WRITING SAMPLE 1

Hongbo Wang

Effects of Family Background upon the Timing of First Marriage in Modern China and Russia

Hongbo Wang

Irving B. Harris School of Public Policy Studies

University of Chicago

hbwang@uchicago.edu

September 22, 2008

^{0*} I am grateful to Cameron Campbell and Donald Treiman for their assistance in the initial design of the present study. Dr. Treiman also generously permitted me to use the Chinese and Russian data. Insightful comments from Sarah Burgard, Kathryn Coursolle, Sarah Edgington, Robert Mare, William Mason, Shige Song, Judy Seltzer, and Megan Sweeney are also acknowledged. This study was supported by a grant from the Training in International Population Studies (TIPS) program, funded by The William and Flora Hewlett Foundation through the California Center for Population Research (CCPR) at UCLA.

Abstract

This paper addresses the effects of family background on entry into first marriage during early adulthood in modern China and Russia. China and Russia are historically characterized by nuptial systems distinct from that in Western Europe. During the past century, these two countries have experienced dramatic social changes, which have undermined the social foundations of traditional marriage. Using survey data collected in the 1990s, I examined the extent to which the Western pattern of advantaged family background discouraging early marriage holds for modern China and Russia. Findings from a discrete-time survival analysis indicate that, both China and Russia, traditionally two non-Malthusian societies, now seem to exhibit the U.S. paradigm: youth from privileged social origins are less likely to marry at young ages. Nevertheless, this delaying effect is not necessarily attributed to intergenerational transmission of social status.

KEYWORDS: Age at First Marriage, Family Background, China, Russia

INTRODUCTION

Age at first marriage and its determinants have been a topic of great interest to social scientists. Demographers relate it to other population processes, such as age structure and sex ratio. Economists view entry into marital union as an individual choice, involving deliberate calculation of (relative) returns from marriage. For sociologists, marriage is considered one aspect of social stratification in the sense that marriage age, as well as assortative mating, is driven by social factors such as family background, norms, and openness of the society in general (Goldstein and Kenney 2001; Mare 1991).

This study compares the effect of family background on the timing of first marriage in modern China and Russia. Historically, these two countries differentiated themselves from Western societies by their non-Malthusian, if not unique, nuptial systems (Hajnal 1982). Marital formation was, and is, considered more of an individual decision in Western Europe, where late marriage and lifetime celibacy have been common (Davis and Blake 1956; Hajnal 1982; Malthus 1992[1798]). In contrast, China and Russia were characterized by familyoriented arranged marriages, although this might be more so for the former (Coale 1994; Dixon 1971, 1978; Hajnal 1982). Marriages also tended to be early and relatively universal (Lee and Wang 1999; Scherbov and Vianen 1999).¹ These distinctive features, in conjunction with demographic factors, formed the relationship between family background and marriage age. For example, due to a sex ratio persistently in favor of males, studies of traditional Chinese societies show that affluent parents were able to marry their sons at younger ages as socially desired. However, female age at marriage was universally low and consistent across all social classes (Lee and Wang 1999; Telford 1992). This is arguably at odds with the Malthusian paradigm that those who are from poor families or denied inheritance postpone matrimony or even remain celibate for their whole life.

¹ But this general portrait does not amount to understating well-known geographical and ethnic variations in both countries (See e.g. Coale, Anderson, and Härm (1979, pp.147-178)).

In modern North America and Europe, children of wealthy and educated parents generally establish families of their own at older ages (e.g. Michael and Tuma 1985; Waite and Spitze 1981). Yet empirical evidence is scant as to whether this inverse relationship holds for modern Chinese and Russian societies. China and Russia have both seen remarkable social changes in the past century, including rapid industrialization and dissolution of the traditional social hierarchy. Their experiences with communism also warrant special attention since it has largely uprooted many social foundations for traditional marriage. In particular, it will be interesting to see whether social changes have altered the historically positive association between family privilege and early marriage in China. With its comparative components, this inquiry will also contribute to a more comprehensive understanding of marital formation as a social process.

Specifically, this study examined the relationship between family background and entry into first marriage during early adulthood (ages 15-25) in the People's Republic of China and former Soviet Russia. It addressed three major questions: (1) Does advantaged family background delay early marriage in modern China and Russia? (2) Are family background effects differentiated by gender? And (3) how does China compare to Russia with respect to the relationship between social origins and marriage age?

BACKGROUND

Family Background and Marriage Age

Marriage researchers in the United States have consistently observed that youth from higherstatus families are more likely than their less privileged peers to postpone marriage. South (2001) identifies four likely complementary, rather than conflicting, pathways through which higher levels of family income and parental education may lead to later marriages: (1) Youth born to affluent parents are less motivated to improve their lives by marrying; (2) Those from favorable backgrounds will not get married until they can afford what they consider a decent standard of living; (3) Privileged family environments also tend to foster higher educational and occupational attainments among children, either expected or actual, making early marriage less desirable; and (4) High-status parents have more motivations and power to prevent their children from "premature" marriages. Paths (2) and (3) imply that the delaying effect of family privileges pivots on intergenerational transmission of social status, with early marriage possibly leading to downward social mobility from youth's perspective. This mechanism may be also supplemented by motivational factors suggested by paths (1) and (4).

