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Marital Instability in the Context of Dramatic Societal Change: The Case of Kyrgyzstan

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Abstract

How do marriages fare during times of dramatic social, political and economic transition? Transitional societies offer a unique context for studying marital instability as they are often buffeted by countervailing forces of modernization and re-traditionalization, in addition to socio-economic and political changes. Using detailed and rich data from Kyrgyzstan, the study investigates trends over time in marital instability in response to societal upheavals and gradual secular transformations; ethnic group-specific responses in marital instability; and the role of changing gender regimes in marital instability. The findings reveal an increase in the rate of marital dissolution over time. However, ethnic group-specific differentials remained significant mirroring the historically shaped relative positioning of the groups in the process of demographic change. The results also highlight gender differentials in the influence of education and employment on marital instability. The findings are discussed within the broader framework of demographic and social changes in transitional Central Asia.

Introduction

The stability of marriages is a vital barometer of social, family and moral life. Marital stability is affected by structural, economic and cultural shifts in society, and increase in marital dissolution is said to reflect greater individualization, liberalization and modernization (Härkönen, 2014). Transitional societies provide unique opportunities for understanding the relationship between, socio-economic and political systems, identity, ethnicity and socio-cultural changes, on the one hand, and individual behaviours including those related to union formation and dissolution, on the other (Berdahl, 1997; Hörschelmann & Stenning, 2008). The term “transitional societies” has generally been applied to societies that have seen radical shifts and ruptures in multiple aspects of social, political, economic situation and individual lives. Such societies include post-socialist countries of Central Asia and Central and Eastern Europe that have transitioned to market economy, as well as other countries that have experienced democratic transitions.

This study contributes to the broader scholarship on social changes and marital instability and to the specific scholarship on marital instability in transitional societies as they are likely to differ from other contexts. The study’s key objectives are: a) to examine changes in marital instability in response to societal upheavals and gradual secular transformations; b) to examine group-specific responses in marital instability; and c) to understand the role of changing gender regimes in marital instability. These objectives are grounded in the literature that suggest that demographic behaviours are shaped not just by short-term economic or political exigencies and shocks but also by long-term, historically rooted structural changes, ideational shifts and socio-political evolution, and mediated by ethnicity, gender and socio-economic status (Billingsley, 2010; Dommaraju & Agadjanian, 2008; Schumacher & Spoorenberg, 2013; Sobotka, 2011; Spéder & Kapitány, 2014).

The study focuses on transitional context of Central Asia, a region which, as Brück et al. (2014) note, has experienced a “unique combination of post-socialist transition, weak economic development, and, for some countries, rapid globalization” (p. 120). Using nationally representative survey data from the Kyrgyz Republic (henceforth Kyrgyzstan) we examine the dynamics of marital instability in the context of these multidimensional societal transitions. A lower middle income country (with Gross National Income per capita of \$1,110 in 2016), with few natural resources and an economy highly reliant on labour migrants’ remittances, Kyrgyzstan has undergone massive structural transformations in the past quarter century (World Bank, 2015). Kyrgyzstan is a multi-ethnic country: according to the 2009 census, its population of 6 million is made up of Kyrgyz (70.9%), Uzbeks (14.3%), Russians (7.8%), and a smaller number of other minority groups (National Statistical Committee, 2009).

Social and demographic context

In the period immediately following the collapse of the Soviet Union in 1991 Central Asia, including Kyrgyzstan, experienced dramatic declines in economic

well-being but also greater exposure to outside cultural influences (Clifford, Falkingham & Hinde, 2010; Nedoluzhko & Agadjanian, 2015a). Such changes created, as in the case of Central and Eastern Europe, “considerable disruption, uncertainty, and confusion” (Thornton & Philipov, 2009, p. 138), and have manifested themselves in changing demographic behaviour, including entry into marriage, childbearing and migration. The subsequent period of relative stabilization saw shifts towards market-based economy, institutional changes, including changes to the social welfare system, shifts in educational and labour force participation, and changing patterns of spatial and economic mobility, openness to ideas promoting greater individualism and non-traditional family forms (Brück et al., 2014; Commercio, 2015; Kandiyoti, 2007).

