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Drobnic, Sonja; Blossfeld, Hans-Peter; Rohwer, Götz; Wittig, Immo

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Sonderforschungsbereich 186 der Universität Bremen

Statuspassagen und Risikolagen im Lebensverlauf

Women's Part-time Work: Reconciliation between Family and Employment?

A Comparison between Germany and the USA

von

Sonja Drobnič Hans-Peter Blossfeld Götz Rohwer Immo Wittig

Arbeitspapier Nr. 32



Preface

The focus of the research project B6 within the Special Collaborative Program on "Status Passages and Risks in the Life Course" is the interrelation between the family and the employment sphere. In this paper, an international comparison of women's full-time and part-time employment patterns within the family life cycle is presented.

It is commonly assumed that women pursue part-time employment for better compatibility with family and household responsibilities. This paper directly links the labor market behavior of individual women to their family life cycle stage, and examines the flows into and out of the full-time and part-time segment of the labor market over time. Furthermore, these employment transitions are compared over the life course of American and (West) German women. Empirical evidence for white American women does not support the predictions generated by the human capital theory – part-time employment seems to be used neither as a strategy for optimizing the outcomes of intermittent careers, nor as a measure for remaining in employment even during periods of increased family demands. In Germany, family life cycle plays a considerably more important role in women's employment patterns than in the USA, and part-time work is an important form of re-employment upon termination of the "family break".

Prof. Dr. Ansgar Weymann Chair, Special Collaborative Programme No. 186

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1 Introduction

The difficulty of combining employment with family responsibilities remains an important obstacle for the achievement of equality of women in the labor market. Since women in general continue to assume the primary responsibility for childcare and other household tasks even in dual-earner couples (Presser 1994), economists argue that this affects their choice of occupations, length of time spent in paid employment, work commitment, and allocation of effort to household and workplace activities. Work schedule, and in particular the length of working time, is of utmost importance due to the competing demands that employment and family place on a woman's limited supply of time. The "choice" available to a working woman in contemporary Western societies, if she is unwilling to forgo marriage and motherhood altogether, is that of working part-time, particularly when she has young children (Bernhardt 1993). Thus, it is commonly assumed that women pursue parttime jobs because they are relatively easy to combine with household responsibilities. At various stages of the family formation, part-time work may offer the flexibility that is required to meet family obligations, and at the same time allow women to maintain ties to the labor market.

This paper examines the dynamic relationship between the family life cycle and women's employment patterns over time in the United States and Germany. It points to the need of performing longitudinal analysis on individual-level data to investigate how the fluctuating family responsibilities affect the level of women's labor force participation and their work schedule, and to examine to what extent part-time employment accomplishes the task to reconcile domestic and employment roles. In particular, we examine (1) whether flows out of the labor market following the increase in family demands differ for women holding part-time and full-time jobs, (2) whether the return to paid work is facilitated through part-time work arrangements, and (3) whether there are similarities and differences in this respect between the two countries.

2 Conceptual Framework

In spite of a dramatic increase in the proportion of married women and mothers in paid employment outside the home, women continue to be segregated in specific segments of the labor market. Theorists in the neo-classical tradition explain this continuous occupational segregation and the resulting gender wage differentials with individual preferences and self-selection of women into jobs that conflict less with the family. Jobs considered to be compatible with household responsibilities and parenting are those that allow women to maximize their earnings and minimize

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human capital depreciation in case of intermittent employment (Polachek 1976, 1979, 1981; Mincer and Ofek 1982). Other desirable attributes are availability of work at home, close proximity to the working place, short working hours (Darian 1975), as well as schedule flexibility and ease of job performance (Glas and Camarigg 1992). The *length of working time* is particularly important when increased household and family requirements pose competing demands on women's time.

Two alternative predictions about the function of part-time work in women's career patterns can be formulated within the human capital theory. One approach which explicitly embedded women's choice of jobs within a human capital model emphasizes the rationality of occupational sex segregation in view of typical intermittent female careers. Women who anticipate discontinuous participation in the labor market over their life course choose occupations and jobs which allow them to interrupt their labor force participation with minimal wage loss and depreciation of human capital at reentry. Thus, it is economically rational for women who plan to spend extended time out of the labor force to choose jobs with low atrophy; that is, low erosion of earnings during the periods of labor force intermittency. According to this view, predominantly "female" occupations have low depreciation risks, making them attractive for women who plan to combine employment with full-time homemaking. Along the same lines, this reasoning can be extended to part-time jobs, as typical "female" jobs in the labor market (Corcoran, Duncan, and Ponza 1984).

Upon empirical evidence, England (1982) refuted predictions generated from Polachek's theory of occupational segregation. Earnings of American women in predominantly female occupations do not show lower rates of either deprecation or appreciation than do the earnings of women in occupations containing more males. Also, women who have spent more of their postschool years out of the labor force are no more apt to be in predominantly female occupations than are women who have been employed more continuously. Also the argument that women choose occupations with part-time opportunities to maximize their earnings and minimize depreciation from intermittent employment during the childbearing years seems to be shaky. The costs of part-time working are severe. Part-time work not only brings about the loss of income, but also an erosion of wages, non-monetary benefits, promotion possibilities, job training and job security (Corcoran, Duncan, and Ponza 1984). The effects of part-time jobs on women's wages are nearly identical to the effects of time spent out of the labor force. In view of these findings, part-time work is hardly an ideal strategy for a person wishing to optimize a lifelong employment career.

However, other advantages of part-time work may perhaps contribute to a woman's ability to combine employment with family. American working women are increasingly opting for more continuous and uninterrupted labor market careers (Mellor and Parks 1988; Smith and Ward 1989). With the fall in fertility, an increase in the propensity to divorce, and the increasing earning power of women, a strict sexual division of labor becomes less advantageous. According to a theorem by Becker (1981: 18), one member of an efficient household at the most would invest in both market and household capital, and would allocate time to both sectors, when several members of a household have the same comparative advantages. Since Becker argues that the major trend away from traditional roles is due to women's increasing investment in market skills and not because of men's increased specialization toward the household sector, this "one member of an efficient household" is generally the woman.

Household work and particularly the presence of young children require extensive time inputs which are difficult to combine with a full-time employment schedule. Therefore, working part-time should be a common strategy particularly utilized by mothers of young children to manage work as well as household and childcare responsibilities. By combining the two (part-time work and childcare) they maximize their investments in both sectors. During the childrearing period, the value of women's time in household production is the highest, reducing the loss of the income foregone. At the same time, holding a part-time job prevents women's market capital to depreciate to the same extent as if they completely drop out of the labor market for extended periods of time. Along this line of reasoning, the main role of part-time employment in women's working lives is not to buffer employment intermittencies but to facilitate the simultaneous pursuit of employment and housekeeping role.

