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In the past, marriages were often disrupted by the untimely death of a spouse, and remarriage was common. Remarriage had far-reaching effects on several levels, not only on individual life courses, but also in re-forming and reorganizing households, as well as on reproductive patterns at the societal level. However, in historical demography, the study of remarriage is still underdeveloped, especially in comparison with the attention paid to first marriages. It is a missing variable in Hajnal's framework and little has been done in order to place the concept in a broader, comparative demographic framework (Saito 2005: 174). This study is one of the first attempts to examine remarriage in a comparative perspective. Here, the patterns and likelihood of remarriage is analysed for four pre-industrial local communities in Europe and Asia. Our focus is on the influence of socioeconomic and household factors on individuals' likelihood of remarriage.

Not everybody that was widowed remarried, and among those who did remarry, the timing varied. Previous studies on remarriage in eighteenth and nineteenth century Europe and United States have pointed out several key factors that were important in this respect: age, gender, wealth, presence of children in the household, and trends over centuries (e.g. Grigg 1977; Dupaquier et al. 1981; Mitterauer and Sieder 1982; Knodel and Lynch 1985; Van Poppel 1995, 1998; Lundh 2002; Mattijs 2003). These studies all point to a pronounced age and sex differentials in the probabilities of remarriage. They suggest that probabilities of remarriage declined rapidly with age. Widows were far less likely to remarry than widowers. Temporal trend is also a major concern in these studies. A secular decline in the tendency to remarry was found in many of these studies. Explanations of the decline included the mortality decline, attitudinal change towards marriage and remarriage, change in the local marriage market, and change of roles in and ideas about family as an economic unit of production. The effects of socioeconomic factors (e.g. occupational groups, peasant vs. no peasants, landless vs. land owners) and children (number and age) are also important but the findings of these effects were not as straight forward as demographic factors. Religious and legal factors were also taken into account.

The economic theories of remarriage assumes that the state of being married was desired and sought, and that the success, as measured by the achievement of remarriage, is seen as the outcome of the deployment of valued resources, both personal and economic (Griffith 1980). Indeed, a recent study on the risk of death revealed that widowed population was much more vulnerable than married population in both Europe and Asia (Tsuya and Nystedt 2004). Remarriage was certainly an option to stay out of this vulnerability in physical, psychological and economic sense. However, the choice of remarriage

was often preconditioned by legal and cultural attitudes towards remarriage as well as socio-specific conditions on remarriage and the marriage market. The cost and benefits of remarriage were also influenced by the range of alternatives provided in each particular society (Kurosu 2007a). Since available alternatives varied between widowed individuals depending on gender, age, social class and household composition, not all individuals could be expected to desire remarriage (Grigg 1967; Segalen 1981; Van Poppel 1995; Lundh 2002; Dribe, Lundh and Nystedt 2007).

Our approach brings household into the central stage of these issues and considers household affecting or mediating the pronounced gender and age differences. As in other rural communities in preindustrial societies, the basic unit of production and consumption was the household in all societies in this study. It was also an important institution for social welfare to provide childrearing, security and care in old age (Mitterauer and Sieder 1982). Thus, it was vital for the individuals' survival and welfare to belong to a household. Alternatively, individual lifecourses, chances of marriage, childbearing, and remarriages, were often affected or even determined by the household they belonged to. Further, in East Asian societies marriage was not recognized primarily as a union of two individuals nor did it mean the formation of a new household. Not even in Europe was remarriage necessarily a strategy for the *formation* but rather for the *reorganization* of a household. The socioeconomic status and wealth of the household was a major resource for a widow or widower who decided to bargain for a remarriage, but it could also offer alternatives and acceptable substitutes for the security of remarriage (Griffith 1980). The household composition, i.e. who was coresiding with the widowed person, did also have a great impact on the propensity to remarry.

Our research is based on data from rural communities in four study areas in eighteenth and nineteenth century Europe and Asia: Scania in southern Sweden, Casalguidi in central Italy, Liaoning and Shuangcheng in northeast China, and Shimomoriya and Niita in northeast Japan. We try to uncover economic and socio-cultural mechanism which encourages or discourages remarriage. Longitudinal data on individual life courses with few missing years are used, and the individual information is linked to household and community information they reside. This will allows us to overcome the problematic conclusions, as some conscious researchers remarked, often drawn by relying on the simple ratio of re-marriage to all marriages to examine trends overtime or to compare differences among groups (Watkins 1983, Mattijs 2003). Further, our data and method make it possible to follow the details of widowers and widows and the household context they belonged. Further, this will allow us to examine multilayered factors that concerned the lives of widows and widowers. The analyses in this paper deal only with widows and widowers, and not divorced people (which were numerous in Shimomoriya & Niita). Applying event-history analysis to these longitudinal micro-level data, we demonstrate how individual demographic characteristics as well as economic conditions and domestic organization did influence the likelihood of remarriage.

