The Importance of Work Changing Work Commitment Following the Transition to Parenthood¹

Marie Evertsson Swedish Institute for Social Research, Stockholm University, SE-106 91 Stockholm, Sweden Email: marie.evertsson@sofi.su.se

Richard Breen Department of Sociology and Center for Research in Inequalities and the Life Course, Yale University, New Haven, CT06520

DRAFT [March 2008]

The Importance of Work

Changing Work Commitment Following the Transition to Parenthood

Abstract

We use a longitudinal approach to examine changes in subjective work commitment among recent mothers in Sweden. In a sample of childless women in 1999, we study changes in work commitment by 2003 for those who have children compared to those who do not. In 1999, there are no significant differences between the two groups. However, structural equation models show that in 2003, women who gave birth in the period are less work committed. Additional analyses including women with older children indicate that the negative relationship between becoming a parent and work commitment is restricted to the first few years of the child's life; when women have children older than four years of age, they are not less work committed than non-mothers. We interpret the lower commitment among recent mothers' as a way of temporarily adjusting to difficulties of juggling work and family during the early pre-school years.

Introduction

Many studies have found that women's active labor force participation diminishes after marriage and childbirth. Even though this may be less so in a country like Sweden, where work is increasingly seen as a lifelong reality among women as well as among men, the transition to motherhood is almost always followed by a relatively long period of parental leave, and then frequently by a decrease in working hours. Does this indicate a concomitant decrease in women's work commitment?

There are few satisfactory studies of the relationship between changing family responsibilities and work commitment, mainly due to the lack of adequate data. In fact, we know of no such study for Sweden, on which we focus, and only three other studies (Bielby and Bielby 1984; Noonan, Rippeyoung and Glass 2006; Salmela-Aro et al. 2000). Such studies require panel data, and panel studies are few everywhere, especially those which include information on attitudes to work, aspirations or subjective evaluations of the importance of work and/or family. Most studies of work commitment thus rely on cross-sectional data, making it impossible to distinguish causal relationships from selection effects. If women with children report lower work commitment than childless women, this could be due to a selection of women with lower work commitment into motherhood, or be the result of family responsibilities lowering women's work commitment (or a combination of both).

Many studies of women's work commitment only have information from those who are employed. One of the strengths of our study is that our measures of work commitment also include those who are not currently employed. Moreover, we have measurements at two points in time, i.e. parallel indicators in two waves of a panel study,

as well as information on family events in between the two surveys. Thus, we are able to contribute to the – so far fairly underdeveloped – field of longitudinal studies of the relationship between family responsibilities and subjective work commitment. In doing so, we use data from a country well advanced in the so-called Second Demographic Transition² (Lesthaege 1995; Oláh and Bernhardt forthcoming), where female labour force participation is high (UNDP 2005). A study based on data from the International Social Survey Programme indicates that in the Scandinavian countries, women have significantly higher subjective work commitment than men and differences between classes and between educational categories seem to be much more important than family structure in determining commitment (Svallfors, Halvorsen and Andersen 2001). In a similar vein, Hakim (2004) points out that the sex differential in subjective work commitment has now been eliminated within the workforce in Britain, because men have become less committed to work and women more committed.³

Theoretical background

Work commitment as a concept

Work commitment can be conceptualized as either 'identity' or 'behavior'. The behavioral definition classifies women who are actively involved in paid work as 'work committed'. However, subjective work commitment cannot be inferred from labor force participation as women still bear a disproportional responsibility for the care of (any) small children in the household (Bielby and Bielby 1984; Bygren, Gähler and Nermo 2004; Hartmann 1981). Consequently, as long as parental responsibilities are not shared more equally, even the most work-oriented women have to stay home to care for a newly

born child. This is the reason why the assumed conflict between work roles and family roles mostly been studied only for women (see e.g. Swiss and Walker 1993). Although having to care for children still affects the degree to which women are economically active outside the home, its impact has lessened over time (Axelsson 1992; Rosenfeld 1996).

Bielby and Bielby (1984), find two features to be of most significance in defining work commitment: a) the work role as a source of identity in adulthood, and, b) the fact that it involves a distribution of subjective investments among adult roles. They go on to define work commitment as: "...the centrality of the work role as a source of intrinsic satisfaction relative to other adult roles." (Bielby and Bielby 1984), p. 235). By defining work commitment in this way, Bielby and Bielby recognize that (at least women's) work commitment reflects more complex life-style choices where both occupation and family involvement are included. The 'identity formation' approach put forth by Bielby and Bielby (1989) suggests that in order to be a proper 'wife' or 'mother', women need to balance dual role identities (such as 'worker' and 'mother') by trading one off against the other. For men on the other hand, the normative expectations of a 'husband' and a 'father' do not necessarily include fully shared involvement in housework and childcare.

The identity approach focuses on commitment as a psychological state, something that gives life meaning. However, an individual can also be committed to work because it is necessary for economic reasons. One way of measuring subjective work commitment is to ask the respondents if they would prefer to work, even if they had enough money to live comfortably (see for example Esser 2005; Hakim 2004; Moen and Smith 1986; Svallfors, Halvorsen and Andersen 2001). Another related indicator is organizational

commitment, i.e. the extent to which individuals are affectively attached to the goals and values of the employing organization (e.g. Buchanan 1974; Sjöberg 1997). However, organizational commitment can be affected by differences in the rewards received from work. Also, the extent to which women and men occupy jobs that offer commitment-enhancing features differ (Marsden, Kalleberg and Cook 1993).⁴ Another disadvantage with organizational commitment is that it is possible to estimate only for those employed. Hence, in a study of changing employment commitments during the transition to parenthood among young adults, work commitment is preferable because it sets out to capture an overall commitment to work, not necessarily to the current employer or work place. Hence, in the paper at hand, we will use an indicator of overall work commitment based on five items (see *Data and variables*).

Subjective work commitment and work commitment measured as actual labor force participation are of course not unrelated to each other. Else equal, women with pronounced work commitment are more likely to actually be employed, but external constraints interact with preferences for paid work and careers to determine women's actual labor force participation. Women with the same level of work commitment may have very different labor market careers because of differing capacities for overcoming constraints (Gerson 1985; McRae 2003; Stone 2007). The societal context in which the women find themselves will of course also be of great importance – whether public policies are supportive of the combination of work and family and the degree to which public opinion takes a positive view of working mothers.