Yet, along with a widening penetration of western values and norms, the region has experienced re-emergence of traditional Islamic and even pre-Islamic norms and corresponding resurgence of related traditional patriarchal structures and practices (Brusina, 2008; Commercio, 2015; Heyat, 2004; Louwa, 2013; Rasanayagam, 2014). Though there is debate on whether some of these shifts constitute a large-scale “re-traditionalization” of family behaviour (e.g., Nedoluzhko & Agadjanian, 2015b), they do indicate the persistent relevance and increased prominence of values that are perceived as traditional (Heyat, 2004). While practical adherence to these new or re-imagined moralities may not be widespread, they have considerable symbolic presence and may potentially influence individual choices and behaviours (Cleuziou, 2016; Kirmse, 2013; Louwa, 2013).

Kyrgyzstan, as the rest of Central Asia, witnessed demographic changes in births, deaths and migration, with the pace and direction of the changes varying at different points during the transition (An & Becker, 2013; Guillot et al., 2013; Nedoluzhko & Agadjanian, 2015a; Spoorenberg, 2013). There were also changes in union formation. Trends in crude marriage rates presented in Figure 1 show dramatic changes between 1989 and 2013 in Kyrgyzstan and other Central Asian countries. Data for Turkmenistan are available only until 2006 and there is limited information about marriage and other demographic changes in the country. Entry into marriage hastened during the initial, acute phase of the post-Soviet crisis perhaps as a mechanism to share risks, smoothen consumption and reduce expenditures (Agadjanian & Makarova, 2003; Schumacher & Spoorenberg, 2013). This was followed by dramatic declines driven by a combination of economic conditions, ideational shifts, cultural changes and changing nature of union formation and childbearing (Clifford, 2009; Clifford, Falkingham, & Hinde, 2010; Spoorenberg, 2015, 2017). The number of marriages reached a nadir for most countries between 1998 and 2003, and increased in the subsequent period in all the countries. With the exception of a significant jump in Tajikistan attributed to compulsory registration of religious marriages including previously unregistered marriages (Roche & Hohmann, 2011; TransMonEE, 2015), for rest of the countries the marriage rates ended at similar levels by 2013. In Kyrgyzstan, marriage rates, after a dramatic fall in the first half of the 1990s, stabilized by 1995 and began to increase from 2000.

Reliable information on trends in marital dissolution in Kyrgyzstan is not available, but according to the 2009 Census, 4.2% of men and 8.5% of women aged 15 and over were divorced or separated (National Statistical Committee, 2009). In the 2012 Demographic and Health Survey, a nationally representative sample, 3.6% of men and 6.1% of women aged 15-49 were divorced or separated (National Statistical Committee, Ministry of Health & ICF International, 2013).

Theoretical framework and hypotheses

We use the framework of demographic modernization as a point of departure in conceptualizing changes in marital instability in transitional societies by focusing on three dimensions of change—time, gender and ethnicity. In the area of marriage, demographic modernization suggests shift towards greater choice in selection of spouse, spread of non-marital and flexible unions, increase in non-marriage, higher levels of divorce or separation and declines in remarriages after divorce. Some of these demographic changes can be considered as features of the second demographic transition (Lesthaeghe, 2010). These shifts in demographic behaviour have been attributed to changes in values, attitudes and beliefs about family behaviour associated with spread of mass media and communication technologies (Allendorf & Thornton, 2015; Thornton, 2001). However, these ideas are often competing with other schemas related to family behaviour and, as Allendorf & Thornton (2015) note, are likely “reframed through group and individual processes” (p. 250). These shifts are intertwined with institutional structures, cultural factors and economic and material bases (Kavas and Thornton 2013). In contemporary multi-ethnic and patriarchal Central Asia, in particular, such competing schemas often include those defined or influenced by ethnicity and gender ideologies.

Time and marital instability

The pressures induced by transition and modernization—including weakening of the power held by family and kin, rise in non-traditional occupations, increasing freedom, and related normative changes—are often associated with increase in marital instability (Cammack & Heaton, 2011; Wagner & Weiss, 2006). However, the effect of these changes on marital stability is neither universal nor unidirectional, nor does it lead to convergence of marital patterns across societies. This effect would depend on the broader institutional, social and economic transformations and the cultural responses to these transformations, and the extent to which traditional cultural values and norms persist and adapt to the demands of transition (Buttenheim & Nobles, 2009; Fussell & Palloni, 2004; Hirschman & Nguyen, 2002).

