established" position in the labour market seems to be a prerequsite for both getting and keeping a part-time job after childbirth. Conversely, a high level of education and/or "upper middle class" background seems to be associated with a disinclination toward part-time work.

The study is based on data from the Swedish Fertility Survey, undertaken by Statistics Sweden in 1981.

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## <u>Contents</u>

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1. Introduction	1
2. Data and methods	2
3. Home attachment - permanent or transitory?	3
4. Full-time or part-time work?	8
4.1 The probability of part-time work one year after first birth	11
4.2 Transitions from home to full-time or part-time work	13
4.3 Transitions from full-time to part-time work	13
4.4 Transitions from part-time to full-time work	15
5. Discussion	18
Acknowledgements	20
Résumé en français	20
Tables	22
Figures	26

#### 1. Introduction

Sweden has one of the highest female employment rates in the world. Approximately half the number of economically active women work part-time. Traditional patterns of complete or at least prolonged withdrawal from the labour force in connection with childbirth have been largely undermined among younger women. The old "breadwinner system" has been gradually replaced by the emerging "egalitarian system" (Davis 1984). Sweden is probably one of the countries in the world where this new system has evolved furthest. In a recent review of the status of women in Europe (Höhn 1982), it was assumed that equality between the sexes was already more or less achieved in Sweden. This is no doubt an exaggeration; nonetheless, it may be of particular interest to study the impact of the transition to parenthood on the work activity of Swedish women. Are there still women who focus on home and family in such a society?

Earlier studies of employment patterns of Swedish women in the childbearing ages (Bernhardt 1984) have shown that there are substantial differences between women with different levels of education in the extent of their labour force participation over the life cycle (Figure 1). Among women born in 1941-45 average time between the age of 17 and 35 devoted to full-time housework was 7.3 years for women with a low level of education, 5.6 years for women with a medium level of education and only 2.1 years among women with a high level of education.

As in most western, industrialized countries the temporal separation of work and maternal activities used to be quite strict in Sweden. Still, on the arrival of the first child (an event which occurs to the overwhelming majority of women), women face the choice of giving up work or trying to combine the two roles of mother and worker. It is our hypothesis that due to the combination of several factors in the Swedish society, it is easier for Swedish women to opt for the latter alternative than for women in most other countries.

Women are confronted with life course choices in a way that (most) men are not. The choices that they make with regard to their level of economic activity in connection with first birth are likely to influence their future

lives in many ways (Skrede 1982). It is commonly assumed that there is some kind of personality trait or attitudinal dimension, from strongly "home-oriented" at one end of the spectrum to strongly "work-oriented" at the other. The notion of a basic orientation refers to expectations developed by the individual during childhood and adolescence concerning what will happen to them later in life. Family-oriented women regard paid work as something transitory and marriage and children as indispensable, while work-oriented women regard employment as a life goal and marriage and children as possibilities. It is our impression that an increasing proportion of Swedish women strive to limit their work life interruptions as much as possible, without jeopardizing the welfare of their children.

#### 2. Data and methods

We have used data from the 1981 Swedish National Fertility Survey in which 4 300 Swedish women were interviewed (WFS 1984). A substantial part of the interview was devoted to the work life history of the woman, giving monthby-month information on activity status (full-time and part-time employment, studies and housework being the main categories) from September of the year in which the woman reached the age of 16. The interview also contained the complete cohabitation and marriage history as well as information on all live births. The combination of these retrospective life histories make possible a detailed analysis of the interaction between the two parallel processes of labour force participation and childbearing. Factors influencing the transition to motherhood (first birth) and later steps in the family formation process have been analyzed in other reports from our project (see for example B. Hoem 1985 and 1986, and Etzler 1987). These reports use a common methodological approach, namely that of intensity regression, in which the simultaneous influence of several factors on the transition intensities is analyzed and their relative importance is established. For a description of the method see for example Trussell and Hammerslough 1983.

However, due to data limitations we did not consider it feasible to analyze in detail the early return flow of one-child mothers to the labour market. Instead we decided to study the sub-phase consisting of a one-year period after first birth by means of <u>logistic regression</u> to investigate which factors influence the probability that a woman is still at home one year after

the arrival of her first child. This probability is specified as p = 1/(i+exp(-2U)), where U is the sum of the parameters for the specified model. We used the LOGLIN program to fit various models with main effects and interaction effects, both in the case of logistic regression and intensity regression. This paper will present results from a number of different analyses with regard to work life transitions of Swedish one-child mothers. The results are reported in detail in Bernhardt (1986), (1987a) and (1987b). To summarize the different methodological approaches, we have used

#### logistic regression for the following situations:

1)	at home or	working one year after first birth.	(Table i and 2)
2)	if working,	whether part-time or full-time,	(Table 6)

intensity regression for the following (first) transitions:

a) home to full-time work	(Table 3)
b) home to part-time work	(Table 4)
c) home to employment	(Table 5)
d) full-time to part-time	(Table 7)
e) part-time to full-time	(Table 8)

Transitions (a), (b) and (c) refer to women at home one year after first birth, while transitions (d) and (e) refer to women who take up employment within two years after first birth.

