Between Tradition and Modernity: Marriage Dynamics in Central Asia

Lesia Nedoluzhko

Victor Agadjanian

Abstract

The demographic literature on union formation in post-communist Europe typically documents

retreat from marriage and increase in cohabitation. However, sociological and anthropological

studies of post-Soviet Central Asia often point to a resurgence of various traditional norms and

practices, including those surrounding marriage, that were suppressed under the Soviet rule. We

engage these two perspectives on union formation by analyzing transition to first marriage in

Kyrgyzstan both before and after the collapse of the USSR. We use uniquely detailed marriage

histories from a nationally representative survey conducted in 2011-2012 to examine the

dynamics of traditional marital practices among that country's two main ethnic groups – Kyrgyz

and Uzbeks, focusing on trends in arranged marriages and in marriages involving bride

kidnapping. Whereas the analysis reveals instructive ethnic and period differences, it also

indicates an overall decline in the risks of both types of traditional marriage practices in the post-

Soviet era. In fact, although the decline has characterized all marriage types, it was more

substantial for traditional marriages. We interpret these trends as evidence of continuing

modernization of nuptiality behavior in the region.

Introduction

Transformation of nuptiality is an inalienable ingredient of modernity. Although changes in nuptiality regimes and union formation take different shapes in different societies, for many settings, including those of the former USSR, the demographic literature typically documents declining marriage rates and increase in non-marital cohabitation (e.g., Gerber and Berman 2010; Katus et al. 2008; Kennedy and Bumpass 2008; Kierman 2001). In societies with traditionally high prevalence of arranged marriages, i.e., marriages in which the decision to marry is not made by the groom and the bride, studies point to declining involvement of parents in marriage decisions and a rising share of marriages based on the groom's and the bride's choice (Bahramitash and Kazemipour 2006; Ghimire et al. 2006; Heaton et al 2001; Thornton et al. 1994; Zang 2008). These fundamental shifts in nuptiality regimes are said to be both products and engines of broader social and demographic changes, such as the rising status of women and declining fertility (Feyisetan and Akinrinola 1991; Ghimire and Axinn 2013).

One part of the world that does not seem to fit neatly into this developmental paradigm is the post-Soviet Central Asia, a predominantly Muslim region that comprises five nations with a total population of some 65 million people. The sociological and anthropological literature on this region often points to retraditionalization of marital customs and practices after the collapse of the Soviet system in the early 1990s. Specifically studies note the resurgence of polygamy, increase in early marriage, marriage among close relatives, religious marriage, traditional wedding ceremonies, and bride payments throughout the region (e.g., Dadabaev 2007; Handrahan 2001; Koroteyeva and Makarova 1998; Roche and Hohmann 2011; Werner 1997). The scholarship on Kyrgyzstan, the focus of our study, also depicts a major revival of bride kidnappings (e.g., Amsler and Kleinbach 1999; Kleinbach 2003). At the same time, several

recent studies have produced evidence of a demographic modernization of Central Asia, such as an increase in non-marital fertility, spread of cohabitation, marriage postponement, and retreat from marriage (e.g., Agadjanian et al. 2013; Denisenko 2004; Denisenko and Kalmykova 2011; Dommaraju and Agadjanian 2008; Nedoluzhko 2011)—i.e., the trends that to a greater or lesser extent have characterized other, non-Muslim parts of the former Communist world.

The changing nuptiality behavior is part of the general societal and cultural transition propelled by the breakup of the USSR and the transformation of the former Soviet republics into independent nations. Thus, the literature on Central Asia has devoted considerable attention to what is often characterized as a retreat from the modernizationist policies of the Soviet era and a revival of pre-Soviet traditions and norms, especially those rooted in the Islamic religion, and a concomitant retraditionalization of many aspects of societal life (e.g., Brusina 2008; Dadabaev 2007; Koroteyeva and Makarova 1998; Louw 2013; Phillips and James 2001; Tazmini 2001). At the same time, it has also been argued that the breakup of the Soviet Union has led to greater openness of the region to Western cultural and social influences (e.g., Agadjanian and Dommaraju 2011). These parallel, even if conflicting, processes have resulted in a unique mix of modernity and tradition in the region.

Engaging the modernization *vs.* retraditionalization debate, our study seeks to examine how the balance between different marriage types has changed in Kyrgyzstan, a Central Asian nation of some 5.5 million inhabitants with a PPP-adjusted Gross National Income per capita of $2260 (The World Bank 2013), since it became independent from the Soviet Union in 1991. The study covers the late Soviet period as well as two post-Soviet decades, the first of which was marked by radical socio-political transformations and dramatic economic decline, while the second – by a gradual social stabilization and economic recovery and growth. Using unique recent survey

data, we analyze marriage dynamics by estimating competing risks of arranged *vs.* non-arranged (choice) marriage among Kyrgyzstan's two largest Muslim ethnic groups – Kyrgyz, the nation's titular ethnicity, and Uzbeks, its biggest minority. For ethnic Kyrgyz – a historically nomadic group, we also examine the dynamics of marriage involving bride kidnapping, a traditional, pre-Islamic practice common among nomads in Central Asia and elsewhere which can be of either forced or consensual nature.

Conceptualization and Hypotheses

In the rich cross-national literature on union formation, Central Asia has received little attention. Research on nuptiality in this part of the post-Soviet world is scant and often limited to examinations of aggregate marriage trends (e.g., Denisenko 2004; Denisenko and Kalmykova 2011). Earlier studies have been generally limited to contrasting natives and Europeans (i.e., descendants of voluntary and forced migrants mainly from Russia), two population segments with vastly different demographic backgrounds (e.g., Agadjanian 1999; Agadjanian and Makarova 2003; Agadjanian et al. 2008; Nedoluzhko and Agadjanian 2010). Only one recent study looked at ethnic-specific probabilities of first marriage among indigenous groups in Kyrgyzstan and Kazakhstan (Agadjanian et al. 2013). That study showed an overall decline in first marriage probabilities in a decade-and-a-half after the dissolution of the Soviet Union, but due to the lack of appropriate data the authors could not investigate trends in different types of marriage.

Our study aims to contribute to the literature on nuptiality of autochthonous Central Asian ethnic groups in general and on the dynamics of traditional marriages, in particular. We compare trends in arranged and non-arranged marriages among the two largest native ethnic groups in

Kyrgyzstan – Kyrgyz and Uzbeks – which according to the 2009 national population census accounted for 70.9% and 14.3% of the country's population, respectively (Mkrtchyan and Sarygulov 2011: 85). We define as "arranged" those marriages in which at least one of the spouses (mostly the wife) did not take part in the marriage decision. For ethnic Kyrgyz we also analyze trends in marriages involving bride kidnapping. We differentiate between marriages with forced kidnapping, which by definition are a specific type of arranged marriage, and marriages with consensual, or mock, kidnapping (elopement). We contrast kidnapping-based marriages with marriages which did not involve bride kidnapping. Non-arranged marriages and marriages without bride kidnapping are defined in our study as choice marriages, i.e. marriages in which both the bride and the groom participated in the marriage decision.[1] We refer to arranged marriages and marriages involving forced bride kidnapping as traditional marriage types. In our conceptualization, mock kidnapping represents an intermediate marriage type which combines features of a traditional marital practice with those of choice marriage.

