



Demographic Research a free, expedited, online journal
of peer-reviewed research and commentary
in the population sciences published by the
Max Planck Institute for Demographic Research
Konrad-Zuse Str. 1, D-18057 Rostock · GERMANY
www.demographic-research.org

DEMOGRAPHIC RESEARCH

**VOLUME 18, ARTICLE 6, PAGES 181-204
PUBLISHED 4 APRIL 2008**

<http://www.demographic-research.org/Volumes/Vol18/6/>

Research Article

**Women's employment and union dissolution in
a changing socio-economic context in Russia**

Magdalena Muszyńska

© 2008 *Muszyńska*

This open-access work is published under the terms of the Creative Commons Attribution NonCommercial License 2.0 Germany, which permits use, reproduction & distribution in any medium for non-commercial purposes, provided the original author(s) and source are given credit. See <http://creativecommons.org/licenses/by-nc/2.0/de/>

Table of Contents

1	Introduction	182
2	Background of the study	182
2.1	Theories concerning the effect of women's employment on the desire and the opportunity to dissolve a union	183
2.2	The Russian socio-economic context and its effect on the relationship between women's employment and risk of union dissolution	185
3	Data and methods	188
3.1	Data	188
3.2	Models	189
3.3	Variables	189
4	Results	194
4.1	The effect of employment and job characteristics	194
4.2	The effect of other characteristics	195
5	Summary	199
6	Acknowledgments	200
	References	201

Women's employment and union dissolution in a changing socio-economic context in Russia

Magdalena Muszyńska¹

Abstract

This study examines the effect of women's employment on the risk of union disruption within the centrally planned economy and transition period in Russia. The empirical part is based on two retrospective surveys conducted in Russia in 2004/2005, covering the years 1967-2004. These are analyzed using hazard regression. The results show that within two periods (1967-1991 and 1992-2004) the risk of union dissolution was similar among women who worked and those who did not work. No differences were found between various employment groups during socialism. In the transition period, however, a variation in the risk of union dissolution among groups of working women existed. The biggest differences are related to company ownership type, with women who worked in private enterprises having the highest risk of union dissolution.

¹Duke Population Research Institute & Population, Policy, and Aging Research Center, Terry Sanford Institute of Public Policy, Duke University, 188 Rubenstein Hall, Durham, NC 27708, USA. E-mail: magdalena.muszynska@duke.edu

1. Introduction

The effect of women's employment on union stability in Western economies has been discussed by many authors, yet few studies on this topic have been undertaken in the socialist or transition economies of Eastern Europe. Due to its historically high divorce rates (Council of Europe, 2004), Russia is an interesting country to study the relationship between those phenomena in two economically distinctive periods. Despite the high prevalence of divorce, its determinants in Russia are poorly understood. It has been studied mostly on the macro level (Andreev and Scherbov, 1996; Avdeev and Monnier, 2000; Becker and Hemley, 1998; Darsky and Scherbov, 1995; Mazur, 1969; Scherbov and van Vianen, 2001, 2004). Studies on the individual level concentrated on the consequences rather than on the determinants of divorce (e.g. Festy et al., 2003; Prokofieva and Terskikh, 1998). So far, to our knowledge, no study has been conducted for Russia using individual level data to discuss women's employment as a determinant of union dissolution.

The advantage of studies based on Eastern Europe lies in a unique setting that cannot be achieved by any inter-country comparisons: rapid change in structural conditions in a relatively stable cultural context. First, in the last decade in Russia the situation in the labor market changed dramatically from one with a relatively homogenous level of earnings and guaranteed employment, to one characterized by high income disparities and unemployment. Second, with the economic changes, the purchasing power of the average family income declined significantly, resulting in a decline in living conditions. The existence of these two distinct economic regimes in Russia gives an empirical possibility to study the influence of socio-economic context on the relationship between women's involvement in paid work and union instability. In addition, the almost universal participation of women in the labor market in Russia and their relatively low level of earnings, compared to Western economies, give rise to the question: Can the mechanism describing the effect of women's employment on union instability that is characteristic for Western countries, be generalized to the Russian context?

2. Background of the study

In the first part of this section we present selected theories concerning the effect of women's employment on the risk of union dissolution in the Western socio-economic context as described by other authors. Reviewing theoretical foundations concerning the individual decision making process, we group them according to two channels of influence: the effect of women's employment on the *desire to dissolve a union* and its effect on the *opportunity to dissolve a union*. This classification was originally proposed by Og-

burn and Nimkoff (1955). The first group of theories concentrates on the effect of work on the quality of a union and the satisfaction derived by an individual from being in a union, whereas the second group concentrates on the fact that women's independent income from employment could make it possible for women to leave unhappy relationships. In the second part of the section we question whether or not the relationship between women's employment and union dissolution in socialist and transition Russian settings differs from Western experience. We focus on differences between the macro-settings, looking in particular at the level of earnings and job security.

2.1 Theories concerning the effect of women's employment on the desire and the opportunity to dissolve a union

Women's employment increases the desire to leave a union as it leads to the impairment of the marital interaction and increases opportunities to find a better partner in an enlarged marriage market. The impairment of the relationship of working women results, first of all, from lower union-specific investments (Becker, 1993; Becker et al., 1977; Lehrer, 2003; Sayer and Bianchi, 2000; South, 2001). As the union-specific investments would be worth less when the union dissolves, high investments reduce the desire to leave a union; working women invest less on average in union-specific capital than women who do not work (Becker, 1993; Becker et al., 1977). According to the household economic theory, a decrease in investment in household issues and tasks and childrearing among working women reduces a woman's gain from being in a union and increases a woman's propensity to dissolve it (Becker, 1993; Becker et al., 1977; Lehrer, 2003; Sayer and Bianchi, 2000; South, 2001). On the other hand, the lower investments in the union-specific capital among working women could be also considered the result of strong market-oriented and low family-oriented preferences. According to Hakim (2000, 2003), the different investment strategies of women (union-specific and market-related) result from their preferences towards work or family. The author claims that those preferences are formed early in a woman's life and do not change significantly over the life-course.