#### 3. Home attachment - permanent or transitory?

Most women stop working at the time of delivery, if not before. Some do it only temporarily, others for an extended period of time. What can be said about the behaviour of modern-day Swedish women in this respect?

First of all, the majority of Swedish women work or study full-time right up to the arrival of their first child, i e through most of the pregnancy. In fact, less than one in five women, even in our oldest birth cohort (women born in 1936-40), were full-time housewives for at least six months before their first birth, and in younger cohorts the percentage has decreased even further (Bernhardt 1984). Swedish women are granted a substantial period of paid maternity leave. Starting in 1955 with 3 months, it was increased to 6

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months in 1963. Further improvements were implemented in the later half of the 1970s. Since 1980, it is 12 months. Women employed in the government sector have since long had the right to unpaid maternity leave up to 18 months after delivery. This right to return to previous employment has since 1979 been extended to women employed in the private sector.

Rules for paid and unpaid maternity leave have thus varied over the period under study (from the late 1950s onwards) and between women employed in different sectors of the economy. In limiting the time perspective to one year we restrict our analysis of home attachment to those women who stay at home after first birth for a period definitely longer than that for which they receive economic compensation roughly at the level of their previous wage.

Our analysis of home attachment at first birth excludes women who were single one year after first birth and those who exhibited "early labour force withdrawal", i e women who stopped working (or studying) and became fulltime housewives more than three months prior to the delivery. Only women who live in a partner relationship have any real choice to stay at home and take care of their newborn baby for any length of time. Single women usually need to provide both for themselves and for their newborn baby and can therefore be expected to return quickly to the labour market. This was also found to be the case. Moreover, we found in an earlier stage of the analysis that "early labour force withdrawal" made a statistically significant, additional contribution to the probability that a woman still stays at home one year after first birth. The effect was strongly positive, i e early labour force withdrawal substantially increased the degree of home attachment. This applied to all educational groups. While only 15 percent of the women actually stopped working or studying more than three months before delivery, these women seem more determined that others to devote their energies to their homes and families. One might suspect that these women thereby manifest an intention to retire from the labour market for a substantial period of time. This was confirmed in our analysis of the transitions back to the labour market among women still at home one year after first birth (see Table 5). Women with early labour force withdrawal were only half as prone as other women to start working again (prior to their second birth).

The logistic regression analysis performed on married or cohabiting onechild mothers who worked up to less than four months prior to delivery was undertaken in two steps. First the three educational groups were analyzed

separately. In that part of the analysis <u>social background</u>, <u>age at first</u> <u>birth</u> (as a proxy for work experience), <u>civil status</u> (cohabiting or married) and <u>union duration</u>, i e whether the woman was pregnant at the start of cohabitation or marriage, were included as background variables. As the separate analysis of each educational group demonstrated a distinct period effect for women with a low or medium level of education, logistic models were then fitted separately for two calendar periods, "before 1968" and "1968-80" (calendar year refers to time of first birth). Educational level was then included as a background variable. Since age at first birth is strongly correlated with achieved level of education, it was not possible in this part of the analysis to use the more precise measure of age at first birth as a proxy for work experience. Instead, we now used a direct measure of work experience (shorter than two years, and two years and more).

Women in different educational groups exhibit a decisively different pattern of behaviour in respect to factors affecting home attachment one year after first birth<sup>1</sup>. Highly educated women seem to have established a pattern of low home attachment already in the mid-1950s, while women with little education exhibit a progressively decreasing tendency to remain at home one year after first birth. Women in the intermediate educational group first become less prone to stay at home, but toward the end of the 1970s they seem to have "back-tracked" a little, becoming somewhat less anxious to start working within one year after first birth. This may be due to improvements in the rules for paid and unpaid maternity leave and/or the persistent problems of the egalitarian system, pointed out by Davis (1984). Home duties are unevenly distributed among mates in Sweden, especially when there are small children in the household, and improvements in child care provisions have been inadequate to meet the rising demands.

The differential impact of the transition to parenthood seems to have become less pronounced over time, with different groups of women tending to become more alike in their behaviour. Still, highly educated women continue to have a substantially lower degree of home attachment than women with shorter education. In the period before 1968 both education and civil status made a statistically significant contribution to the probability that a woman still stays at home one year after first birth. In the period 1968-80 these two

i) The detailed results of these analyses are found in Bernhardt (1986).

factors were also found to be significant, although the size of the parameters indicate that both education and civil status are of less importance after 1968 than before (Table 1 and 2). The main difference between the two periods is however that short union duration was found to significantly increase the probability of home attachment one year after first birth in the period 1968-80 but not before. Work experience was not found necessary for the fit of the model in either period.

When present, the union duration factor is not only significant but also rather strong. We interpreted this in terms of a strengthened selection mechanism in a period of modern contraception and free abortion. Women who are planning-minded and anxious to have both a secure job attachment and a well-tested partner relationship before they get pregnant, would tend to have a long union duration and are highly likely to start working again within one year after first birth. On the other hand, women who are less anxious to maintain an attachment to the labour market, would see no particular reason to postpone the start of family building. They intend to have children and may feel that you might as well have them sooner rather than later. It therefore seems reasonable that a short union duration is associated with a high degree of home attachment one year after first birth in the later period. The decreasing importance over time of the education and civil status factors may be related to a more even distribution between the categories in the later period. Before 1968 a low level of education was the dominant educational group (67 per cent), as was marital status (89 per cent). In other words, higher education and (unmarried) cohabitation, which both imply a lower degree of home attachment, were more of a "deviant" behaviour before 1968 than in the later period. This will have tended to change the meaning of high education and unmarried cohabitation, respectively, or, put in other words, to change the selection mechanism to be less restricted to women with strong work motivation.