While no demographic analyses of arranged marriages in Central Asia have been attempted, considerable sociological and anthropological literature has focused on emotional, ethical, social, and gender implications of bride kidnapping among the region's historically nomadic groups - Kazakhs and, especially, Kyrgyz (e.g., Amsler and Kleinbach 1999; Borbieva 2012; Brusina 2008; Handrahan 2004; Kleinbach and Salimjanova 2007; Werner 2009). There have been attempts to estimate the incidence of bride kidnapping in independent Kyrgyzstan, yet these

---

[1] We should note that in our definition "choice marriages" are not limited to marriages that result from decisions made solely and even primarily by the groom and the bride. In the context of Kyrgyzstan, as in many similar contexts, inputs from parents, other relatives, and even non-relatives typically play important roles in most, if not all, marriages.

attempts are not based on representative samples (e.g., Amsler and Kleinbach 1999; Kleinbach 2003; Kleinbach et al. 2005).

Our hypotheses regarding temporal trends in traditional marriage address the modernization *vs.* retraditionalization dilemma. Thus under the modernization assumption, the incidence of traditional marriage should decline. On the contrary, the retraditionalization scenario would imply an increase in the incidence of traditional marriage. At the same time, from the modernization perspective, the dynamics of mock kidnapping could differ from those of arranged marriage and marriage involving forced-kidnapping. If marriage with mock kidnapping is a transitional form between marriage based on forced kidnapping and choice marriage, then, under the modernization scenario, the incidence of marriages involving mock kidnapping should first increase and then decrease.

Additionally, changes in the dynamics of traditional marriages could be group-specific: groups that are culturally more conservative could display greater adherence to arranged marriages than culturally less conservative groups. Here our hypotheses are guided by the assumption that Uzbeks, a traditionally sedentary agricultural people with a longer and stronger influence of Islam, are in general more culturally and demographically conservative in comparison to Kyrgyz, traditional nomads, whose sedentarization and Islamization are historically recent. The adherence to traditional practices among Uzbeks may also have been enhanced by their minority status in a country where the titular group is increasingly favored. Thus several studies suggest that ethnic or other minorities in settings where they feel marginalized or threatened often tend to adhere to their traditions, including those related to marriage and reproduction, as a means of preserving their group identity and cohesiveness, and eventually their numerical strength (e.g., Anson and Meir 1996, Fargues 2000). We therefore

expect that Uzbeks, *ceteris paribus*, will be more inclined to retraditionalization of marital

practices. Accordingly, we hypothesize that the incidence of arranged marriage among the two

ethnic groups in our study will change at different pace. Specifically, under the

retraditionalization assumption, Uzbeks should exhibit a stronger revival of arranged marriages

whereas, under the modernization scenario, they should have a slower decline in arranged

marriages, compared to Kyrgyz.

The anticipated trends in different marriage types may not manifest themselves uniformly

throughout the entire post-Soviet period. Thus, it is possible that reemergence of traditional

marriage forms would be particularly pronounced in the early years after the collapse of the

Soviet Union, when the decades-long restrictions on traditional norms and practices, of both

Islamic and pre-Islamic nature, were swiftly removed. After this initial traditional revival,

marriage practices could be expected to settle back into a modernizationist path. Also, divergent

trends in arranged vs. choice marriages in the early post-Soviet period may reflect the impact of

the economic crisis that characterized it. Thus, although the literature typically suggests a decline

of marriage during hard economic times (e.g., Frejka 2008; Galloway 1988; Perelli-Harris 2008;

Weir 1984), bride kidnapping could have been fostered by the post-Soviet crisis because

kidnapping, which is typically followed by a quick and simplified wedding with a reduced

brideprice, might help to lower the financial burden of marriage (see e.g., Handrahan 2004;

Kleinbach and Salimjanova 2007; Lockwood 1974; Werner 1997).

Data

Our data come from the nationally representative cluster household survey "Socio-Economic and

Migration Processes in Kyrgyzstan" conducted in 2011-2012. The survey interviewed men and

women aged 18-49, one respondent per household (N=2032). The survey dataset contains respondents' marital, childbearing, migration, employment, and educational histories as well as various other characteristics of the respondents, of their parents and spouses/partners (if any), and of their households at the time of interview. To estimate risks of entry into marital union, we employ the uniquely rich information from respondents' marital histories. To our knowledge, the survey that supplies our data is the first nationally representative sample survey that distinguished between arranged marriages and choice marriages in Central Asia. It is also a pioneering survey of this kind in assessing the incidence of forced and mock bride kidnapping.

To account for the effects of individual economic characteristics and place of residence, we use information on the respondents' employment, educational, and migration experiences. We restrict the analysis to two autochthonous Central Asian ethnicities – Kyrgyz and Uzbeks. The survey sample also included Russians and other respondents of European roots; these respondents are not part of our analysis as they are very unlikely to experience arranged or forced marriages. We also exclude from the analysis representatives of other ethnic groups whose numbers in the sample are too small to allow for sound comparisons.

Several limitations of our data must be acknowledged. Most importantly, detailed information on union type, i.e. arranged, forced, or choice marriage, is available only for current unions. We do not have such information for previous unions (if any) and therefore exclude from the analysis respondents who were in a union at the time of survey but had had an earlier official or religious marriage and those who were not in a union at the time of the interview but had been married before (in total, 13.1% of Kyrgyz and 7.7% of Uzbeks in our sample). To test whether the exclusion of these respondents from the analysis affected our results, we estimated alternative sets of models under different imputation assumptions (including the extreme assumption that all

dissolved unions were arranged) and compared the results to the results of the models limited to respondents with no history of dissolved marriages. These comparisons revealed no substantial discrepancies between the results of the models presented below and those of the alternative models.

Other limitations concern the covariates used in the analysis. Thus, the survey did not collect data on socioeconomic status of respondents' families of origin; we use "father's occupation" as a proxy for family socioeconomic background. Also, the survey collected information only on respondents' five most recent occupations (including occupation at the time of interview), i.e. employment histories of respondents who changed more than five occupations are truncated. However, the share of respondents for whom five occupations were recorded and thus who potentially could have richer employment histories is very small, constituting only 2% of the total sample and 3% of ever-employed respondents. Finally, the survey accounts for years, but not months, of start and completion of respondents' various educational stages. In constructing the "educational enrollment" covariate we assume that enrollment followed a standard school year calendar. The timing of other events in respondents' lives is defined with an accuracy of a month.