The effect of transition on marital instability is likely to be different during different stages of transition—from initial crises to later stabilization. The literature on the impact of economic and social crises on marital instability suggest that crises could either strengthen marital stability as families strive to preserve household economies and reduce costs (Amato & Beattie, 2011; Chowdhury, 2012; Cohen, 2014) or heighten marital instability by straining and weakening marital

bonds (Hardie & Lucas, 2010). In countries of Central and Eastern Europe, divorce rates increased with very few exceptions, such as in Catholic Poland (Dimitrova, 2008; Maslauskaitė & Baublytė, 2015; Maslauskaitė et al., 2015). Over the long term, however, marital stability is also affected by secular trends in the quality of marriages, as well as their type and duration (Arkes & Shen, 2014; Roy, 2011).

The periods following acute crises typically see a confluence of ideational and structural changes. These changes often include increased connectedness to global market and informational flow and normative openness, greater freedoms in public and private spheres, and restructuring of state institutions providing support for families, housing and childcare (Brück et al., 2014; Commercio, 2015; Gunes-Ayata & Ergun, 2009; Kandiyoti, 2007; Rasanayagam, 2014). These ideational and structural changes create new values and attitudes, such as greater acceptance of different forms of unions, delayed marriage and non-marriage as well as changing gender expectations (Abbasi-Shavazi et al., 2012; Cammack & Heaton, 2011; Thornton & Philipov, 2009). These changes in values and beliefs, in turn, impact marital stability. In addition, decision to dissolve a marriage is likely to be influenced by shifting benefits of and alternatives to marriage reflecting changes in employment structure and household economic resources.

Hence, we hypothesize a general upward trend in marital instability over the transitional period even though we also expect to find short-term variations in the pace and even the direction of the trend in response to changes in the macro environment, such as economic recessions and bouts of political instability (Hypothesis 1).

Ethnic differences in marital instability

The second dimension that we examine is ethnic variations in marital instability. A key insight from demographic studies is that the trajectories of demographic change vary across ethnic groups and show the persistence of contextually-rooted group differences even as socio-economic conditions change (e.g., Buttenheim & Nobles, 2009; Malhotra & Tsui, 1996; Zang, 2008). Ethnic-specific demographic responses to transitional changes have been shaped by their earlier demographic histories and the shifting status and differing stakes of different ethnic groups in Central Asian societies, and corresponding differences in opportunities and challenges in the new socio-political context. They may have also been affected by massive ethnic-specific emigration from the newly independent Central Asian nations (Agadjanian, Nedoluzhko, & Kumskov, 2008; Mansoor & Quillin, 2007).

Central Asia's ethnic mosaic is diverse and the difference in demographic behaviour between native groups, such as Kyrgyz and Uzbek, on the one hand, and ethnic Russians and other European-origin groups (henceforth Europeans) are often quite pronounced. In the historical-cultural context of Kyrgyzstan, Europeans have been historically most advanced in the process of demographic transition. In contrast, Uzbeks, Kyrgyzstan's largest ethnic minority, with stronger and conservative religious and cultural values, have been most traditional

demographically. The demographic patterns for the Kyrgyz, the nation's titular and largest ethnic group, fall in the middle of the traditional-modern spectrum (Agadjanian, Dommaraju, & Nedoluzhko, 2013; Nedoluzhko & Agadjanian, 2015b). Specifically, studies have documented a pattern of early marriage but lower fertility of the Europeans, compared with later marriage but higher fertility among the native groups (Agadjanian, Dommaraju & Glick, 2008; Clifford, Falkingham & Hinde, 2010; Spoorenberg, 2013).

Projecting these ethnic distinctions onto marital stability, we hypothesize that the risk of marital dissolution will be highest for the Europeans, followed by Kyrgyz, and then Uzbeks (Hypothesis 2).