The Swedish context

Sweden is widely considered the archetype of a women-friendly welfare state, although recent literature has begun to challenge this conclusion (e.g. Mandel and Semyonov 2006; Orloff 2006). In 2005, women's percentage of the male activity rate was 90 percent (UNDP 2005), and employment among mothers with small children is high; in 2004, 82 percent of all mothers 25-54 years of age with children younger than 7 years of age were in the labor force (AKU 2004).⁵ Probably as a consequence, about 80 percent of both women and men with children 10-18 years of age believe that it is important to aim for a society where men take as much responsibility for children and the household as women do (Evertsson 2006).

Two important reforms contributed to the current high labor force participation among women, and in particular mothers; the introduction of separate taxation in 1971 (for studies of how separate taxation affects female labor supply, see Gustafsson 1992; Smith et al. 2003)⁶, and the parental leave insurance, replacing maternity leave, in 1974. The expansion of the public sector and, in particular, high quality subsidized public childcare was also important (Axelsson 1992; Gustafsson and Stafford 1992).

The parental leave insurance gives young women strong incentives to work for a year or more before the birth of the first child.⁷ The right to paid leave with job security has meant that most mothers stay at home for a majority of the parental leave period, at the same time as it has accelerated the rate at which the group with earlier 'home-maker' characteristics returns to work after childbirth (Jonsson and Mills 2001; Ronsen and Sundstrom 1996). Parental leave taking among fathers has also increased and in 2004, fathers took close to 20 percent of all leave (Forsakringskassan 2005). Fathers are

however more likely to take leave when the child is no longer an infant, they are also more likely to spread out the leave and use it as a way of prolonging summer vacation and holidays (Ekberg, Eriksson and Friebel 2005).

Before we turn to an empirical test of how the birth of a child might affect women's work commitment in the described setting, we summarize earlier longitudinal studies of changing work commitment among first time mothers.

Earlier longitudinal studies on work commitment

Bielby and Bielby (1984) examine how family related events (among other things) such as marriage and pregnancy affect subjective work commitment⁸ (from here on only referred to as work commitment) and how work commitment in turn, influences employment behaviors. Their findings suggest that work commitment is fairly stable over time; work commitment among women who married between the surveys decreased somewhat, whereas becoming a mother did not lower women's work commitment, instead, it actually increased slightly. Still, recent mothers were significantly less likely to be employed. Bielby and Bielby conclude: "... intermittency of work activity was not a consequence of unstable commitments ... and subjective investments in the work role remained stable while these women adjusted their work behaviors to accommodate the demands of child rearing." (Bielby and Bielby 1984, p. 245-246). Although this study is informative and provides a good test of the theory, it has two major disadvantages: it is based on data collected in the 1960s and it only includes women with a college degree. In terms of work commitment, this group most likely has higher work commitment than lower educated women and is therefore not representative of all women.

Noonan Rippeyoung and Glass (2006) in their study also find that work commitment increased somewhat for the women who gave birth between the surveys. However, a limitation of the latter study is that the indicator of work commitment refers to expected activity at age 35.⁹ The data used is the National Longitudinal Survey of Youth (NLSY) for the years 1979-1984 and the respondents were on average 20 years of age at the time of the survey. Consequently, one reason for the finding that women who had a child between surveys were more work oriented could be because these women, by the time they were 35, would have older children and hence quite rationally, could expect to be able to invest more in work again. On the other hand, the women who did not have a child during the studied period were probably expecting to have children in the future and consequently, they were more likely to expect that they would be either concentrating on the family at age 35 or on combining work and family.

The third and last study that we know of where a longitudinal approach is used is a Finnish study of a sample of women who visited a midwife three months into pregnancy (Salmela-Aro et al. 2000). The women were asked to fill in a questionnaire at three and eight months into pregnancy, as well as three months after the child was born. In the questionnaire, the mother and her spouse were asked to write up their personal projects. The number of women who mentioned achievement related goals declined from three to eight months into pregnancy. Among first time mothers, the number of women who mentioned achievement related goals when the child was three months old did not increase compared to eight months into pregnancy. However, for women who had their second or higher order child, achievement related goals did seem to increase somewhat. One major weakness with the Salmela-Aro et al. study is that the latest time at which the

women filled in the questionnaire was when the child was only three months old. At that time, the vast majority of the women were still at home full-time taking care of the child and quite naturally, work related goals were not their priority. A fourth follow up when the child was one or even two years old would have been useful in order to establish the extent to which achievement related goals increase again.

In the study at hand, we are able to compare changes in work commitment for the same women at Time 1 (1999), when no women had any children and Time 2 (2003) when about 30 percent of the women had made the transition to motherhood. We are also able to compare these women to more experienced mothers. The reason for doing this is that the inclusion of women with older children in the analysis will increase our understanding of the extent to which mothers' work commitment increases again as children grow older. In the following, we turn to a description of our data and variables.

Data and variables

The data used is from the two waves of the Swedish Young Adult Survey (1999 and 2003). The project "Family and working life in the 21st century" was started by Eva Bernhardt¹⁰ in 1998. The purpose is to build up a longitudinal database in order to be able to analyze the mutual relationship between attitudes and demographic behavior among young adults in Sweden. Such an approach requires panel data. A first survey was undertaken in 1999. Based on a nationally representative sample, 3,408 individuals aged 22, 26, and 30 were asked to respond to a mail questionnaire that included questions about their plans, expectations and attitudes regarding family and working life. Factual information about their current situation and background characteristics was also

included. The response rate was 67 percent; 2,273 respondents returned their questionnaires. A second round took place in 2003, four years after the first survey. The respondents were then 26, 30 or 34 years old. The attrition rate was 22 percent. The data sets from the two surveys (1999 and 2003) can be ordered from Swedish Social Science Data Service (see the below link). For a description of the data in Swedish, see http://www.ssd.gu.se/?p=displayStudy&id=SSD%200786. A third wave is planned to take place in 2008.