This paper starts with the discussion of social and economic conditions that are relevant to remarriage in the four study areas based on three perspectives: economic, socio-cultural and household organization. Next, sources and settings of the communities are clarified, followed by descriptive analysis and life-table analysis of remarriage. Finally, the event history analysis examines and contrasts the effects of demographic, socioeconomic and household factors which relate to remarriage separately for men and women in the four study areas.

Remarriage in the Past

Although frequencies and patterns vary, remarriage was not uncommon in any communities in the past. And in explaining the variation of remarriage patterns, gender and age have always been canonical. Since an earlier collaborative effort on the studies of remarriage quarter century ago in Norway 1979 (Dupaquier et al. 1981), our understanding on widowhood and remarriage greatly improved. As Watkins reviewed and succinctly summarized the considerable variation in the findings of the colloquium, "no matter how crude or subtle the measure, widowers are more likely to re-marry than widows, and to do so more quickly; the likelihood of re-marriage decreases with age, though usually more rapidly for women than for men (1983)." Given the high mortality in preindustrial agricultural communities, remarriage was often sought, since marriage and thereby access to a household meant economic and social security. Multi-fold approaches have been taken in further explaining the great variation of gender and age from the perspective of property ownership, inheritance, female independence, and family system (a survey of these literature is found in Oris and Ochiai 2005: 63-79). Recent studies using multivariate analysis make us aware of the ranges of incentives and constraints widows and widowers faced. Rather than simple economic models, these studies emphasize the importance of bringing in the variety of factors including complexity of household, presence of children, and even kin members outside the household (Van Poppel 1995, 1998, Lundh 2002, Campbell and Lee 2005, Alter et al. 2005).

A recent collaboration of the authors of this chapter appeared in the special issue of remarriage in *Continuity and Change* (Breschi et al. 2007, Lundh 2007, Kurosu 2007b). We started to find evidence in three case studies of common structural factors that alternatively encouraged or discouraged individuals from remarrying, apart from the differences in frequencies and patterns of remarriage arising from specific socioeconomic and cultural factors in the communities in Sweden, Italy and Japan (Kurosu 2007a). In this study we develop comparative models based on these cases as well as the case from China and try to uncover the process which encouraged or discouraged remarriage based on three perspectives: economic, socio-cultural, and household organization.

Multi-fold issue is concerned in the economic differentials *between* and *within* households (Wang et al, P&P chapter4). First, at the macro-level, economic condition of the community, short-term economic stress affects marriage market and that people may postpone remarriage, as was the case for other demographic events (e.g. mortality, fertility, marriage, and migration: Allen et al., 2005). Second, socioeconomic status of household was important in both providing bargaining power for individuals in remarriage market, and providing economic assurance for widows and widowers. In case of first marriage, the former was the case and that higher socioeconomic status was associated with higher propensity of marriage among the population of our study areas. However, in case of remarriage, household resource could well be used to protect widows and widowers, thus reduce their necessity of remarriage. Third, economic and institutional alternatives provided by, for example, retirement system in Scania gave individuals an option of staying unmarried, an option which was not available for their East Asian counterpart. Fourth, the influence of the inheritance system on the likelihood of remarriage also needs to be considered. For example, if a Scanian widow decided to remarry, the inheritance after her late husband had to be divided among the children. By entering a new marriage she would become legally incompetent and the land she owned would be put at the disposal of her new husband. If a Casalguidi widow decided to remarry, then her household of marriage (her diseased husband's household) had to return her dowry. These are important concerns both for individuals and households in the process of remarriage.

Socio-cultural perspective brings our attention to cultural and religious ideas concerning family and marriage. Catholic societies encourage to keep family intact, or to forbid family to break. East Asian societies emphasize continuation of family line, with particular emphasis on patriarchy and patrilineality. In both cases, reproduction plays an important role in completing or continuing a family and thus might encourage remarriage of childless widows and widowers. For example, as soon as one child was old enough to care for his or her siblings and could assist with housework and shopping, a powerful inducement to remarriage disappeared (Van Poppel 1995: 424). This replacement effect could take a different form in other societies. In China, having a living son ensured that a woman would be treated well by her husband's household if she became widowed (Campbell and Lee 2005). In Japan, childlessness could be compensated by well-practiced adoption (Kurosu and Ochiai 1995).

There are also moral codes that come into play between remarriage and reproduction. In Italy, widows who remarried were stigmatized. The Swedish Lutheran Church was more tolerant to remarriage than the Catholic Church in southern Europe (Ariès 1981; Gaunt & Löfgren 1981). Remarriage was accepted by the church and by the secular authorities in Sweden. However, a period of mourning after the death of a spouse (*tempus luctus*) was compulsory, one year for widows and six months for widowers, during which remarriage was forbidden. The main concern was to prevent remarriage until it was certain that the widow was not pregnant with a child fathered by her late husband (Lundh 2002). In China, both state policy and social norms prevalent during the Qing strongly discouraged widow

remarriage (Campbell and Lee 2005). In Japan, marriage system was flexible with high frequency of divorce and remarriage (Kurosu 2004, 2005).[1] The Confucian teaching of marriage (e.g. fidelity) cited in a famous text for female moral instruction do not appear to accurately reflect practices (Tsubouchi and Tsubouchi 1970: 216; Fuess 2004: 19-20; Kurosu 2004). Thus, the actual experiences of people in the past might be very different from the moral codes due to high mortality levels and economic hardships.