Gender and marital instability

The third dimension of marital instability that we are interested in is gender. In transitional societies, changes have spurred multiplication of gender ideologies influenced by both local and international inputs, but these have not translated as better opportunities for women (Johnson & Robinson, 2006). There has been a shift towards restoration of male privilege in various spheres, decline in women's roles in the public spheres, and positive structural changes such as expansion of education has been countervailed by higher risk of unemployment for women (Ismailbekova, 2014; Johnson & Robinson, 2006; Kandiyoti, 2007). In such contexts, the increased sense of freedom and liberalization, accompanied by resurgent traditionalism and structural economic and social changes are likely to moderate the gendered influence of marital stability.

Two key determinants of marital stability—education and employment—affect men and women differently (Kalmijn & Poortman, 2006). While the education gradient for men is usually negative, the gradient for women can be in either positive or negative (Jalovaara, 2001; Maslauskaitė et al., 2015; Ono, 2009). The direction of the gradient for women depends on the societal context and on cost of divorce (social, legal, and economic) as well as on the prevailing levels of marital dissolution. Following Goode (1963), research has shown that when cost of divorce is high, women with higher education have higher rates of divorce, but when the cost becomes low, women with lower education have higher rates of divorce (Härkönen & Dronkers, 2006).

Similar to education, the effect of employment on marital stability varies for men and women. Some studies have documented a positive impact of women's employment (Jalovaara, 2001; Schoen, Rogers & Amato, 2006; Teachman, 2010), but other studies show this impact to depend on marital quality, commitment and satisfaction (Sayer & Bianchi, 2000; Schoen et al., 2002). Cross-national research has emphasized the role of gender equality, especially in household division of labour, in the effect of employment on marital stability (Frisco & William, 2003; Neugart, 2012; Pettit & Hook, 2009; Poortman & Kalmijn, 2002). As Cooke et al. (2013) note, women's employment might increase the risk of divorce in gender-unequal societies, while in more gender-equal settings women's employment might, on the contrary, reduce the risk.

Accordingly, we hypothesize that higher education and gainful employment would significantly increase the risk of divorce or separation among women but not men (Hypothesis 3).

Data and methods

The data are from a nationally representative survey conducted in 2011 -2012 titled “Socio-Economic and Migration Processes in Kyrgyzstan”. The survey sampled households using a multi-stage cluster sampling procedure. In each sampled household, one adult aged 18-50 was randomly selected to participate in the survey. Besides information on individual and household characteristics, the survey collected detailed histories on marriage, education, employment and migration. The survey interviewed 2,032 men and women aged between 18 and 50. The analysis is based on data from 1,347 men and women who had married at least once and had complete information on all the variables of interest. Out of these, 557 were men and 790 were women. Sample characteristics are presented in Table 1.

We analyse the risk of first marriage ending in divorce or separation and include predictors to test our hypotheses. We limit the analyses to first marriages as only six percent of ever-married respondents had married more than once. We subdivide the respondents into five marriage cohorts with earliest cohort representing respondents who married before 1991 and the most recent cohort for those marrying after 2005. Ethnicity is categorized as Kyrgyz, Uzbek, and European. The latter group includes mainly Russians and a smaller number of respondents of other European origin. A few respondents who do not fit in any of these three ethnic categories were excluded. The next set of predictors in the model includes gender, employment and education. Employment is measured as the number of months respondents were employed in a 12-month period that ended 12 months before the survey month. As expectation of divorce can lead to a higher likelihood of employment (Härkönen, 2014; Özcan & Breen, 2012), inclusion of a lagged indicator for employment minimizes this potential endogeneity. Education is operationalized as a dichotomy—below tertiary vs. tertiary or above—and is measured based on highest education level attained in a given year. Both education and employment are time-varying measures.

The models control for two time-varying characteristics: number of children and area of residence. Area of residence is classified as big city, town and village. The survey did not collect retrospective information on household economic status at the time of marriage or during marriage. As a rough proxy for respondents’ economic background before marriage, we use father’s or step-father’s occupation when the respondent was about 15 years old. Respondent’s age at marriage and marital duration are also included in the models.