The impairment of the union relationship of working women results from the fact that when a woman enters employment, she has less time to spend on household tasks (*absence effect*). As a result of her absence at home, some household tasks traditionally conducted by women are simply not done. This shift in gender roles of working women does not signify an automatic shift in the roles of men. In most developed societies, women have entered the paid labor market and hence have started to take on new roles, while at the same time, men's household responsibilities have not changed dramatically (Pascall and Lewis, 2004; Spitze, 1988). The unequal share of household duties the couple has might pose an additional stress on the couple's relationship and increase the desire to separate (Greenstein, 1990, 1995; Ross and Sawhill, 1975).

Women who work also have a larger marriage market than women who do not work and hence more opportunities to find a better match than their current partner (South, 1985; South and Spitze, 1986). This effect of widening the marriage market for working women would positively influence the desire to dissolve a union.

Contrary to the previous arguments, women's employment might have a stabilizing effect on a union, serving as a source of additional income to be invested in common assets (*income effect*). The common investments might decrease the desire to separate by increasing the utility of staying in the union (Greenstein, 1990). Higher disposable income in the household simply increases the quality of marital life (Sayer and Bianchi, 2000).

The second channel of influence of women's employment on dissolution risk relates to the increased opportunities to dissolve an unsatisfactory union, through the *independence effect*. A woman who can afford to maintain a separate household would be less likely to stay in an unsatisfactory union than a woman who does not work and hence does not have a source of income independent of her husband (Becker, 1993; Lehrer, 2003; Sayer and Bianchi, 2000; South, 2001). In addition, women who anticipate a union dissolution might invest more in job market related skills in order to become economically independent (Becker, 1993; Lehrer, 2003; Poortman, 2005).

According to the above arguments women's employment leads to the impairment of the intimate relationship due to lower union-specific investments, unequal division of tasks between the partners, and the absence effect. Women's employment also provides opportunities to find a better match in an enlarged marriage market. The effect of income from women's work on the risk of dissolution, however, is twofold. This additional household income could lead to additional investments into common assets resulting in an increase in the union stability. On the other hand, the economic opportunity that working women have to maintain a separate household could result in a higher propensity to dissolve an unsatisfactory union in comparison to women who do not work. It is not clear if the disruptive effect of women's work or the stabilizing effect of women's income would dominate. The results of the previous empirical studies on the effect of women's employment on union dissolution are mixed (for a more complete review of previous studies see: Ono, 1998; Oppenheimer, 1997; Spitze, 1988). The discrepancy between theoretical assumptions and empirical findings, according to Sayer and Bianchi (2000), results from the fact that the economic independence theories are based on traditional gender roles and, over time, these have definitely changed. As the acceptance of women's work is higher nowadays, it is not the complementarity of roles that stabilizes a union, but rather the similarity of labor market roles that is a stabilizing factor. In terms of union formation, wives with the highest income are married to high-earning husbands. As shown by Sayer and Bianchi (2000), couples where both partners enjoy high income face a lower

risk of divorce than the low-earners, which suggests that the income effect of women's work reduces the independence effect.

A woman's level of pay and her absence from the home depend on the number of hours a woman works. High pay and high absence from home are the strongest among women who work full-time and among those involved in side jobs additional to their major employment, as opposed to women working part-time. Similarly, pay and home-absence levels depend upon a woman's occupational status (Poortman and Kalmijn, 2002).

2.2 The Russian socio-economic context and its effect on the relationship between women's employment and risk of union dissolution

In the theoretical investigations concerning the interrelation between economic cycle and divorce in Western democracies, the number of divorces is claimed to rise during periods of economic prosperity and decrease during recessions (South, 1985). During an economic downturn, this effect is related to a decrease in opportunities for working women to dissolve unsatisfactory unions as a result of having insufficient income to maintain a separate household. One could hypothesize, however, that in times of economic crisis, it is also difficult to "fulfill the financial obligations required to maintain satisfaction in marriage" (South, 1985, p.33) and furthermore, that investments into common assets are lower, resulting in a decrease in the protective effect of women's income.

Similar to the effect of material conditions, the effect of economic conditions on intimate relationships in the socialist and transition Russian settings would differ from the Western experience as a result of differences in the level of job security. A decrease in job security during recessions has a negative effect on the opportunities to leave an unsatisfactory union, as the higher risk of losing one's job would decrease the level of perceived well-being and disposable income (Ruggles, 1997). On the other hand, it could be expected that when the level of earnings is low and the risk of job dismissal is high, one would try to increase the number of hours worked. Additional to the increased absence effect, stress resulting from these adverse economic conditions causes tensions between the partners and results in the impairment of the relationship (Larson et al., 1994; White and Rogers, 2000; Fischer and Liefbroer, 2006).

During socialism in Russia, women's employment was an ideological principle and female labor force participation was almost as high as that of males (Desa and Todd, 2000; Ogloblin, 1999). State enterprises guaranteed not only employment, but also provided a wide range of benefits and goods (Clarke, 1999; Mroz and Popkin, 1995). The wages assured a minimum standard of living, however it was difficult to maintain a household from a single income. Despite the fact that the level of earnings was centrally administered and, to a great extent, independent of educational attainment and occupational status (Gerber and Hout, 1998; Lubyova and Sabirianova, 2001), differences in wages existed and were

based on the branch of industry (e.g. employees in defense and heavy industry had, on average, higher earnings), regional differences, and also job positions or responsibilities - those in managerial positions had higher wages (Gerber and Hout, 1998). Labor market segregation, with women concentrated in light industry and services, and in typical female jobs and low-skilled jobs, resulted in women having lower earnings in comparison to men. As a result, despite the employment guarantee and the ideological principle of equal pay, the independence and income effects of women's employment on union instability were limited. In addition, resulting from the fact that unemployment did not exist and job security was high, contrary to the previous argument it could be hypothesized that women's paid employment had only a limited effect on the impairment of marital interaction. Additionally, the data show only a limited "absence effect" on union instability resulting from women's employment; this was related to the fact that, despite hardly any part-time employment opportunities, the work day during socialism was relatively short in comparison to Western economies (Desa and Todd, 2000). To summarize, as a result of its limited effect on the desire and opportunities to dissolve a union, one could expect no significant effect of women's employment on the risk of union dissolution during the period of centrally planned economy in Russia.