When analyzing the educational groups separately (Bernhardt 1986), we found that marriage increases the degree of home attachment for women with a low level of education, while women with a medium or high level appear rather unaffected by civil status. Social background, on the other hand, was not found to have any significant effect by itself in any educational group.

What is the most likely event that will happen to a non-pregnant one-child mother still at home one year after first birth? To start working (full-time

or part-time) or to become pregnant again? Plotting the observed occurrence/ exposure rates for these three possible events, we found that women who had their first birth before 1968 were considerably more inclined to get pregnant again than to return to labour market (Bernhardt 1987a). There was relatively little difference in the propensity to start part-time work or full-time work, respectively. The pattern is similar for women who had their first child in the 1968-74 period. After 1975 there is, however, a major break with previous trends. In the beginning of the second year after birth women are more inclined to start working than to get pregnant. Thereafter, the propensity of women who are still housewives to get pregnant with a second child again overshadows their inclination to start working, but the difference is nowhere near that in the period before 1968. This means that about half of the women who had their first birth before 1968, and who were still at home one year later, became pregnant again without working in the interval between births, while this was true of only 15 percent of those who had their first birth in 1975-80.

Given that they have not become pregnant with their second child, what factors influence the transition to employment among home-attached women? Fitting hazard models to the transition to employment (Table 5) we find that social background has no influence (apart from that which is captured by educational level). The effect of education is, on the other hand, again the most important of the covariates considered here. The differences between the educational groups below "high" are small but significant, indicating that length of education is directly related to the propensity to abandon the exclusive housewife role and start working outside the home. Having an education of four years or more at first birth, increases the work propensity about three times compared to women in the "mediumyoung" category. Clearly, the highly educated women are in a category by themselves.

The civil status covariate is significant, indicating that cohabiting women are 40 percent more inclined to start working before next pregnancy than are married women. As commented on above, early labour force withdrawal has a depressing effect on the transition to employment: women who have seemingly manifested their "family orientation" by quitting work prior to first birth, are only half as prone to take up employment before having their next child.

There is also a strongly positive period effect. The increase has been especially dramatic in the beginning of the observation period (second year af-

ter first birth), causing an interaction between the period and the duration factor to emerge. In analyzing the transition from home to employment among women still at home one year after first birth, it must of course be kept in mind that this is a situation which has become increasingly uncommon. Already in the mid-1950s highly educated women had established a pattern of low home attachment, i.e. a high propensity to start working again already prior to their child's first birth-day. Women with a medium or low level of education have tended to "catch up" over time. Thus being at home one year after first birth has become increasingly uncommon. At the same time it appears that with changes in maternity leave rules the "meaning" of being at home one year after first birth has changed. While previously it indicated an intention of remaining at home for quite a while, more and more of these home-attached women regard their home attachment as transitory: they have in reality not left the labour market.

The "continuous housewife" (women reporting no employment after the birth of their first child) has become a rare phenomenon in Sweden (Bernhardt 1984). Among women having their first birth in the early 1960s only 7 percent were still housewives after 16 years. The impression that women in the child-bearing ages are moving a great deal in and out of the labour force is probably mostly due to the fact that women make work interruptions in connection with childbirth. With the generous rules for maternity leave that exist in Sweden and the relative ease with which a new job could be found, at least during the 1970s, such "home leaves" can sometimes last well over a year without the woman really withdrawing from the labour market for good. This is, in our view, one important reason behind the emerging "combination strategy" in Sweden (see below).

#### 4. Full-time or part-time work?

What role has the increasing possibility of getting a <u>part-time</u> job played in the interaction process between labour force participation and childbearing? It can easily be seen from the Swedish Labour Force Survey that parttime work (less than 35 hours per week)<sup>2</sup> has increased substantially in the 1970s. In fact, the whole increase in participation rates for women during

<sup>2)</sup> The definition used here is 16-34 hours per week. Mostly this means around 20 hours per week, i e half-time.

the 1970s was due to part-time work. Part-time is a phenomenon almost completely limited to women. Researchers who have analyzed part-time work in Sweden argue that for many women the alternative to part-time work is not full-time work (in the labour market) but full-time work in the household, i e no employment. Our findings do lend some support to this proposition.

We hypothesize that the employment "choices" made in connection with first birth are among the first signs of a more long-term "strategy", not necessarily overtly expressed, with regard to the future relationship to the labour market that the woman envisages at this point in her life. Of course, one important life course choice is already made when the woman has become a mother. This step having been taken, what are the possible strategies? The traditional option is of course the "<u>homemaker strategy</u>", i e the woman intends to stay at home for an extended period of time. In previous times this usually meant for the rest of her life (barring the death of her husband). Nowadays the time perspective is more likely to be limited to the time when the youngest child starts school or reaches the age of 12 or 15 or something like that. This strategy does not preclude temporary work in the labour market, most probably for strictly economic reasons, but the first choice of the woman is to devote herself full-time to meet the needs of her family (for a discussion of first choices and second choices, see Bernhardt 1984).