Type of household organization prevailing in a society preconditions the range of alternatives one could take. In a simple nuclear family, the death of one of the spouses could have dramatic consequences for the surviving one. The relative absence from the household of kin other than those of the nuclear family unit and the out-migration of older children of the family made it important for the household to have both husband and wife in order to continue as a viable social and economic unit (Griffith 1980). On the other hand, widowed persons living in multiple households could count on the other household members for help and support, even avoiding possible economic repercussions (Breschi et al, 2007). Consequently, we cannot exclude that this latter situation could dampen and make less urgent the search for a new spouse (Tittarelli 1991).

The core of household was the nuclear family in Scania, and simple family household was dominant. However, the household could include other people as well. Especially among peasants, a household used to include one or more unrelated servants who were hired on a yearly basis for board and lodging and a minor part of the wage in cash. Also, quite many peasant households for a certain phase of the family life cycle contained three generations living on the same farm (Lundh 2005). This is because of the retirement contract system in which elderly farmers transferred the farm to one of the children while the parent(s) were (was) still alive, in exchange for board and lodging another pension benefits specified in certain retirement contracts.

The households tend to be more complex in the other three areas. In Casalguidi, with the influence of sharecropping, half of the population was living in complex households and the rest in nuclear family units (Breschi et al 2005). The East Asian counterparts are even more complex although in a different manner: The Japanese complex household was mostly in the form of vertically extended stem household with one couple from each generation co-residing, while the dominant form in the Chinese populations under study was the joint family household with more than one married couples from a generation, as well as other relatives, co-residing. In both cases, hierarchical and patriarchal nature of family organization should be noted. The Chinese family specifies clear lines of duty, responsibility, and entitlement for each of its members according to the principles of generation, gender, and seniority

[1] However, there was a great regional varition in the prevalence of divorce and remarraige in pre-industrial Japan (Kurosu, Tsuya and Hamano 1999).

measured by age and birth order (Lee and Campbell 1997). The Japanese stem family also had priorities by gender and generation. However, one crucial difference from China was the strong adherence to the stem family rule of one couple per one generation (Cornell 1987; Smith 1977).

These economic, socio-cultural and household organization explanations for remarriage are highly related to each other and are complimentary. We will explore in the multivariate analysis, how demographic, economic and household context related to the likelihood of remarriage as a way of examining these three complimentary explanations.

Source and Settings

This study is based not only on variety of geographic locations with large differences in socio-cultural backgrounds, but also on diverse size and nature of population registers. Our analyses draw the data from four study areas in different regions of four Eurasian societies: five rural parishes in western Scania 1766-1894 in the south of Sweden; one parish, Casalguidi 1820-1858 in Tuscany in central Italy; state farms in Liaoning 1789-1909 and Shuangcheng 1870-1912 in northeast China; and two farming villages of Shimomoriya and Niita 1716-1870 in northeast Japan. We will discuss briefly the sources and settings for each study area.[2]

For Sweden, the data is based on family reconstitutions carried out within the Scanian Demographic Database for five rural parishes in Western Scania in the south of Sweden: Hög, Kävlinge, Halmstad, Sireköpinge, and Kågeröd. The family reconstitutions were carried out using data on births, marriages, and deaths, for the period from the late seventeenth century until 1894 (for specifics, see Bengtsson and Lundh 1993). The material is of high quality, with only a few years missing. They have also been linked to other sources, mainly the poll-tax registers (*mantalslängder*) and the catechetical examination registers (*husförhörslängder*). The database contains all individuals born in, or migrating into, the parishes. Thus, the life course of each individual could be studied, from birth or in-migration until out-migration or death. The socioeconomic structure of the parishes varied somewhat. Hög and Kävlinge were dominated by farmers on freehold and crown land with rather similar social characteristics, while tenant farmers on manorial land totally dominated the other three parishes (Bengtsson and Lundh 1990; Bengtsson and Dribe 1997; Dribe 2000). Besides the peasant group, there were also various landless and semi-landless groups, who worked temporarily or on a permanent basis for peasants or on the manors. In 1766, the five parishes had 2,509 inhabitants. By 1895 that figure had increased to 5,539.

[2] The data are described in detail in Appendix A of Bengtsson, Campbell, and Lee (2004).