The socio-economic changes in Russia after the collapse of socialism negatively influenced the level of incomes and job security. The institutional changes also resulted in a significant rise in the costs of maintaining a separate household, in particular for women with small children. The continuing decline in real income, related to high inflation and a slower increase in wages and family benefits, resulted in the lowering of living standards for Russian families, as well as a rising level of poverty and an increasing income differentiation (Elizarov, 1999; Gerber and Hout, 1998; Prokofieva and Terskikh, 1998). Apart from the low level of earnings, women faced two further problems on the Russian labor market: discrimination on the basis of sex in selection and promotion, and structural unemployment, as their skills did not match the requirements of offered jobs (Bridger and Kay, 1996; Lubyova and Sabirianova, 2001). Although unemployment in Russia affected both men and women, more women than men dropped out of employment (Lokshin, 2004). While men moved to better paid occupations and jobs, women either stayed in their old occupations or moved downwards (Ashwin and Bowers, 1997). In addition, a significant gender gap in pay existed, even when controlling for employment sector (Gerber and Hout, 1998; Ogloblin, 1999). In the Russian non-monetary economy an additional problem (related to job insecurity and low wage levels) faced by households is that wages were not paid on a regular basis (Clarke, 1999). As a result of a lowering of disposable income, the irregularities in salary payment, and increased job insecurity related to high unemployment among women, we expect that during the transition period in Russia, both the independence and income effect of women's wages on the risk of union dissolution would be limited. Similar to the experience of workers living through eco-

conomic downturns in Western democracies, the response to lower wages and job insecurity in Russia is to increase the number of hours worked, causing an augmented absence effect due to women working longer hours and lower union-specific investments. It is hard to determine whether during the transition period the increased desire to leave a union due to a lower income effect and an increased absence effect would dominate over the limited possibilities to do so among working women, resulting in an increased propensity to dissolve a union, or rather the limited possibilities would restrain partners to stay together in their union. An important element of this discussion is the fact that in post-Soviet Russia, wages account for less than a half of the total income of the population (Clarke, 1999). The New Russian Barometer (after Rose and McAllister, 1996) revealed that in 1992, in order to cope with the difficult economic situation, almost every household in Russia was involved in additional income-related activities. Russians have coped with the economic crisis in a variety of ways: having a side job, producing fruits and vegetables in small gardens for private consumption or sale, mutual help within a kin network in the form of financial support or services (Bühler, 2004; Clarke, 1999; Desa and Todd, 2000; Lubyova and Sabirianova, 2001; Prokofieva and Terskikh, 1998; Rose and McAllister, 1996). As a result, we can expect that women involved in economic activities that are additional to their main job would be characterized by an elevated risk of dissolution due to the existing financial opportunities to maintain a separate household. Apart from financial independence, the augmented absence effect among these couples would result in an increased divorce rate. In the transition period in Russia, the type of ownership of a company that a person worked for played a crucial role in the level of earnings and the number of hours worked. The highest level of earnings characterized private companies established after the collapse of socialism (Lubyova and Sabirianova, 2001). According to Clarke (1999) the level of earnings in these new private companies was on average 40 % higher than in public enterprises. In 1998 the new private enterprises accounted for about 15% of total employment and were concentrated mostly in large urban centers, where they accounted for up to 30% of total employment (Clarke, 1999). In the context of this study, the higher level of earnings in private companies signifies increased opportunities to dissolve an unsatisfactory union among women who work there. In addition to the independence effect, one would expect that women who worked in the most competitive segment of the market had on average more work hours than those employed in other companies, resulting in an elevated absence effect. Hence, we expect that the effect of women's employment on the risk of union dissolution in the post-Soviet Russia depends on the type of the ownership of the company employing the women, with those working in the newly opened private firms being characterized by the highest risk of union dissolution.

3. Data and methods

3.1 Data

The study is based on data derived from two retrospective surveys. The first survey, *Generations and Gender Survey (GGS)*, was conducted in Russia between June and August 2004. This survey is a part of the Gender and Generation Programme which conducts comparative individual-level surveys that integrate both prospective and retrospective approaches. First, the questionnaire is comprised of detailed retrospective questions, including questions on nuptiality and fertility histories. Second, the form of the survey is prospective and the respondents were followed in a panel study over several waves. For a full description of the GGS Programme see Vikat, et al. (2007). The Russian GGS study was based on a multistage probability sample of dwelling units. The target sample size consisted of 11,000 dwelling units (for the description of the sample see, Kosolapov 2004). As a result, 4,223 men and 7,038 women between ages 18 and 79 were interviewed. The second survey, *Education and Employment Survey (EES)*, was conducted in November 2005. In this survey respondents were asked detailed questions concerning their employment, educational, and migration histories. The sample consisted of the GGS survey respondents. The joined GGS and EES data sets constitute the first Russian longitudinal data with detailed nuptiality, childbearing, employment, and educational life-histories.

After combining the GGS and EES data files, we found 3074 women who had been in a union and who were respondents in both surveys. As the union formation and dissolution patterns might differ between various ethnic groups, we studied only unions formed by women who were Russian, Belorussian, or Ukrainian and thereby excluded 255 women from our study. Data checking eliminated other women from the study, (some women had different years of birth in the two surveys or the date of union formation was misreported - meaning an age below 14 was reported for the woman at 1st union formation), which limited the number of studied women to 2,803.

The study subject is a union, with a woman as a marker. This analysis is based on marital/union histories as reported by women. The studied period is from 1967 to 2004. In our data the year 1967 is the earliest year a union was formed by our respondents. The year 1967 represents the beginning of a period that follows almost directly after the Russian divorce procedure was simplified in 1965. According to Avdeev and Monnier (2000), before 1965 (since 1944) the divorce procedure was very complicated and costly and, as a result, divorce was uncommon. We divided the study period according to the theoretical background into two sub-periods: 1967-1991 and 1992-2004. In the first period, we studied 1989 first unions (with 409 dissolutions), 245 second unions (with 45 dissolutions) and 16 third unions (with 4 dissolutions). In the years 1992-2004, we studied 2226 first

unions (with 497 dissolutions), 526 second unions (with 159 dissolutions) and 74 third unions (with 4 dissolutions).