Another strategy could be called the "work career strategy". Women with this approach make relatively short work interruptions in connection with childbirth and their first choice is to work full-time or close to full-time rather than to de-escalate working hours when they get children. These women probably always have been in minority. There has been an apparent growth in continuous work attachment (Bernhardt 1984); nevertheless it must be remembered that this has more and more been combined with a de-escalation of working hours. At least a year-long work interruption in connection with childbirth and part-time work seems to constitute a new strategy, which I would like to call the "combination strategy". The women do not leave the labour market when they become mothers, but they enter a special category, that of the part-time employed. They have one foot in the home and one in the labour market. It is probably a highly sensible strategy, at least in the short run, as they manage at the same time to keep an attachment to the labour market and avoiding a situation where they would not be able to live up to demands from their husband/cohabitant and children. It may be noted

that the "combination strategy" is encouraged by the progressive tax system in Sweden, since you pay proportionately less tax per worked hour if you work part-time.

The probability that a woman will still be at home one year after first birth has decreased sharply over time. There are noticeable differences between educational groups (level of education achieved prior to first birth), although these differences have decreased over time. The reverse of home attachment is labour force attachment. With the exception of women with a high level of education prior to first birth, practically all women are either at home or in the labour market one year after first birth (see Figure 2).

It is clear that the growth of part-time work over time is much more pronounced among women with a low level of education than among women with a medium or high level. Thus the shorter the education the more enthusiastically have the women responded to the increasing availability of part-time jobs. The proportion working full-time one year after first birth increases with the level of education, but over time the trend has been pretty much the same in all educational groups, i e an increase in the 1968-74 period and then a decline. Especially noticeable is the pronounced decline in fulltime work among women with a medium level of education in the late 1970's, when they reach the same proportion as women with a low level of education (15 percent), while highly educated women are twice as inclined to take up full-time work. On the other hand, women with a high level of education have become much less inclined to be full-time students one year after first birth, a category which hardly exits among women with shorter education. It is uncertain whether this implies that they, thanks to better contraceptive technology and/or free access to abortion, are better able to complete their education before starting childbearing or whether they, for economic reasons, increasingly combine studies with part-time work (and therefore are classified as part-time workers).

In terms of our previously hypothesized "strategies", it would seem that the "homemaker" strategy is best represented by women with a low level of education who had their first child before 1975. The "work career strategy", on the other hand, seems to characterize highly educated women who entered motherhood before 1975, while the "combination strategy" is most characteristic of women with a low or medium level of education who gave birth to their first child in the late 1970s.

#### 4.1 The probability of part-time work one year after first birth

What factors decide the choice of part-time work, provided that the woman has taken up employment one year after first birth? To answer that question we have analyzed the probability of part-time work by means of logistic regression<sup>3</sup>. The result is shown in Table 6. The factors originally included in the analysis were: <u>calendar year of first birth</u>, <u>educational level</u>, <u>social background</u>, <u>prior activity</u>, <u>work life experience up to first birth</u>, and <u>civil status</u> (cohabiting or married). Neither civil status nor social background were found to be significant In the final model we were left with the main factors of calendar period of birth and prior activity and the interaction between educational level and work experience.

The coefficients for the period factor show a strong positive gradient, i e part-time work has increased its popularity over time among women who have taken up employment within one year after first birth. The coefficients for prior activity indicate that having a part-time job before the delivery greatly increases the probability that the new mother will work part-time one year later. These are probably women who have made the adjustment to their new family situation and reorganized their daily life well in advance of the arrival of the child. The proportion working part-time immediately prior to first birth is small but has increased slightly over time. The overwhelming majority of women (70-75 per cent) work full-time up to at least three months prior to first birth. These women have the lowest probability of working part-time one year later, while women who quit working three months or more prior to first birth (here classified as "home") and students are slightly more inclined to be working part-time (if they work).

The length of work life experience is positively related to part-time work, i e the longer they have worked the higher the probability of part-time work. This is true regardless of educational level, but the effect is most pronounced for women with a low level of education. For women with a medium level of education work life experience seems to be of relatively little im-

<sup>3)</sup> It would probably have been preferable to analyze this complicated situation, where women are confronted by several alternatives (home, parttime or full-time work) by means of logistic regression with multiple outcomes. Here we have assumed, that women first choose between employment or being at home, and then, if they choose employment, take up either part-time or full-time work, i e two consecutive either-or situations.

portance. Regardless of the time employed prior to first birth, between 40 and 50 per cent of women with a medium level of education will be in a parttime job one year after first birth<sup>4</sup>. Highly educated women show an intermediate pattern: work life experience increases the probability of part-time work but not as strongly as for women with a low level of education.