For Italy, the data is drawn from annual nominative lists of inhabitants (*status animarum*[3]) in Casalguidi, supplemented by parish registers of vital events covering the period 1819-1859. Since these lists were made annually, it is possible to trace changes in household size and composition. Records of vital events (baptisms, burials, and marriages) extracted from parish registers were also linked to the information from the *status animarum* (Manfredini 1996). The marriage registers date back from 1819 to 1859 and includes all the endogamous and husband-exogamous unions whose weddings were celebrated in the church of Casalguidi. These acts provide information about the wedding date, name and surname of spouses and parents, marital status at the moment of marriage as well as current spouses' place of residence. The marriages between local men and foreign women, was traced using status animarum. The reconstruction of the life-histories of dwellers of Casalguidi was thus made possible with the good continuity over time of the *stati animarum* of Casalguidi (only one year missed in the period studied). Additional data is drawn from the tax register to reconstruct the local socioeconomic hierarchy (for specifics, see Manfredini 2003).

Casalguidi is a small town (2,400 residents on average) situated, in the period 1820-58, in the territory of the Grand Duchy of Tuscany, only few kilometres from the city of Pistoia and not far from Florence. This proximity to important cities caused a constant exchange of people among those local populations, with not indifferent annual flows of immigration and emigration both of individuals and entire households (Manfredini 2003). The economy was mostly based on agriculture, which employed about 70% of the total active population. The Tuscan form of the sharecropping farm (*podere mezzadrile*) was common in Casalguidi and dominant in the area. Small independent farmers and farm labourers existed too. Artisans, small shopkeepers and few bourgeois people completed the economic structure of the population (Breschi et al 2004). The growth of the population, very similar to that observed for the Tuscany as a whole, records the annual average growth rate 8.3 per 1,000 during the observation period, only interrupted by a period of population stability (1836-43) and the cholera epidemic of 1854-55 (see Breschi et al 2004 for more details).

Liaoning and Shuangcheng data are derived from 'Household and Population Registers of the Eight Banner Han Chinese Army' (*Hanjun baqi rending hukou ce*) that were compiled on for a number of *han* Chinese banner populations living in the northeast and certain other locations from the early 18th century until 1909. Liaoning registers record at three year intervals and Shuangcheng registers record annually for each person in the entire population including the following information relevant to this study: relationship to their household head; adult banner status; age; marriage, death or emigration; and village of residence. Once individuals entered the household registration system, they were followed

[3] The annual *status animarum* was a kind of annual census taken by the parish priest around Ester with information by household---age, sex, marital status, and relationship to the head of the household are recorded for each person.

until they departed in their last record through death, emigration, or marriage. Thus, daughters and widows who left their households through marriage or remarriage since the previous register are explicitly identified as having done, so as are the individuals who died since the previous register. These registers are the most extensive and detailed records of Chinese peasant population in the late imperial period (Lee and Campbell 1997: 223-237).

The Liaoning villages are all in what is now Liaoning province in northeast China. There are more than 600 villages scattered across a strip the size of Connecticut that stretched from the coast of the Bohai Gulf through an agricultural plain to the hilly and remote region in the northeast of the province. The villages represent a wide variety of economic and geographic contexts, ranging from villages engaged in fishing and salt production on the coast, to farming villages in the agricultural plain and remote villages in the hills whose residents engaged in agriculture, bee-keeping, and hunting. The data cover the villages from the middle of the eighteenth century, 1749, up to the beginning of the twentieth, 1909.[4] The banner population in Shuangcheng was a mix of urban and rural immigrants being relocated by the Qing government in 1810s to 1860s. The data include 120 villages from 1852 through 1912 (Chen et al 2005).

For Japan, the study draws its data from the local population registers called *ninbetsu-aratame-cho* (NAC) in Shimomoriya and Niita, two farming villages in the present Fukushima prefecture in northeastern Japan. These NAC records extend over a period of 154 years, 1716-1869 for Shimomoriya and 1720-1870 for Niita, with only a small number of intermittent years missing. The registers were compiled annually based on the principle of current domicile, i.e., they are all *de facto*. Registers annotated all major demographic events, including birth, death, marriage, divorce and migration for all individuals residing in the villages. In addition, exits from and entry to the villages (including movements within and outside the village) were recorded in detail, allowing this study to follow the consequence of marriage. Exits for unknown reasons were extremely rare, accounting for less than one percent of all recorded exits in the NAC registers in both villages. Thus, these NAC's quality and length make these registers some of the best documentation for historical population in Japan.[5]

The two villages were almost exclusively agricultural. Because of under-developed agricultural technologies at that time, the circumstances of the two villages were often at the mercy of fluctuations in agricultural output, driving their living standards near or below subsistence levels at times of crop failure. The population trends of the two villages reflect the economic hardships of peasant life. The populations of the two villages at the beginning of their registers were 538 for Niita and 419 for

[4] For description of Shuangchengpu, see Cheng, Campbell and Lee (2005).

[5] The history of population registers, their reliability, their compilation and computerization of the data sets are described in detail elsewhere (Hayami 1979; Cornell and Hayami 1986; Ono 1993).

Shimomoriya. Unlike the population trend in other study areas the population sizes of both villages were in overall decline, being disturbed particularly by famines. The populations started a gradual upturn only after the 1840s, with the general improvement of climate resulting in less frequent famines, and the development of agricultural techniques that improved the living standards in the two villages.