3.2 Models

The event under study is union separation and not official divorce. The moment of union separation is considered to be the date the respondent reports the union ending. The reason for studying separation instead of a divorce is that for cohabiting unions there is no such event as official divorce. With the death of a partner, the observation is censored.

We model time since union formation to separation using hazard regression models (Blossfeld and Rohwer, 2002; Hoem, 1987, 1993, 2001). The baseline hazard of dissolution, according to duration since union formation, is modeled as a linear spline. The time is measured in months.

Unions formed in the years 1967-1991, which were still together in January 1992, were right-censored at this date. These unions were also followed up in the second set of models (for the years 1992-2004) and left-truncated as they entered the population under risk.

As the aim of this study is to test whether women's employment influences risk of union dissolution, information on the respondent's employment status and selected characteristics of her job are entered into the model as a set of time-varying covariates. Several additional time-constant and time-varying variables, which refer to characteristics that are not employment characteristics, are introduced into the model. We control for selected characteristics for which there are significant compositional differences between women who work and those who do not work.

3.3 Variables

In this section, first, we present the variables created to describe women's status in the labor market and selected characteristics of their jobs, and afterwards we present the explanatory variables.

3.3.1 Women's employment

From detailed employment histories of women, several time-varying covariates were constructed to describe their employment status.

The first of the variables indicates if a woman was involved in paid employment. An additional variable was created to indicate if a woman had an extra source of income from an additional job (side job). We distinguish also between full- (40 hours and more a

week) and part-time (4-39 hours) employment spells. In the situation where the number of working hours was unknown, we created a separate level with unknown working hours.

We also distinguished between different occupational groups. In constructing this variable, we made use of International Standard Classification of Occupations (ISCO-88). Below, in the brackets, we provide the reader with the ISCO-88 codes for major groups of occupations. We distinguished between: agricultural workers (farmer employers and own account farmers; in ISCO-88 coded as 6), manual workers (unqualified and qualified; 8, 9), lower white-collar (4,5,0) and higher-white collar occupations (1,2,3). In addition, in the group of upper-white collar occupations, we distinguished women who held white-collar jobs in typical female employment and distinguished them from other white-collar workers. We regarded women with professional backgrounds working in education (as teachers), in medicine, and in the social sciences as having typical female employment. We also included an additional level for data sets with missing information.

Finally, we distinguish among the different forms of company ownership (for companies where women worked): newly established private enterprise (new private), former state and privatized (including mixed property), state or municipal, and 'other'. In the latter group ('other') we included non-profit organizations, international organizations, regional offices of foreign companies, and employment by private persons and groups. An additional group was added consisting of those firms for which the type of company ownership was not specified. This variable was created only for the period after the collapse of socialism. We did not include information concerning the type of company ownership in the centrally planned economy because women reported almost exclusively that they worked in the public sector.

The distribution of exposures and events according to women's status on the labor market as described above is presented in Table 1a.

3.3.2 Control variables

The characteristics that are often found to be predictors of union dissolution are educational level, size of residential area (small to large village, town, city, etc.), the existence of children in the union, type of union, parents' divorce age at union formation, union order and union duration.

Educational level is claimed to have a stabilizing effect on union, as those better educated would be better at selecting appropriate mates (Lehrer, 2003) or have communication skills that improve the relationship (Ono, 1998). On the other hand, one might argue that women who are better educated have on average higher earnings and hence economical resources to dissolve an unsatisfactory union (Hoem, 1997). Most empirical studies have found that women with a higher level of education have a lower risk of union dissolution (e.g. Greenstein, 1990; Hoem, 1997; Martin and Bumpass, 1989; South, 2001).

In the variable describing educational status of the respondents we distinguish between women in education and those with the highest completed education out of the four levels (according to the International Standard Classification of Education): primary or lower secondary (up to 9 years in education), upper secondary, and tertiary. For 25% of the respondents, there was no information concerning involvement in education in the year they completed their 17th birthday. We assumed that the missing information is caused by the fact that they were not anymore in education at that moment and had completed 9 years of education or less which classifies them in the first level of the variable.

The **size of the settlement area** influences the risk of union dissolution, with those living in urban areas, and in particular, in big cities, being more prone to separate than those living in rural areas. This effect results from there being a higher number of marriage alternatives to the current union, more liberal views and less social stigma of divorce and more employment opportunities in urban areas than in rural ones (Boyle et al., 2006; South and Spitze, 1986). We distinguish between large cities (regional centers), other towns, urban-type villages and other villages.

As far as **the effect of children** on the risk of union dissolution, one can expect a negative effect. Children constitute union-specific capital because of the selection effect into motherhood and the higher costs of maintaining two separate households in the presence of children. However, children from previous partnerships might have a negative effect on union stability as they might cause conflict within the marriage (Andersson, 1997; Becker, 1993; Becker et al., 1977; Lehrer, 2003; Waite and Lillard, 1991). To document motherhood status, two variables were constructed: motherhood status at the union formation and number of common children. In the first variable, we distinguish between women who were mothers at union formation and those who were not (women who were pregnant at union formation are included in the latter group).

Individuals whose **parents divorced** would be expected to have a higher risk of union dissolution (Amato, 1996; Lehrer, 2003). Similarly, those in a **second and subsequent union** as opposed to those in their first union (Becker et al., 1977; Hoem and Hoem, 1992; Lehrer, 2003) would also have a higher risk. The effect of the type of a union on the risk of dissolution is discussed in the literature as a selection effect into direct marriage versus cohabitation (Axinn and Thornton, 1992; Hoem and Hoem, 1992; Lillard et al., 1995).

Being of **young age at union formation** is expected to negatively influence the risk of dissolution due to the short time invested in the search for an optimal partner, emotional immaturity, as well as personal traits that make those who form a union at young age different from those who do so at later ages (Becker et al., 1977; Hoem and Hoem, 1992; Andersson, 1997). In addition, young age is usually associated with lower accumulation of human capital, from education or work experience, and as a result with lower level of earnings.