Method

We employ event-history analysis to model risks of entry into different types of marriage. This method allows us to examine the risks dynamically and to account for the effects of time-varying covariates. We fit multiplicative intensity regression (or proportional hazard) models with a piecewise-constant baseline hazard (Hoem 1971; 1976). In addition, we model competing transitions to different types of marriage jointly and compare the effects of various factors across

these transitions using an extension of this approach described in Hoem and Kostova (2008). All models are fitted in the STATA software.

The dependent variable in the analysis is the occurrence of first marriage, which includes both officially registered marriages and marriages formed through a religious ceremony but without official registration (the latter category constitutes only 3% of all current marriages). Respondent's age, or, more precisely, the number of months elapsed since his/her 16th birthday, is the basic process time variable. We define five three-year age groups from 16 to 30 and a broader age group of those older than 30. We lump all ages above 30 together because in Kyrgyzstan, as in many similar settings, first marital unions are rarely formed after age 30.

Guided by our hypotheses on the trends in marriage formation, we divide the time of observation into three approximately equal periods: 1980-1990 (i.e., before the disintegration of the USSR), 1991-2001 (that roughly corresponds to the period of post-Soviet crisis), and 2002-2011 (a period of stabilization and slow economic growth). Given the age range of the survey sample,[2] the first period does not include ages over 30; there are also few exposure months and no marriage occurrences in the age group 28-30 in this period. The second period does not include ages above 35. Finally, the last period includes the entire age range of up to age 49. Because most first marriages take place at young ages, the uneven distribution of older respondents across the time periods should not be a problem.

To account for ethnic differences in the transition to arranged vs. non-arranged (choice) marriage, the corresponding models are standardized for respondents' ethnicity – Kyrgyz or Uzbek. Other control variables are respondent's gender, employment, educational enrollment

---

[2] The oldest respondents in our data turned 16 in 1978, but there were no marriage occurrences before year 1980.

and attainment, and type of place of residence. Educational attainment and enrollment of respondents' as well as their employment status and place of residence are time-varying covariates. The lowest educational level in our analysis is basic secondary education; this category also includes several drop-outs from secondary school. For the employment status of respondents we define two levels: non-employed and employed. The place-of-residence covariate has three levels: the capital city (Bishkek), other urban, and rural.[3] This covariate accounts for all relocations of respondents within the country; observations are censored at the time of first migration abroad. We exclude from the analysis 17 cases of respondents who moved into Kyrgyzstan from the neighboring countries – Uzbekistan and Tajikistan – after age 16.

Finally, the socioeconomic status of respondent's family of origin is approximated by the occupation of his/her farther or stepfather when the respondent was approximately 15 years old. This time-fixed covariate differentiates among three occupational groups: higher status occupations (e.g., managers and highly qualified specialists), other non-agricultural occupations, and agricultural occupations. It also includes a "non-working, not specified" category which constitutes about 12% of the sample and is comprised of respondents whose fathers were not working or were unemployed, respondents who did not know their fathers' occupation, and respondents whose fathers were not alive or not around when they were 15 years old. The

---

[3] We experimented with more categories for place of residence by additionally estimating risks for residence in Osh, Kyrgyzstan's second largest city, and subdividing urban and rural settlements into those located in the northern and southern parts of the country. The use of more nuanced classifications revealed no informative associations and therefore we do not report corresponding results here (they are available upon request).

distribution of occurrences and exposure months by each covariate used in the analysis is presented in the appendix.

Results

Descriptive Results

Table 1 presents the distribution of respondents who were married at the time of interview by ethnicity, gender, and marriage cohort according to marriage type. It shows that more than 30% of marriages in our sample can be classified as arranged. The share of such marriages is noticeably higher among Uzbeks befitting the notion of greater traditionalism of that group. Among Kyrgyz, one-third of marriages involved bride kidnapping; in half of those marriages kidnapping was of forced nature. Period comparisons, the primary interest of our study, suggest that Uzbeks experienced an increase in the share of arranged marriages in the early post-Soviet period. There was also some increase in the share of arranged marriages among Kyrgyz men during that period, whereas the trend was opposite for Kyrgyz women. Similar gender differences can also be observed in the case of forced bride kidnapping. Notably, the shares of traditional marriages, i.e. arranged marriages and marriages involving forced bride kidnapping, were the lowest among respondents of both ethnic groups and both genders in the last marriage cohort.

Table 1 about here

Table 1 also depicts ethnic differences in marriage timing; in general Uzbeks have lower ages at marriage compared to Kyrgyz. Both ethnic groups exhibit marriage postponement, which is particularly pronounced among men. Uzbek women experienced an increase in early marriages

12

during the first post-Soviet decade but joined the common trend of marriage delay during the following period.

Multivariate Results: Arranged vs. Non-arranged Marriages

Table 2 displays the results of three multivariate models, presented as relative risks. Model 1 combines transitions to arranged and non-arranged (choice) marriages, i.e. the corresponding estimates refer to marriage in general, irrespective of its type. Models 2 and 3 are competing risks models, estimated separately. Paralleling the descriptive statistics presented in Table1, the results of all three models uniformly suggest that the risks of both arranged and non-arranged marriage declined considerably in the most recent period. At the same time there was no substantial or statistically significant difference in marriage risks between the first two time periods defined in our study—the late Soviet years and the first post-Soviet decade. It is also noteworthy that the decline in marriage risks was most pronounced in the case of arranged marriages compared to non-arranged marriages. Overall, these trends do not support the retraditionalization argument.

Table 2 about here

The results in Table 2 are also instructive with respect to ethnic differences. While no gap between Kyrgyz and Uzbeks is noticeable in the risks of transition to choice marriage, the results for arranged marriage (Model 3) show a strong ethnic contrast, with Uzbeks having almost 50% higher marriage risks compared to Kyrgyz. All three models in Table 2 uniformly suggest that women have higher risks of marriage compared to men, reflecting the fact that women enter marriage at younger ages than do men. The effect of employment status is not significant in any

of the models. Supporting the common finding that schooling conflicts with family responsibilities (e.g., Hoem 1986; Santow and Bracher 1994; Thornton et al. 1995), our results indicate considerably lower marriage risks among respondents in education compared to those of respondents who had finished education. This result is consistent in all three models. The estimates for educational attainment also uniformly suggest a higher propensity to marry among more educated respondents. The risks of non-arranged marriage are comparatively high in rural areas; at the same time, the risks of arranged marriage seem somewhat higher in cities. These results appear counterintuitive, but corresponding coefficients are not statistically significant precluding any inferences. Father's occupation has an effect only on arranged marriage. The highest risks of arranged marriage are among respondents whose fathers worked in agriculture, which probably reflects the effects of the traditional cultural background of a respondent's family of origin.

To provide a more refined insight into period effects and possible ethnic variations in these effects, we estimate joint models of arranged and non-arranged marriage. The joint modeling allows for direct comparison of risks across competing transitions. The essence of this analytical technique is the formal inclusion of the decrement as an extra factor in the model, a factor which can be interacted with any of the predictor or control variables (see Hoem and Kostova 2008).