In interpreting this result, two things should be kept in mind. First, the average length of work life experience prior to first birth has increased over time, as women have postponed the arrival of the first child. Second, the proportion taking up employment within one year has increased most noticeably for women with a low level of education. It is thus for women with a low level of education. It is thus for women with a low level of education but at least 5 years of work experience (meaning that they are generally over 22 when they give birth to their first child) that we have the most clearcut abandonment of the "homemaker strategy" in favour of the "combination strategy".

Women with little work experience are likely to have a more tenuous attachment to the labour market, for example they are less likely to have permanent jobs. This probably explains the general trend that, regardless of level of education, short work experience means lower probability of parttime work. To have worked for a while and have a more "established" position in your occupation or place of work, puts you in a better bargaining position with regard to part-time work. For planning-minded women this is likely to be one important reason to postpone the arrival of the first child, i e among women with at least 5 years of work experience there is a selection of women whose intention is to reduce working hours after getting their first child.

The most unlikely to be working part-time one year after first birth are women with either a low or a high level of education in combination with a very short work experience (perhaps none at all). These are two very different groups of women, whose lack of interest in part-time work has very different reasons. Women with a low level of education and less than one year of work life experience are the teenage mothers often premaritally pregnant (see Bernhardt 1986). These young mothers are highly likely to be

<sup>4)</sup> These figures are calculated on the basis of the model parameters in table 6, assuming that the woman gave birth in the 1968-74 period and worked full-time prior to delivery.

at home for at least one year (probably for the whole interval between first and second birth). If they do take up employment, most likely because they <u>must</u> contribute to the family income, they may not have any other choice than to work full-time. Conversely, highly educated women with no or very little work experience, are likely to be employed one year after first birth (if they don't continue their studies), and the part-time alternative may not be very attractive to them for career reasons. They are in a hurry to get themselves "established" and working part-time would tend to run counter to such an effort.

#### 4.2 Transitions from home to full-time or part-time work

Fitting hazard models separately to the transitions to full-time and parttime work respectively (among women who were still at home one year after first birth), results in fairly similar final models for the two transitions (Table 3 and 4 ). Social background has no significant impact on the propensity of one-child mothers to stop being full-time housewives and return to the labour market, except via the intervening educational variable. Length of education at first birth is, however, a strongly influential factor, with highly educated women about three times as likely to start working, either part-time or full-time, than women with shorter education.

Civil status has no significant impact on the transition to part-time work, but cohabiting women are more inclined to start full-time work than are married women. There are indications of a narrowing of the gap between married and cohabiting women. Early labour force withdrawal has a depressing effect on the propensity to start working again among home-attached one-child mothers. This effect is stronger with regard to part-time work, indicating that women who stop working more than three months prior to first birth are not interested in the "compromise" of part-time work combined with housework and childrearing. They intend to stay at home for an extended period of time and not work in the interval between births.

#### 4.3 Transitions from full-time to part-time work

Do one-child mothers working full-time actually stick to this arrangement or do they give up and leave the work force or modify their situation by reducing their working hours? Observed occurrence/exposure rates for various transitions among one-child mothers working full-time (Bernhardt 1987b) show that from the beginning of the second year the most likely event for these women is having a second child. Transitions back to full-time housework or to part-time work are considerably lower. In fact, these rates are quite low, indicating a considerable amount of tenacity among one-child mothers working full-time. In the first period (before 1968) women were more likely to go back home than to switch to a part-time job, but this is reversed later. Women having their first child in the late 1970s are more likely to reduce their working hours than to quit working. Thus even women taking up full-time work after first birth (many of whom presumably follow the "work career strategy") have become increasingly prone to take advantage of the possibility of part-time work and thus abandon the "work career strategy" in favour of the "combination strategy".

The transition from full-time to part-time work among one-child mothers has increased in popularity over time. Who are the women most prone to reduce working hours, if any such groups can be distinguished? To answer that question we have analyzed the transition from full-time to part-time work by means of intensity regression (Table 7). The factors included in the analysis (in addition to the duration variable, which is time counted since the return to work) were: starttime, civil status, social background, calendar period of first birth, educational level and work life experience. The variable "starttime" refers to when the woman started working again after childbirth (less than 6, 6 to 17 and 18 to 23 months after first birth). The coefficients show a positive gradient, i e the later you take up full-time employment the more inclined you are to switch to part-time work later. This seems reasonable, if you take starttime as an indication of which "strategy" the women follow, i e the sooner you take up employment the more likely it is that your inclination is toward the " work career strategy". The variable "starttime" was not significant, however. Neither was "work experience", although the coefficients were in the expected direction, i e women with very short work experience were less inclined to switch to part-time work. The coefficients for the three variables "education", "civil status" and "social background" were trivially small, and they could be removed without deteriorating the fit of the model. No interactions were needed and thus we were left with a model with only one variable in addition to duration, namely calendar year of first birth. The relative risks shown in Table 7 indicate that the propensity for one-child mothers to switch from full-time to part-time work doubled between the period before 1968 and the 1968-74

period. In the late 1970s there was an additional increase of 50 percent. The coefficients of the duration variable demonstrate that women are most inclined to reduce working hours in the first half year after they have taken up employment. The longer they work, the more inclined they are to let things remain as they are. In fact by that time most women have quit working because they have opted for another child, so one-child mothers still working full-time after two or three years are likely to be those women who either do not want another child, are unable to conceive or are planning a long interval between births (perhaps for career reasons?).