As to **union duration**, the risk of dissolution is expected to decrease as the union-

Table 1a: Descriptive statistics for the variables describing women's employment status that are included in the analyses of union dissolution in Russia, years 1967-1991 and 1992-2004

Variables	1967-1991			1992-2004		
	person months	events	rate	person months	events	rate
does not work	36637	88	0.0024	56382	172	0.0031
Employment status I						
works	186662	370	0.0020	181235	510	0.0028
Employment status II						
works but no side job	183974	366	0.0020	176251	486	0.0028
works and side job	2688	4	0.0015	4984	24	0.0048
Occupational group*						
farmers	16825	25	0.0015	13627	23	0.0017
manual workers	54939	113	0.0021	48583	137	0.0028
lower white-collar	42200	86	0.0020	43296	155	0.0036
upper white-collar	71736	141	0.0020	74653	193	0.0026
in typical female jobs	43715	85	0.0019	48147	119	0.0025
other upper white-collar	28021	56	0.0020	26506	74	0.0028
unknown	962	5	0.0052	1076	2	0.0019
Hours worked						
works part-time	34262	70	0.0020	42491	99	0.0023
works full-time	151586	298	0.0020	137973	407	0.0029
unknown	814	2	0.0025	771	4	0.0052
Type of ownership						
new private				14382	62	0.0043
other private				9672	40	0.0041
former state, privatized				21672	56	0.0026
state or municipal				132338	344	0.0026
unknown				3171	8	0.0025
TOTAL	223299	458	0.0021	237617	682	0.0029

*farmers = farm employers and own account farmers

manual workers = manual workers skilled and unskilled

lower white-collar = lower administrative or clerical employees

upper white-collar = managers and higher administrative or clerical employees

upper white-collar in female typical employment = teachers, working in medicine and social sciences

Source: author's estimations based on Russian GGS and EES

Table 1b: Descriptive statistics for the control variables included in the analyses of union dissolution in Russia, years 1967-1991 and 1992-2004

Variables	1967-1991			1992-2004		
	person months	events	rate	person months	events	rate
Union order						
1st	203757	409	0.0020	194002	497	0.0026
2nd or 3rd	19542	49	0.0025	43615	185	0.0042
Parents divorced						
no	185773	357	0.0019	197061	517	0.0026
yes	37526	101	0.0027	40556	165	0.0041
Educational level						
in education	14360	26	0.0018	15688	49	0.0031
primary or lower secondary	127159	285	0.0022	129724	398	0.0031
upper secondary	72121	129	0.0018	78563	195	0.0025
tertiary	9659	18	0.0019	13642	40	0.0029
Motherhood at formation						
not mother	176017	354	0.0020	161164	449	0.0028
mother	47282	104	0.0022	76453	233	0.0030
Motherhood status in union						
childless	47328	129	0.0027	61997	282	0.0045
one child	109398	289	0.0026	100713	297	0.0029
two and more children	66573	40	0.0006	74907	103	0.0014
Size of settlement						
regional center	78182	196	0.0025	88113	353	0.0040
another town/city	67748	154	0.0023	65602	190	0.0029
urban-type village	19088	26	0.0014	18566	37	0.0020
village	58281	82	0.0014	65336	102	0.0016
Civil status						
cohabiting	18721	83	0.0044	38909	237	0.0061
married after cohabitation	44487	102	0.0023	60307	184	0.0031
married directly	160091	273	0.0017	138401	261	0.0019
Age at formation						
15-20	88678	216	0.0024	77512	246	0.0033
20-25	107754	174	0.0016	97253	220	0.0023
25-30	20644	49	0.0024	34653	104	0.0031
30+	6223	19	0.0031	28199	112	0.0041
TOTAL	223299	458	0.0021	237617	682	0.0029

Source: author's estimations based on Russian GGS and EES

specific capital increases with union duration, and also because couples who are more prone to divorce would dissolve their unions faster (Becker, 1993; Becker et al., 1977; Sayer and Bianchi, 2000).

4. Results

Table 2 presents selected results from our models which refer specifically to the effect of women's employment on the risk of union dissolution. Only in Table 3 do we present the results we obtained for the effect of the variables describing women's characteristics other than employment status.

4.1 The effect of employment and job characteristics

Both during the period of the centrally planned economy and after the collapse of the socialism, the risk of union dissolution was similar for both non-working and working women (no matter the number of hours worked). In both periods, the average income from a job was not sufficient to maintain a separate household and hence the independence effect of women's employment was limited. These limited opportunities to leave an unsatisfactory union most probably dominated over the decreased income effect of women's work. (Women's decreased income would generally result in lower investment in common capital, and lower investment can destabilize a union.) In addition, we hypothesize that during socialism the short working hours allowed working women to fulfill their household duties, and hence the absence effect was relatively low.

The effect of side work activity on union stability turned out to be insignificant, but we believe it would be still interesting for the reader if we briefly discuss the results here. In the years 1992-2004, women who had a side job had a higher risk of union dissolution than women who were not involved in any additional economic activity of this type or women who did not work. Contrary to this, during socialism women who held a side job had a lower risk of dissolution than other women. It is difficult to understand, however, why the effect of side job on union stability was different in the two periods. This effect might result from the different character of the economic activity additional to the primary job. In the time of centrally planned economy, a secondary economic activity was a common phenomenon, but the number of people officially having second jobs was very low. Most of the additional activity was concentrated in the shadow economy (Foley, 1995) and served to supplement the wages from the primary job for those groups whose income was low (Rose and McAllister, 1996). After the collapse of socialism, it became legal to have a second job, and it became an important survival solution for families, in particular in urban areas.

Neither during socialism, nor in the transition period, were there significant differences in the risk of union dissolution between women in different occupational groups.

The type of ownership of a company a woman worked for turned out to be an important determinant of union stability after the collapse of socialism. The highest risk of union dissolution characterized women working in newly privatized companies or in 'other' private enterprises. This group of women had, on average, greater opportunities to leave a union as the earnings in newly established private and foreign companies were higher than in companies belonging to other categories of ownership (Lubyova and Sabirianova, 2001). In addition, one could expect that employment in a private company results in an increased desire to dissolve a union due to three factors: impairment of the relationship related to work-related stress, the absence effect, and lower union-specific investments. However, this interpretation might have some flaws. In Moscow, as shown by Vannoy et al. (1999), satisfaction with the current marriage was the highest among women in higher professional occupations and also positively correlated with a woman's monthly income. If the results of Vannoy et al. (1999) are taken into theoretical consideration, the income effect could be discussed as having a dominant position over the absence effect.