Propositions generated from Polachek's and Becker's approach have been evaluated empirically in an indirect way, by looking at the effects of part-time work on women's wages, promotion possibilities and other benefits, or by examining women's employment behavior upon changes in the family structure in relation to the prevalence of part-time work in specific sectors or occupations (cf. Desai and Waite 1991). However, the direct link between family demands and part-time work of individuals has not been verified, although it is tacitly or explicitly assumed. As Darian (1975: 249) points out: "The advantages of short working hours for women with childcare responsibilities are fairly clear and could be expected to be particularly strong for women with young children." Perhaps it is this obviousness

of the convenience of part-time jobs that has prevented a more thorough empirical verification of the relationship between family responsibilities and part-time work.

The purpose of this article is to explicitly link the dynamics of women's family life cycle to part-time employment patterns. Aggregate or cross-sectional individual data are of no great use in such causal analysis and cannot give us the complete information on underlying processes that generate the observed distribution of women's employment patterns. To be able to assess what is going on behind the given picture, the processes of entering and leaving the labor force must be known. We will use detailed event history data on life courses of individuals. The participation rate will be decomposed into flows into the labor market and flows out of the labor force, and the impact of background characteristics on each component will be analyzed. Given that other factors besides the variation in the family structure over time might affect women's movements into and out of paid work, we will also control the effects of age, birth cohorts, period effects, and education.

3 Hypotheses

In terms of women's choice of part-time jobs before the family formation stage, two competing hypotheses can be formulated. We will test the following behavioral patterns consistent with the propositions of the human capital theory: (1) women choose part-time jobs to maximize returns on their lifetime labor force participation and to minimize erosion of earnings and skills during employment intermittence. The implication empirically is that we should observe high exit rates from part-time jobs following the increase of family responsibilities. Alternatively, in accordance with increasingly continuous patterns of female labor force participation, we hypothesize that part-time jobs might perform a different function in the labor market - namely, to enable and facilitate continuous labor market involvement. In this case, (2) women who plan to combine domestic and employment roles over their life course will choose part-time work, so that they can remain in employment also during periods of increased family demands. Following the theoretical propositions which predict more compatibility between family roles and women's part-time rather than full-time employment, the propensity to leave part-time work following the increased family demands should be low.

Because these two hypotheses suggest opposite effects of women's family life cycle on leaving part-time jobs, it is difficult to make predictions about their size or sign. However, in both cases, one would expect the exit rates to be different than those

for full-time jobs. Also, if high exit rates out of part-time work are observed as a consequence of low penalties on intermittence, (3) we should observe high transition rates into part-time jobs following the alleviation of family responsibilities. Women who have been out of the labor market entirely should at this stage of their family life cycle have a high propensity to enter part-time employment, and this could perhaps facilitate their full integration into the labor market at a later stage.

Further, we will perform the analyses and compare the results for the United States and Germany. Both countries belong to the group of rich industrialized countries but exhibit significant differences in the level of married women's economic dependence and the proportion of part-timers, as well as in their family policy, the role of the welfare state, and the structure of the labor market.

4 Part-time Work in the United States and Germany

About 20 million people in the U.S. non-agricultural sector are part-time employees, with part-time work defined as less than 35 hours a week. Part-timers comprise about 17 percent of the work force. Part-time employment grew fastest in less skilled white-collar occupations, particularly clerical, sales and service occupations (Tilly 1991). Women are more likely than men to work on a part-time basis, although men's part-time work has been gaining in importance. Currently, every fourth employed woman works part-time. The corresponding figure for men is one out of ten.²

While in the US, both part-time and full-time employment of women have been increasing throughout the post-WWII decades (Drobnič and Wittig 1995,

¹ Throughout this paper, data on Germany refer to former West Germany. Labor market structure and female labor force participation, in particular have been very different in former East Germany (cf. Sørensen and Trappe 1995).

² OECD data on part-time employment at the beginning of the 1990s show the position of American women that work part-time in international comparison: 62.2% of employed women in the Netherlands work part-time, 47.6% in Norway, 43.2% in UK, 40.5% in Sweden, 38.4% in Denmark, 34.3% in Japan, 33.8% in Germany, 25.6% in the US, 23.5% in France, 20.2% in Austria, 11.2% in Spain, and 9.6% in Italy. Thus, the proportion of part-time working women in the US is moderate compared to North-Western European countries. Part-time for men, however, is more common in the US than in most other countries: 16.7% in the Netherlands, 10.5% in the USA, 10.4% in Denmark, 10.1% in Japan, 9.1% in Norway, 7.5% in Sweden, 5.3% in the UK, 3.4% in France, 2.6% in Germany, 2.4% in Italy, 1.6% in Austria, and 1.5% in Spain.

forthcoming), a substitution of part-time for full-time jobs occurred in several European countries in the period from the 1950s to the late 1980s (Hakim 1993). In this time, part-time employment was expanding and an increasing number of women were integrated in the labor market; however, there has been little or no substantial change in the overall level of female workforce participation when measured in full-time equivalent rates. Also in West Germany the notion of a "rise" in women's overall economic activity rates only applies to a fairly recent period. Between the 1950s and the late 1970s, only women's part-time work grew steeply, whereas the proportion of female full-time workers even declined. After this period of rapid expansion, women's labor force participation has slowly been increasing, and the proportion of part-timers has been relatively stable. Currently, about one-third of employed women work part-time; this places (West) Germany among relatively high part-time countries. Part-time is almost exclusively women's work; only about 2% of men are in part-time employment.

To summarize, American women have higher participation in the labor market than (West) German women. Among all workers, about 46% in the US but only 39% in Germany are women. If only full-time employment is taken into account, the corresponding figures are 41% for the US and 33% for Germany. Part-time is more prevalent among employed women in Germany. Thirty-three percent of women in Germany in comparison with 25% in the US work on part-time basis.

5 Data and Methods

Modeling patterns of women's employment requires longitudinal individual-level data. For the United States, The National Survey of Families and Households (NSFH), a national representative sample of households interviewed in 1987–1988, collected detailed retrospective information on family events and changes in household structure, as well as employment histories.³ This dataset enables us to analyze the process of labor force exit separately from that of labor force entry.

³ The National Survey of Families and Households was funded by a grant (HD21009) from the Center for Population Research of the National Institute of Child Health and Human Development. The survey was designed and carried out at the Center for Demography and Ecology at the University of Wisconsin-Madison under the direction of Larry Bumpass and James Sweet. The field work was done by the Institute for Survey Research at Temple University.

The analysis in this paper is based on data for white women who were primary respondents in the NSFH. Since labor force participation and the employment patterns over the life course used to differ considerably between black and white women, we limited our analysis to white women. Employment career in NSFH is depicted as a sequence of periods within the labor force and "out-of-work" states, starting when the person began working on a job lasting at least 6 months for the first time. This spell of employment lasted until the person stopped working. A new employment spell started if the person re-entered the labor market and lasted until exiting again. The length of the employment/out-of-work spells is coded in months. For every at-work spell, we knew whether the respondent mainly worked full-time or part-time.