In our first selected sample, we only include women who did not have any biological children in 1999 and who were not pregnant at the time of the 1999 survey. This sample consists of 623 women. We exclude women who already had children in 1999 from the first analyses, as we want to start out with a sample of women who are as equal as possible when it comes to our central dependent and independent variables. By having such a sample, we should be better able to study causality, i.e. how having a child affects the overall importance of work. Starting out with these women in the analyses, we separate between those who have no children by 2003 (n=435) and those who have at least one child (n=188). In later analyses, the sample is expanded to all women (total n=943). In this sample, 45 percent have no children in 2003. Finally, we also compare women with no children in 1999 to men with no children in 1999 (n=1134) and distinguish women and men who have children by 2003 from those who do not (424 men or 78 percent have no children in 1999 and 2003).

Dependent variables

The indicator of work commitment used in this paper is based on five items. Respondents were asked: 'What does a good job mean to you?'. Out of overall twelve, we picked three dimensions that we felt came closest to indicating overall work commitment: 'that I can think and act independently'; 'that it offers good possibilities to advance'; 'that I can be proud of my work'. The responses to these items fall on a five point scale ranging from 1; 'unimportant' to 5; 'very important' Respondents who answered 'don't know' are excluded from the multivariate analysis. The fourth item (with the same response categories as the ones above) is 'Can you tell me how important it is to you to be successful in your work?" and the fifth indicator is 'Overall, how important is work in your life?' (with responses ranging from 'one of the least important things in my life' to 'one of the most important things in my life'). This latter question corresponds to a question tried out and included on a regular basis in the World Values Survey.¹¹ In earlier analyses, we estimated the models with this item as the single dependent variable. Results from these analyses largely follow the ones for the five item latent variable (results available from the authors on request). In the descriptive part, we mainly focus on the 'importance of work' item (instead of the five-item scale) for ease of interpretation.

Independent variables

According to earlier research, individuals with higher education tend to have higher employment and/or organizational commitment (Svallfors, Halvorsen and Andersen 2001). Educational level in 1999 and 2003 are coded into a dummy variable with value 1 for those who have education post gymnasium (i.e. university) of 3 years or more. In the multivariate analysis, the dummy for university \geq 3 years in 1999 is included as well as

another dummy variable indicating if the respondent reached this educational level between the two surveys.

Earlier research on differences in work commitment among employed and unemployed individuals come to differing conclusions (see p. 143 and p. 149 in Svallfors, Halvorsen and Andersen 2001). Here, we differentiate between individuals who have a job and those who do not. Respondents who stated their current activity to be employment (permanent or fixed-term contract, self-employed included, individuals in employment programs excluded) are coded as *employed*.¹²

Good career possibilities is one potential commitment-enhancing feature of a job (cf. Marsden, Kalleberg and Cook 1993). The extent to which the individual has good career possibilities in 1999 and 2003 is indicated by a dummy variable that takes the value 1 if the respondent partially or completely agreed to a statement regarding the current job providing good career possibilities.¹³ In addition to that, two dummy variables are included indicating, a) if the respondent had good career possibilities in 1999 but not 2003 (i.e. if he she experienced decreasing career possibilities between the years), or, b) if the respondent had good career possibilities in career possibilities increased). The reference category consists of respondents who did not have good career possibilities in either of the years. We also include a dummy for missing information on this variable in 1999 or 2003. Finally, we control for birth cohort and separate those born in 1968 from the rest.

In the appendix, a number of control variables (most of which are also shown in Table 1) are described. These variables were included in the models at different stages of the initial analyses but were not kept in the final model due to statistical insignificance.

Results

Differences between women with and without children by 2003 in 1999

Table 1 shows some differences and similarities in 1999 between women who have children by 2003, compared to those who do not. As earlier mentioned, the respondents in the survey are born in 1968, 1972 and 1976. When those who have a child by 2003 are compared to those who do not, the former category on average is older than the latter one and they also – mainly due to this age difference – have longer work experience. Women who have a child by 2003 have higher education in 1999 than those who remain childless (partly due to their higher age). Among those who do have a child by 2003, significantly more are cohabiting in 1999; 77 percent compared to 39 percent among those who do not have a child. Those who have children by 2003 are also more likely to work at the time of the 1999 survey. Comparing only those who do work, women who have children four years later have better career possibilities than the category that does not have children. Although some of the differences described above is due to the fact that women who have children by 2003 are older than those who do not, also controlling for age, women with children by 2003 are significantly more likely to cohabit, to work and to have good career possibilities in 1999 than those with no children (analysis not shown). This indicates the importance of a work career and a stable job for the majority of Swedish women's decision to have a child (Bernhardt and Goldscheider 2006; Hoem 1995; Kennerberg 2007).

[Table 1 about here]

Turning to the importance of work, there are no differences between the proportions of women who state that work is very or rather important to them in 1999; 75 percent of all women agree to this. Neither is there a significant difference between the two groups when we look at the five-item index (not shown). The proportion of women who expect to share childcare responsibilities equally with their partner is also not significantly different in the two groups. Among those who did have children by 2003, 88 percent planned this already in 1999 (Table 1). However, among those who in 1999 planned to have kids within the next five years, only 47 percent actually had a child of their own in 2003 (not shown). It is perhaps worth noting that there is a difference (although only significant at the 10 percent level) between those who have children by 2003 and those who do not when they are asked about what the presumed best arrangement for a family with a preschool child is (Table 1). Among those who have a child by 2003, 76 percent agree that the best arrangement is that the mother and father work roughly the same hours (in 1999). Among those who do not have a child by 2003, 82 percent agree with the statement that both parents should work approximately the same hours. This might indicate that some women change – or, perhaps, are forced to change – the way they view this, the closer they get to having a child themselves.

Finally, the gender attitudes of women with and without children in 2003 are compared (in 1999). There are no significant differences between the proportion of women who believe that a society where women and men are equal is a good society (about 75 percent agree completely). Neither is there any difference between the proportions who agree completely with the statement that men can do as well as women in caring jobs (about 90 percent). About 94 percent in both groups agree that it is as

important for a woman as for a man to support oneself and consequently, the two groups of women overall have very similar gender attitudes.

The conclusion from Table 1 is that there are few selection mechanisms into motherhood in Sweden and instead, the transition to parenthood appears more to be a response to having reached a certain life course stage. The most important things for women seems to be that they have a solid relationship with a partner and that they are well established in the labor market (and for some, even being on a career track) before they have a child. In this context, it is also worth noting that there is no relationship between the importance of being successful at work and the importance of having children (the correlation between the two items is 0.05). Hence, Swedish women in these birth cohorts who find it important to be successful at work are not more, neither less, likely to state that it is important to them to have children.