As is common in the study of divorce, we combine those who are divorced and separated into a single category (henceforth we use divorce or marital dissolution to refer to either divorce or separation). The event of interest is whether a respondent’s marriage ends through divorce. The observations with

intact marriages at the time of the survey are right censored. For descriptive analysis, we use survival estimates obtained using Kaplan-Meier method. For multivariate analysis, we use discrete-time event-history logistic regression which is well suited to handle censored data and non-normal distribution of time (see Allison 2010; Singer and Willet 2003, for description of this modelling approach). In the model, each person contributes multiple observations based on their duration at risk of divorce. The risk of divorce starts from the time of marriage and ends at the time of divorce; observations with no marital dissolution are censored at the time of the survey. Those whose marriage ends in the death of the spouse are censored at the time of widowhood.

The time is measured in months. A comparison of AIC and SC statistics for linear, quadratic and log form of duration at risk suggested that log of time fits the model best, and therefore duration at risk is modelled using log of time. For each month at risk a person would contribute one observation. In total there were 214,644 observations (person-months). The statistical model can be expressed as follows.

$$\ln\left(\frac{P_{it}}{1 - P_{it}}\right) = \alpha_t + \beta X_{it} + \gamma Y_i$$

where P_{it} it is the conditional probability of an individual i divorcing at time t given that he or she has not already divorced; α_t is the function of time t that is to be estimated; X_{it} denotes time-varying covariates and Y_i time-invariant covariates, including ethnicity; and β and γ are the vectors of the coefficients to be estimated. To test Hypothesis 3 we fit an interaction model that tests for differences in the effect of education and employment by gender. In the interaction model, in addition to the covariates, product terms of gender and education, and gender and employment, are included one at a time. The estimates are presented in the form of odds ratios and have the same interpretation as in logistic regression models.

Results

In the survey, among men and women who had married at least once about 14.4% and 15.4%, respectively, were divorced or separated. These percentages are higher than the earlier reported estimates from the 2009 Census and 2012 DHS. Our survey percentages are based on ever-married respondents and are not directly comparable to the census (peopled age 15 and over) or the DHS (all respondents aged 15 to 49). The shares divorced or separated in our survey for all respondents age 18 to 50 is 5.8% for men and 9.8% for women, which are much closer to the Census and the DHS figures.

Figure 2 presents the probability of marital dissolution between 1987 and 2011. It addresses Hypothesis 1 and shows an increase in divorce from the late 1980s up to 1993-95, a period in which, as can be recalled from Figure 1, marriage rates were falling. There was a slight dip between 1993-95 and 1996-98, following which the probability of divorce continuously but gradually increased till the end of the observation period. Overall, the trends suggest a steep rise in the period of

acute post-Soviet crisis and a subsequent decline followed by much more gradual increase in the most recent period of stabilization.

Next we look at percent of marriages ending in divorces within 10 years of marriage for various marriage cohorts and groups using survival estimates (Figure 3). Panel 3a also addresses Hypothesis 1 and shows a clear difference for the two most recent marriage cohorts compared to the previous cohorts. Thus, for the recent marriage cohorts, more marriages ended in divorce within 10 years of marriage (around 15 to 20 percent compared to around 11 percent for earlier cohorts). The ethnic-specific trends displayed in Panel 3b conformed to Hypothesis 2, with nearly 35 percent of marriages among Europeans ending in divorce compared to about 10 percent among Kyrgyz and less than 5 percent among Uzbeks. For Hypothesis 3 we use time varying measures and these are analysed in the adjusted models.

Table 2 displays unadjusted and adjusted odds ratios from the discrete-time logistic regression models for the whole sample. Fitting with Hypothesis 1, the results suggest that more recent marriage cohorts have higher odds of divorce compared to those married before 1990, even after adjusting for the covariates. This is similar to the cohort estimates presented in Figure 3a. Hypothesis 2 linked modernization with ethnic-specific risk of marital dissolution. The estimates for ethnicity in the model echo the pattern displayed in Figure 3b and support this hypothesis. Though the magnitude of the ethnic differences is reduced in the adjusted models, they are still large and significant. The three ethnic groups stand in the predicted order: net of other factors, the odds of marital dissolution among European-origin groups are 51 percent higher than those among Kyrgyz, while these odds are 61 percent lower among Uzbeks, compared to the titular group.