Part-time is defined as less than 30 hours per week. This definition differs somewhat from the usual limit of 35 hours, on which the US Bureau of Labor Statistics' data on part-time work are based. The dataset has both advantages and disadvantages for the study of women's careers. Data represent a random sample of non-institutional US population of age 19 and older, and thus offer possibilities for generalization. Employment and family events are coded in the life history form and cover long periods of time. Entries to and exits from employment allow the reconstruction of a continuous employment/non-employment career.

The major disadvantage for our analysis is that changes of jobs and employment statuses within an employment spell are not coded. Therefore, we cannot study transitions between full-time and part-time jobs if such a transition occurs without

⁴ Particularly in the 1950s and 1960s, labour force participation of black women was significantly higher than that of white women. Since then, the gap has narrowed and in 1991, the civilian labour force participation rate of white women surpassed the black women's participation rate for the first time (Economic Report of the President 1992). Employment projections for the next ten years predict that labour force participation of white women will continue to be higher than the participation rate of black women. Because our data are retrospective, we cannot ignore these different developments in employment patterns in the past. Differences are also visible over the individuals' life course. Among whites, young women in the 16–19 age group had a higher participation rate than older women until the end of the 1980s; black teenagers, however, have had considerably lower participation rates than older black women and also lower ones than their white counterparts. These differences in age patterns have been persistent over time. In 1991, the civilian labour force participation rate of white females, aged 16–19, was 54.3%, and of those 20 years and over, 57.7%. Among black women, the 16–19 group had a participation rate of only 33.5%, and that of black women 20 years and over, 59.3% (Economic Report of the President 1992; see also Mellor and Parks 1988).

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an intermediate non-employment phase.⁵ Likewise, different out-of-work statuses cannot be distinguished. Our major concern in studying the linkage between family events and labor force participation is the housekeeping status. However, non-employment status in our data may include housekeeping, unemployment, schooling, or retirement. We undertook several measures to deal with this problem. We assume that schooling is for most persons concentrated in younger ages, before family formation and childrearing start to affect the employment career. The work history in our analysis does not start until a person holds a job lasting at least 6 months; in this way, early short-term employment spells, such as summer jobs, are excluded from the analysis. We tried to avoid biases due to the retirement exits by excluding all subspells starting at the respondent's age of 60 and over from the analysis. We were not able to make any adjustments in distinguishing between housekeeping and unemployment.

Analysis for Germany is based on data from the German Socioeconomic Panel, a nationally-representative longitudinal dataset of persons, households, and families in the Federal Republic of Germany. The first data collection was carried out in 1984 when about 6,000 German and foreign households as well as 12,245 individuals were interviewed, and data on employment history were collected retrospectively. There has been a further panel wave in every subsequent year. We used information on (West) German women from the waves 1984–1993.⁶

Life history data for German women are based on two kinds of information. First, we reconstructed employment histories until 1983 by using retrospective biographical information collected by the so-called biographical scheme which recorded yearly information on employment statuses from the respondent's 15th birthday until the time of data collection or her 65th year of age. Further, we extended these histories with monthly data that referred to women's employment changes between panel waves. We distinguished three states in a woman's employment history: full-time,

This may not be a major obstacle, however. Moen and Smith (1986: 469), who studied employment behavior of women in two subsequent years, found that the odds of continuously employed full-time workers to switch to part time are extremely low. If their work status changes, they are more likely to drop out of the labor force than to move into part-time jobs. Likewise, continuously employed part-timers are more likely to move out of the labor force than to full-time hours. Also Blank (1989) found a striking stability of women's labor market involvement and a low mobility between the part-time and full-time segment of the labor market.

⁶ For further general information, see Deutsches Institut für Wirtschaftsforschung (1990). In 1990, the survey was extended to include a sample of former East German households.

part-time employment, and housewife status. These statuses were based on self-reports. Since more than one status could be reported simultaneously, we ordered them hierarchically. Full-time employment with any other combination is counted as full-time work. Part-time imples that a woman works part-time, has no full-time employment but may have other statuses. A woman has a housekeeping status if she selected this option and was at the same time not employed, not in the educational system, not unemployed and not retired.

Event history analysis was used to analyze transition rates. This type of analysis is described in detail elsewhere (Blossfeld and Rohwer 1995; Blossfeld, Hamerle, and Mayer 1989; Tuma and Hannan 1984; Allison 1984; Kalbfleisch and Prentice 1980). The dependent variable is the instantaneous rate of change from one state, j, to another state k. It is defined as:

$$r_{jk}(t) = \lim_{\Delta t \to 0} \frac{1}{\Delta t} P_{jk}(t \le T < t + \Delta t \mid t \le T), j \ne k$$

where r_{jk} is the instantaneous probability that spells in the interval $[t,\Delta t]$ are terminating, provided that the individual was at risk at time t. Parameters in the models are estimated by using maximum likelihood estimation which permits censored events to be included in the analysis. To estimate the transition rates, we used a piece-wise constant model which allows the baseline hazard rate to vary without having to specify the exact hazard-rate path. This method of modeling time-dependent hazard rates divides the duration of spells into separate periods, and estimates – in addition to the effects of covariates on hazard rates – also the β coefficients which can vary from period to period.

To introduce time-dependent measures into the rate equations, we used the method of episode-splitting, described in detail by Blossfeld, Hamerle and Mayer (1989). For each of the sub-spells, four different pieces of information were provided: time at the beginning and end of the sub-spell; values of the time-dependent covariates at the beginning of these sub-spells; whether the interval ended with an event or not; the values of other covariates relevant for the analysis. Estimates were performed with the Transition Data Analysis (TDA) program (Rohwer 1994).

6 Variables

Dependent variables are transition rates between the following labor market states: transition from full-time employment to non-employment (FT→NE), from part-time employment to non-employment (PT→NE), from non-employment to full-time employment (NE→FT), and from non-employment to part-time employment (NE→PT).

To assess variations in household and childcare responsibilities of women over the life course, we used the concept of family life cycle, based on the classical model developed by Glick (1977), with some important modifications. Marital and childrearing history was used to distinguish between various stages in the family life cycle. Marital status entails three possible states: not married, used as a reference category, married without children, and married after the birth of the first child. The purpose of distinguishing two types of "marriages" is to assess the effect of marriage "in itself" and to be able to distinguish the effects of children for married and unmarried mothers. When a woman marries, but has no children yet, the dummy variable "marriage without children" is coded 1 and "marriage with children" 0. The birth of a child reverses the coding of these two variables, and the variable "preschool child" gets a code 1.

Childrearing history distinguishes four states: no children, which is the reference category in the analysis, presence of at least one young child until 6 years of age (pre-school children), no child younger than 6 years but at least one child under 18 years of age is present (school children), and no children younger than 18 years in the family, which was used as a proxy for the life cycle stage when children leave their parents' home. When more than one child was present in a family, a higher priority was given to the youngest child, in this way recognizing the greater demands of young children on their mothers' parental responsibilities.