Going back to the importance of work, we noted that there was no difference between the two groups of women in 1999. However, by 2003, there are significant differences between them. Compared to those who have had a child by 2003, significantly more women with no children state that work is rather or very important to them in 2003 (68 percent compared to 54 percent). Although the proportion who state that work is very important has decreased between the surveys in both groups, the proportion that changed attitudes is larger among the mothers (cf. Figure 1a and b). When we look at the five-item index, (ranging from 6 to 20 in this sample) women with children on average have a 0.90 lower work commitment than women without children (the average for the latter group being 15.1) (not shown). In Figure 2a and b, fathers (by 2003) are compared to men with no children. Even if fathers are slightly less likely than

non-fathers to state that work is very or rather important to them in 2003, the difference between the two groups is small and insignificant (56 and 59 percent respectively).

[*Figure 1a-b and 2a-b about here*]

Changes in the importance of work between 1999 and 2003, a structural equation model

Are there grounds for claiming that having a child *causes* the greater decline in work commitment that we observe? We now address this problem by applying a structural equation model to data from the sample of women who were childless in 1999. First, to deal with possible problems of measurement error we replace the single item, work importance, with a latent variable, 'work commitment' which has five, ordinal indicators. Secondly, we consider having a child between 1999 and 2003 as a treatment and seek to identify and measure its causal effect. The causal model we use is shown in Figure 3. Y(99), latent work commitment in 1999, is measured using five indicators labelled Z1 through Z5 while work commitment in 2003 is measured using the same five indicators, measured in 2003 (and labelled W1 through W5). Work commitment in 1999 (Y(99)) depends on a set of covariates, X, and work commitment in 2003 (Y(03)) depends on work commitment in 1999 and on the change in the values of X between 1999 and 2003 (labeled Δ X). B distinguishes two groups: those who had a child in the 1999-2003 period (B=1) and those who did not (B=0).

Figure 3: Causal diagram for effect of childbirth on work commitment



Turning first to our measurement model, we use the five indicators of work commitment in 1999 and 2003 mentioned above (see *Data and variables*). The reliability of the resulting scale for our sample of women is 0.67 for both the 1999 data and the 2003 data. We estimated the measurement model and the structural simultaneously using Mplus, with Y(99) and Y(03) considered to be continuous standard unit normal variables and their relationship to their indicators was specified as a set of ordered probit models.

Because we have measures of work commitment before (in 1999) and after (in 2003) childbirth, it is possible to distinguish the effect of being in B=0 or B=1 from the effect of having a child (which happened to those for whom B=1). So we can ask whether membership in B influences work commitment in 1999, prior to having a child (i.e. if there is selection into motherhood), and whether it affects work commitment in 2003, after having had a child. Given that we control for a set of determinants of work

commitment in 1999 (namely X), the first effect can be identified with unmeasured differences between members of B=0 and B=1 that influence work commitment. The difference between this effect and the impact of B on Y(03) can be seen as the effect of childbirth per se, assuming that these unmeasured effects remain the same. But in our case we find that there is no effect of B on Y(99) (i.e. the dashed arrow can be removed from the graph in Figure 3) and so all differences between B=0 and B=1 in work commitment in 2003 can be attributed to the effect of having a child. That is, once we controlled for the covariates in our model, we can find no residual selection effect into motherhood. Because B does not influence Y(99) the causal effect of B on Y(03) is identified using Pearl's (1995) back-door criterion. The variables X, Y(99) and ΔX are not descendants of B and they block all paths between B and Y(03) which contain an arrow into B. Note that this effect would not be identified if B affected Y(99) because then Y(99) would be a descendant of B. Table 2 reports the parameter estimates of this model.

[Table 2 about here]

On the left side of Table 2 we see that being in the treatment group (women who will have children between 1999 and 2003) is unrelated to work commitment in 1999, but, on the right hand side we see that it has a strong negative effect on work commitment in 2003, reducing work commitment by just over one-fifth of a standard deviation. Work commitment in 1999 has a positive impact on work commitment in 2003, as we might have expected, and having gained a University degree and having better career possibilities are also positively related to work commitment in 2003, but having begun to work over the 1999-2003 has a negative impact.

A further model was estimated to try to differentiate between members of B=1. Dummy variables were added for whether the person had more than one child and whether they had a child under the age of 2 years. The results are shown in Table 3. Having a child, having more than one child and having a child under 2 years old (by 2003) do not have significant effects on work commitment in 1999 but having a child reduces work commitment in 2003 (the estimated coefficient is -0.284) and having more than one child reduces it further (the coefficient for this variable is estimated as -0.215, though it is significant only at the 10 percent level).

[*Table 3 about here*]

Changes in work commitment between 1999 and 2003, taking a closer look at all women and men

The results described above show that having a child seems to change at least some women's work commitment and we have established a causal effect of childbirth on work commitment. In the next step, we aim to put this result in a broader perspective by including all women, that is, also those who have had a child prior to 1999 to get an indication of the extent to which the lower work commitment is something lasting among women with children or if it tends to change again as children grow older. We use the same measurement model as before but now we focus only on work commitment in 2003: thus the latent variable of work commitment in 1999 enters the model as an explanatory variable and the dependent variable is the latent work commitment variable in 2003.

In Table 4, we distinguish between those whose youngest child is less than two years old, two to four years old, four to six years old and those whose youngest child is 6 years or older. Here, the difference in the work commitment between those with children 4 years of age or older and those with no children is not significant. Consequently, work commitment appears to be at its lowest during the very first years after birth and commitment increases once the child grows older. Of course, we are implicitly arguing here that women with children less than 4 years of age in 2003 would have the same work commitment as those with older children in 2003 if we were to ask the same question again, two to four years later, when the former group's children would be older than four.

[Table 4 about here]

In Table 5, men are included and the sample is reduced to women and men with no children in 1999. Again we focus only on 2003. In this model women with no children seem more prone to state that work is important to them compared to the corresponding men (cf. Svallfors, Halvorsen and Andersen 2001). Still, women with two or more children and women with children two to four years of age are significantly less work committed than men are. This could be because women are the ones who take the longer leave and they also more often than men work part-time when they have pre-school children. Consequently, women – to a greater extent than men – have to trade one role off against the other (i.e. the role of 'worker' for the role of 'mother') and this appear to affect many women's work commitment, at least when they have very young children.