We start the presentation of the results of joint modeling with an interaction between marriage type and ethnicity (Table 3). These and any other results of joint modeling should be interpreted as averages standardized for the other covariates. The results for ethnic differences essentially confirm those presented in Table 2: while there is no substantial difference in the risks of non-arranged marriage between the two ethnic groups considered in our analysis, Uzbeks have a 61% higher average risk of arranged marriage, compared to that of Kyrgyz. In addition,

Table 3 shows that the risks of choice marriage are higher than those of arranged marriage among both ethnic groups; however, the corresponding difference is noticeably smaller among Uzbeks, a more traditional of the two groups.

Table 3 about here

The results of the joint modeling for ethnic-specific period changes in marriage risks are shown graphically in Figure 1. As can be seen, the dynamics of both non-arranged and, especially, arranged marriage vary between Uzbeks and Kyrgyz. Particularly intriguing is the spike in risks of arranged marriage among Uzbeks during the first decade of the post-Soviet era, which was characterized by a generalized socio-economic crisis and a radical political transition. This result resonates with the findings on ethnic-specific demographic response to economic hardships around the time of the collapse of the Soviet Union. Thus Agadjanian and Makarova (2003) in their study of Uzbekistan explain an increase in marriage risks during hard economic times by inflation of dowry, a marital payment practice that is particularly typical for arranged marriages among Uzbeks. They argue that the "transformation of dowry requirements may have put pressure on families to marry their daughters earlier – before any further escalation of these requirements could take place" (p. 460).

Figure 1 about here

In contrast to Uzbeks, Kyrgyz experienced a decline in the risk of arranged marriage during the crisis years. Unlike the dowry-based Uzbek marriage, traditional marriage among Kyrgyz is

primarily centered on brideprice. There are no sociological or anthropological studies that trace the evolution of brideprice payments among Kyrgyz in the post-Soviet period. Although brideprice inflation probably was also happening in that period, it was likely not as high as that of dowry given the lower cultural pressures to marry on men than on women. Importantly, the lesser traditionalism of Kyrgyz would also suggest that they would be more likely than Uzbeks to forego or renegotiate downward the marital payments. It is also interesting that the first post-Soviet decade did not see any noticeable change in risks of non-arranged marriage in either ethnic group. Relative to the last Soviet decade, these risks increased slightly among Uzbeks while declining insignificantly among Kyrgyz. In contrast, the last period under observation registered clear declines in all four ethnicity-marriage type categories. The decline was particularly dramatic for arranged marriages among Uzbeks, reversing the rise of the previous decade. The magnitude of the decline in risks of arranged marriage was more modest among Kyrgyz, but because that decline started earlier, the risks of arranged marriage among the two groups converged in the last observation period. In comparison, choice marriage risks among the two groups displayed very similar trends, declining at almost the same rate between the first and second post-Soviet decades. As a result, the risks of both arranged and choice marriage declined in both ethnic groups between the first and last periods under observation, with the difference between the two types of marriage being similar in the 1980s and the 2000s. And for each type of marriage, the differences between Kyrgyz and Uzbeks were minimal in both of these periods.

Multivariate Results: Marriages with and without Bride Kidnapping

We now turn to the analysis of three competing transitions among ethnic Kyrgyz—to marriage without bride kidnapping, marriage involving mock bride kidnapping, and marriage involving

forced bride kidnapping. Table 4 shows the results of separate models for each transition. In general, these results are consistent with those presented in Table 2: with few exceptions, they also detect similar associations between the covariates and marriage risks in the different marriage types. Most importantly, the estimates for period effects again indicate little change in marriage propensities between the late Soviet years and the first post-Soviet decade but a considerable decline in the last observation period. It is also noteworthy that the recent decline was particularly strong in the case of forced bride kidnapping.

Table 4 about here

Among other noteworthy results, women have significantly higher marriage risks compared to men. The gender difference is particularly pronounced in the model of marriage resulting from forced bride kidnapping, which is an indication of a considerable age gap between partners in marriages of this type. The effect of employment is not significant; it also appears to be negative in the model of forced bride kidnapping and positive in two other models. The effect of educational attainment is positive in the case of marriage without bride kidnapping and marriage involving kidnapping; the highest risk of mock bride kidnapping is found among respondents with intermediary educational level. Educational enrollment is negatively associated with marriage, irrespective of marriage type.

Next, we jointly model three competing transitions: to marriage without bride kidnapping, and to marriages resulting from mock or from forced bride kidnapping. Figure 2 illustrates graphically the period change in marriage risks. Paralleling the trends for Kyrgyz in Figure 1, the results suggest a continuous decline of marriage risks in the post-Soviet years. The decline is

relatively modest between the first two periods. Between the second and third periods, the decline in marriages seems to accelerate for all marriage types. In absolute terms, the overall decline is largest in the risks of marriages without bride kidnapping, but in relative terms, it is largest for marriages involving forced bride kidnapping. Thus the risks of forced kidnapping were 72% lower in 2002-2011 than in 1980-1990. For the two other marriage types, the declines between these periods constituted about 50%. These results therefore show no increase in forced kidnappings in response to the post-Soviet crisis as it sometimes suggested in the literature. Also contrary to our expectation, the trends of mock kidnapping generally parallel those of forced kidnapping.

Figure 2 about here

Summary and Conclusion

This study contributes to the limited research on nuptiality in Central Asia, a region of a unique historical mix of traditional and modern family-formation practices, with the special focus on Kyrgyzstan. We tested the relevance of the modernization and retraditionalization paradigms to contemporary marriage trends in this country by tracking the dynamics of traditional – arranged or forced – and choice marriages among its indigenous population. The analysis revealed that propensities of traditional and choice marriages changed only modestly between the late Soviet and early post-Soviet periods. The observed trends were not what one could have expected given the epochal socioeconomic and political shifts triggered by the demise of the USSR and by the massively increased openness of the region to both Western and Islamic cultural influences. However, the apparent non-responsiveness of marriage dynamics to the generalized societal

18

change might be a result of counterbalancing effects of cultural modernization and retraditionalization in the first post-Soviet period. For the most recent period under observation our analyses document a substantial decline of all types of marriages, arranged and non-arranged—in line with the modernization argument.

The comparative analysis of competing transitions by ethnicity, which related the risks of traditional marriage to the risks of choice marriage among Kyrgyz, the majority group with a relatively weak influence of Islamic-rooted traditions, and Uzbeks, a minority with a stronger Islamic identity, revealed instructive differences. Most interestingly, the analysis detected a jump in the risks of arranged marriage and an increase in the risks of non-arranged marriage (even if less impressive than for arranged marriage) among Uzbeks during the first decade after the USSR, while the corresponding risks among Kyrgyz slightly declined. The last post-Soviet period, however, showed a clear decline of marriage risks among both groups and in both types of marriages, with the decline being particularly steep in the risks of arranged marriages among the Uzbek minority. Over the entire observation span, arranged marriages declined faster than choice marriages, offering additional support to the modernization argument. Finally, the analysis demonstrated that the trends in forced and mock kidnappings among Kyrgyz paralleled each other, indicating that mock kidnapping is not a transitional form of marital union formation in that context.