We did not limit these vital events to a single linear progression through the stages in a predetermined order. The chronology of events is not predetermined. For example, the birth of a child can precede the status "married". Or, if the spacing between children's births is of a longer duration than 6 years, the stage "school children present" precedes the "pre-school children present" stage for some period of time. We also did not assume a classical stable nuclear family. Several marriages may occur, and children may be born to different spouses or out-of-wedlock. No distinctions are made between the classical ideal model of the conventional family life cycle events and "non-conventional" family patterns. Every stage can be repeated

several times in various orders and is assumed to have the same effect on the likelihood of employment transitions. Information on marital status and children is included in the model in a set of time-varying dummy variables.

Besides family history, other covariates were included in the analysis. Age has often been used as an indicator of family responsibilities. Older studies of the relationship between paid work and family revealed that the life cycle pattern of work of many married American women displayed several distinct stages which correlated with woman's age. Between school and childbearing, there used to be a period of several years' continuous work. After the birth of the first child there was often a period of non-participation, which may have lasted between five and ten years. This was generally followed by a period of intermittent participation starting when the youngest child reached school age. Finally there may have been a period of permanent labor force affiliation (Stromberg and Harkess 1978). This differential pattern of labor market participation according to age groups can be illustrated by an M-shaped curve. A dip in labor force participation was attributed to the responsibility of childrearing. In our analysis, we do not use age as a proxy for family life cycle since we measure marital histories and childrearing directly. However, other life-course effects may be captured in this variable. We included age in linear and quadratic form in our model to examine the well-established nonmonotonic relationship between individuals' age and employment participation.

Next, we included information on birth cohorts. The cohort analysis needs to be performed very cautiously because of the inherent confounding of cohort differences with aging within cohorts, historical factors, and other variables which may strongly be related to cohort memberships, such as educational level. The role of cohort factors in social change can only be interpreted when other theoretically relevant factors have been taken into account. However, ignoring the cohort effect may seriously distort the picture. Goldin (1990) demonstrated how important it is to examine women's labor market participation across cohorts to understand changes in the female employment patterns. In order to capture cohort variation, we used a series of dummy variables representing birth cohorts in four-year intervals; the reference category for birth cohorts are women born prior to 1924.

Although we want to test theories concerned with the supply side of the labor market, it should not be overlooked that women enter or exit labor markets in certain historical times which are characterized by favorable or depressed historical conditions. The range of opportunities in the labor market, such as the unemployment level, the availability of part-time jobs, the level of discrimination or

normative expectations about married women's employment can, to a large extent, influence the employment patterns of women of different ages and in different lifecycle situations. This kind of structural influence is generally called a period effect. To at least partially control these structural factors, we included the period dummy variables. The reference category for historical time is the period before 1958.

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It has been found that education has a strong positive association with the growth of women's labor force participation. In all industrialized societies, the educational attainment of younger birth cohorts of women increased considerably; therefore, it is particularly important to disentangle the effect of education from cohort effect. Within the economic approach to the family, this trend indicates an increased affinity to invest in the market specific capital, which changes the opportunity cost of working or withdrawing from the labor force. Thus, higher education reflects the job reward potential of a woman, and it may increase the labor market participation and reduce the job-leaving rate. Education was measured in years of schooling for the US; a similar indicator was created for Germany, combining information on general education and vocational training. Mean value for the US is 12,6 years and for Germany 11.3 years.

As noticed before, data on employment spells from the German Socioeconomic Panel consist of a retrospectively assessed biographical scheme for the time before 1984. Both because these data span long periods of time, and "year" is the unit of observation, it is likely that some spells, particularly those of shorter duration, are underrepresented in the retrospective part of the dataset. Since 1984, data have been collected annually on a monthly basis. In 1983, the biographical and running calendar data linked and overlapped. To control for the differences in time units and to increase the robustness of the estimates, a variable D83 was included in the analysis for Germany. This is a dummy variable, indicating whether a spell originates from the monthly panel data (as opposed to the biographical retrospective data); its parameter estimate has a purely controlling function and will not be interpreted substantively.

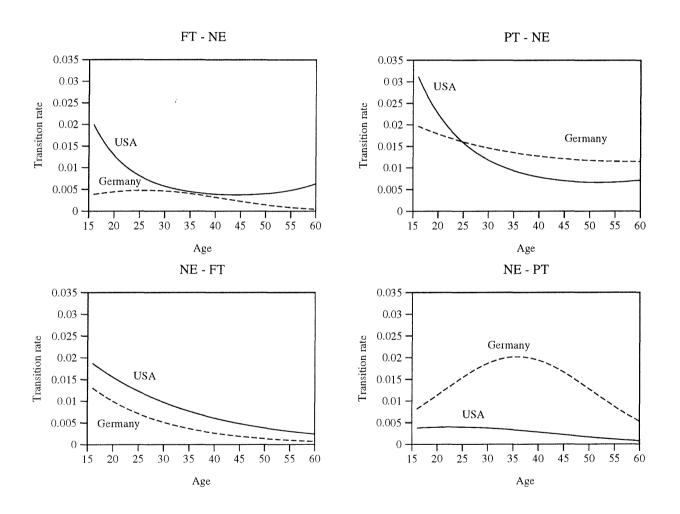
7 Results

7.1 Age

We started the analysis by estimating hazard rates between full-time or part-time employment and non-employment over the life course of American and German women. Figure 1 shows the transition rates among various employment statuses for both countries, as estimated with an exponential model.

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Figure 1: Estimated transition rates between employment statuses over the life course of American and German women. Exponential model.



In the USA, the hazard rates of leaving the labor market have basically the same shape for full-time and part-time employment; first they decrease, and then they slightly increase at an older age. If a woman has a job in the first place, it becomes less and less likely that she will leave the labor force. Only after the ages of 44 and 52 for full-time and part-time employment, respectively, does the probability to move to non-employment status slightly increase. This is a somewhat unexpected result,

showing that women do not move out of the labor market at their prime childbearing and childrearing ages. The full-time pattern for German women is different. The risk of leaving full-time jobs increases until the age of 26 when it gradually starts falling. The transition rate from part-time employment to housekeeping is lower than in the US for very young women but exceeds the US rate when women are in the midtwenties and remain higher for older ages. It has a tendency to decline over the women's life course.

Transitions to another direction yield interesting patterns. The rate to move from non-employment to full-time employment decreases monotonically both in the US and Germany. When women grow older, they are less and less likely to enter full-time employment. The rate from non-employment to part-time employment is very low in the USA and considerably higher in Germany. It is in both cases non-monotonic. In the USA it rises – almost unnoticeably – until the age of 23 and then declines. This pattern suggests that entering part-time employment is primarily the characteristic of young women at the beginning of their employment career; soon the intensity to enter part-time employment decreases. In Germany the risk of entering part-time jobs increases substantially until the age of 36 and then declines. Already this simple modeling of movements between various employment statuses across the life span of individuals displays differences in female employment patterns between the countries, in particular with respect to entering part-time jobs.