[*Table 5 about here*]

Concluding discussion

In this paper, we use the Swedish longitudinal Young Adult Survey to estimate how subjective work commitment changes for women because of them having a child. The primary analysis focuses on women in three birth cohorts (1968, 1972 and 1976) who did not have a child in 1999 but by 2003, about 30 percent of these women had at least one child. In 1999, there are no differences between these two groups (i.e. those who have a child in 2003 and those who do not) in terms of the degree to which work (overall) is important to them. When it comes to background characteristics, there are small differences between them. Women who have a child by 2003 are slightly older. Still, controlling for age, they are further ahead in their work career (as they more often work and have a job with comparatively good career possibilities), and they are more likely to cohabit. Consequently, it seems the decision to have a child in Sweden is more due to life course stage rather than particular, and comparatively stable, selection mechanisms. To this testifies also the structural equation models. When we control for a number of different factors such as education, employment and career possibilities (as well as changes in these factors between the surveys) in multivariate structural equation models, we find that women who have children by 2003 have lower work commitment than those with no children. Also among men we find some indications of reduced work commitment after the birth of a child. Here, however, the difference between those with and without children in 2003 is not significant. One reason for this may be that it still is usually the woman, rather than the man, who takes the main responsibility for small children. Findings from Bielby and Bielby (1989) suggests that when women and men are engaged in similar work and family roles, they tend to be almost equally committed to

these roles and consequently, greater father involvement in child care might result in an equally large change in work commitment among men as among women.

Additional analyses suggest that the reduction in work commitment among women with children is temporary. The difference in work commitment among those with children compared to women with no children is highest when the youngest child is at most 4 years old. Hence, when women have children older than 4 years of age, their work commitment is not significantly different from that of non-mothers. The way we interpret this finding is that women, once they are back at work, have to be prepared for, and act on, the sudden emergencies that arise for instance once they suddenly have a sick child who cannot be in day care. Women also often reduce their work hours (willingly, or due to the fact that the father rarely does) in order to leave and/or pick up the child from day care. When women with small children rate their overall work importance, they probably weight in the fact that the child sometimes has to be more important than work. The change in work commitment could also be the result of women adjusting their preferences to their possibilities. This phenomenon of adaptive preferences is defined and discussed in length by Elster (1983) in *Sour Grapes*. Our result of a change in work commitment among recent mothers is in contrast to Bielby and Bielby's (1984) finding of stable work commitment throughout the early parental phase. Worth noting though is that the indicators used by Bielby and Bielby all take a long-term perspective on work vs. family commitment and this could be the reason why they do not find a significant change in work commitment among recent mothers. The conclusion from our study is also that work commitment is a stable characteristic in the long run. It is, however, vital to acknowledge that part of the reason why women with small children seem less work

committed is due to the high base line for the reference category; women with no children. These women are not only more work committed than women with children are, they are also more work committed than men with and without children are.





Figure 1b. The importance of work for women with no children in 1999 and 2003





Figure 2a. The importance of work for men with children (by 2003) in 1999 and 2003

Figure 2b. The importance of work for men with no children in 1999 and 2003



Characteristics as of 1999	No child by 2003 (ref.)	Has child by 2003
Respondent born in 1968	14.0%	28.7%
Respondent born in 1972	31.3%	38.8% ***
Respondent born in 1976	54.7%	32.4%
Has >= 3 years post-gymnasium	8.5%	14.4% *
Cohabiting	39.4%	76.6% ***
Average labor market experience in years	3.9	5.8 ***
Doesn't work	38.9%	14.9% ***
Good career possibilities (among those with any job)	45.5%	59.1% **
Work is very or rather important	75.8%	75.4%
Important to be successful at work	74.1%	75.1%
Expects partner and self to share child care responsibilities equally	70.3%	76.2%
Expects the first child within 5 years	43.0%	87.8% ***
Gender attitudes in 1999:		
A society where men and women are equal is good $\ensuremath{\dagger}$	74.7%	74.5%
Men can do as well as women in caring jobs †	90.6%	88.3%
It is as important for a woman as a man to support oneself \dagger	94.0%	93.6%
Both work roughly the same hours (best arrangement for a family with preschool children)	82.3%	76.1%

Table 1. Descriptive statistics on women with no children in 1999, comparing those who have a child by 2003 to those who did not.

*** p<.001, ** p<.01, * p<.05; Pearson Chi-Square test † Respondent agrees completely Table 2: Structural equation model results for work commitment in 1999 and in 2003. n=602.

Ordered probit: Dependent variat (five it	ole = Work co tems)	ommitment i	n 1999	Ordered probit: Dependent variab (five it	le = Work coi ems)	mmitment in	2003
	beta	std err	d		beta	std err	d
				F1 Work commitment	0.779	0.069	0.000
Has children in 2003 (B)	-0.061	0.072	0.396	Has children in 2003 (B)	-0.224	0.065	0.000
University >=3 years 1999	0.296	0.107	0.005	Univ. >=3 years 2003, not 1999	0.184	0.075	0.0145
Birth year = 1968	-0.238	0.094	0.011	Birth year $= 1968$	0.116	0.071	0.100
Good career poss. 99 and 03	0.439	0.088	0.000	Career noss increased 99-03	0 370	0.086	0000
Career poss. decreased 99-03	0.084	0.104	0.420	Career poss. decreased 99-03	-0.086	0.090	0.3447
Worked in 1999 and 2003	-0.195	0.104	0.062				
Worked in 1999, not in 2003	-0.074	0.134	0.578	Worked in 1999, not in 2003 Did not work in 1990 worked in	0.032	0.114	0.778
				2003 2003	-0.266	0.110	0.016
Measurement model	beta	std err	b/s.e	Measurement model	beta	std err	b/s.e
Z1 Act independently	1	0	0	W1 Act independently	1	0	0
Z2 Good advancement poss.	1.109	0.08	13.806	W2 Good advancement poss.	1.109	0.088	12.668
Z3 Proud of work	0.997	0.073	13.578	W3 Proud of work	0.944	0.085	11.162
Z4 Important successful at work	1.005	0.08	12.560	W4 Important successful at work	1.041	0.085	12.271
Z5 Importance of work	0.739	0.071	10.362	W5 Importance of work	0.768	0.08	9.556

Table 3: Structural equation model results for work commitment in 1999 and in 2003. n=602.