Yet, a few caveats on empirically testing these theories are in order. First of all, much of the prior research has not carefully targeted the appropriate age span for analyzing the *timing* of first marriage. As Michael and Tuma (1985) put it, researchers often conceptually confound "the effects of a background variable on early entry into marriage or parenthood with its effects on the *ultimate* entry" (p.515). The present study thus narrows the event of interest to entry into first marriage *during early adulthood*, specifically ages 15-25. It is also worth emphasizing that focusing on early adulthood alleviates the bias caused by the exclusion of employment from the analysis.²

Secondly, as described above, one way family privileges discourage early marriage is by fostering high expectations for socioeconomic achievements among youth. However, testing this mechanism entails recognition of the fact that individual achievement, in particular education, could have double-edged consequences for one's entry into marital union: whereas school attendance often reduces the feasibility of marrying because of competition with the role of husband/wife, the influence of educational attainment, strictly speaking, is ambiguous, if not always making one more attractive to potential spouses (Blossfeld and Huinink 1991;

 $^{^{2}}$ The roles of employment and career are not addressed in this paper. It is conceivable that non-trivial bias may ensue especially for China, where only a very small fraction of the population have attained post-secondary education until recent years.

Thornton et al. 1995).³ Hence, a better understanding of family background effects on marriage age ought to explicitly consider intergenerational transmission. In doing so, it is necessary to distinguish "enrollment effects" from "attainment effects".

Finally, studies of marriage should always take gender into account. Demographic factors, such as shortage of marriageable females (or males), could give rise to gender-differentiated effects of family background. Yet, family background may affect sons and daughters differently because of cultural factors, including social expectations of gender (Becker 1981; but also see Oppenheimer 1988, Sweeney 2002). It will be misleading to ignore the role of gender especially when such once strictly patriarchal societies as China and Russia are concerned.

Transformation of Marriage in Modern China and Russia

Similar to the changes in nuptial systems in the West since the industrial revolution (Goode 1970; Thornton and Fricke 1987), modern China and Russia have also seen a striking transformation of marriage in the past century, particularly during the communist era. After the 1949 Chinese revolution, "mercenary marriage" was officially banned, with traditional bride price and dowry labeled "backward customs" (Whyte and Parish 1984). Free courtship and gender-equality were endorsed. The government also prohibited underage marriages by reinforcing legal marriage ages. Similarly, the Soviet Union propaganda praised salutary marriage for love, denouncing so-called "bourgeois marriages" based on economic considerations (Cartwright 2000; Fisher 1980). Therefore, both countries saw a declining role of parental wealth and status in affecting one's marital decision. A related consequence of such state interventions was the weakening of family control over offspring's marriage (Volkov 1994; Xu and Whyte 1990). Young men and women became increasingly independent in deciding when and whom to marry. Generally speaking, the nuptial systems of both China and Russia have, to some extent, aligned with those of the West. Yet, it is certainly true

 $^{^{3}}$ An explicit treatment of assortative mating, though needed to formally assess this (Kalmijn 1994; Mare 1991), is beyond the scope of this paper

that China was much less modernized than Russia at least until the collapse of the former Soviet Union.

State-sponsored education and employment also provided youth with alternatives to early marriage. Socialist welfare diminished the role of intergenerational transmission of socioeconomic attainments. There is also indication that China saw more intergenerational mobility in education during the Mao era as a result of aggressive governmental interventions (e.g. Deng and Treiman 1997). Yet, neither Mao's China nor the former Soviet Union could be considered an egalitarian paradise; social origins still played a significant role in determining socioeconomic attainment (e.g. Gerber 2000; Gerber and Hout 1995; Zhou, Moen, and Tuma 1998). For each country, it remains an empirical question to what extent the expansion of socialist welfare has altered the connection between family background and marriage.

It is worth mentioning, however, that state interventions and resulting social changes did not affect all groups equally. The influences of state controls and modernization were more pronounced in cities. On average, urban residents got married at older ages. Secondly, the social elite, such as officials and educated professionals, tended to espouse more the ideas of free-choice courtship and gender equality, and were more willing to comply with state policies. It is no surprise that "feudal remnants", such as underage marriage and bride price, were more common among populations at the bottom of social hierarchy.

Final Notes on Period Effects

China experienced successive social catastrophes during the Mao era, including the threeyear long national famine $(1959-1961)^4$ and the Cultural Revolution (1966-1976). In the former Soviet Union, tens of millions died during the Revolution of 1917 and the ensuing Civil War (1917-1922), the Stalin tyranny (1928-1934), and World War II (1941-1947). Such historical events had enormous and lasting impacts as far as marriage is concerned. People

 $^{^4}$ It is officially called "Three-year Natural Disasters"

delayed their marriages during famines, wars, and the like. The massive loss of life during the wars resulted in distorted population structures usually featuring an excess of females, which reshaped the marriage market and the association between family background and marriage age.