7.2 Duration dependence

At the next stage, we introduced a piece-wise constant model and re-estimated the baseline rates for employment transitions. The piece-wise constant model is a modification of a standard exponential model which can take into account the time-dependence in the process under consideration (Blossfeld and Rohwer 1995). It is a very flexible modeling of the hazard rate which can change within the duration of a spell. The basic idea of the model is to split the time axis into time intervals and to assume that transition rates are constant within the intervals but can change between them.

The time spent in a particular state may have significant consequences for future employment behavior. Most women demonstrate considerable stability in their labor market involvement (Blank 1989; Moen and Smith 1986). Women who are employed and stay in employment for a longer period of time, accumulate work experience and other resources which increase their career prospects, strengthen their labor market

attachment, and increase the opportunity costs of leaving their jobs. Women who stay out of the labor force gradually loose their marketable skills and their prospects of getting a "good" job may decline. Both arguments lead to the supposition that the rates of leaving a particular state over the duration spent in this state are not constant.

Indeed, estimates of the baseline hazard rate for all four employment transitions for American women show a tendency of a declining hazard over the duration (Table 1 and Table 2). Women who have been employed full-time for less than a year, are 2.6 times more likely to leave the labor market than those women who have been employed without interruption for 12 years or more. Also for German women,

Table 1: Baseline rate in transition from full-time (FT) and part-time work (PT) to non-employment (NE).

Piece-wise constant model; D83 for Germany controlled.

	FT →	NE	PT → NE		
	USA	Germany	USA	Germany	
duration < 12 months	-4.5403**	-6.4734**	-3.9746**	-5.2660**	
	(0.037)	(0.096)	(0.057)	(0.070)	
duration ≥12-36 months	-4.5426**	-5.9751**	-4.0773**	-5.2344**	
	(0.031)	(0.061)	(0.057)	(0.064)	
duration ≥36-60 months	-4.7964**	-5.4108**	-4.6098**	-5.5108**	
	(0.041)	(0.053)	(0.093)	(0.085)	
duration ≥60-96 months	-5.0969**	-5.0910**	-5.0362**	-5.6632**	
	(0.046)	(0.044)	(0.116)	(0.094)	
duration ≥96-144 months	-5.3993**	-5.0782**	-5.3932**	-5.9399**	
	(0.056)	(0.048)	(0.151)	(0.120)	
duration ≥144 months	-5.5011**	-6.0087**	-5.3302**	-6.2756**	
	(0.050)	(0.055)	(0.136)	(0.122)	
Number of Events	3570	2086	904	1227	

^{**} $p \le .05$ * $p \le .1$

Note: Standard errors in parentheses.

most of the transition rates fall over time. However, the transition out of full-time employment shows an atypical shape; the rate increases up to the duration of 5 years

⁷ Since $\exp(-4.5403)=0.0107$, $\exp(-5.5011)=0.0041$, and the ratio between these two rates yields 2.61.

and only falls in the last interval, for women who have been employed for 12 years or more without interruption. Thus, the human capital arguments that predict a falling rate over duration in the employment state do not seem to be valid for full-time employed German women. Other considerations than the effects of the accumulated job experience or the opportunity costs of leaving the labor market motivate the moves out of full-time employment.

Table 2: Baseline rate in transition from non-employment (NE) to full-time (FT) and part-time work (PT).

Piece-wise constant model; D83 for Germany controlled.

	NE -	FT	$NE \rightarrow PT$		
	USA	Germany	USA	Germany	
duration ≤ 12 months	-4.2677**	-6.2594**	-5.4075**	-5.6590**	
	(0.039)	(0.098)	(0.068)	(0.061)	
duration ≥12-36 months	-4.3287**	-6.1531**	-5.4637**	-6.0803**	
	(0.037)	(0.078)	(0.065)	(0.064)	
duration ≥36-60 months	-4.8797**	-6.3393**	-5.8783**	-6.2807**	
	(0.059)	(0.094)	(0.098)	(0.079)	
duration ≥60-96 months	-5.2115**	-6.7070**	-6.0095**	-6.2680**	
	(0.069)	(0.104)	(0.103)	(0.076)	
duration ≥96-144 months	-5.3615**	-6.7353**	-5.9466**	-6.2622**	
	(0.082)	(0.105)	(0.110)	(0.076)	
duration ≥144 months	-5.9171**	-7.1818**	-6.4147**	-6.6791**	
	(0.089)	(0.079)	(0.115)	(0.057)	
Number of events	2167	801	807	1701	

^{**} $p \le .05$ * $p \le .1$

Note: Standard errors in parentheses.

To control for duration dependence, piece-wise constant rates have been used for all further model specifications.

7.3 Cohorts

Before we analyze the effects of the family cycle on women's employment behavior, let us proceed by examining the age-period-cohort phenomenon. Problems inherent in distinguishing age, cohort and period effects are not negligible (Ryder 1985;

Hobcraft, Menken, and Preston 1982; Blossfeld 1986; Burt 1991; Riley 1987); however, it is necessary to distinguish between these factors in order to disentangle individual variations in employment behavior during women's life course, those effects which are experienced by an aggregate of women, and the historical constellations which affect all women in a similar way during a certain historical time.

Dummy variables representing birth cohorts in four-year intervals have been included in the estimations. Controlling for the effect of age and period, the risk of dropping out of the full-time segment of the labor market has decreased for the younger cohorts of American women (Table 3). For Germany, there are no changes across cohorts in terms of leaving full-time employment. In the part-time segment of the labor market in Germany, birth cohorts exhibit more variation, with younger cohorts leaving part-time jobs more than older ones; however, the estimates are relatively unstable and most of them are not statistically significant when education and family-related variables are included in the model.

When transition into the labor market is examined, younger birth cohorts in both countries exhibit a greater likelihood to enter part-time employment than older cohorts, but no consistent trend appears for full-time work (Table 4).

7.4 Period Effects

As coefficients in Tables 3 and 4 show, transition rates into full-time employment are particularly dependent on historical periods. For the USA, a strong, robust, and consistent trend in the estimated coefficients show that American women have increasingly entered the full-time segment of the labor market since the mid-1960s. This trend is observed for Germany since the beginning of the 1970s. Another consistent trend over time is a falling tendency to leave part-time and (since the mid-1980s) full-time employment in Germany.

Table 3: Age, cohort and period effects on the estimated rates of transition from full-time (FT) and part-time work (PT) to non-employment (NE). Piece-wise constant model; D83 for Germany controlled.