Ordered probit: Dependent variable = Work commitment in 1999

Ordered probit:Dependent variable = Work commitment in 2003

(five it	ems)			(five i	tems)		
	Beta	std err	d		beta	std err	d
				F1 Work commitment	0.7777	0.068	0.000
Has children in 2003 (B)	-0.144	0.116	0.212	Has children in 2003 (B)	-0.284	0.109	0.009
University >=3 years 1999	0.303	0.108	0.005	Univ. >=3 years 2003, not 1999	0.181	0.076	0.017
Birth year = 1968	-0.234	0.094	0.013	Birth year = 1968	0.127	0.071	0.072
Good career poss. 99 and 03	0.441	0.089	0.000				
Career poss. decreased 99- 03	0.089	0.105	0.396	Career poss. Increased 99- 03 Career poss. decreased 99- 03	0.380 -0.083	0.092 0.092	0.000 0.364
Worked in 1999 and 2003	-0.190	0.105	0.071				
Worked in 1999, not in 2003	-0.073	0.138	0.599	Worked in 1999, not in 2003 Did not work in 1999 worked in	0.044	0.116	0.704
				2003	-0.258	0.111	0.020
>= 2 children	-0.089	0.160	0.576	>= 2 children	-0.215	0.122	0.078
Youngest child < 2	0.134	0.136	0.324	Youngest child < 2	0.136	0.119	0.252
Measurement model	heta	std err	h/s.e	Measurement model	heta	std err	h/s.e
Z1 Act independently	-	0	0	W1 Act independently	1	0	0
Z2 Good advancement poss.	1.102	0.078	14.048	W2 Good advancement poss.	1.102	0.086	12.868
Z3 Proud of work	0.991	0.072	13.726	W3 Proud of work	0.942	0.083	11.324
Z4 Important successful at work	0.995	0.078	12.681	W4 Important successful at work	1.032	0.084	12.335
Z5 Importance of work	0.73	0.069	10.609	W5 Importance of work	0.755	0.080	9.415

	heta	std err	n
	Deta	stu err	þ
F1 Work commitment	0.749	0.054	0.000
Univ. >=3 years in 1999	0.221	0.078	0.005
Univ>=3 years 03, not 99	0.140	0.064	0.028
Career possibilities 99 and 03	0.452	0.071	0.000
Career possibilities decreased 99-03	0.003	0.083	0.967
Career possibilities increased 99-03	0.351	0.067	0.000
>= 2 children	-0.072	0.070	0.304
Youngest child < 2	-0.414	0.072	0.050
Youngest child 2-4	-0.269	0.093	0.004
Youngest child 4-6	-0.005	0.109	0.966
Youngest child >6	0.036	0.097	0.708
Measurement model 1999	beta	std err	b/s.e
Z1 Act independently	1	0	0
Z2 Good advancement possibilities	1.110	0.060	18.441
Z3 Proud of work	0.884	0.056	15.832
Z4 Important successful at work	0.998	0.060	16.706
Z5 Importance of work	0.685	0.056	12.231
Measurement model 2003	beta	std err	b/s.e
W1 Act independently	1	0	0
W2 Good advancement poss.	1.149	0.069	16.581
W3 Proud of work	0.872	0.066	13.254
W4 Important successful at work	0.991	0.066	15.055
W5 Importance of work	0.768	0.063	12.191

Table 4. Ordered probit regression of work commitment in 2003. Including all women (both those who have and those who do not have children in 1999). n=934. Ordered probit: Dependent variable = Work commitment in 2003 (five items)

	beta	std err	р
F1 Work commitment	0.747	0.054	0.000
Univ. ≥ 3 years in 1999	0.154	0.074	0.037
Univ>=3 years 03, not 99	0.095	0.046	0.039
Career possibilities 99 and 03	0.396	0.053	0.000
Career possibilities decreased 99-03	0.117	0.061	0.055
Career possibilities increased 99- 03	0.317	0.054	0.000
>= 2 children	0.187	0.153	0.222
Youngest child < 2	-0.067	0.083	0.421
Youngest child >2	0.068	0.126	0.590
Woman	0.168	0.046	0.000
Woman * 2 or more children	-0.446	0.195	0.022
Woman * youngest < 2	-0.059	0.109	0.588
Woman * youngest > 2	-0.486	0.173	0.005
Measurement model 1999	beta	std err	b/s.e
Z1 Act independently	1	0	0
Z2 Good advancement possibilities	1.257	0.079	15.919
Z3 Proud of work	1.087	0.068	15.946
Z4 Important successful at work	1.316	0.078	16.798
Z5 Importance of work	0.866	0.067	12.848
Measurement model 2003	beta	std err	b/s.e
W1 Act independently	1	0	0
W2 Good advancement poss.	1.219	0.072	16.894
W3 Proud of work	1.133	0.066	17.088
W4 Important successful at work	1.273	0.076	16.721
W5 Importance of work	0.859	0.066	13.094

Ordered probit: Dependent variable = Work commitment in 2003 (five items)

Table 5. Ordered probit regression of work commitment in 2003. Including all women and men with no children in 1999. n=1134.

Appendix

In the multivariate analyses, a number of control variables were tested (although not included in the final analyses). These indicators, described below, are also included in the descriptive Table 1 in order to compare the background characteristics (in 1999) of women with children in 2003 to those without.

A dummy for *cohabiting/married* indicates if the respondent stated that she/he lives with a partner (cohabitor or spouse). The reason for including this is that some earlier studies found women's work commitment to be affected by the initialization of a marriage/union (Bielby and Bielby 1984).

As indicated by the study by Salmela-Aro et al. (2000), women on parental leave might have lower work commitment than working women. *On parental leave* in 2003 indicates if the respondent stated her current activity to be 'parental leave'. According to a similar line of reasoning, respondents were asked when they think they would have their first (next) child. If women who expect a child in a not too distant future lower their work commitment, this variable would capture this. Those who answered 'within the next two years' are coded 1 for *expects a child < 2 years*.