Demographic profiles of remarriage

Before going into multivariate analysis, let us clarify a pair of background demographic features: first marriages and mortality and their relation to remarriage. As far as first marriages are concerned, there are two different patterns among the study communities. The singulate mean age at marriage (SMAM[6]) for men and women, respectively, were 28.7 and 26.9 in Scania; and 28.5 and 25.7 in Casalguidi. The proportion never married at age 45-49 in Scania was14.8 for men and 13.6 for women while it was14.5 and 10.0 in Casalguidi. Clearly, these communities fit nicely to the features of Hajnal's (1965) "West European Marriage pattern." The figures for Liaoning, Shuangcheng, and Shimomoriya & Niita demonstrate stark differences from these cases having very early age at marriage. SMAM for Liaoning males and females were 20.1 and 17.8, Shuangcheng were xxx and xxxx, Shimomoriya and Niita were 19.1 and 15.2, respectively. The proportion never married was extremely low for females in both Liaoning, Shuangcheng, and Shimomoriya and Niita, 0.7, xxx, and 0.6; while men's celibacy at age 45-49 were relatively high in Liaoning, 13.5, xxxx in Shuangcheng, and moderate, 4.8 in Shimomoriya & Niita. Never married proportions for men tended to be higher than those for women in any communities. However, the difference of male and female proportions was large (about 13%) in Liaoning. This caused the highly imbalanced marriage market where competition for brides was fierce.

The level and pattern of age specific mortality provides an important prerequisite for the timing and necessity of marriage and remarriage. A life table estimate of probability of dying in the interval gives us a clue to the association between mortality and remarriage. There was a great variation in the percentage of those surviving to age 15 who die before age 50 (Alter et al, 2004: Table 11.1): for male and female respectively, 24.7 and 22.3 in Scania (difference of male and female is 2.3); 25.5 and 32.0 (-6.6) in Casalguidi, 30.6 and 40.9 (-10.3) in Liaoning; and 27.6 and 35.0 (-7.4) in Shimomoriya & Niita. While the proportion of adults who died before age 50 tended to be high in all study areas, it was the highest in Liaoning, followed by Shimomoriya and Niita. The excess female mortality coincides with the reproductive age (Alter, et al 2004: 338) except Scania where it was as low as (or even lower than) the male counterpart.[7] In Liaoning, the proportion of females who survive to age 15 and die before age 50 was 10% higher than that of males. High rate of mortality, particularly in the younger age

[6] The figures here are taken from the unpublished materials prepared for a publication of Eurasia Project.

[7] However, even this result would have been different if it were for the age interval from 15 to 40 (Alter, et al 2004: 338).

(15-25), have been seen as one factor behind the custom of early age at marriage in East Asian societies (Saito 2005).

Remarriage can be also considered a function of mortality; however, rates of remarriage in Table 1 suggest that the association between mortality and remarriage is not straightforward. The rates of remarriage at younger ages (15-34), for example, are not necessarily higher in two East Asian societies than the European counterpart. The overall rates of remarriage at age 15-64 varied disregard of the mortality levels. In fact, the rates of remarriage for males and females were the lowest in Liaoning where the mortality rates were the highest among the four study areas. Due to the imbalanced sex ratio at the marriage market where competition for brides was fierce to begin with, widower remarriage was not easy. Meanwhile, widow's remarriage was frowned upon according to customs. The high female remarriage rate (actually the highest among all women in the four study areas) in Shimomoriya & Niita appears to symbolize peasants' liberal and flexible attitudes toward remarriage.

-- Table 1 about here

A common feature is that the remarriage rate varied with age. In the age of 15-34 relatively few were widowed, but among them many remarried. Just as expected, the remarriage rate decreases for older age groups. Interestingly, although the rates of remarriage were higher for widowers than widows in all study areas, the sex ratio of remarriage was much higher in the two societies of joint household orientation. That is, in Casalguidi, and Liaoning and Shuangcheng, widower's remarriage was 6 times more prevalent than widow's remarriages. Although this is a general pattern observed in many other societies, the pronounced gender difference appears to be stronger in these two study areas. As discussed earlier, widow's remarriage was culturally discouraged in these societies.