Dramatic oscillation in marriage-related policies also directly influenced marital behavior of the population in the two authoritarian countries. China's communist government first set legal marriage age at 20 for males and 18 for females right after the revolution. As a major departure from previous Soviet-type pro-natal policies, nevertheless, the "Later, Longer, and Fewer"⁵ campaign launched in the early 1970s encouraged people to marry at ages above the legal limit. The official minimum marriage age was finally raised by 2 years for both sexes in 1981 and thereafter has been stable (Wang and Tuma 1993; Zhang 2003).⁶ Similarly, the Soviet Union had vacillated between different abortion policies (Scherbov and Vianen 1999, 2001).⁷ Considering that abortion was the most important contraceptive measure in Russia, shifts in abortion policies might affect individuals' marital behavior by virtue of factors such as "shotgun marriage" (Cartwrigth 2000).

Building on the existing knowledge, the present study tested four hypotheses regarding the relationship between family background and entry into first marriage during early adulthood in modern China and Russia:

Hypothesis 1: Privileged family background has negative effects on youth's entry into first marriage during early adulthood (ages 15-25). It is also expected that family background effect is stronger in Soviet Russia relative to China.

Hypothesis 2: Part of the delaying effect of advantaged family background is explained by individual achievements, such as education and Communist Party membership, in China

⁵ It stands for *later marriage*, *longer inter-birth intervals*, and *fewer children* (Zhang 2003).

 $^{^{6}}$ This adjustment was in fact an effort to ease farmer's resistance to increasingly heavy-handed reinforcement of birth-control measures by local governments.

⁷ The late Stalin era saw the most extreme pro-natal policies, such as ban on abortion and taxation of the singles (Avdeev and Monnier 2000; Ilyina 1994).

and, to a larger extent, Soviet Russia.

Hypothesis 3: School attendance will reduce the likelihood of getting married during early adulthood, while the extent to which education level affects early marriage is undetermined.

Hypothesis 4: The delaying effect of advantaged family background on first marriage is expected to be weaker for females than for males in China.

DATA AND METHOD

This study drew on data from two independent, comparable surveys conducted in mainland China and the Russian Federation in the 1990s. The 1996 Chinese survey, titled "Life Histories and Social Change in Contemporary China", yielded a nationally representative sample of about 6000 Chinese adults aged 20-69 (Treiman 1998). The Russian survey, which, as part of the "Social Stratification in Eastern Europe after 1989" project, was conducted in the early 1990s, followed a similar design and questionnaire (Szelenyi and Treiman 1993). The Russian sample contains over 5,000 adults at ages up to 69. Both surveys gathered information on demographic characteristics, family socioeconomic status, as well as histories of education, employment, and residential mobility. I limited the analysis to the Chinese respondents who turned age 15 after the 1949 revolution and to the Russians reaching adulthood during the Soviet period (1917-1991).

Family characteristics refer to one's age 14, including urban residence, family structure, number of siblings, parental education, parental occupation, and parents' political affiliation. Urban residence indicates whether the respondent resided in a city at age 14.⁸ Family structure was coded as 1 if one lived with two parents at age 14 and 0 otherwise, in conjunction with number of siblings. I measured parental education by mother's or father's

⁸ For the Chinese data, hukou status at age 14 was used instead. China has since the late 1950s adopted a rigid household register system known as hukou. One's hukou status determined whether he was entitled to state welfare and allowed to reside in cities or he had to be a self-dependent farmer in the countryside.

completed years of schooling, whichever was higher or non-missing. Parents' occupational status was rated by the International Socioeconomic Index (ISEI). Finally, an indicator of whether any parent had ever joined the Communist Party was also created. As to individual achievements, I used three time-varying measures: school enrollment, completed years of schooling, and Party membership. Note that years of schooling and school enrollment were both included to separate attainment effects and enrollment effects of schooling.^{9, 10}

Social disasters and policy changes were captured by dummy variables for historical periods. Specifically, the history of the People's Republic of China (PRC) was divided as follows: "Early PRC (1949-1958)", "Great Famine (1959-1961)", "Political Turmoil (1962-1972)", ¹¹ " 'Later, Longer, and Fewer' (1973-1980)", and "New Marital Law (1981-1996)". For Russia, historical periods included "Collectivization & the 1932 Famine (1928-1934)", "pre-WWII development (1935-1940)", "World War II and aftermath (1941-1947)", "Ban on abortion (1948-1957)", and "Post-Stalin era(1958-1991)".

I relied on a discrete-time survival analysis to examine family background effects on entry into first marriage during early adulthood. The original data were converted into person-year observations accordingly. I also adopted a complementary log-log specification largely because the timing of first marriage was roughly measured in calendar years.¹² In other words, time to first marriage is not treated as intrinsically discrete as in the logistic specification (Jenkins 2005).¹³ In addition, complementary log-log model is more appropriate when the binary response follows a skewed distribution (Agresti 2002; Jacobs and Carmichael 2002).

 $^{^9}$ The same set of family and individual variables were constructed for both samples, except that the Chinese analysis also controlled for ethnicity (Han vs. non-Han), while ethnicity was replaced by religion for the Russia sample due to data limitation.

¹⁰ Observations missing on any covariate were excluded from the analysis.

¹¹ China experienced endless political movements during this period, including the early and most tumultuous years of the Cultural Revolution.

¹² In principle, we could gauge the timing of first marriage by month or even day. However, such detailed information is not available in the data

¹³ Certainly, we have to accept the proportional hazard assumption underlying this specification.