4.2 The effect of other characteristics

Similar to the results of empirical studies in Western economies, in Russia, the risk of union dissolution is the highest in the first months after the union formation and decreases with union **duration** (Table 3).

In both periods the risk of dissolution was highest among those women who formed their unions at very young ages. However, there was no significant difference among the unions formed after the woman's 20th birthday.

Educational level did not have a significant effect on the risk of union disruption in Russia neither in the time of the centrally planned economy nor in the transition period.

We found **size of the settlement** to have a significant effect on union stability. As expected, the risk is higher in urban settings than in rural areas. In the communist period, in the urban areas there were no significant differences between the risk of dissolution for women living in the regional centers or in other cities. Similarly, no differences existed between different types of villages. After the transition, however, unions in the big regional centers had a higher risk of dissolution than those in the smaller cities. Greater opportunities to dissolve a union in a big city are related to higher wages, an elevated desire to divorce resulting from having a larger number of available partners who could replace the current one, more liberal views, and less social stigma connected to divorce. Larger cities offer more employment opportunities in private enterprises than do smaller settlements. The number of available private sector jobs is lowest in the rural areas (Ger-

Table 2: Relative risks of union dissolution in Russia, according to the employment status of a woman, estimated separately for the years 1967-1991 and 1992-2004, controlled for educational level, size of settlement, etc.

	Model 1		Model 2		Model 3		Model 4		Model 5
	1967-1991	1992-2004	1967-1991	1992-2004	1967-1991	1992-2004	1967-1991	1992-2004	1992-2004
doesn't work	1	1	1	1	1.05	0.96	1.02	1.03	1.08
Employment status I									
works	0.98	0.92							
Employment status II									
works but no side job			0.97	0.97					
works and side job			0.72	1.32					
Hours worked									
part-time					1.11	0.85			
full-time					1	1			
Occupational group									
farmers							0.92	0.93	
manual workers							1	1	
lower white-collar							0.96	1.18	
upper white-collar							1.02	1	
in typical female jobs							1.09	1.02	
other upper-white collar							1.00	1.15	
Type of ownership									
new private									1.41**
other private									1.58***
former state, privatized									1.05
state or municipal									1

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: author's estimations based on Russian GGS and EES

Table 3: Relative risks of union dissolution in Russia (1967-1991, 1992-2004) by selected individual characteristics other than employment status and slope estimates of log-hazard for duration variable, after controlled for woman's employment status (employment status I in Table 2)

	1967-1991	1992-2004
Educational level		
in education	0.9	1.11
primary or lower secondary	1.1	1.06
upper secondary	1	1
tertiary	1.06	1.24
Size of settlement		
regional center	0.99	1.25**
another town/city	1	1
urban-type village	0.58**	0.77
village	0.65***	0.59***
Motherhood at formation		
not mother	1	1
mother	0.88	0.80**
Motherhood in union		
childless	1	1
one child	0.95	0.88
two or more children	0.26***	0.45***
Parents divorced		
no	1	1
yes	1.33**	1.25**
Union order		
1st	1	1
2nd or 3rd	0.93	1.1
Civil status		
cohabiting	2.08***	2.44***
married after cohabitation	1.17	1.41***
married directly	1	1
Age at formation (in years)		
15-20	1	1
20-25	0.70***	0.67***
25-30	0.74	0.77**
30+	0.85	0.77*

Table 3: (Continued)

	1967-1991	1992-2004
Union duration (baseline)		
0-6 months (slope)	0.365**	0.560***
6-12 months (slope)	-0.031	-0.152***
12-36 months (slope)	0.023**	0.025**
36-48 months (slope)	-0.044*	0
48-60 months (slope)	0.037	-0.007
60-72 months (slope)	-0.031	-0.006
72+ months (slope)	-0.002	0.007***
Constant	-7.893***	-9.582***

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: author's estimations based on Russian GGS and EES

ber and Hout, 1998). On the other hand, jobs in the big cities might be characterized by a higher level of job insecurity, which could lead to an increased desire to dissolve a union due to relationship impairment related to absence effect.

As far as **the effect of children** is concerned, we found a negative effect of the existence of children on the risk of union dissolution, both before and after the collapse of socialism. The effect of the first child was insignificant when controlled for additional covariates, while the existence of a second child in the union significantly decreased the risk of dissolution. Contrary to what we expected, when we controlled for additional characteristics, being a mother already when the couple moved in together lowered the risk of dissolution. Following the theoretical background, the interpretation of this result is that common children stabilize the union (decreasing the desire to dissolve ties), and also that the presence of children in the household increases the costs of maintaining a separate household and hence decreases opportunities to leave an unsatisfactory union.

The effect of her **parents' divorce** of a woman has a negative effect on union stability. This effect is significant in both periods of analysis and remains significant when controlled for additional characteristics of the woman.

Similar to previous empirical studies, the risk of dissolution depends significantly on the **civil status**. Those who marry directly have the lowest risk of divorce, as compared to those who marry after the period of pre-marital cohabitation or those who live together without being married.

The negative effect of **union order** on its stability disappears when controlled for additional characteristics of a woman and, in particular, for the civil status. The reason

is that direct marriage is much more common in first unions than in subsequent unions, and for those who marry directly, the risk of dissolution is lower. The effect of civil status turned out to be stronger than the effect of union order.

5. Summary

In this study, we examined the relationship between women's employment and risk of union dissolution in two periods of distinct socio-economic conditions in Russia. The uniqueness of the socio-economic context in Russia provides an opportunity to test whether the existing theories can be applied to settings different from Western democracies. Moreover, the dramatic shift in living and working conditions in Russia, together with relatively stable cultural settings, makes it possible to disregard cultural context and study how the different structural conditions influence the relationship between women's employment and union stability.