The effects or non-effects of other covariates are also noteworthy. In the unadjusted models, tertiary or above education and full employment are associated with higher odds of divorce. However, in the adjusted models both education and employment are not significant. In the next part of the analyses, we examine whether the effect of education and employment differs by gender. The number of children has a strong influence on risk of divorce with lower odds for respondents with a larger number of children compared to those with no children. In fact, even those with two children have higher odds of divorce compared to those with either three or four children (results not shown). There is also a difference among those living in big cities compared to those residing in villages, with the latter having significantly lower odds of divorce. Age at marriage and father's occupation have no statistically significant effect on divorce.

Next, to test Hypothesis 3 on gender specific effects of education and employment, we fit a model with interaction terms for gender and education and employment. Table 3 presents interaction estimates for gender and education, and gender and employment, controlling for other covariates (the full results are presented in the appendix Table A.1). Both interaction estimates are significant suggesting a difference between men and women in the effects of education and employment on divorce. Tertiary or above education and full employment have

stronger positive influence on divorce among women than among men. The odds of experiencing divorce among women with tertiary or above education, for instance, are double that of men with tertiary or above education. Similarly, the odds of divorce among women with full employment are 50 percent higher than those among fully employed men. But, for women with less than tertiary education or not working the likelihood of divorce is lower than for men with comparable characteristics. The results from the interaction model support Hypothesis 3 on the gendered nature of divorce propensities with higher education and full employment significantly increasing the risk of divorce for women compared to men.

Discussion and conclusion

In comparison to research on other aspects of demographic behaviour, such as entry into marriage or fertility, there have been few studies on marital instability in transitional societies. Drawing on uniquely rich data from Kyrgyzstan, the study examined marital instability in a transitional context where people face a multi-layered mix of changing structural, economic, socio-political realities. In such contexts, individuals are exposed to different and often conflicting models of family behavior—those based on new, western values and those rooted in traditional values, including those that were suppressed during the previous era. In all, the results of the analysis highlighted both the universal and unique features of demographic change as it has unfolded in transitional Central Asia. The results also demonstrated the effect of dramatic transition on the pace and direction of demographic change as exemplified by dynamics of marital instability.

We specifically examined three dimensions of marital instability. A key finding on the trends over time, the first dimension of interest, is that of increasing marital instability among most recent marriage cohorts. For men and women who married since 2001 the divorce rate is distinctly higher than for earlier marriage cohorts. The increasing instability occurred in the period of gradual improvements in the economy; during that period entry into marriage, especially of traditional type, was declining (Nedoluzhko & Agadjanian, 2015b) and cohabitation was on the rise (Agadjanian & Dommaraju, 2011). These two trends—the increasing marital instability and decreasing marriage rates—during the period of economic stabilization are inherent to the process of demographic transition and modernization. Besides the specific context of Central Asia, our results contribute to the broader scholarship of demographic modernization, which suggests that a rise marital instability is often accompanied by postponement of marriage or non-marriage (Lesthaeghe, 2010).

Our findings can also be related to transitional societies which are often characterized by the interaction and confluence of multiple and opposing forces. In the case of Central Asia, the forces include re-traditionalization and increasing religiosity in the public sphere, on the one hand, and of those ideas and images associated with greater individualism, consumerist aspirations, alternative lifestyles and moral values, on the other (Kirmse, 2013; Louwa, 2013; McGlinchey, 2009; Spéder & Kapitány. 2014). Although we cannot analyse respondents' values

and beliefs directly with the data at hand, the detected evidence of increasing instability for the most recent marriage cohorts serve as a strong indicator that the influence of re-traditionalization on family behaviour has been modest despite its increased public display.

The second dimension that the paper examined was ethnic-specific risk of divorce. The results showed higher levels of marital instability among the European-origin group and lower risk among the Uzbeks, the group with strongest religious conservatism. The risk of divorce among the titular Kyrgyz stood between those of Europeans and Uzbeks, mirroring their relative position in the process of demographic transition. As elsewhere, ethnic or racial differentials in demographic behaviour, including marital dissolution, are driven by historical and cultural factors (Kposowa, 1998; Lyngstad & Jalovaara, 2010; Sweeney & Phillips, 2004). At the same time, ethnic differentials in demographic behaviour might also be infused with the new realities of transitional national ideologies and the position of groups in the new social order. However, our results suggest that despite the perturbations of transition the long-term ranking of the three groups, determined by the degree of demographic modernization, has persisted. The findings therefore illustrate important demographic continuities in transitional Central Asia.