The complementary log-log model can be formally written as:

$$ln\{-ln[1 - Pr(Y = 1|X)]\} = X\beta$$

where Y is a binary indicator of transition into first marriage and X the covariate vector.

The analysis was conducted separately by country and gender. The first model assessed the effect of family background on the likelihood of entry into first marriage between ages 15 and 25. Only demographic characteristics and family SES measures were included as covariates. A second model added individual attainment indicators, i.e. school attendance, years of schooling, and Party membership, testing the extent to which the family background effect was explained by intergenerational transmission of social status. Both models also included appropriate dummy variables for historical periods. Baseline hazard was captured by a set of age dummy variables. Finally, clustering of observations was accounted for via sandwich estimator of variance for parameter estimates.

RESULTS

Descriptive statistics of key variables by country and gender are shown in Table 1. The left panel indicates that Chinese men and women significantly (p<0.001) differ in age at first marriage and individual achievements. The mean age at first marriage of women is about 22, more than two years lower than that of men.¹⁴ In addition, 93 percent of the Chinese women report having ever married by the time of the survey, with a slightly smaller portion (89%) of the Chinese men reporting so. There also appear to be significant gender-inequalities with respect to individual achievements: Chinese men not only tend to attain more years of schooling, but also are much more likely to be a member of the ruling Communist Party, a key factor for upward social mobility. The right panel of Table 2 reveals a similar discrepancy in

¹⁴ This pattern obviously tallies with the sex gap in legal marriage age.

age at first marriage between Russian men and women, with the former marrying significantly later. However, gender differentials in individual achievements are less salient in Russia. In fact, Russian men and women are equally educated. Yet the Communist Party is largely male-dominated. Finally, the Russians are unquestionably better off than the Chinese in terms of family socioeconomic status, which is in accord with the enormous gaps in social and economic development between the two countries before the 1990s. For example, Chinese parents on average achieve only about 4 years of schooling, less than half of that achieved by their Russian counterparts.

(Table 1 here)

The first two columns of Table 2 show results from the discrete-time survival analysis for Chinese men. Model 1 includes only family background measures (parental education, occupation, and Party membership), family structure, and urban residence, while adjusting for age and period effects. As expected, men with rural hukou are more likely than urban men to have early adult marriages. The coefficient for parental education, out of all family background indicators, is significantly negative (= -0.026, p < 0.05), suggesting a ceteris *paribus* delaying effect on entry into first marriage. In other words, there exists an inverse relationship between family privilege and early marriage. As Model 2 indicates, however, little of this effect is explained by individual achievement indicated by school attendance, years of schooling, and Communist Party membership. It is worth pointing out that whereas school enrollment is associated with a reduced likelihood of establishing family during early adulthood, neither years of schooling nor Party affiliation has a statistically significant direct effect, all else being equal. Finally, noteworthy period effects on men's age at first marriage emerge from both models. In particular, male marriages are significantly later during the time when the "Later, Longer, and Fewer" policy was in effect (1973-1980). For men, the first post-revolution decade (1949-1958) relative to the most recent period seems to be associated with an elevated "risk" of early adult marriage.¹⁵ The Wald test further reveals that, compared with the previous period (1949-1958), the national famine from 1959 through 1961 has significantly deferred men's transition into marriage during early adulthood.

(Table 2 here)

Parallel models for Chinese women are presented in the last two columns of Table 2. As in the case of men, urban hukou is associated with a reduced risk of early adult marriage for Chinese women. More importantly, Model 1 provides evidence that advantageous family background also tends to postpone entry into first marriage during early adulthood among Chinese women. This delaying effect indeed seems somewhat more statistically appreciable than that for men. Specifically, the more educated parents are, the less likely their daughters are to marry at ages between 15 and 25. There is also an inverse relationship between parents' occupational status, indicated by ISEI score, and the chance of early adult marriage. In addition, intact family with two biological parents vis-á-vis broken home at age 14 is associated with a reduced risk of marrying at ages 15 to 25. Model 2 further demonstrates that a substantial fraction of the delaying effects of favorable family background are attributable to girls' school enrollment and years of schooling. Indeed, adding individual achievement measures to the model nearly halves the coefficients for parental education, parental occupation, and urban residence, rendering the effects of these factors statistically insignificant. The magnitude of the coefficient for family structure also becomes slightly smaller. The patterns of period effects are similar for Chinese women as for men, except that the turbulent years from 1962 to 1972 feature early female marriages instead.

(Table 3 here)

Table 3 contains the results from comparable analysis for the Russian sample. It is shown that urban residency does not exhibit a statistically significant effect on early adult transition

 $^{^{15}}$ Among other explanations, there exists a 2-year gap in legal marriage age between the two cohorts.

into first marriage for Russian men, holding everything else constant (Model 1). Model 1 does not reveal a statistically appreciable effect of any family background characteristic. In fact, only parental occupation status manifests a marginally significant effect (= -0.007, p=0.058) on the chance of marrying between ages of 15 and 25. There is no evidence for significant direct effect of individual achievements, either, with the exception that Party membership appears to promote entry into marriage among young Russian men (Model 2). However, both models suggest salient period effects, with men significantly less likely to have early adult marriages throughout the Stalin era compared with recent decades.