Overall, the marriage trends in Kyrgyzstan detected in our study largely mirror those in other post-socialist settings. Studies in several such settings suggest that marriage rates somewhat increased there around the time of the collapse of the communist system and breakup of the USSR. The subsequent years, however, were characterized by considerable marriage declines. The declines did not stop after the most severe economic and socio-political shocks of the

transitional period were over and continued, albeit at a slower pace, during the years of socio-political stabilization and economic recovery (e.g., Avdeev and Monnier 2000; Dommaraju and Agadjanian 2008; Philipov and Dorbritz 2003). Moreover, research has offered evidence that the massive societal cataclysms around the fall of Communism notwithstanding, family formation in Eastern Europe and post-Soviet Eurasia generally conformed to a model charted by the second demographic transition theory, albeit with some context-specific nuances (e.g., Gerber and Berman 2010; Zakharov 2008).

Although situated on the Muslim periphery of the former Soviet empire, Kyrgyzstan, then, appears to have followed a nuptiality pathway similar to that of the empire's European successors. However, the noted differences between Kyrgyz and Uzbeks also illustrate the diversity in trajectories of marriage changes. Thus Uzbeks, whose nuptial behavior may have been influenced by their deeper-rooted traditions as well as their minority status, displayed a seemingly anomalous increase in the probability of arranged marriage early in the post-Soviet era, while the titular ethnic group showed a moderate decline. Whether the explanation for an increase in marriage rates around the collapse of the Soviet Union proposed by Agadjanian and Makarova (2003) for neighboring Uzbekistan is applicable to early post-Soviet trends in arranged marriage among Uzbeks' in Kyrgyzstan remains open to debate. Yet, it is noteworthy that this early post-Soviet surge in arranged marriages reversed itself forcefully in the later post-Soviet period, bringing the risks of arranged marriage among the two ethnic groups to similarly low levels. In fact, although we do not have data on earlier trends in arranged marriage in Kyrgyzstan and the sample size and age composition preclude an expansion and a more detailed periodization of the observation span, it would probably be safe to surmise that the levels reached in the first decade of the twenty-first century were the lowest in Kyrgyzstan's history.

It should also be noted that the observed decrease in arranged marriage in Kyrgyzstan resembles the declines in arranged marriage documented in culturally diverse settings that had never been subjected to societal experiments comparable to the Soviet modernizationist project. Thus in a number of East and Southeast Asian settings where until recently arranged marriage was an important part of the nuptiality system, this type of marriage all but disappeared (Jones 2010). In the settings where parent-arranged marriages still persist, their share has been shrinking rapidly. However, while in such settings the share of choice marriages has been rising, the decline of arranged marriages has also been often accompanied by marriage postponement and increasing singlehood (Jones 1994; Jones and Gubhaju 2009; Jones 2010; Retherford et al. 2004; Retherford and Ogawa 2006; Thornton et al. 1994).

The changes in nuptiality that we witness in Central Asia and in other countries across the globe, are part of "the world historical transformation of marriage" (Coontz 2004) – the universal process that is characterized by declining societal importance of marriage, the fading of its traditional types and functions, and, as result, marriage postponement, informalization, and even complete retreat from it. An analysis of the consequences of this transformation in Central Asia is beyond the scope of our study. What our study does illustrate is how this global process is locally manifested. Although anthropological and sociological accounts of unique and often dramatic expressions of traditional marriage practices provide useful insights in the real-life complexity of contemporary nuptiality regimes, they should not obfuscate the fundamental imperatives of modernity.

References

Agadjanian, V. (1999). Post-soviet demographic paradoxes: ethnic differences in marriage and fertility in Kazakhstan. *Sociological Forum,* 14 (3), 425–446.

Agadjanian, V., & Makarova, E. (2003). From Soviet modernization to post-Soviet transformation: understanding marriage and fertility dynamics in Uzbekistan. *Development and Change,* 34 (3), 447-473.

Agadjanian, V., & Dommaraju, P. (2011). Culture, modernization, and politics: Ethnic differences in union formation in Kyrgyzstan. *European Journal of Population,* 27, 79–101.

Agadjanian, V., Dommaraju, P., & Glick, J. (2008). Reproduction in upheaval: ethnicity, fertility, and societal transformations in Kazakhstan. *Population Studies,* 62 (2), 211-233.

Agadjanian, V., Dommaraju, P., & Nedoluzhko, L. (2013). Economic fortunes, ethnic divides, and marriage and fertility in Central Asia: Kazakhstan and Kyrgyzstan compared. *Journal of Population Research,* 30 (3), 197-211.

Amsler, S., & Kleinbach, R. (1999). Bride kidnapping in the Kyrgyz Republic. *International Journal of Central Asian Studies,* 4, 185-216.

Anson, J., & Meir, A. (1996). Religiosity, nationalism and fertility in Israel. *European Journal of Population,* 12, 1-25.

Avdeev, A., & Monnier, A. (2000). Marriage in Russia: A complex phenomenon poorly understood. *Population,* 12, 7-49.

Bahramitash, R., & Kazemipour, S. (2006). Myths and realities of the impact of Islam on women: Changing marital status in Iran. *Critical Middle Eastern Studies,* 15 (2), 111-128.

Borbieva, N. O. (2012). Kidnapping women: Discourses of emotion and social change in the Kyrgyz Republic. *Anthropological Quarterly,* 85 (1), 141–170.

Brusina, O. I. (2008). Sharia and civil law in marital relations of the Muslim population in Central Asia. *Anthropology and Archeology of Eurasia,* 47 (2), 53–68.

Coontz, S. (2004). The world historical transformation of marriage. *Journal of Marriage and Family,* 66 (4), 974-979.

Dadabaev, T. (2007). How does transition work in Central Asia? Coping with ideological, economic and value system changes in Uzbekistan. *Central Asian Survey,* 26 (3), 407-428.

Denisenko, M. (2004). Marriage in Kyrgyzstan. In Z. Kudabaev, M., Guillot & M., Denisenko (Eds.). *Population of Kyrgyzstan*. (pp. 206-241). Bishkek: National Statistical Committee of the Kyrgyz Republic (in Russian).

Denisenko, M. and Kalmykova, H. (2011). Nuptiality and divorce. In M. Denisenko (Ed.), *Population of Kyrgyzstan at the turn of the XXI century* (pp. 93−117). Bishkek: UNFPA in Kyrgyzstan (in Russian).

Dommaraju, P., & Agadjanian, V. (2008). Nuptiality in Soviet and post-Soviet Central Asia. *Asian Population Studies*, 4 (2), 195-213.

Fargues, P. (2000). Protracted national conflict and fertility change: Palestinians and Israelis in the twentieth century. *Population and Development Review,* 26 (3), 441-482.