It may seem surprising that nothing else really matters than the calendar year in which the child was born, i e when the woman entered motherhood. Educational level has for example often been found to be of great importance for the the work behaviour of women. The tendency to abandon the "work career strategy" in favour of the "combination strategy" has however been equally strong regardless of the educational level of the woman. One possible interpretation of this is that for most women it is a very tall order to work full-time and have (the main) responsibility for a young child<sup>5</sup>. If they have a chance to reduce hours worked in the market during this period of their lives, most women will do so. It simply makes sense, given the way our society is presently organized.

#### 4.4 Transitions from part-time to full-time work

Are there one-child mothers who escalate their working hours, i e who shift from part-time to full-time work in the period when their child is still quite young? In the terminology used above, one could perhaps characterize these women as being inclined toward a "work career strategy". A woman who has managed to get a part-time job when returning to work after having her first child, is likely to be thinking in terms of a "combination strategy". To escalate working hours while the child is still quite young would seem to

<sup>5)</sup> The provision of public day care in Sweden has greatly improved during the 1970s. Nevertheless, the supply is not enough to meet the demand. According to the Swedish Fertility Survey in 1981, roughly half of the children of pre-school age, whose mother worked or studied for at least 20 hours per week, had public day care. For the other half, day care is provided by relatives, neighbours, nursemaids, or by having one parent working when the other one is home and vice versa.

indicate either economic necessity<sup>6</sup> or that the woman is dissatisfied with her work situation. In some occupations part-time work may, for example, involve a set-back in career possibilities. In other places the woman may be put under pressure from the employer or from her fellow-workers to go back to full-time work.

Observed occurrence/exposure rates for various transitions among one-child mothers working part-time show that, similar to what we found for one-child mothers working full-time, getting a second child is the most likely event, except in the very beginning (Bernhardt 1987b). Transitions back home or to full-time work are much less common, and they do not seem to vary much over the duration intervals. Nor is there any apparent trend over time, i e women having their first child in the late 1970s have the same low inclination to abandon their part-time work (except if they are about to have their second child) as women who had their first birth before 1968. Their main strategy seems to be to stick to part-time work until it is time to have a second child.

Clearly, switching from part-time to full-time work is an unlikely event among one-child mothers. Still, there might be particular groups of women who are more inclined than others to take such a step. We have therefore analyzed the transition from part-time to full-time work using intensity regression (Table 8). The factors included in the analysis were starttime, civil status, social background, educational level, calendar year of first birth and work life experience. All the durations could be combined into one interval without deteriorating the fit of the model. As expected, the period factor could also be excluded. Likewise, the educational variable was again found to be unnecessary, i e there were no significant differences between women at different levels of education. All pairwise interactions were tested but only one was found to significantly improve the fit of the model, namely the interaction between social background and work life experience. The final model (see Table 8) thus contained the main effects of "starttime" and "civil status" as well as social background and work life experience in interaction.

<sup>6)</sup> Note however that we only deal with married or cohabiting women, so women who escalate working hours for economic reasons after a divorce or a separation are not included in our analysis.

That cohabiting women have a higher propensity to escalate working hours than married women, can probably be interpreted in terms of a selection process, i e women who choose not to formalize their partner relationship by a wedding ceremony tend to be women with a strong work orientation in the first place. The starttime factor is a bit more difficult to interpret. Considering the way the parameters behaved during the fitting exercises leading up to the final model(see discussion in Bernhardt 1987b), our interpretation is that starttime in fact captures some of the effect of the (excluded) educational variable. Women who take up part-time employment after a work interruption of more than a year tend to be well-educated and "planning-minded". Their part-time work is scheduled to last only as long as the child is very young. They are well aware that if they work full-time again prior to the next child, maternity benefits will be at a higher level (when they get the next child).

The relative coefficients of the interaction between social background and education exhibit a very interesting pattern. Keeping in mind that we are talking about an unusual transition, there are indeed great differences between certain groups of women with particular combinations of these two factors. Generally speaking, the longer the work experience prior to first birth, the lower the propensity to abandon part-time work in favour of longer working hours. This corresponds well with our previous findings in Section 4.1. Somehow, an "established" position in the labour market seems to be a prerequisite for both getting and keeping a part-time job after childbirth. We suspect that this has to do with the necessity of securing a foothold in the labour market, perhaps primarily in terms of having a permanent job, before you can claim exception from the general rule, which in most parts of the labour market is full-time work7. The group that has most wholeheartedly accepted the "combination strategy" are daughters of skilled workers and lower level employees who have at least 5 years of work experience (which means that they tend to be in the age span 22-25 when they become mothers). They are more likely to be working part-time than full-time one year after first birth and very unlikely to escalate working hours once they have managed to get a part-time job.

7) Since 1979 parents of preschool children have a right to reduce working hours (with a consequent cut in pay, of course).