The results shown in the last two columns of Table 3 reveal a different picture for Russian women. Specifically, the likelihood of entry into first marriage during early adulthood seems significantly lower among daughters of parents with more prestigious occupations (Model 1). Other measures of family background do not manifest appreciable *ceteris paribus* effects on the timing of first marriage. Nevertheless, the magnitude and significance of the coefficient for parental occupation status remains nearly the same in the presence of individual achievement indicators, such as education and Communist Party affiliation (Model 2). It thus suggests that the delaying effect of higher parental occupational status on daughters' transition into first marriage at ages 15-25 is not accounted for by the fact that girls with such parents themselves tend to have higher levels of achievement. Model 2 also indicates evidence of a significantly negative direct effect of school attendance on early adult marriage, while, other things being equal, women with more years of schooling are more likely to marry during early adulthood. Similar to Russian men, no significant effect of urban residency is found for Russian women. The pattern of period effects also looks similar. Yet, women seem to have been less affected by the horror of Stalin rule prior to WWII from 1935 to 1940.

DISCUSSION

The present study demonstrates that China and Russia, which were historically characterized by non-Western nuptial systems, now conform to marriage patterns resembling the modern U.S. marriage paradigm. That is, children of higher-status parents tend to postpone establishing their own families, thus less likely to enter first marriage during early adulthood. There is also suggestive evidence that the delaying effect of advantaged family background is more salient in China than in Russia. In particular, the inverse relationship between family privilege and early marriage is not statistically appreciable among Russian men.

For China, this contemporary pattern represents a profound shift in the relationship between social origins and marital behavior in the population. It reflects the erosion of those social foundations that underlie traditional marriage. As discussed above, modernization, as well as state interventions, caused far-reaching social changes, which included the transformation of marriage. In particular, social norms in favor of early marriage have faded, while socioeconomic alternatives, such as modern education, have become available. The findings from this study consistently indicate a conflict between school attendance and entry into marriage during early adulthood for both men and women.¹⁶

The shift in family background effects for Chinese women is especially striking. In historical China, female marriages were universally young, regardless of social origins, because of social preference for early marriage and a shortage of marriageable women. This study clearly shows a delaying effect of privileged family background on transition into marriage among girls in modern China. In addition to other social changes, rising status of women may play a significant role in this remarkable shift.¹⁷

This study also provides mixed evidence for intergenerational transmission of social status

¹⁶ This effect also holds for Russian women but is not statistically significant for Russia men.

¹⁷ There is no evidence for any fundamental reversal of the sex imbalance in favor of females, which has for centuries plagued Chinese society (Lee and Wang 1999). See also Zeng et al. (1993) and Lai (2005) for recent trends in sex ratio in China.

as a mechanism through which the delaying effect of family privilege operates. For Chinese women, a substantial part of family background effects appear to be mediated by individual attainments, such as school attendance, educational attainment, and political achievement. That is, Chinese girls born to higher-status parents tend to avoid early marriage partly because of its incompatibility with their pursuit of individual achievements. Nevertheless, this pattern does not extend to other populations studied here. Future research needs to address roles of other factors, such as differences in marital expectations and decision-making within the family across social classes.

Placed in a broader context, this study illustrates noteworthy variability in the association between social origins and marital behavior across societal and historical settings, which may differ substantially in nuptial norms, demographic makeup, and socio-political structures. In fact, modern U.S. society also manifests evidence of this variability. Prior work shows that the well-established inverse relationship between family privilege and early marriage has weakened from late 1960s to early 1990s (South 2001). A deeper understanding of this relationship ought to pinpoint those social foundations underlying it. Comparative approaches are necessary for this inquiry.

References

- [1] Agresti, Alan. 2002. Categorical Data Analysis (2nd edition). New York: Willey.
- [2] Allison, Paul D. 1995. Survival Analysis Using the SAS System: A Practical Guide. Gary, NC: SAS Institute Inc.
- [3] Avdeev, Alexandre and Alain Monnier. 2000. Marriage in Russia: A Complex Phenomenon Poorly Understood, Population: An English Selection 12: 7-49.
- [4] Becker, Gary S. [1981] 1992. A Treatise on the Family (Reprint) Cambridge, MA: Harvard University Press.
- [5] Blossfeld, Hans-Peter and Johannes Huinink. 1991. "Human Capital Investment or Norms of Role Transition? How Femaless Schooling and Career Affect the Process of Family Formation." American Journal of Sociology 97:143-68.
- [6] Cartwright, Kimberly D., 2000. "Shotgun Wedding and the Meaning of Marriage in Russia: An Event History Analysis." *The History of the Family* 5(1): 1-22.
- [7] Coale, Ansley J. 1994. "Nuptiality and Fertility in USSR Republics and Neighboring Populations." in W. Lutz, S. Scherbov and A. Volkov (eds), *Demographic Trends and Patterns in the Soviet Union before 1991.* Routledge, London/New York, pp. 3-17.
- [8] Coale, Ansley J., Barbara A. Anderson, and Erna Härm. 1979. Human Fertility in Russia since the Nineteenth Century. Princeton, NJ: Princeton University Press.
- [9] Czap, Peter Jr. 1983. "'A Large Family: The Peasants Greatest Wealth': Serf Households in Mishino, Russia, 1814-1858." in Richard Wall, Jean Robin, and Peter Laslett (ed.) *Family Forms in Historical Europe*. Cambridge, UK: Cambridge University Press.
- [10] Davis, Kingsley and Judith Blake. 1956. "Social Structure and Fertility: An Analytic Framework." *Economic Development and Cultural Change* 4(April). 211-235.
- [11] Deng, Zhong and Donald J. Treiman. 1997. "The Impact of the Cultural Revolution on Trends in Educational Attainment in the Peoples Republic of China." *American Journal* of Sociology 103: 391-428.
- [12] Dixon, Ruth B. 1971. "Explaining Cross-Cultural Variations in Age at Marriage and Proportions Never Marrying." *Population Studies* 25:215-33.
- [13] _____ 1978. "Late Marriage and Non-Marriage as Demographic Responses: Are They Similar?" *Population Studies* 32: 449-66.
- [14] Engel, John W. 1984. "Marriage in the Peoples Republic of China: Analysis of a New Law." Journal of Marriage and the Family 4: 955-961,
- [15] Fisher, Wesley Andrew. 1980. The Soviet Marriage Market: Mate-Selection in Russia and the USSR. New York: Praeger Publishers.