	FT →	$FT \rightarrow NE$		$PT \rightarrow NE$		
	USA	Germany	USA	Germany		
age	-0.1819**	-0.0647**	-0.0938**	0.0119		
	(0.011)	(0.019)	(0.022)	(0.022)		
age square	0.0021**	0.0003	0.0010**	0.0002		
•	(0.000)	(0.000)	(0.000)	(0.000)		
cohort 1924 - 1928	-0.2193**	0.1247	-0.0134	0.3616**		
	(0.110)	(0.093)	(0.229)	(0.177)		
cohort 1929 – 1933	-0.1303	0.0717	-0.2018	0.3540*		
	(0.113)	(0.102)	(0.291)	(0.196)		
cohort 1934 – 1938	-0.1360	0.0226	-0.0959	0.1746		
	(0.145)	(0.119)	(0.313)	(0.238)		
cohort 1939 – 1943	-0.2271	0.0738	0.1033	0.7202**		
	(0.172)	(0.149)	(0.368)	(0.275)		
cohort 1944 – 1948	-0.1414	0.2554	-0.0357	1.0354**		
	(0.198)	(0.184)	(0.429)	(0.331)		
cohort 1949 – 1953	-0.2558	0.1538	0.1346	1.0802**		
	(0.226)	(0.219)	(0.481)	(0.382)		
cohort 1954-1958	-0.4351*	0.1630	0.1367	1.2135**		
	(0.256)	(0.255)	(0.547)	(0.439)		
cohort 1959 – 1963	-0.6266**	0.0490	0.0509	1.2220**		
	(0.287)	(0.292)	(0.615)	(0.492)		
cohort 1964 –	-0.5332*	-0.5198	0.1547	1.2983**		
	(0.321)	(0.336)	(0.666)	(0.561)		
period 1959-1963	-0.1389	0.2164**	-0.3939*	-0.5565**		
	(0.099)	(0.103)	(0.221)	(0.244)		
period 1964-1968	-0.0190	0.1904	-0.4764**	-0.8317**		
	(0.110)	(0.131)	(0.234)	(0.261)		
period 1969 – 1973	-0.0358	0.0224	-0.1569	-0.9462**		
	(0.128)	(0.164)	(0.265)	(0.294)		
period 1974-1978	0.0386	-0.3498*	-0.3311	-1.4520**		
	(0.151)	(0.201)	(0.316)	(0.346)		
period 1979-1983	0.1797	-0.2670	-0.3304	-1.1448*		
	(0.177)	(0.232)	(0.371)	(0.389)		
period 1984 – 1988	0.4358**	-1.0040**	-0.2648	-1.2212**		
	(0.203)	(0.283)	(0.421)	(0.439)		
period 1989 –	- ′	-1.3522**	_ ′	-1.6120**		
-	-	(0.318)	-	(0.488)		
Number of Events	3570	2086	904	1227		

** $p \le .05$ * $p \le .1$ Note: Standard errors in parentheses.

Table 4: Age, cohort and period effects on the estimated rates of transition from non-employment (NE) to full-time (FT) and part-time work (PT). Piece-wise constant model; D83 for Germany controlled.

	NE -	$NE \rightarrow FT$		$NE \rightarrow PT$		
	USA	Germany	USA	Germany		
age	0.0841**	-0.0306	0.1062**	0.2173**		
	(0.019)	(0.028)	(0.031)	(0.025)		
age square	-0.0016**	-0.0004	-0.0014**	-0.0024**		
-	(0.000)	(0.000)	(0.000)	(0.000)		
cohort 1924-1928	-0.3923**	0.1175	0.3350	0.2536		
	(0.168)	(0.148)	(0.293)	(0.167)		
cohort 1929 – 1933	-0.2483	-0.2988	0.2805	0.4407**		
	(0.184)	(0.188)	(0.342)	(0.190)		
cohort 1934 – 1938	-0.3566*	-0.1738	0.5971	0.9436**		
	(0.214)	(0.238)	(0.385)	(0.228)		
cohort 1939 – 1943	-0.3041	-0.6945**	0.8152*	1.1687**		
	(0.257)	(0.297)	(0.455)	(0.272)		
cohort 1944 – 1948	-0.3242	-0.6927*	1.0085*	1.4193**		
	(0.299)	(0.361)	(0.525)	(0.329)		
sohort 1949 – 1953	-0.2679	-0.8913**	1.1474*	1.5963**		
	(0.341)	(0.425)	(0.594)	(0.382)		
cohort 1954 – 1958	-0.3861	-1.1594**	1.4402**	1.5366**		
	(0.386)	(0.492)	(0.667)	(0.437)		
sohort 1959 – 1963	-0.2508	-0.7731	1.3921*	1.7603**		
	(0.434)	(0.548)	(0.746)	(0.492)		
cohort 1964 –	-0.0863	-0.8172	1.5797*	1.7809**		
	(0.485)	(0.618)	(0.828)	(0.557)		
period 1959 – 1963	0.0734	0.2496	0.4836	0.3547		
	(0.152)	(0.200)	(0.351)	(0.223)		
period 1964 – 1968	0.4553**	0.2634	0.5026	0.2601		
	(0.169)	(0.247)	(0.369)	(0.244)		
period 1969-1973	0.4768**	0.9963**	0.4837	0.5120*		
	(0.200)	(0.293)	(0.407)	(0.277)		
period 1974-1978	0.6992**	0.8622**	0.4366	0.2548		
	(0.236)	(0.360)	(0.458)	(0.326)		
period 1979 – 1983	0.7291**	0.9001**	0.6757	0.6473*		
	(0.278)	(0.428)	(0.518)	(0.374)		
period 1984 – 1988	0.7303**	1.1006**	1.0836*	0.7105*		
	(0.317)	(0.494)	(0.575)	(0.421)		
period 1989 -	-	0.9834*	-	0.5912		
	_	(0.549)	-	(0.466)		
Number of events	2167	801	807	1701		

** $p \le .05$ * $p \le .1$ Note: Standard errors in parentheses.

7.5 Family Cycle and Education

Educational expansion is one of the most important factors in the growth of women's labor force participation. It is particularly important to disentangle the effect of education from cohort effect. The educational attainment of younger birth cohorts of women rose considerably over time. While in 1952, one-third of bachelor degree recipients were women, their share increased to over 50 percent in the mid-1980s (Jacobs 1989). Within the economic approach to the family, this trend indicates an increased affinity to invest in the market specific capital, which changes the opportunity cost of working or withdrawing from the labor force. Thus, higher education – which is characteristic of younger birth cohorts – reflects the job reward potential of women; it may increase their participation in the labor market and reduce their job-leaving rate.

Table 5: Education and family-related effects on the estimated rates of transition from full-time (FT) and part-time work (PT) to non-employment (NE). Piece-wise constant model;

D83 for Germany, age, cohorts, and periods are controlled.