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#### 5. Discussion

Swedish women have become more and more inclined to take up part-time work when they return to the labour market after first birth. A decline in home attachment has gone hand in hand with the increasing popularity of part-time work. There has been a parallel development in the tendency to reduce working hours among one-child mothers who first take full-time jobs when they return to market work. Consequently, full-time work has become more transitory among one-child mothers. Conversely one-child mothers who work parttime tend to stick to this arrangement until it is time for the next child. The length of work life experience prior to first birth is positively related to part-time work. Somehow, an "established" position in the labour market seems to be a prerequisite for both getting and keeping a part-time job after childbirth. There is also a dimension which is captured either by education or by social background (two factors which are clearly related to each other). A high level of education and/or "upper middle class" background is associated with a disinclination toward part-time work.

Rather extended work interruptions (of a year or so) in connection with childbirth combined with part-time work seems to constitute a new strategy, which might be called the "combination strategy". This way of organizing life after entering motherhood seems to have attracted adherents both from groups of women who previously tended toward the "homemaker strategy" and among those who in earlier times would have pursued a clearcut "work career strategy".

Sweden has been characterized as a country "in pursuit of sexual equality". Public policy measures enacted with the more or less explicit goal to promote a more equal division of social roles between men and women have been enacted, in particular during the 1970s. In comparison with most other advanced industrialized countries, Sweden is no doubt a relatively egalitarian society.

The extent to which Swedish women, in particular women with small children, are involved in paid work outside the home, is often regarded as a clear indication of how advanced sex-role equality is in Sweden. Among young couples today it is probably regarded as quite old-fashioned for the woman to be completely out of the labour force for any length of time. Yet, it can be questioned whether the "combination strategy", as we have called it, is

anything but a modern version of the old sex-role structure with male dominance and female subordination. We have a new pattern of male-female interaction, characterized by an increasing prevalence of informal cohabitation rather than formalized marriage, increasing dissolution rates and a lessening economic dependence on the part of the woman in a partner relationship. A woman pursuing a "combination strategy" is not completely economically dependent on her husband, nevertheless she has largely suppressed her own (long-term) economic and other interests during the phase of her life when she has small children. A very important question therefore, which cannot be answered on the basis of the data set available here, is what the long-term consequences will be with regard to earnings, occupational careers and satisfaction with their life situations, of the life course choices that women make in connection with first birth.

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#### Résumé en français

#### L'impact de l'accès a la maternité sur l'activité économique des Suédoises

Les femmes suédoises sont devenues de plus en plus enclines à prendre un emploi à mi-temps après la naissance du premier enfant. L'attachement au foyer devient de plus en plus faible en même temps que la popularité du travail à mi-temps augumente sensiblement. Même les femmes qui ont commencé leur vie profesionelle dans un emploi à temps plein ont tendance à diminuer les heures de travail après la naissance de leur premier enfant. D'autre part, la propension des mères avec un enfant petit, ayant commencées à travailler à mi-temps, à augmenter les heures de travail est restée très faible. En général, on travaille à mi-temps jusqu'à l'arrivée de l'enfant suivant. La durée et le caractère de l'activité profesionelle sont parfois décisifs pour l'option d'un travail à plein ou à mi-temps. On constate par ailleurs qu'un haut niveau d'instruction et l'origine des classes élévées sont en relation avec le choix d'un emploi à plein temps même après l'arrivée du premier enfant.

Cette étude a été entreprise à l'aide des données de l'Enquête Suédoise de Fécondité, 1981.

#### References

Bernhardt, E. 1984. <u>Arbete och barn: kvinnors sysselsättning i de barnafö-</u> <u>dande åldrarna</u> (Work and children: Employment patterns among women in the childbearing ages), Statistics Sweden, Stockholm.

Bernhardt, E. 1986. Women's home attachment at first birth: The case of Sweden. <u>European Journal of Population</u>, Vol.2, No.1.

Bernhardt, E. 1987a. Continued home attachment versus transition to employment: An intensity regression analysis of Swedish one-child mothers. <u>Stockholm Research Reports in Demography</u>, No.33.

Bernhardt, E. 1987b. The choice of part-time work among Swedish one-child mothers. <u>Stockholm Research Reports in Demography</u> (forthcoming).

- Davis, K. 1984. Wives and work: The sex role revolution and its consequences. <u>Population and Development Review</u>, Vol. 10, No 3, 397-417.
- Etzler, C. 1987. Education, cohabitation and the first child: some empirical findings from Sweden. <u>Stockholm Research Reports in Demography</u>, No.34.
- Hoem, B. 1985. Ett barn är inte nog. Vad har hänt med svenska ettbarnskvinnor födda 1936-60? (One child is not enough: What has happened to Swedish one-child mothers born in 1936-60?), <u>Stockholm Research Reports</u> in Demography, No 25.
- Hoem, B. 1986. Tredjebarnsfödslar bland svenska kvinnor födda 1936-50. Stockholm Research Reports in Demography No.30.

Höhn, C. 1982. Participation in economic activity and the changing role of women. Council of Europe, Strassbourg.

Skrede, K. 1982. Fate, fortune or plans? INAS-notat 82:11, Oslo.

Trussell, J. and C. Hammerslough 1983. A hazards-model analysis of the covariates of infant and child mortality in Sri Lanka. <u>Demography</u>, Vol.20, No.1, 1-26.