- [16] Gerber, Theodore P. 2000. "Educational Stratification in Contemporary Russia: Stability and Chang in the Face of Economic and Institutional Crisis." Sociology of Education 73: 219-246.
- [17] Gerber, Theodore P., and Michael Hout. 1995. "Educational Stratification in Russia During the Soviet Period." *The American Journal of Sociology* 101: 6111-660.
- [18] Goldstein, Joshua R. and Catherine T. Kenney. 2001. "Marriage Delayed or Marriage Forgone? New Cohort Forecasts of First Marriage for U.S. Females." *American Sociological Review* 60: 506-19.
- [19] Goode, William J. 1970. [orig. 1963] World Revolution and Family Patterns. New York: The Free Press.
- [20] Hajnal, John. 1982. "Two Kinds of Preindustrial Household Formation System." *Population and Development Review* 8(3): 449-94.
- [21] Ilyina, Irina. 1994. "Marital-Status Composition of the Soviet Population." in W. Lutz, S. Scherbov and A. Volkov (eds), *Demographic Trends and Patterns in the Soviet Union before 1991*. Routledge, London/New York, pp.167-83.
- [22] Jenkins, Stephen. 2005. *Survival Analysis*. (Manuscript). Available at http://www. iser.essex.ac.uk/teaching/degree/stephenj/ec968/pdfs/ec968lnotesv6.pdf.
- [23] Jacobs, David and Jason T. Carmichael. 2002. "The Political Sociology of the Death Penalty: A Pooled Time-Series Analysis." *American Sociological Review* 67:109-31.
- [24] Kalmijn, Matthijs. 1994. "Assortative Mating by Cultural and Economic Occupational Status." American Journal of Sociology 100:422-51.
- [25] Lai, Dejian. 2005. "Sex Ratio at Birth and Infant Mortality in China: An Empirical Study." Social Indicators Research 70: 310-26.
- [26] Lee, James Z. and Cameron Campbell. 1997. Fate and Fortunate in Rural China: Social Organization and Population Behavior in Liaoning, 1774-1873. In Cambridge Studies in Population, Economy and Society in Past Time. Cambridge, UK: Cambridge University press.
- [27] Lee, James Z. and Wang Feng 1999. One Quarter of Humanity: Malthusian Mythology and Chinese Realities. Harvard University Press.
- [28] Li, Bobai and Andrew G. Walder. 2001. "Career Advancement as Party Patronage: Sponsored Mobility into the Chinese Administrative Elite, 1949-1996." American Journal of Sociology 106:1371-1408.
- [29] Malthus, Thomas R. 1798/1803/1992. An Essay on the Principle of Population, 2nd Edition, (ed.) D. Winch. Cambridge: Cambridge University Press.
- [30] Mare, Robert. 1991. "Five Decades of Assortative Mating." American Sociological Review S6:15-32.