	FT →	NE	$PT \rightarrow NE$		
	USA	Germany	USA	Germany	
education	-0.0410**	-0.0460**	-0.0294*	-0.0004	
	(800.0)	(0.012)	(0.017)	(0.013)	
marriage without children	1.1632**	1.4151**	0.4673**	1.3986**	
	(0.051)	(0.069)	(0.124)	(0.154)	
marriage with children	0.2082**	1.2158**	-0.0065	0.7864**	
-	(0.055)	(0.113)	(0.116)	(0.138)	
preschool child	0.6111**	1.1179**	0.4617**	0.6703**	
-	(0.070)	(0.121)	(0.146)	(0.188)	
school child	0.3499**	-0.3241**	0.3763**	0.4186**	
	(0.083)	(0.152)	(0.180)	(0.199)	
child older than 18	0.4161**	-0.0745	0.4798*	0.1588	
	(0.106)	(0.185)	(0.248)	(0.214)	
Number of Events	3570	2086	904	1227	

^{**} $p \le .05$ * $p \le .1$

Note: Standard errors in parentheses.

In table 5, we first present parameter estimates for the effect of schooling on leaving full-time jobs, which has an important effect on women's labor market behavior in

both countries. Longer schooling considerably decreases the propensity of leaving full-time jobs, consistent with the human capital theory. Women with higher levels of education are likely to have better paying jobs and their moving out of the labor market bears higher costs. Education also decreases the probability of leaving part-time jobs in the USA, although the effect is weaker than for full-time jobs.

When transitions from non-employment to employment are considered, education has a statistically significant positive effect on reentering both full-time and part-time employment (Table 6).

Table 6: Education and family-related effects on the estimated rates of transition from non-employment (NE) to full-time (FT) and part-time work (PT). Piece-wise constant model; D83 for Germany, age, cohorts, and periods are controlled.

	NE -	FT	NE → PT		
	USA	Germany	USA	Germany	
education	0.0457**	0.0682**	0.0875**	0.0763**	
	(0.010)	(0.018)	(0.017)	(0.011)	
marriage without children	-0.5536**	-0.2063	0.0013	-0.1159	
Č	(0.088)	(0.159)	(0.179)	(0.173)	
marriage with children	-0.5888**	-0.8827**	0.1130	0.1327	
•	(0.064)	(0.120)	(0.117)	(0.113)	
preschool child	-0.3353**	0.1708	-0.0037	0.1701	
	(0.087)	(0.154)	(0.176)	(0.161)	
school child	0.3095**	1.0578**	0.3413*	0.7623**	
	(0.100)	(0.164)	(0.195)	(0.164)	
child older than 18	0.0886	0.9545**	-0.1074	0.4422**	
	(0.161)	(0.227)	(0.273)	(0.184)	
Number of events	2167	801	807	1701	

^{**} $p \le .05$ * $p \le .1$

Note: Standard errors in parentheses.

We proceeded to study the effects of the family cycle on women's employment patterns. The question is how – in addition to age, cohort, period and education – family-related factors affect the likelihood of a transition between employment states.

Marriage and the presence of young children increase the likelihood of leaving the labor force, when the transition rates are compared to those of unmarried women

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without children (Table 5 and summary in Table 7). Entry into marriage increases the transition rate from full-time employment to non-employment by 220% for American women and even 312% for German women.⁸ Thus, marriage has an important influence on women's employment behavior, even if it is not coupled with motherhood. One could speculate that marriage is a triggering event for some groups of women oriented toward more traditional roles who use this occasion to move to the status of a housekeeper.⁹ In addition, there are other possible explanations for the significant effect of marriage. Marriage is often associated with geographic moves for at least one partner. If such a move occurs, the person has to interrupt his/her employment career at least temporarily before finding a new job at the new location.

Table 7: Effects of Family Events (in percent) on Change in Transition Rates. Piece-wise constant model.

	FT → NE		PT → NE		NE → FT		NE → PT	
	USA	FRG	USA	FRG	USA	FRG	USA	FRG
marriage without children	+220	+312	+59	+305	-43	•	•	•
marriage with children	+23	+237		+120	-45	-59		•
preschool child	+84	+206	+59	+95	-28			
school child	+42	-28	+46	+52	+36	+188	+41	+114
child 18+	+51		+62			+160		+56

The presence of pre-school children has a dampening effect on full-time employment, but the effect is much stronger for German than for American women (Table 5). The possibility to distinguish marital status with or without children gives us the opportunity to examine the effects of children of various ages for married and unmarried mothers. The presence of a pre-school child increases the risk of leaving

⁸ Since $(\exp(1.4151) - 1) \times 100\% = 328\%$.

⁹ For both countries, model specifications with an interaction between marriage and cohorts show a much stronger effect of marriage for older cohorts than for younger ones (estimates not shown).

the job in the USA by 107% for married mothers (the sum of effects "marriage with children" and "pre-school child"), and 84% for unmarried mothers of pre-schoolers. This is a modest effect when compared to the dramatic consequences of having young children in Germany, where there is a 443% increase in the propensity to leave full-time employment for married and 206% for unmarried mothers.

When there is a child of school age, the risk of leaving full-time employment increases by 65% and 42% for married and unmarried American women, respectively, and similarly with a child older than 18 years. Interestingly, older children in Germany have a negative effect on the transition rate to the housewife status. However, the net effect is only negative for unmarried mothers; married mothers nonetheless exhibit a substantial increase in the FT-NE rate.

Transitions between part-time employment and non-employment exhibit rather similar patterns, but also some differences in comparison to full-time employment. Marriage before children also fosters part-time working women to stay at home; this tendency is strong in Germany but considerably weaker in the USA. The presence of young children has a positive effect on leaving the labor market in both countries, but in the USA this effect is independent of women's marital status.

Table 6 displays results for the transitions from non-employment status to full-time and part-time jobs. Significant differences are found in the effects of family-related covariates which are important for re-entering full-time but not part-time employment. Other things being equal, marriage and pre-school children decrease the probability to start a full-time job for American women. School children, however, have a positive effect. The net result is that single mothers increasingly enter full-time jobs when children reach school age.

Marriage as such has no effect on (re)entering the labor market for German women. Women in Germany have a strong tendency to reenter employment when children reach school age, and also when they grow up. This also holds for part-time employment. In the USA, however, marriage and children have little effect on the likelihood to enter part-time employment. Family obligations do not inhibit women to accept part-time jobs. Mothers are somewhat more likely to work part-time when children reach school age, but this effect is only marginally significant and much weaker than in Germany.

8 Discussion and Conclusion

The primary purpose of our analysis is to explicitly test the commonly assumed proposition that women pursue part-time jobs for better compatibility with their family roles, and to compare employment patterns of American and German women in this respect. We directly linked the labor market behavior of women to their family life cycle stage, and separately examined the flows into and out of the labor market to assess the underlying processes that produce the observed distribution of women's labor force participation at any given time.