Feyisetan, B. J., & Akinrinola, B. (1991). Mate selection and fertility in urban Nigeria. *Journal of Comparative Family Studies,* 22 (3), 273-292.

Frejka, T. (2008). Determinants of family formation and childbearing during the societal transition in Central and Eastern Europe. *Demographic Research*, 19 (7), 139-170.

Galloway, P. (1988). Basic patterns of annual variations in fertility, nuptiality, mortality, and prices in pre-industrial Europe. *Population Studies,* 42, 275-302.

Gerber, T. D., & Berman, D. (2010). Entry to marriage and cohabitation in Russia, 1985–2000: Trends, correlates, and implications for the Second Demographic Transition. *European Journal of Population,* 26 (1), 3 -31.

Ghimire, D. J., Axinn, W. G., Yabiku, S. T., & Thornton, A. (2006). Social change, premarital nonfamily experience, and spouse choice in an arranged marriage society. *American Journal of Sociology,* 111 (4), 1181-1218.

Ghimire, D. J., & Axinn, W. G. (2013). Marital processes, arranged marriage, and contraception to limit fertility. *Demography,* 50, 1663–1686.

Handrahan, L. (2004). Hunting for women: Bride-kidnapping in Kyrgyzstan. *International Feminist Journal of Politics,* 6, 207–233.

Handrahan, L. (2001). Gender and ethnicity in the 'transitional democracy' of Kyrgyzstan. *Central Asian Survey,* 20 (4), 467-496.

Heaton, T. B., Cammacj, M., & Young, L. (2001). Why is the divorce rate declining in Indonesia? *Journal of Marriage and Family,* 63 (2), 480-490.

Hoem, J. M. (1971). Point estimation of forces of transition in demographic models. *Journal of the Royal Statistical Society*, *Series B,* 33 (2), 275-289.

Hoem, J. M. (1976). The statistical theory of demographic rates: A view of current developments (with discussion). *Scandinavian Journal of Statistics,* 3 (4), 169-185.

Hoem, J. M. (1986). The impact of education on modern family-union initiation. *European Journal of Population,* 2 (2), 113-133.

Hoem, J. M., & Kostova, D. (2008). Early traces of the Second Demographic Transition in Bulgaria: A joint analysis of marital and non-marital union formation, 1960-2004. *Population Studies,* 62 (3), 259-271.

Jones, G. W. (1994). *Marriage and Divorce in Islamic Southeast Asia*. Singapore: Oxford University Press.

Jones, G. W. (2010). Changing marriage patterns in Asia. Resource document. Asia Research Institute. Working Paper #131. http://www.ari.nus.edu.sg/docs/wps/wps10_131.pdf. Accessed 10 December 2013.

Jones, G. W., & Gubhaju, B. (2009). Trends in marriage in the low fertility countries of East and Southeast Asia. *Asian Population Studies,* 5 (3), 237-265.

Katus, K., Puur, A., & Sakkeus, L. (2008). Family formation in the Baltic countries: A transformation in the legacy of state socialism. *Journal of Baltic Studies,* 39 (2), 123-156.

Kennedy, S., & Bumpass, L. (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research,* 19 (47), 1663 – 1692.

Kierman, K. (2001). The rise of cohabitation and childbearing outside marriage in Western Europe. *International Journal of Law, Policy and the Family*, 15, 1-21.

Kleinbach, R. (2003). Frequency of non-consensual bride kidnapping in the Kyrgyz Republic. *International Journal of Central Asian Studies,* 8 (8), 108-128.

Kleinbach, R., & Salimjanova, L. (2007). Kyz ala kachuu and adat: Non-consensual bride kidnapping and tradition in Kyrgyzstan. *Central Asian Survey,* 26 (2), 217–233.

Kleinbach, R., Ablezova, M., & Aitieva, M. (2005). Kidnapping for marriage (ala kachuu) in a Kyrgyz village. *Central Asian Survey,* 24 (2), 191–202.

Koroteyeva, V., & Makarova, E. (1998). Money and social connections in the Soviet and post-Soviet Uzbek city. *Central Asian Survey,* 17 (4), 579-596.

Lockwood, W. G. (1974). Bride theft and social maneuverability in Western Bosnia. *Anthropological Quarterly,* 47 (3), 253-269.

Louw, M. (2013). Even honey may become bitter when there is too much of it: Islam and the struggle for a balanced existence in post-Soviet Kyrgyzstan. *Central Asian Survey,* 32 (4), 514-526.

Mkrtchyan, N., & Sarygulov, B. (2011). Change of ethnic population structure. In M. Denisenko (Ed.), *Population of Kyrgyzstan at the turn of the XXI century (*pp. 82−92). Bishkek: UNFPA in Kyrgyzstan (in Russian).

Nedoluzhko, L., & Agadjanian, V. (2010). Marriage, childbearing, and migration: Exploring interdependences. *Demographic Research,* 22 (7), 159-188.

Nedoluzhko, L. (2011). Fertility and family planning. In M. Denisenko (Ed.), *Population of Kyrgyzstan at the turn of the XXI century* (pp. 118−147). Bishkek: UNFPA in Kyrgyzstan (in Russian).

Perelli-Harris, B. (2008). Ukraine: On the border between old and new in uncertain times. *Demographic Research*, 19 (29), 1145–1178.

Philipov, D. and Dorbritz, J. (2003). *Demographic consequences of economic transition in countries of Central and Eastern Europe*. Strasbourg: Council of Europe.

Phillips, A., & James, P. (2001). National identity between tradition and reflexive modernization: The contradictions of Central Asia. *National Identities,* 3 (1), 23-35.

Retherford, R. D., Ogawa, N., & Matsukura, R. (2004). Late marriage and less marriage in Japan. *Population and Development Review,* 27 (1), 65-102.

Retherford, R. D., & Ogawa, N. (2006). Japan's baby bust: causes, implications, and policy responses. In F. R. Harris (Ed.), *The baby bust: Who will do the work? Who will pay the taxes?* (pp. 5-48). Lanham, Maryland: Rowman and Littlefield Publishers.

Roche, S., & Hohmann, S. (2011) Wedding rituals and the struggle over national identities *Central Asian Survey,* 30 (1), 113-128.

Santow, G., & Bracher, M. (1994). Change and continuity in the formation of first marital unions in Australia. *Population Studies,* 48 (3), 475-496.

Tazmini, G. (2001). The Islamic revival in Central Asia: A potent force or a misconception? *Central Asian Survey,* 20 (1), 63-83.

Thornton, A., Chang, J. S., & Lin, H-S. (1994). From arranged marriage toward love match. In A. Thornton & Lin, H-S. (Ed.), *Social Change and the Family in Taiwan* (pp. 148–177). Chicago: University of Chicago Press.

Thornton, A., Axinn, W. G., & Teachman, J. D. (1995). The influence of school enrollment and accumulation on cohabitation and marriage in early adulthood. *American Sociological Review,* 60 (5), 762-774.