- [31] Michael, Robert T. and Nancy B. Tuma 1985. "Entry into Marriage and Parenthood by Young males and Females: the Influence of Family Background." *Demography* 22(4):515-544.
- [32] Oppenheimer, Valerie K. 1988. "A Theory of Marriage Timing." American Journal of Sociology 94:563-91.
- [33] Rotolo, Thomas. 2000. "A Time to Join, A Time to Quit: The Influence of Life Cycle Transitions on Voluntary Association Membership." *Social Forces* 78:1133-61.
- [34] Scherbov, Sergei and Harrie Van Vianen. 1999. "Marital and Fertility Careers of Russian Females Born between 1910 and 1934." *Population and Development Review* 25(1):129-43.
- [35] _____ 2001. "Marriage and Fertility in Russia of Females Born between 1900 and 1960: A Cohort Analysis." *European Journal of Population* 17:181-294.
- [36] South, Scott 2001. "The Variable Effects of Family Background on the Timing of First Marriage: United States, 1969-1993." Social Science Research 606-626.
- [37] Sweeney, Megan M. 2002. "Two Decades of Family Change: The Shifting Economic Foundations of Marriage." *American Sociological Review* 67:132-47.
- [38] Telford, Ted A. 1992. "Covariates of Means Age at First Marriage: The Historical Demography of Chineses Lineages." *Population Studies* 46: 19-35.
- [39] Thornton, Arland, William G. Axinn, and Jay D. Teachman. 1995. "The Influence of School Enrollment and Accumulation on Cohabitation and Marriage in Early Adulthood." *American Sociological Review*. 60: 762-774.
- [40] Thornton, Arland and Thomas E. Fricke. 1987. "Social Change and the Family: Comparative Perspectives from the West, China and South Asia." Sociological Forum. 4: 746-779.
- [41] Trent, Katherine and Scott South. 1992 "Sociodemographic Status, Parental Background, Childhood Family Structure, and Attitudes toward Family Formation." Journal of Marriage and the Family 54: 427-39.
- [42] Treiman, Donald J. (ed.). 1994. Social Stratification in Eastern Europe after 1989: General Population Survey. Provisional Codebook. Los Angeles: Department of Sociology, UCLA.
- [43] Treiman, Donald J., ed. 1998. Life Histories and Social Change in Contemporary China: Provisional Codebook. Donald Treiman and Andrew G. Walder, principal investigators, in collaboration with the Renmin University, Beijing, Department of Sociology. Los Angeles: UCLA Institute for Social Research.
- [44] Volkov, Andrei. 1994. "Family and Household Changes in the USSR: A Demographic Approach." in W. Lutz, S. Scherbov and A. Volkov (eds), *Demographic Trends and Patterns in the Soviet Union before 1991*. Routledge, London/New York, 149-66.

- [45] Waite, Linda J. and Glenna D. Spitze. 1981. "Young Femaless Transition to Marriage." Demography 18(4): 681-94.
- [46] Wang, Feng and Nancy B. Tuma. 1993 "Changes in Chinese Marriage Patterns during the Twentieth Century." (reprinted) *Population Series*, No. 296. Honolulu: East-West Center.
- [47] Whyte, Martin King and William L. Parish. 1984. Urban Life in Contemporary China. Chicago: the University of Chicago Press.
- [48] Wolf, Arthur P. 1986. "The Preeminent Role of Government Intervention in Chinas Family Revolution." *Population and Development Review* V12, No 1: 101-116.
- [49] Xu, Xiaohe and Martin King Whyte. 1990. "Love Matches and Arranged Marriages: A Chinese Replication." Journal of Marriage and the Family 52:709-722.
- [50] Zeng, Yi, Tu Ping, Gu Baochang, Xu Yi, Li Baohua, and Li Yongping. 1993. "Causes and Implications of the Recent Increase in the Reported Sex Ratio at Birth in China." *Population Development and Review* 19: 283-302.
- [51] Zeng, Yi, James W. Vaupel and Anatoli I. Yashin. 1985. "Marriage and Fertility in China: A Graphic Analysis." *Population and Development Review* 11: 721-736.
- [52] Zhang, Chunyuan. 2003. Zhongguo renkou zhengce yanbian licheng (The Evolution of Chinese Population Policy), from China Population Information and Research Center, Beijing http://www.cpirc.org.cn/.
- [53] Zhou, Xueguang, Phyllis Moen, and Nancy Brandon Tuma. 1998. "Educational Stratification in Urban China: 1949-94." Sociology of Education 71: 199-222.

Variables	China		Russia	
	Female	Male	Female	Male
Demographic Characteristics Ever married	0.93	0.89*	0.86	0.83
Age at first marriage	22.1	24.4*	23.5	24.5^{*}
Age at Interview	40.9	41.9*	42.5	41
Urban residence at 14	0.28	0.26	0.6	0.59
Han nationality $^{[1]}$	0.94	0.95		
Atheist $^{[2]}$			0.39	0.50^{*}
Russian Orthodox $^{[2]}$			0.55	0.43*
Muslim $^{[2]}$			0.03	0.03
Other $^{[2]}$			0.04	0.04
Family Background Number of siblings	3.5	3.3*	2.1	2.1
Intact Family at 14	0.87	0.86	0.76	0.75
Parental yrs of schooling at 14	3.6	3.6	8.5	8.9
Parental ISEI score at 14	26.3	25.3	41.2	41.7
Parental Party membership	0.18	0.16	0.26	0.27
Individual Achievements Years of Schooling	6.3	7.9*	12.5	12.6
Ever a Party member	0.06	0.22*	0.08	0.18*
Number of Cases	3022	3426	2613	1770

Table 1 Sample Means of Variables by Sex, China and Russia

Note: *Sex-difference is significant at the level of p < 0.001. ^[1] For China only; ^[2] For Russia only