WFS 1984. Fertility survey in Sweden: A summary of findings. Country report No.43, World Fertility Survey, London. Table 1. Logistic regression model for home attachment one year after first birth. The period before 1968..

Intercept	-0.1312
<u>Education</u> low medium high	0.4125 0.0630 -0.4755
<u>Civil status</u> cohabiting married	-0.1982 0.1982

**.** .

Note: educational level at first birth: low = maximum of one year of education after age 16. medium = 1-3 years of education after age 16. high = 4 years or more after age 16.

Table 2. Logistic regression model for home attachment at first birth. The 1968-80 period.

Intercept	-0.1130
Education	
low	0.2423
medium	0.0106
high	-0.2529
Civil status	
cohabiting	-0.0786
married	0.0786
Union duration	
short	0.1873
long	-0.1873
Note: short union duration	= less than 8 months between st

e: short union duration = less than 8 months between start of consensual union or marriage and first birth long union duration = 8 months or more .

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Table 3. The transition to full-time work among home-attached women. Final model. Relative intensities.

Calendar period	Before 1968 1968-74 1975-80		0.89 1.00* 1.50
Early labour force	no		1,00*
withdrawal	yes		0.66
Educational level	low mediumyoung mediumold high	•	0.70 1.00* 0.86 2.95
Civil status	cohabiting		1.80
* = base category	married		1.00*

<u>Note</u>: Mediumyoung=women with a medium level of education, who were less than 23 years at the time of their first birth. Early labour force withdrawal = stopping work more than three months prior to delivery.

Table 4. The transition to part-time work among home-attached women. Final model. Relative intensities.

Educational level	low	0.84
	mediumyoung	1.00*
	mediumold	1.41
	high	2.97
Early labour forc	e no	1.00*
withdrawal	yes	0.36

		Duration	interva	uls	
Period	1 q	2+3 q	4+5 q	6+7+8 q	4+5 yr
-1967	0.75	0.38	0.89	0.38	1.35
1968-74	1.00*	i.00*	1.00*	1.00 <b>*</b>	1.00*
1975-80	2.72	2.25	2.20	0,72	1.03

Note Duration intervals:

1 q = first quarter of second year after first birth etc. \* = base category Table 5. The transition to employment among home-attached women. Final model. Relative intensities.

Educational level	low mediumyoung mediumold high	0.78 1.00* 1.20 3.02
Early labour force withdrawal	no yes	1.00* 0.48
Civil status	cohabiting married	1.42 1.00*

	Duration intervals				
Period	1 q	2+3 q	4+5 q	6+7+8 q	4+5 yr
-1967	0.94	0.47	1.19	0.53	1.10
1968-74	1.00*	1.00*	1.00*	1.00*	1.00*
1975-80	2.33	1.79	2.41	0,76	1.06

\*) base category.

Table 6. Final model for the probability of part-time work among one-child mothers who have taken up employment within one year after first birth. Logistic regression coefficients.

0.1167

Intercept

Calendar	period	of	first	birth	
-1969				-0.	3093
1968-74				-0.	0314
1975-80				0.	3406

Prior activityFull-time work-0.3737Part-time work0.7124Student-0.2359Home-0.1029

	Work experience			
education	<1 yr	1-5 yrs	5+ yrs	
low	-0.6803	0.0269	0.4401	
medium	0.0904	0.1801	0.2267	
high	-0.2737	-0.0898	0.0800	

Note: Educational level defined as in table i. Work experience = accumulated time in employment prior to first birth.

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Table 7. The transition from full-time to part-time work among one-child mothers. Final model. Relative intensities.

Calendar period of first birth

	0.44
	1.00
· .	1.49

Duration	
1+29	1.00
3+4+5+6q	0.93
7+8q+3yr	0,55

Note: Time (duration) is counted from the month in which the woman goes back to work. (q = quarter, yr = year)

# Table 8. The transition from part-time to full-time work among one-child mothers. Final model. Relative intensities.

<u>Starttime</u> -11 months 12-17 months 18-23 months	0.53 1.00* 0.38		
<u>Civil status</u> Cohabiting Married	1.92 1.00*		•
Social background Unskilled workers, farmers and self- employed	<u>Work ex</u> Under i yr 4.44	<u>perience</u> 1-5 yrs 0.96	5 yrs or more 0.68
Skilled workers and lower level employees	-	1.00*	0.40
Middle or higher level employees	1.70	1.24	1.11

Note: starttime = month in which part-time work started. work experience = see definition in Table 6.

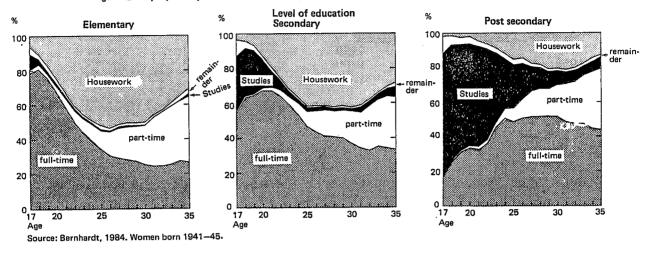


Figure 1 Employment patterns over the life cycle among different educational groups.

Figure 2. Activity status one year after first birth, by calender year of birth and level of education.