Werner, C. (1997). Marriage, markets, and merchants: Changes in wedding feasts and household consumption patterns in rural Kazakhstan. *Culture and Agriculture,* 19 (1/2), 6-13.

Werner, C. (2009). Bride abduction in post-Soviet Central Asia: Marking a shift towards patriarchy through local discourses of shame and tradition. *Journal of the Royal Anthropological Institute,* 15, 314-331.

Weir, D. R. (1984). Life under pressure: France and England, 1960-1980. Journal of Economic History, 44, 27-47.

World Bank. (2013). World DataBank, The World Bank, http://databank.worldbank.org/data.

Zakharov, S. (2008). Russian Federation: From the first to second demographic transition. *Demographic Research,* 19 (24), 907-972.

Zang, X. (2008). Gender and ethnic variation in arranged marriages in a Chinese city. *Journal of Family Issues,* 29 (5), 615-638.

Table 1 Study population by individual characteristics and marriage type

	Kyrgyz		Uzbeks	
	Men	**Women**	**Men**	**Women**
# of cases	571	606	131	162
Currently married, %	60.5	72.4	60.4	70.9
Arranged marriages (% of currently married) marriage decision did not involve: brides' input groom's input	25.7 5.1	29.7 4.2	35.0 16.3	47.5 22.1
Arranged marriages by marriage cohort (% in the marriage cohort) 1980-1990 1991-2001 2002-2011	28.6 30.8 18.6	39.0 32.8 23.1	36.4 42.4 21.7	45.6 52.5 35.7
Marriages resulted from bride kidnapping (% of currently married)	30.5	38.3	n/a	n/a
Bride kidnappings by marriage cohort (% in the marriage cohort) 1980-1990 1991-2001 2002-2011	32.4 30.1 29.7	39.8 41.8 32.7	n/a	n/a
Forced bride kidnappings (% of kidnappings)	47.1	58.5	n/a	n/a
Forced bride kidnappings by marriage cohort (% in the cohort of marriages resulted from kidnapping) 1980-1990 1991-2001 2002-2011	40.0 61.4 34.3	65.3 56.8 54.2	n/a	n/a
Mean age at first marriage by marriage cohort 1980-1990 1991-2001 2002-2011	22.4 23.6 25.9	20.2 20.3 21.8	21.7 22.8 24.2	20.2 19.3 20.8

Table 2 Relative risks of first marriage, Kyrgyz and Uzbek men and women, Kyrgyzstan, 1980-2011

	Marriage (Model 1)	Non-arranged marriage (Model 2)	Arranged marriage (Model 3)
Period			
1980-1990	1	1	1
1991-2001	0.95	0.94	0.97
2002-2011	0.45***	0.54***	0.29***
Ethnicity			
Kyrgyz	1	1	1
Uzbek	1.14	0.98	1.47**
Gender			
Man	1	1	1
Woman	1.93***	1.79***	2.27***
Employment			
Non-employed	1	1	1
Employed	0.99	0.93	1.14
Educational enrollment			
Out of education	1	1	1
In education	0.40***	0.45***	0.30***
Education			
Basic secondary or lower	1	1	1
General and special secondary	2.01***	1.90***	2.10**
Higher	2.62***	2.50***	2.67**
Place of residence			
Bishkek	1	1	1
Urban	1.18	1.13	1.31
Rural	1.21†	1.29†	1.06
Father's occupation			
Managers and qualified specialists	1	1	1
Other non-agricultural	1.11	1.05	1.35
Agricultural	1.25*	0.98	2.17***
Non-working, not specified	1.05	1.01	1.24
Age			
16-18	0.50***	0.43***	0.65**
18-21	1	1	1
21-24	1.50***	1.62***	1.25
24-27	1.48**	1.57**	1.32
27-30	0.87	1.06	0.47
30+	0.61*	0.75	0.25†
Log-likelihood	**-1213.94**	**-1058.50**	**-727.27**
Number of cases	**1454**		

Note: Significance level: †p≤.10, *p≤.05, **p≤.01, ***p ≤.001

Table 3 Relative risks of arranged and non-arranged marriage in a joint analysis, by ethnicity

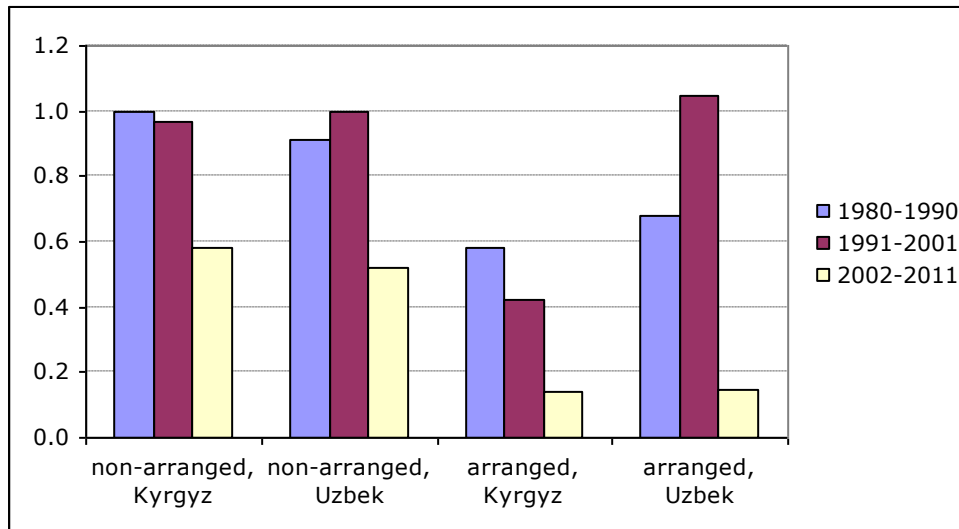| Ethnic group	Arranged marriage	Non-arranged marriage	Risks of arranged marriage relative to those of non-arranged marriage
Kyrgyz	1	2.44***	0.41
Uzbek	1.61***	2.30***	0.70

Note: Standardized for age, gender, employment, educational attainment and enrollment, place of residence, father's occupation, and period.

Table 4 Relative risks of first marriage, Kyrgyz men and women, 1980-2011

	Marriage without bride kidnapping (Model 1)	Mock bride kidnapping (Model 2)	Forced bride kidnapping (Model 3)
Period			
1980-1990	1	1	1
1991-2001	0.90	0.87	0.98
2002-2011	0.48***	0.57*	0.38***
Gender			
Man	1	1	1
Woman	1.73***	1.97***	2.91***
Employment			
Non-employed	1	1	1
Employed	1.05	1.05	0.80
Educational enrollment			
Out of education	1	1	1
In education	0.43***	0.57*	0.43**
Education			
Basic secondary or lower	1	1	1
General and special secondary	2.42***	6.72**	4.58**
Higher	3.82***	4.20*	6.03**
Place of residence			
Bishkek	1	1	1
Urban	1.10	1.15	1.31
Rural	1.27†	1.42	1.23
Father's occupation			
Managers and qualified specialists	1	1	1
Other non-agricultural	1.12	0.73	1.45
Agricultural	1.17	0.80	2.62**
Non-working, not specified	1.21	0.51†	1.37
Age			
16-18	0.49***	0.82	0.83
18-21	1	1	1
21-24	1.48***	2.19***	1.40
24-27	1.38†	2.11*	1.34
27-30	0.93	1.38	0.48
30+	0.80	-	0.24
Log-likelihood	**-829.11**	**-388.19**	**-436.89**
Number of cases	**1165**		

Note: Significance level: †p≤.10, *p≤.05, **p≤.01, ***p ≤.001

Figure 1 Trends in relative risks of arranged and non-arranged marriage

Notes: Relative to risks of non-arranged marriage of Kyrgyz in 1980-1990 (ref.=1); Standardized for age, gender, employment, educational attainment and enrollment, place of residence, and father's occupation.