The third dimension of marital instability that we examined was gender. The findings on gender differences in the effect of education and employment could be seen as reflecting the transformation of the value system and increasingly gendered nature of divorce. Women with higher education and full employment had considerably higher risk of marital dissolution compared to men with similar education and employment levels regardless of other characteristics. We suggest that the positive gradient of the effect of education and employment for women should be interpreted in the context of changing gender norms in Central Asia. While the Soviet ideological project elevated women's status, this did not necessarily translate to changes of gender ideology typically associated with modernity (Ismailbekova, 2014; Kandiyoti, 2007). However, post-Socialist transition has led to rising aspirations, spread of new values associated with egalitarian gender roles, but also to increasing economic strains and reconstruction of patriarchal gender roles (Heyat, 2004). In this setting of seemingly conflicting economic and cultural pressures, education and employment do not appear to act as stabilizing forces for marriage. The findings could also be related to the arguments that emphasize gendered aspects of bargaining within marriage and the need for higher resources for women to exit marriages (c.f. Özcan & Breen, 2012; Sayer, England, Allison, & Kangas, 2011).

The results of this study are based on rich survey data with information on marital, employment and education histories, besides demographic and other characteristics of the respondents. This information allowed us to establish trends and differentials in divorce risks and to test for gender effects. Our data, however, do not have detailed information on the spouse or on characteristics of previous marriages. A fuller understanding of marital stability would require information

on both spouses as well as marital quality indicators. We acknowledge this limitation.

Finally, our analysis focused on only one demographic outcome – marital stability. In complex transitional societies changes in different aspects of demographic behaviour do not necessarily move in the same direction. This makes it difficult to link the trends in marital dissolution to other demographic developments in Kyrgyzstan. For example, while our study documented a post-Soviet decrease in marital stability, fertility rates have stabilized or even increased during the same period. From a conventional demographic modernization perspective, these two trends are not compatible. However, the observed trends in fertility rates have complex explanations from the role of data artefacts, migration, and tempo adjustments to increase in non-marital births (Spoorenberg, 2015, 2017). A comprehensive analysis of demographic changes in Kyrgyzstan and the rest of Central Asia would need to consider the multiple societal forces shaping individual behaviours in various aspects of people's lives. Although such an analysis lies beyond the aims of this study, our findings on marital stability offer important guidance for future research on the region's complex demographic experience.

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Table 1: Sample characteristics, percent or mean, Kyrgyzstan, 2011-12

	Not divorced or separated	Divorced or separated
Marriage cohort		
1976-1990	28.4	27.2
1991-1995	20.4	23.8
1996-2000	18.7	18.8
2001-2005	13.6	17.8
2006-2011	18.8	12.4
Ethnicity		
Kyrgyz	73.8	66.8
Uzbek	18.5	7.9
European-origin	7.7	25.3
Highest education^a		
Below tertiary	80.0	76.2
Tertiary or above	20.0	23.8
Employment^a		
Not employed	45.2	27.7
Employed	54.8	72.3
Father's occupation		
Managers and qualified specialists	13.0	12.9
Other non-agricultural	33.3	47.0
Agricultural	38.2	23.3
Nonworking, not specified	15.5	16.8
Children ever born^a		
None	5.9	19.8
One	13.5	31.2
Two	23.9	25.7
Three	27.7	14.4
Four or more	29.0	8.9
Area of residence^a		
Big city	16.7	28.2
Town	13.0	18.8
Village	70.3	53.0
Gender		
Men	41.6	39.6
Women	58.4	60.4
Age at marriage, mean	21.6	21.9
Marital duration (years), mean	14.3	6.0
Number of respondents	1145	202

Notes:

^a Measured at the time of the survey. The multivariate analyses use time varying measures of these variables.