Earlier research indicates that job values might decrease with work experience (Johnson 2001). *Work experience* is based on the number of years the respondent stated that she/he had been working since age 16.

Indicators of gender attitudes are included as a way of comparing attitudes among women with and without children. Hence, it should be obvious from these indicators if women who later have children have more traditional attitudes to start with (something that might correlate negatively with work commitment). Respondents were prompted for

their view on statements such as, a) *a society where men and women are equal is a good society*, b) *men can do as well as women in caring jobs* and, c) *it is as important for a woman as for a man to support herself.* The respondents indicated the extent to which they agreed on a scale from 1 (didn't agree at all) to 5 (agreed completely). Respondents rating the degree to which they agreed as 5 are coded as 1 on the dummy variables for each gender attitude indicator. Also, respondents were asked what they thought would be the best arrangement for a family with preschool children: 'only the man works and the woman takes the main responsibility for home and children', 'both work but the woman works part-time and takes the main responsibility...', both work but the man works part-time...' and, 'both parents work roughly the same hours and share the responsibility for home and children equally'. Those who indicated that the last option would be the best arrangement are compared to the rest and included in the descriptive Table 1. Finally, an indicator of expected future arrangements in ones own family is included in *expects partner and self to share childcare responsibilities equally.*¹⁴

References

AKU. 2004. Swedish Labor Force Survey. Statistics Sweden.

- Axelsson, Christina. 1992. *Hemmafrun som försvann. Övergången till lönearbete bland gifta kvinnor i Sverige 1968-81*. Stockholm: Swedish Institute for Social Research.
- Bernhardt, Eva, and Frances Goldscheider. 2006. "Gender Equality, Parenthood Attitudes, and First Births in Sweden." *Vienna Yearbook of Population Research*:19-39.
- Bielby, Denise. D. V., and William. T. Bielby. 1984. "Work Commitment, Sex-Role Attitudes, and Womens Employment." *American Sociological Review* 49:234-247.
- Bielby, W. T., and D. D. Bielby. 1989. "Family Ties Balancing Commitments to Work and Family in Dual Earner Households." *American Sociological Review* 54:776-789.
- Buchanan, Bruce. 1974. "Building Organizational Commitment Socialization of Managers in Work Organizations." *Administrative Science Quarterly* 19:533-546.
- Bygren, Magnus, Michael G\u00e4hler, and Magnus Nermo. 2004. "Familj och Arbete vardagsliv i f\u00f6r\u00e4ndring." in *Familj och Arbete vardagsliv i f\u00f6r\u00e4ndring*, edited by M. Bygren, M. G\u00e4hler, and M. Nermo. Stockholm: SNS F\u00f6rlag.
- Ekberg, J., R. Eriksson, and G. Friebel. 2005. "Parental Leave A Policy Evaluaton of the Swedish "Daddy-Month" Reform." *IZA Discussion Paper No. 1617*.
- Elster, Jon. 1983. Sour Grapes. Studies in the subversion of rationality. Cambridge: Cambridge University Press.
- Esser, Ingrid. 2005. *Why work? Comparative studies on welfare regimes and individual's work orientations*. Stockholm University: Swedish Institute for Social Research Dissertation Series.
- Evertsson, M. 2006. "The reproduction of gender: housework and attitudes towards gender equality in the home among Swedish boys and girls." *British Journal of Sociology* 57:415-436.
- Forsakringskassan. 2005. "Föräldrapenning att mäta hälften var. Statistik 2005:1." Swedish Social Insurance Administration.
- Gerson, K. 1985. *Hard Choices. How Women Decide about Work, Career, and Motherhood.* Berkely: University of California Press.
- Gustafsson, S. 1992. "Separate Taxation and Married Womens Labor Supply a Comparison of West-Germany and Sweden." *Journal of Population Economics* 5:61-85.
- Gustafsson, S., and F. Stafford. 1992. "Child-Care Subsidies and Labor Supply in Sweden." *Journal of Human Resources* 27:204-230.
- Hakim, Catherine. 2004. Key issues in women's work : female diversity and the polarisation of women's employment. London: GlassHouse.
- Hartmann, H. I. 1981. "The Family as the Locus of Gender, Class, and Political Struggle the Example of Housework." *Signs* 6:366-394.
- Hoem, B. 1995. "The Way to the Gender Segregated Swedish Labour Market." in *Gender* and Family Change in Industrialized Countries, edited by K. Oppenhiem Mason and A-M. Jensen. Oxford: Clarendon Press.

- Johnson, M. K. 2001. "Change in job values during the transition to adulthood." *Work and Occupations* 28:315-345.
- Jonsson, J. O., and C. Mills. 2001. "Giving birth without giving up: return to employment and return to work amongst women." in *Cradle to Grave. Life-course change in modern Sweden*, edited by J. O. Jonsson and C. Mills. Durham: Sociologypress.
- Kennerberg, Louise. 2007. "Hur förändras kvinnors och mäns arbetssituation när de får barn?" in *Rapport 2007:9*: IFAU The Institute for Labor Market Policy Evaluation.
- Lesthaege, Ron. 1995. "The second demographic transition in Western Countries: An interpretation." in *Gender and family change in industrialized countries*, edited by Karen Oppenheim Mason and An-Magritt Jensen. Oxford: Oxford University Press.
- Mandel, H., and M. Semyonov. 2006. "A welfare state paradox: State interventions and women's employment opportunities in 22 countries." *American Journal of Sociology* 111:1910-1949.
- Marsden, P. V., A. L. Kalleberg, and C. R. Cook. 1993. "Gender Differences in Organizational Commitment - Influences of Work Positions and Family Roles." *Work and Occupations* 20:368-390.
- McRae, S. 2003. "Choice and constraints in mothers' employment careers: McRae replies to Hakim." *British Journal of Sociology* 54:585-592.
- Moen, P., and K. R. Smith. 1986. "Women at Work: Commitment and Behavior over the Life Course." *Sociological Forum* 1:450-475.
- Noonan, M. C., P. L. F. Rippeyoung, and J. Glass. 2006. "Does Women's Work Commitment Change After Marriage and Childbirth?" Paper presented at the 2006 Annual Meeting of the American Sociological Association, Montreal, Canada.
- Oláh, Livia, and Eva Bernhardt. forthcoming. "Sweden: Combining childbearing and gender equality." in *Fertility Trends and Policies in Europe*, edited by Thomas Frejka, Jan Hoem, Tomás Sobotka, and Laurent Toulemon: Max Planck Institute for Demographic Research.
- Orloff, Ann, Shola. 2006. "From Maternalism to "Employment for All": State Policies to Promote Women's Employment across the Affluent Democracies." in *The State after Statism. New State Activities in the Age of Liberalization*, edited by Jonah Levy: Harvard University Press.
- Pearl, J. 1995. "Causal diagrams for empirical research." Biometrika 82:669-688.
- Ronsen, M., and M. Sundstrom. 1996. "Maternal employment in Scandinavia: A comparison of the after-birth employment activity of Norwegian and Swedish women." *Journal of Population Economics* 9:267-285.
- Rosenfeld, R. A. 1996. "Women's work histories." *Population and Development Review* 22:199-222.
- Salmela-Aro, K., J. E. Nurmi, T. Saisto, and E. Halmesmaki. 2000. "Women's and men's personal goals during the transition to parenthood." *Journal of Family Psychology* 14:171-186.
- Sjöberg, Anders. 1997. *Studies of work commitment. Theoretical and methodological considerations*. Stockholm University: Department of Psychology.