In order to discuss the effect of economic conditions on the process under study, two sets of models were estimated separately: (a) for the years of centrally planned economy and (b) the transition period. We hypothesized that during socialism the effect of women's employment on the risk of union dissolution was insignificant due to insufficient income to maintain a separate household and a limited absence effect among working women. Similarly, the relationship between women's employment and union dissolution after the collapse of socialism was shaped by low opportunities to dissolve an unsatisfactory union. As a result, we expected that only those women who were in occupational groups with higher average salaries would have an elevated risk of union dissolution. Additional variables were included and hypotheses concerning the effect of characteristics other than women's employment on the risk of union dissolution were tested (e.g., educational level, size of settlement, motherhood status, etc.).

As we anticipated, in the centrally planned economy there were no significant differences in the risk of union dissolution between women who worked and those who did not work. These differences were also absent in the transition period. The effect of selected characteristics of a woman's job on the risk of union dissolution was, in the majority of the analyses, insignificant.

As shown by other studies, the type of ownership of the company that a woman worked for became an important job feature after the collapse of socialism in Russia and also a key determinant of the level of earnings. The highest risk of union dissolution characterized women who worked in new private companies or in 'other' private enterprises. As women in private companies earned, on average, more than workers in public companies, they had the financial resources that would allow them to maintain a separate household. We admit, nevertheless, that this elevated risk of dissolution might result from

other reasons that pertain to relationship impairment. Women in private enterprises often worked long hours, and as a result, they experienced stress at the workplace (both long hours and stress are related to job insecurity), and are absent from the home. Additionally, women who are able to find and maintain a job in newly established private companies might have some personal characteristics that make them more prone to dissolve a union. The data sources on which this study was based allowed us only to approximate women's income by the characteristics of a job. Information concerning the level of income earned by both partners could bring an additional insight into income-related determinants of union dissolution in Russia.

6. Acknowledgments

This work has been conducted during my stay at the Max Planck Institute for Demographic Research. I am grateful to the Max Planck Institute for Demographic Research for providing me the opportunity to use the Russian GGS and EES data. I would like to thank Hill Kulu, Jan M. Hoem, Dirk Konietzka, Dora Kostova and Nadja Milewski for their valuable comments and two anonymous referees for their helpful suggestions. I am very grateful to Nancy Vaupel for her careful language editing of the manuscript.

References

- Amato, P. R. (1996). Explaining the intergenerational transmission of divorce. *Journal of Marriage and the Family*, 58:628–640.
- Andersson, G. (1997). The impact of children on divorce risks of Swedish women. *European Journal of Population*, 13:109–145.
- Andreev, E. and Scherbov, S. (1996). Demographic atlas of Russia. Unpublished manuscript.
- Ashwin, S. and Bowers, E. (1997). Do Russian women want to work? In Buckley, M., editor, *Post-Soviet Women: From the Baltic to Central Asia*, pages 21–37. Cambridge: Cambridge University Press.
- Avdeev, A. and Monnier, A. (2000). Marriage in Russia: A complex phenomenon poorly understood. *Population: An English Selection*, 12:7–50.
- Axinn, W. G. and Thornton, A. (1992). The relationship between cohabitation and divorce: Selectivity or causal influence? *Demography*, 29:357–374.
- Becker, C. M. and Hemley, D. D. (1998). Demographic change in the former Soviet Union during the transition period. *World Development*, 26:1957–1975.
- Becker, G. S. (1993). *A treatise on the family*. Cambridge, Massachusetts: Harvard University Press.
- Becker, G. S., Landes, E. M., and Michael, R. T. (1977). An economic analysis of marital instability. *Journal of Political Economy*, 85:1141–1187.
- Blossfeld, H.-P. and Rohwer, G. (2002). *Techniques of event history modeling: New approaches to causal analysis*. Mahway, NJ: Lawrence Erlbaum Associates.
- Boyle, P. J., Kulu, H., Cooke, T., Gayle, V., and Mulder, C. H. (2006). The effect of moving on union dissolution. MPIDR Working Paper WP 2.
- Bridger, S. and Kay, R. (1996). Gender and generation in the new Russian labour market. In Pilkington, H., editor, *Gender, generation and identity in contemporary Russia*, pages 21–38. London: Routledge.
- Bühler, C. (2004). Additional work, family agriculture, and the second birth in Russia at the beginning of the 1990s. *Population Research and Policy Review*, 23:259–289.
- Clarke, S. (1999). *New forms of employment and household survival strategies in Russia*. Centre for Comparative Labour Studies, Warwick.
- Council of Europe (2004). Recent demographic developments in Europe 2004. Technical report, Strasbourg: Council of Europe.
- Darsky, L. and Scherbov, S. (1995). Marital status behaviour of women in the former Soviet Republics. *European Journal of Population*, 11:31–62.
- Desa, P. and Todd, I. (2000). *Work without wages: Russia's nonpayment crisis*. Cambridge, London, MIT Press.
- Elizarov, V. V. (1999). The demographic situation and problems of family policy. *Socio-*