The youngest observed age at widowhood for males and females were, in both Scania and Casalguidi 22 and 19, Liaoning 11 and 12, Shuangcheng 12 and 18, and Shimomoriya and Niita 17 and 13 years old. The youngest observed age at remarriage of those widows and widowers was Scania 27 and 22, Casalguidi 25 and 20, Liaoning 11 and 19, Shuangcheng 15 and 19, and Shimomoriya and Niita 18 and 13. East Asian males and females, because of their early age at first marriage, became widowed and remarriage much earlier than the first marriage of their European counterpart. The mean age at remarriage for both males and females, in general, are relatively lower in East Asian societies reflecting their early age at first marriage. However, the mean age at remarriage for Casalguidi widows was even lower than their East Asian counterpart, possibly reflecting the social stigma attached to widow's remarriage (i.e. remarriage happened in earlier ages if at all). Age difference of mean age at remarriage between men and women shows stark difference between two European societies and two East Asian societies. Widower's age at marriage was higher than widow's by 6 years in Scania and Casalguidi while it was only 0.3 years in Shimomoriya and Niita. As for Liaoning and Shuangcheng, widow's age

at marriage was higher than widower's by 1.4 years. A study of fertility using the same data sets found that, contrary to Laslett's prediction (1983), a higher proportion of women in Liaoning and Shuangcheng, and Shimomoriya & Niita, compared to their European counterpart, spent their married reproductive years with husbands of the same age or younger.[8] Such difference in marriage pattern may be reflected in the age difference of males and females in their remarriage pattern as well.

Table 2 demonstrates possible combination of marriage partners (first or remarriage) among marriages that were contracted during the respective observation period. Given the high mortality of the time, marriages often ended in widowhood.[9] Remarriage took place quickly after the dissolution of marriages. Therefore, the proportion of marriages with at least one widowed party was considerable (20% or more) (Table 2). Among the total number of marriages during the observation periods, we can identify marital status of *both* spouses in 1,885 cases (77.8%) in Scania, 917 cases (89.2%) in Casalguidi, and only 502 cases (41.8%) in Shimomoriya and Niita.[10] Although limited, the examination of these figures gives us some clue to the frequency of remarriages. Among these figures, first marriage of both men and women account for 80.2% in Scania, 78.0% in Casalguidi, and 57.2% in Shimomoriya and Niita.

--Table 2 about here

A number of studies in England, France, and Belgium have found that the percentage of remarriages to all marriages until early nineteenth century fell between 15% and 30% (e.g. Griffith 1980, Corsini 1981, Mattijs 2003). The figures for Scania and Casalguidi fit to these orders. The proportion of first marriages is extremely low in Shimomoriya and Niita. This is due to the fact that the remarried population includes quite large numbers of divorcees. If remarriages of divorced were excluded (calculation not available at this point), the proportion should become closer to other two communities.

To further understand the remarriage market, Table 3 looks at the partner's age by sex and one's own age. Just like the previous analysis, males and females are widows and widowers, while their partner could include unmarried (marrying for the first time). The figures are only available for widowers in Liaoning and Shuangcheng. There is a strong tendency for younger (age below 35) widows to remarry younger females in all the societies. Widowers remarried females of the same age category or younger in all communities. Widows in Shimomoriya and Niita mostly remarried partners in the same age category. Partner selection appears to be a little more relaxed among widows in Scania and Casalguidi.

[8] Wang Feng, Satomi Kurosu, Michel Oris, and Noriko O. Tusya, P&P chapter 4.

[9] In case of Shimomoriya and Niita, more marriages ended in divorce (Kurosu 2004).

[10] For some marriages reconstructed from the sources, it is impossible to determine the marital status of non-native spouses coming to the communities upon marriage.

---Table 3

In order to see the dynamic patterns of remarriage by age and sex, Figures 1-5 show life table (Kaplan-Myer) analysis of remarriage. This exercise will allow us to see which gender-age specific group was more inclined to stay in the sate of widowhood, or leave the state of widowhood by remarrying. As the life table method takes care of the exits from the observation by death, migration and other reasons, we can reliably compare the remarriage patterns of sub-groups (Blossfeld et al 1989). Although the speed and magnitude of remarriage vary, several interesting features come out from Figures 1-5. We found a tendency that the remarriage of youngest widowers was the quickest (usually the first few years) and the largest, and that of older widows (middle-aged widows in case of Casalguidi as there was no observation of remarriage for older widows) the slowest and smallest. All the other groups fall in-between these two lines. Reflecting the low remarriage rates we found in Table 1, widows, in particular, those age 35 and above remained not remarried. In Scania and Casalguidi, the age below 50 did not make much difference for widowers: about 60% of them remarried within five years after the end of previous marriage. In Scania and to a lesser extent in Shimomoriya and Niita, young widows were remarrying as much as their male counterpart. Although the life table analysis provides us with good image of the remarriage chance of widows and widowers at different life cycle, there is a limit to what we can compare with this method. We will therefore turn to multivariate analysis.

---Figures 1-5

Measurement and Method

Our multivariate analyses focus on men and women whose marriage ended due to death of spouse, and those who were living in the parishes or villages. We tested several options for age boundaries and duration to be included for the analysis and decided to include widows and widowers age below 65 in the population at risk.[11] The number of population at risk (person-yeas) recorded and number of events (remarriage) observed are as follows.

	Scania		Casalguidi		Liaoning		Shuangcheng		Shimomoriya&Niita	
	male	female	male	female	male	female	male	female	male	female
Population at risk	528	1,192	903	2,600	27,466	70,196	15,063	59,926	1,968	3,292
Number of events	209	235	115	51	4,370	875	678	452	186	131

[11] Remarraige after this was rare in all communities. We tested several age boundaries and durations but did not find much differences in the results.