Figure 2 Trends in relative risks of marriage with and without bride kidnapping
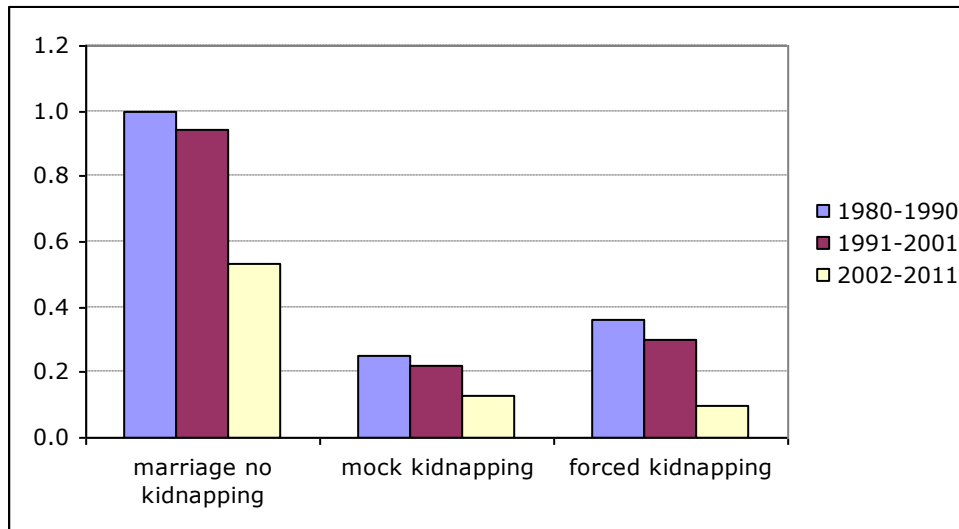
Notes: Relative to risks of marriage without kidnapping in 1980-1990 (ref.=1).
Standardized for age, gender, employment, educational attainment and enrollment, place of residence, and father's occupation.

Appendix

Exposures and occurrences (aggregate and distribution in %)

1) Non-arranged and arranged marriage

	Exposures		Occurrences			
			Non arranged marriage		Arranged marriage	
		%		%		%
Period						
1980-1990	25097	23.8	176	26.2	109	35.4
1991-2001	32238	30.6	272	40.5	142	46.1
2002-2011	48186	45.7	224	33.3	57	18.5
Ethnicity						
Kyrgyz	86760	82.2	559	83.2	229	74.4
Uzbek	18761	17.8	113	16.8	79	25.6
Gender						
Men	57419	54.4	303	45.1	116	37.7
Women	48102	45.6	369	54.9	192	62.3
Employment						
Non-employed	80788	76.6	454	67.6	206	66.9
Employed	24733	23.4	218	32.4	102	33.1
Educational enrollment						
Out of education	63171	59.9	579	86.2	277	89.9
In education	42350	40.1	93	13.8	31	10.1
Education						
Basic secondary	27031	25.6	41	6.1.	20	6.5
General and special secondary	72592	68.8	541	80.5	263	85.4
Higher	5898	5.6	90	13.4	25	8.1
Place of residence						
Bishkek	16173	15.3	81	12.0	26	8.4
Urban	24233	23.0	141	21.0	73	23.7
Rural	65115	61.7	450	67.0	209	67.9
Father's occupation						
Managers and qualified specialists	16796	15.9	101	15.0	26	8.4
Other non-agricultural	36682	34.8	226	33.6	85	27.6
Agricultural	34491	32.7	236	35.1	158	51.3
Non-working, not specified	17552	16.6	109	16.2	39	12.7
Age						
16-18	49372	46.8	129	19.2	91	29.5
18-21	31664	30.0	240	35.7	116	37.7
21-24	14856	14.1	198	29.5	69	22.4
24-27	5093	4.8	69	10.3	26	8.4
27-30	2097	2.0	20	3.0	4	1.3
30+	2439	2.3	16	2.4	2	0.6

2) Marriage without bride kidnapping, mock and forced kidnappings

	Exposures		Occurrences					
			No kidnapping		Mock kidnapping		Forced kidnapping	
		%		%		%		%
Period								
1980-1990	19723	22.7	135	26.3	34	27.0	48	32.2
1991-2001	27552	31.8	217	42.3	51	40.5	70	47.0
2002-2011	39485	45.5	161	31.4	41	32.5	31	20.8
Gender								
Men	47669	54.9	237	46.2	55	43.7	49	32.9
Women	39091	45.1	276	53.8	71	56.3	100	67.1
Employment								
Non-employed	67176	77.4	339	66.1	86	68.3	113	75.8
Employed	19584	22.6	174	33.9	40	31.7	36	24.2
Educational enrollment								
Out of education	49814	57.4	444	86.5	104	82.5	127	85.2
In education	36946	42.6	69	13.5	22	17.5	22	14.8
Education								
Basic secondary	20280	23.4	20	3.9	3	2.4	5	3.4
General and special secondary	60857	70.1	408	79.5	112	88.9	130	87.2
Higher	5623	6.5	85	16.6	11	8.7	14	9.4
Place of residence								
Bishkek	15905	18.3	72	14.0	17	13.5	16	10.7
Urban	18197	21.0	99	19.3	24	19.0	31	20.8
Rural	52658	60.7	342	66.7	85	67.5	102	68.5
Father's occupation								
Managers and qualified specialists	14985	17.3	76	14.8	24	19.0	13	8.7
Other non-agricultural	29090	33.5	159	31.0	39	31.0	38	25.5
Agricultural	28118	32.4	190	37.0	49	38.9	79	53.0
Non-working, not specified	14567	16.8	88	17.2	14	11.1	19	12.8
Age								
16-18	39539	45.6	99	19.3	33	26.2	50	33.6
18-21	25915	29.9	178	34.7	38	30.2	50	33.6
21-24	12664	14.6	152	29.6	38	30.2	34	22.8
24-27	4516	5.2	53	10.3	13	10.3	12	8.1
27-30	1945	2.2	16	3.1	4	3.2	2	1.3
30+	2181	2.5	15	2.9	0	0	1	0.7