	M	Male		Female		
Covariate	Model 1	Model 2	Model 1	Model 2		
Demographic Characteristics						
Urban $hukou$ at 14 (urban=1)	-0.619	-0.6	-0.436	-0.239		
	$(0.095)^{**}$	$(0.093)^{**}$	$(0.077)^{**}$	(0.076)		
	× ,		· · · ·	× /		
Historical Periods						
New Republic, 1949-1958	0.491	0.525	0.771	0.614		
	$(0.139)^{**}$	$(0.151)^{**}$	$(0.131)^{**}$	$(0.147)^{**}$		
Great famine, $1959-1961$	-0.178	-0.141	0.247	0.177		
	(0.158)	(0.166)	(0.138)	(0.143)		
Political turmoil, 1962-1972	-0.015	-0.011	0.229	0.13		
	-0.104	-0.104	$(0.094)^*$	(0.102)		
Later, longer, fewer, 1973-1980	-0.487	-0.489	-0.45	-0.5		
	$(0.093)^{**}$	$(0.095)^{**}$	$(0.085)^{**}$	$(0.085)^{**}$		
New Marital Law, 1981-						
Family Background	0.001	0.001	0.005	0.019		
Number of siblings	-0.001	-0.001	0.025	0.013		
Intest Femily at 14 (Intest 1)	(0.019)	(0.019)	(0.015)	(0.015) -0.199		
Intact Family at 14 (Intact=1)	$0.045 \\ (0.083)$	$0.05 \\ (0.083)$	-0.222 $(0.084)^{**}$	$(0.083)^*$		
Parental yrs of schooling at 14	(0.083) -0.026	(0.083) -0.022	-0.03	-0.016		
1 arentar yrs or schooling at 14	$(0.010)^*$	$(0.010)^*$	$(0.009)^{**}$	(0.009)		
Parental ISEI score at 14	0.003	0.003	-0.004	(0.003) -0.002		
	(0.003)	(0.003)	$(0.002)^*$	(0.002)		
Parental Party membership	0.033	0.048	-0.026	0.026		
i architar i arty membership	(0.075)	(0.074)	(0.067)	(0.068)		
	(0.010)	(0.011)	(0.001)	(0.000)		
Individual Achievements						
Enrolled in school		-0.778		-1.276		
		$(0.151)^{**}$		$(0.189)^{**}$		
Years of Schooling		0.001		-0.049		
		(0.012)		$(0.010)^{**}$		
Communist Party member		0.122		-0.484		
· ·		(0.165)		(0.25)		
		. /		. /		
Constant	-5.353	-5.097	-4.669	-4.308		
	$(0.487)^{**}$	$(0.486)^{**}$	$(0.363)^{**}$	(0.356)		
Log-likelihood	-5307.455	-5287.587	-5728.301	-5641.594		
Number of person-years	25202	25202	21361	21361		

Table 2 Coefficients for the Complementary Log-log Model of the Impact of FamilyBackground on Entry into First Marriage in Early Adulthood (15-25) in China, 1949-1996

Note: Each model also includes ethnicity (Han vs. non-Han) and dummy variables for ages 16-25.

** $p{<}.01$.

* p < .05 .

	Male		Fen	Female	
Covariate	Model 1	Model 2	Model 1	Model 2	
Demographic Characteristics					
Urban residence at 14 $(urban=1)$	-0.017	-0.017	-0.082	-0.092	
	(0.089)	(0.088)	(0.069)	(0.068)	
Historical Periods					
Collectivization(1928-1934)	0.173	0.159	-0.722	-0.675	
	(0.700)	(0.699)	(0.429)	(0.434)	
Pre-WWII (1935-1940)	-3.236	-3.243	-0.093	-0.11	
	$(0.543)^{**}$	$(0.538)^{**}$	(1.000)	(1.000)	
WWII & aftermath $(1941-1947)$	-1.261	-1.314	-0.928	-0.911	
	$(0.363)^{**}$	$(0.354)^{**}$	$(0.197)^{**}$	$(0.195)^{**}$	
Pro-natal policy $(1948-1957)$	-0.406	-0.415	-0.533	-0.49	
	$(0.139)^{**}$	$(0.138)^{**}$	$(0.088)^{**}$	$(0.089)^{**}$	
Post-Stalin (1958-1991)					
Family Background					
Number of siblings	-0.03	-0.029	0.012	0.011	
0	(0.025)	(0.024)	(0.016)	(0.017)	
Intact Family at 14 (Intact=1)	0.158	0.156	0.038	0.03	
, , , , , , , , , , , , , , , , , , ,	(0.111)	(0.111)	(0.077)	(0.078)	
Parental yrs of schooling at 14	0.017	0.019	-0.001	-0.001	
	(0.016)	(0.016)	(0.014)	(0.014)	
Parental ISEI score at 14	-0.007	-0.006	-0.01	-0.009	
	(0.004)	(0.003)	$(0.003)^{**}$	$(0.003)^{**}$	
Parental Party membership	-0.021	-0.02	0.121	0.135	
	(0.093)	(0.094)	(0.075)	(0.077)	
Individual Achievements					
Enrolled in school		-0.132		-0.236	
		(0.076)		$(0.083)^{**}$	
Years of Schooling		-0.004		0.022	
		(0.010)		$(0.007)^{**}$	
Communist Party member		0.387		-0.381	
		$(0.185)^*$		(0.338)	
Constant	-17.487	-17.394	-5.527	-5.403	
	(0.200)	(0.214)	$(0.422)^{**}$	$(0.430)^{**}$	
Log-likelihood	-3368.76	-3364.231	-4538.46	-4523.905	
Number of person-years	15214	15214	19860	19860	

Table 3 Coefficients for the Complementary Log-log Model of the Impact of Family Background on Entry into First Marriage in Early Adulthood (15-25) in Russia, 1928-1991

Note: Each model also includes religion and dummy variables for ages 16-25. ** $p{<}.01$.

 $\ast~p{<}.05$.