In order to calculate the influence of individual demographic characteristics as well as socioeconomic and familial context on the likelihood of remarriage, we use event history analysis (for previous use of this method in the Eurasia project, see Bengtsson, et al. 2004). In the case of Scania, a Cox proportional hazard model is applied (Cox 1972). All widowers and widows are being observed from the date the spouse died until the date they remarry (event) or die or move out of the parish (censored). In this model, time since the death of the spouse is the baseline risk in the duration regressions. For Casalguidi, Liaoning and Shuangcheng and Shimomoriya and Niita discrete-time event history analysis is applied. The dependent variable is a dichotomous variable measuring whether or not a man or women at risk remarried within one year (for Liaoning, three years) from one registration to the immediately succeeding registration.

The demographic characteristics consist of two covariates: current age and for discrete-time model, time since most recent marital dissolution. Remarriage is often considered a function of age and that young people are expected to have more to gain from remarriage than older ones. Also, we know from the descriptive analysis that the remarriage tend to peak around the early years after dissolution of marriage. We made a categorical variable consisting of three groups to see some threshold: below age 35, 35-49, and 50 and above. Using the youngest group as reference, three dummy variables were constructed. The first two groups represent the early and later age of reproduction. The latter two groups consist of younger and older ages after the end of reproduction. Time (in years) since the most recent dissolution of marriage is included in order to index the duration of exposure to risk of remarriage except Scania. This is a categorical variable: 0-2 years, 3-9 years, and 10 and more years (and unknown category for Casalguidi). Less than 2 years is used as the reference except for Liaoning as the register is tri-annual.

Socioeconomic factors include local food prices and household status. The covariate “prices” is a proxy for the short-term variation in the standard of living and refers to the yearly changes in (the logged) local prices of grains: Rye for Scania (previous year), wheat for Casalguidi, sorghum for Liaoning and Shuangcheng, and rice for Shimomoriya and Niita. Since the economic hardship negatively affected the likelihood of first marriage, a similar effect is expected to be found for remarriage.

Household socioeconomic status refers to the socioeconomic status of household where widows and widowers resided. Although based on different measure of socioeconomic status appropriate for each society, we categorized three groups---low, middle, and high. For Scania, the households are categorized as peasant, semi-landless or landless. “Peasants” refer to households where the men were registered as farmers with a landholding of at least 14 acres (1/16 *mantal*). Both freeholders and tenant farmers on crown and noble land are included in the peasant group which is the highest group in the socioeconomic hierarchy in this community. The landless group is categorized as the lowest ranked one, formed by cottagers, artisans, soldiers, married servants and agricultural workers (for instance *statare*)

who had no real property and did not lease a landholding. In between was the semi-landless group (middle), including households that owned or had at their disposal some land but had to do additional wage labor, for instance crofters and farmers with landholdings of less than 14 acres. For Casalguidi, the households are categorized by means of the annual amount of the family tax. Having untaxed group as reference, low and high-medium tax groups are compared as middle and high SES. For Liaoning and Shuangcheng, they are categorized by income from official position: no income as reference, they are categorized into three groups of the income distribution. For Shimomoriya and Niita, they are measured by the size of landholding (in *koku*).[12] They are grouped into three groups: landless as low, top 20% as high and the rest as middle.

Our study areas span into various time period and space. We therefore control for time period and residential community of the individual, since a considerable temporal differentials existed in socioeconomic and environment conditions. Because the records from several communities (Scania, and Shimomoriya and Niita) are pooled for this analysis, a dichotomous variable is also included to control for the possible community effect.

To examine the effects of coresiding adults, we included the presence of parents. This variable had strong effects on first marriage in these study areas and a similar effect can be expected. Presence of parents in household consists of four categories: both parents present; only father present; only mother present; and no parent present (reference). The presence of parents was a proxy for a stable household in Shimomoriya & Niita (Tsuya and Kurosu 2000; Kurosu 2004) and may have encouraged young widows and widowers to remarry.

Another important covariate is the effect of children. Having children can be an asset, for future farm labour or for continuation of family line, or burden as they are less attractive in marriage market. The role of children in promoting or hindering remarriage has usually been tested solely in terms of the number of children either ever born from previous marriage or alive at the moment of retirement (Breschi et al, 2007).[13] Since the role children played very much depended on their sex, place of residence (coresiding or not) and age (able to work or not, or can be assumed as an heir or not), we take three measures to test it. First, to see the effect of the dependency of coresiding children, we constructed four categories: no coresiding children, only minor children, both minor and adult children, and only children adult children (reference). Age 15 is used for marking minor and adult children for Scania, and for the rest of the communities, age 12 is used. They are considered appropriate for child to start to contribute to household economy and household work in all the communities.

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[12] One *koku* is equivalent to around 5 bushels, or 180 liters. One *koku* is often considered as the average consumption per capita year.