Table 2: Unadjusted and adjusted odds ratios (OR) of divorce or separation, Kyrgyzstan, 2011-12

	Unadjusted OR		Adjusted OR	
Marriage cohort				
1976-1990 (ref)	1		1	
1991-1995	1.50 *		1.54 *	
1996-2000	1.70 *		1.33	
2001-2005	3.36 **		2.43 **	
2006-2011	4.31 **		3.41 **	
Ethnicity				
Kyrgyz (ref)	1		1	
Uzbek	0.43 **		0.37 **	
European-origin	3.32 **		1.51 *	
Highest education^a				
Below tertiary	1.00		1.00	
Tertiary or above	1.34 +		0.75	
Number of months working in 12 months, lagged by 12 months^a				
0 months (not working)	1		1	
1 to 11 months	1.35		1.12	
12 months	1.51 **		1.19	
Father's occupation				
Managers and qualified specialists (ref)	1		1	
Other non-agricultural	1.35		1.37	
Agricultural	0.54 **		0.81	
Nonworking, not specified	1.02		1.31	
Number of children alive^a				
None (ref)	1		1	
One	0.42 **		0.35 **	
Two	0.15 **		0.16 **	
Three	0.04 **		0.05 **	
Four or more	0.02 **		0.03 **	
Area of residence^a				
Big city (ref)	1		1	
Town	0.81		0.85	
Village	0.40 **		0.60 **	
Gender				
Men (ref)	1		1	
Women	0.99		1.10	
Age at marriage	1.06 **		1.02	
Marital duration, log	0.76 **		1.67 **	
N (person-months)	214644			

Notes:

Significance: ** p <= 0.01; * p <= 0.05; + p<=.10

^a Time varying measures

Table 3: Adjusted odds ratios of divorce for women compared to men, interaction estimates of gender and education and gender and employment, Kyrgyzstan, 2011-12

Odds ratios of divorce for women compared to men	Odds ratios	Significance
Highest education		
Below tertiary	0.94	**
Tertiary or above	2.08	
Employment status		
0 months	0.76	**
1 to 11 months	0.68	
12 months	1.52	

Notes:

a. Joint test for significance. * $p \leq 0.05$.

b. The interaction models are adjusted for the same set of covariates as in Table 2.

Figure 1: Number of marriages per thousand population, Central Asia, 1989-2013

Source: Based on data from TransMonEE (2015)

Figure 2: Predicted probability of divorce or separation for first marriages by year, with 95 percent confidence interval, Kyrgyzstan, 1987-2011

Figure 3: Percent of marriages ending in divorce or separation, by marriage cohort and ethnicity

A: Marriage cohort

B: Ethnicity

Appendix. Table A.1: Parameter estimates of divorce from interaction models for gender, education, and employment

	Gender* education		Gender* employment	
Marriage cohort				
1976-1990 (ref)	1		1	
1991-1995	0.43	*	0.44	*
1996-2000	0.29		0.31	
2001-2005	0.90	**	0.94	**
2006-2011	1.24	**	1.28	**
Ethnicity				
Kyrgyz (ref)	1		1	
Uzbek	-1.00	**	-0.97	**
European-origin	0.39	*	0.40	*
Highest education				
Below tertiary	1		1	
Tertiary or above	-0.79	*	-0.32	
Gender * education				
Women*Tertiary or above	0.79	+	-	
Number of months working in 12 months, lagged by 12 months				
0 months (not working as ref)	1		1	
1 to 11 months	0.12		0.11	
12 months	0.17		-0.25	
Gender * employment				
Women* working 1 to 11 months	-		-0.11	
Women* working 12 months	-		0.69	*
Father's occupation				
Managers and qualified specialists (ref)	1		1	
Other non-agricultural	0.32		0.32	
Agricultural	-0.22		-0.19	
Nonworking, not specified	0.26		0.27	
Number of children alive				
None (ref)	1		1	
One	-1.06	**	-1	**
Two	-1.86	**	-1.81	**
Three	-3.09	**	-3.02	**
Four or more	-3.60	**	-3.53	**
Area of residence				
Big city (ref)	1		1	
Town	-0.13		-0.18	
Village	-0.51	**	-0.53	**
Gender				
Men (ref)	1		1	
Women	-0.06		-0.27	
Age at marriage	0.02		0.02	
Marital duration, log	0.51	**	0.50	**

Notes:

Significance: ** p ≤ 0.01; * p ≤ 0.05; + p ≤ 0.10