The first hypothesis that we tested in this analysis was derived from Polachek's model, predicting that a worker will choose a job that imposes the smallest penalty on labor force withdrawals, given the desired lifetime participation. By selecting jobs that are easy to leave and re-enter, women can more easily combine the dual demands of career and family. Since women are considerably more likely than men to work in part-time jobs, there are reasons to believe that part-time jobs are chosen by women that anticipate discontinuous work careers and prolonged non-work time. If the choice of part-time work were driven by anticipated interruptions, we should expect particularly high exit rates out of part-time jobs, and high entry rates at specific stages of the family life cycle when the family demands are reduced.

Empirical evidence for American women does not support these predictions. The rates of exiting part-time and full-time jobs are very similar. The baseline piece-wise constant rate of leaving part-time employment is somewhat higher in the first three years of employment but the differences are too small to draw any firm conclusions. Moreover, when family-related covariates are included in the model, it becomes evident that marital status has a much weaker effect on part-time employment, and children have similar effects on part-time as on full-time job interruptions. However, the differences between the two leaving rates also do not warrant the alternative hypothesis that views part-time work as a strategy to avoid intermittency in women's careers. More precisely, marriage does seem to be more compatible with part-time work than full-time employment, but children basically have the same effects on both leaving rates.

The length of staying out of the labor market is important for the likelihood of returning to paid employment. The longer a woman stays out, the less likely she is to re-enter. When family variables are included in the model, differences between full-time and part-time employment become apparent. Marriage and the presence of young children inhibit women to enter full-time employment. The inhibiting effect

of a pre-school child, however, is considerably weaker for non-married mothers. When children enter school, the likelihood of mothers to start working full-time increases, consistent with the assumption that household and childrening obligations are most severe when children are small; when children reach school age, paid employment is easier to combine with family responsibilities.

This is also valid for part-time employment where the likelihood of entering part-time work somewhat increases when children go to school. However, the family life cycle in general has little effect on American women's prospect of entering the part-time segment of the labor market. This is an unexpected result, opposing the at least tacit assumptions that a close fit of part-time employment with family responsibilities counterbalances the drawbacks of part-time jobs in terms of pay and other benefits.

This study also advances our understanding of how the much echoed but not well explained increase in the female labor force participation in the USA was accomplished. As already demonstrated by Goldin (1990), the cross-sectional data are not very informative in this respect and are in some cases openly misleading. She displayed the benefits of the cohort approach and provided a new view on the evolution of the female labor force. However, since she used aggregate level census data for the most part, the individual level life-cycle progression and the effects of particular events remained obscured in her analysis. According to Goldin, the bulk of the increase in female employment did not originate in a change in leaving rates, but in higher rates of reentry across successive cohorts. We also found that American women continued to exhibit a traditional behavior with leaving the labor market in accordance with family events. Only cohorts born since the end 1950s started showing different patterns, with less employment interruptions. Likewise, we found that there have been much more dramatic changes in women's propensity to re-enter the labor market, where new non-traditional patterns have emerged.

However, our analysis provides a more refined analysis of cohort effects and somewhat modifies Goldin's arguments that cohorts are vehicles of change in female employment. When we only included birth cohorts in the estimated models, we obtained growing, highly significant rates of entry across successive cohorts for both full-time and part-time work. However, after including the period effect, education, and family covariates, it became clear that (1) some of the effects that Goldin contributed to cohorts as such are due to differences in fertility and education among cohorts, and (2) the distinction between full-time and part-time jobs must be made in order to understand the patterns in detail. When we distinguish between full-time and part-time employment, it becomes evident that re-entry to full-time work is in

essence a period phenomenon. Since the mid-1960s, women of all generations have increasingly entered the full-time segment of the labor market. Part-time employment, however, is predominantly a cohort phenomenon. Younger cohorts show a clear trend of entering part-time employment on a larger scale than older cohorts.

Comparison of employment patterns over the life course of American women with German women shows significant differences between the two countries. In Germany, family life cycle plays a stronger role in women's work lives than in the USA. A typical pattern is one of full-time work until marriage and children, a prolonged stay out of the labor market, and return to paid employment via part-time work when the youngest child reaches school age. It has been argued that part-time work is for German women the most important form of re-employment upon the termination of the "family-break" (Pfau-Effinger 1994; Schupp 1991; Blossfeld and Rohwer forthcoming). This has been confirmed by our analysis, with an extension, however, that unmarried mothers are more likely than married women to enter full-time jobs when children grow older.

A detailed examination of factors explaining the large differences in the role of parttime work in the life cycle of American and German women surpasses the aim of this paper. However, we believe that any such comparative study should also go beyond the characteristics of individual women and their families, and include an analysis of job characteristics, welfare systems, family policies, tax policies and other structural factors (cf. Rosenfeld and Birkelund 1995).

There has been much discussion about the characteristics of part-time jobs. It has been argued that most of the part-time jobs in the USA are poor in terms of low pay, lack of advancement opportunities, and high turnover. Wages in part-time jobs are low; in 1991, the median part-time worker earned only 58 percent of the hourly wage of the median full-time worker (Tilly 1989, 1991). In addition, part-time workers are much less likely to receive most major fringe benefits than full-timers. Part-time work rarely gives benefits such as access to group health insurance (Kalleberg and Rosenfeld 1990; Harris 1993). Particularly the fact that part-time work is unlikely to provide health-care benefits has received considerable attention. Since welfare eligibility with Medicaid benefits is a critical consideration for poor mothers and their children (Harris 1993), part-time employment is in general not a suitable solution for single mothers.

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Part-timers in Germany could roughly be divided into two groups. The majority of them are incorporated in the general social security protection and have a statutory right to proportional pay and allowances when the allowances are related to working time. Where allowances are not related to working time, such as those for work clothes, use of enterprise facilities and family allowances, part-time workers have the same rights as full-time workers (ILO 1992). However, about 15% of part-timers are marginal workers in the sense of legal social protection (Quack 1993: 72). They are not insured in case of unemployment, have no employer-related health insurance, and are not incorporated in the national retirement plan.

Maternity leave and the level of childcare benefits vary in both countries. Whereas only about 40% of employed women in the United States have the right to a maternity leave at the time of childbirth with a partial wage replacement (Moen 1992: 107), all employed women have the right to a maternity leave in Germany – usually for 8–14 weeks. After that, a parent who stays at home with a child can receive a flat-rate home childcare allowance for up to 2 years. However, opposite to the US, no childcare tax credit is available to married parents, as family-centered childrearing is seen as preferable and is therefore socially supported. Within this context, a joint spouses' taxation system also provides strong incentives for part-time work in Germany.

Part-time work as a form of employment that is compatible with the family cycle seems to have expanded in countries (1) where the state has provided relatively "good" part-time jobs which do not marginalize the incumbent, and/or (2) where a supportive income "cushion" is available in case of less than full-time participation. This income backing is based either on the welfare system or the partner as the primary provider. If – as is the case in the US – large proportions of women do not want or cannot afford to play the role of the supplementary provider in the absence of fringe benefits and career prospects, part-time work has not developed into a suitable long-term alternative as a means to reconciliate work and family.

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