- Smith, N., S. Dex, J. D. Vlasblom, and T. Callan. 2003. "The effects of taxation on married women's labour supply across four countries." Oxford Economic Papers-New Series 55:417-439.
- Stone, P. 2007. *Opting out? Why women really quit careers and head home*. Berkely: University of California Press.
- Svallfors, S., K. Halvorsen, and J. G. Andersen. 2001. "Work orientations in Scandinavia: Employment commitment and organizational commitment in Denmark, Norway and Sweden." *Acta Sociologica* 44:139-156.
- Swiss, Deborah J., and Judith P. Walker. 1993. Women and the work/family dilemma : how today's professional women are finding solutions New York: Wiley.
- UNDP. 2005. "Human Development Report 2005. International cooperation at a crossroads: Aid, trade and security in an unequal world." New York, NY: United Nations Development Programme.

Endnotes

¹ Earlier versions of this paper were presented at the Comparative Research Workshop, Department of Sociology, Yale University, in February 2007 and at the LNU-seminar at the Swedish Institute for Social Research, Stockholm University in June 2007. We thank participants at these seminars for helpful comments. In particular, we are grateful to Silke Aisenbrey, Daniela Grunow, Stefanie Gundert, Michael Gähler, Karin Halldén, Karl-Ulrich Mayer and Michael Tåhlin for constructive comments. We gratefully acknowledge financial support from the Center for Research on Inequalities and the Life Course at Yale University and the Swedish Council for Working Life and Social Research (FAS Dnr: 2004-1335). Eva Bernhardt has generously provided us with the data and she has also been involved in this project way beyond what can reasonably be expected. We are most thankful for her support, constructive suggestions and help.

² With the Second Demographic transition, we refer to the dramatic transformation of family patterns towards less committed and more fragile couple relationships as well as later and less likely transition to parenthood and a sharp reduction of higher-order births currently going on in Europe and European-origin populations

³ Hakim notes that the female work force in Britain is more self-selective than the male work force and that women in the labor force have higher work commitment than women who are not in the labor force.

⁴ Although some argue that women more often tend to be in "'people-processing' organizations" that might increase organizational commitment (Svallfors et al. 2001: 152, see also Johansson 1991), others note that men more often are in jobs with commitment-enhancing features such as greater autonomy, supervisory authority and promotion prospects (see Marsden et al. 1993).

⁵ Also those on parental leave are counted as 'in the labor force' if they are on leave from their job.

⁶ Separate taxation means that the two individuals (in the couple) are taxed separately. As a comparison, in a joint taxation scheme, their incomes would be pooled and taxation based on total household income.

⁷ With the introduction of the parental leave insurance, fathers and mothers were given equal rights to take leave for six months with the right to return to the same employer after the leave. The income replacement level was initially set to 90 percent of the individual's gross income (up to a ceiling), and the benefits paid out of the general tax system. Parents who did not work at the time of the child's birth received a lower flat-rate benefit. Since its introduction, the parental leave period has been extended several times. In 1995 the first so called 'daddy's month' was introduced making it no longer possible for one parent to take all of the leave (or, in total, 15 months full-time). Instead, one 'use-or lose' month was reserved for the mother/father and it could not be transferred to the other parent. In 2002, another 'use-or-lose' month was added. For the mothers in our analyses, this meant that they could take as much as 420 days of parental leave for each child (given that the father would give up all but the 'use-or lose' month/s). As of 1998, the parental benefit is 80 percent of the parent's gross income up to the ceiling. The leave period can be prolonged even beyond the 420 days if the parent accepts a lower replacement than 80 percent of the earlier income, a very common strategy among mothers. In addition to this, employers are required by law to allow reduced work hours (to 30 hours per week) among parents with children younger than 8 years of age.

⁸ The work commitment indicator was based on the following question: "Which of the following do you expect to give you the most (and next most) satisfaction in your life?" The possible answers were; 1) career, 2) family, 3) community or international activities, and, 4) leisure, religious, or other involvements.

⁹ The question asked was: "We have a question about the future. What would you like to be doing when you are 35 years old?". Respondents could state that they wanted to be 1) working, 2) married/raising a family, or 3) other.

¹⁰ Eva Bernhardt is Professor Emerita at Center for Gender Studies at Stockholm University in Sweden.
¹¹ The World Values Survey question reads: "For each of the following, indicate how important it is in your life: Family, friends, leisure time, politics, work, religion, services to others. Would you say it is... very

important; rather important; not very important; not at all important; don't know." For more information see www.worldvaluessurvey.org

¹² Women on parental leave will most likely state that they are employed if they have an employment contract that makes them able to return to the same job after the leave.

¹³ More specifically, the questions were: 'What applies to your current job?' '...It provides good career possibilities'. The response categories were 1) applies completely, 2) applies partially and 3) does not apply at all.

¹⁴ This dummy variable indicates respondents who replied 'share equally' when confronted with the statement and question: 'To take care of a child involves many different tasks. How do you think you and your partner will divide the responsibility' (potential other responses being: 'I will do the most' and 'my partner will do the most').