- logical Research*, 38:79–90.
- Festy, P., Kortchagina, I., Mouratcheva, O., and Prokofieva, L. (2003). Divorce and professional careers in Russia during the transition towards market economy. In Garcia, B., Anker, R., and Pinnelli, A., editors, *Women in the labour market in changing economies: demographic issues*, pages 104–129. Oxford: Oxford University Press.
- Fischer, T. and Liefbroer, A. (2006). For richer, for poorer: The impact of macroeconomic conditions on union dissolution rates in the Netherlands 1972-1996. *European Sociological Review*, 22:519–532.
- Foley, M. C. (1995). Labour market dynamics in Russia. Mimeo.
- Gerber, T. P. and Hout, M. (1998). More shock than therapy: Market transition, employment, and income in Russia, 1991-1995. *American Journal of Sociology*, 104:1–50.
- Greenstein, T. N. (1990). Marital disruption and the employment of married women. *Journal of Marriage and the Family*, 52:657–676.
- Greenstein, T. N. (1995). Gender ideology, marital disruption, and the employment of married women. *Journal of Marriage and the Family*, R82:31–42.
- Hakim, C. (2000). *Work-lifestyle choices in the 21st century: Preference theory*. Oxford: Oxford University Press.
- Hakim, C. (2003). A new approach to explaining fertility patterns: Preference theory. *Population and Development Review*, 29:349–374.
- Hoem, B. and Hoem, J. M. (1992). The disruption of marital and non-marital unions in contemporary Sweden. In Trussell, J., Hankinson, R., and Tilton, J., editors, *Demographic applications of event history analysis*, pages 61–93. Oxford: Clarendon Press.
- Hoem, J. M. (1987). Statistical analysis of a multiplicative model and its application to the standardization of vital rates: A review. *International Statistical Review*, 55:119–152.
- Hoem, J. M. (1993). Classical demographic methods of analysis and modern event-history techniques: Introductory comments by the organiser of session 35 on event-history analysis in demography. In *IUSSP 22nd General Conference, Montreal*.
- Hoem, J. M. (1997). Educational gradients in divorce risks in Sweden in recent decades. *Population Studies*, 51:19–27.
- Hoem, J. M. (2001). Demographic analysis, a probabilistic approach to. In Smelser, N. J. and Baltes, P. B., editors, *International encyclopedia of the social and behavioral sciences*, volume 14, pages 3428–3432. Oxford: Elsevier.
- Kosolapov, M. (2004). Preliminary report. Sample of the Russian Federation. Technical report, Moscow: Demoscope.
- Larson, J. H., Wilson, S. M., and Beley, R. (1994). The impact of job insecurity on marital and family relationships. *Family Relations*, 43:138–143.
- Lehrer, E. L. (2003). The economics of divorce. In Grossbard-Shechtman, S. A., editor, *Marriage and the economy: Theory and evidence from advanced industrial societies*, pages 55–74. Cambridge: Cambridge University Press.

- Lillard, L. A., Brien, M. J., and Waite, L. J. (1995). Premarital cohabitation and subsequent marital dissolution: A matter of self-selection? *Demography*, 32:437–457.
- Lokshin, M. M. (2004). Household childcare choices and women's work behaviour in Russia. *Journal of Human Resources*, 39:1094–1115.
- Lubyova, M. and Sabirianova, K. Z. (2001). Returns the human capital under economic transitions: The cases of Russia and Slovakia. *Ekonomicky Casopis*, 49:630–662.
- Martin, T. C. and Bumpass, L. L. (1989). Recent trends in marital disruption. *Demography*, 26:37–51.
- Mazur, D. P. (1969). Correlates of divorce in the U.S.S.R. *Demography*, 6:279–286.
- Mroz, T. A. and Popkin, B. M. (1995). Poverty and economic transition in the Russian federation. *Economic Development and Cultural Change*, 44:1–31.
- Ogburn, W. F. and Nimkoff, M. F. (1955). *Technology and the changing family*. Westport, CT: Greenwood Press.
- Ogloblin, C. G. (1999). The gender earnings differential in the Russian transition economy. *Industrial and Labor Relations Reviewed*, 52:602–627.
- Ono, H. (1998). Husbands' and wives' resources and marital dissolution. *Journal of Marriage and the Family*, 60:674–689.
- Oppenheimer, V. K. (1997). Women's employment and the gain to marriage: The specialization and trading model. *Annual Review of Sociology*, 23:431–453.
- Pascall, G. and Lewis, J. (2004). Emerging gender regimes and policies for gender equality in a wider Europe. *Journal of Social Policy*, 33:373–394.
- Poortman, A.-R. (2005). Women's work and divorce: A matter of anticipation? a research note. *European Sociological Review*, 21:301–309.
- Poortman, A.-R. and Kalmijn, M. (2002). Women's labour market position and divorce in the Netherlands: Evaluating economic interpretations of the work effect. *European Journal of Population*, 18:175–202.
- Prokofieva, L. and Terskikh, L. (1998). Standards of living and family structure in a period of social transformation Russia in the 1990s. *Population: An English Selection*, 10:483–494.
- Rose, R. and McAllister, I. (1996). Is money the measure of welfare in Russia? *Review of Income and Wealth*, 42:75–90.
- Ross, H. L. and Sawhill, I. V. (1975). *Time of tTransition. The growth of families headed by women*. Washington, D.C.: The Urban Institute.
- Ruggles, S. (1997). The rise of divorce and separation in the United States, 1880-1990. *Demography*, 34:455–466.
- Sayer, L. C. and Bianchi, S. M. (2000). Women's economic independence and the probability of divorce. a review and reexamination. *Journal of Family Issues*, 21:906–943.
- Scherbov, S. and van Vianen, H. (2001). Marriage and fertility in Russia of women born between 1900 and 1960: A cohort analysis. *European Journal of Population*, 17:281–

294.

- Scherbov, S. and van Vianen, H. (2004). Marriage in Russia: A reconstruction. *Demographic Research*, 10(2):28–60. <http://www.demographic-research.org/Volumes/Vol10/2/>.
- South, S. J. (1985). Economic conditions and the divorce rate: A time-series analysis of the postwar United States. *Journal of Marriage and the Family*, 47:31–41.
- South, S. J. (2001). Time-dependent effects of wives' employment on marital dissolution. *American Sociological Review*, 66:226–245.
- South, S. J. and Spitze, G. (1986). Determinants of divorce over the marital life course. *American Sociological Review*, 51:583–590.
- Spitze, G. (1988). Women's employment and family relations: A review. *Journal of Marriage and the Family*, 50:595–618.
- Vannoy, D., Rimashevskaya, N., Cubbins, L., Malysheva, M., Meshterkina, E., and Pisklakova, M. (1999). *Marriages in Russia: Couples during the economic transition*. Westport, Connecticut: Praeger.
- Vikat, A., Speder, Z., Beets, G., Billari, F., Buhler, C., Desesquelles, A., Fokkema, T., Hoem, J. M., MacDonald, A., Neyer, G., Pailhe, A., Pinnelli, A., and Solaz, A. (2007). Generations and Gender Survey (GGS): Towards a better understanding of relationships and processes in the life course. *Demographic Research*, 17(14):389–440. <http://www.demographic-research.org/Volumes/Vol17/14/>.
- Waite, L. J. and Lillard, L. A. (1991). Children and marital disruption. *American Sociological Review*, 96:930–953.
- White, L. and Rogers, S. J. (2000). Economic circumstances and family outcomes: A review of the 1990s. *Journal of Marriage and the Family*, 62:1035–1051.