[13] This was also tested in our earlier paper (Kurosu, Lundh and Breschi 2006).

Second, in order to check the effect of the sex composition of coresiding children, we use four categories: no coresiding children; no son, only daughter(s); no daughter, only son(s) alive; and at least one son and one daughter coresiding. Using the sex-balanced offspring set (the last category) as the reference, three dummy variables are entered. This is to test whether the sex of children would have any effect on remarriage. The result may be similar to the first variable (i.e. no sex differentials) in European context. However, in East Asian context, where the distribution of children by sex was important in family building of the couples (Tsuya and Kurosu 1999), we can expect that those with lack of such balance to pursue remarriage more than those who already achieved the sex balance of children.

Third, in a similar manner, we examine the sex and presence of minor/adult children in household. The presence of minor children indicates that the maintenance burden was larger than for widows and widowers without young children (Lundh 2007). In contrast, the presence of adult children indicates that there was extra labour available in the household (Lundh 2007). It might show a replacement effect of children for the loss of a spouse. In a stem family context, it might also indicate that a child reached a target age for the couple to assume an heir and that a widow/widower did not need to seek for remarriage (Saito and Hamano 1998) if remarriage meant family continuation.

Table 4 presents means of variables used in the analysis. We perform two sets of analysis. First, we examine the effects of demographic and economic variables. Next, we extend our model to examine the effects of coresiding parents and three variables for children, controlling for demographic and economic variables. All analysis is conducted separately for men and women considering the possible difference in causal structure. Also, all analysis controls for residing communities and period.

--Table 4

Results

Demographic factors

Table 5 presents the estimated relative risks of the covariates of remarriage separately for men and women. A similar and clear pattern emerges here when demographic variables are compared. First, age was the major determining factor of remarriage for both males and females in all study areas. Compared to the group age below 35, the likelihood of remarriage was significantly less for widows and widowers of higher ages in any society. Also, compared to men, the negative effect of age on the likelihood of remarriage was much more pronounced among women in any society. Negative but non-significant age

effect in Scania and Casalguidi males for the age group 35-49 might suggest that the age threshold was later than their counterparts in East Asia. Compared to men age below 35, men in age group 35-49 were 20-25% less likely to remarry in Scania and Casalguidi. They were about 65% less likely to remarry in East Asian communities. Among all, Casalguidi widows were the least likely to remarry once they were over age 35. This is in accordance with the descriptive and life table analysis above.

--Table 5 about here

Second, time since marital dissolution has a clear negative effect on remarriage. From Table 5 it is obvious that remarriage was more frequent during the first two years after the marital dissolution and that both men and women were much less likely to remarry as the time elapsed. This is in accordance with the pattern observed in Figures 1-5.

Socioeconomic factors

Controlling for these demographic variables, socioeconomic factors affected the chance of remarriage, but in several contrasting ways. Wealth meant more bargaining power for the household in the remarriage market. This is clear among widows and widowers in Liaoning and Shuangcheng, and only widowers (although not statistically significant) in Shimomoriya and Niita. In the rest of the cases, widows and widowers in the middle or high SES were much less likely to remarry compared to those in the low SES. For women in complex household system (e.g. Shimomoriya and Niita, and Casalguidi), higher household socioeconomic status probably meant that household could afford to support or keep widowed persons in the household instead of pushing for remarriage. In communities where widowed people made more individualistic decisions, it is likely that the access of resources opened up alternatives to remarriage that appeared to be attractive, e.g. the options of a peasant in Scania to take over the farm to one of the children in exchange for a retirement contract or to continue to be the widowed head or the household by hiring additional labor.

In general, the effect of food price (here interpreted as short-term economic stress) was negative. As far as Scania is concerned, a more detailed analysis shows that the negative effect of food prices was valid only for non-peasants who used cash to buy parts of their food consumption, while peasants were not affected by changes in the price level (Lundh 2007). This is the same tendency that has previously been found in the analyses of first marriage and fertility: When times are bad, marriage and reproduction are being postponed. One exception from this is the strong and positive effect of food prices on the likelihood of remarriage among Liaoning females. Liaoning widows were more likely remarry or "remarrying-off" at hard time. This reminds us of a strong and positive effect of rice price on female divorce in Shimomoriya and Niita (Kurosu 2004). We can wildly speculate that there is something similar going on to these females in Liaoning. Female remarriage was discouraged in Liaoning to begin

with. Considering their weak position in the Chinese household they might have been "gotten rid of" from the household in the name of remarriage at the time of economic hardship.

A significant and negative effect of time period on the likelihood of remarriage can be observed in Scania. In the last sub-period, 1860-1894, the likelihood of remarriage was much lower than in 1766-1809, especially for the landless[14]. For widows the decline was linear. The decrease in the likelihood of remarriage reflects the economic and social change in the Swedish countryside. Partly the decline in remarriage can be attributed to the decrease in adult mortality, but also to the development of negative attitudes towards marriages characterised by large age differences and remarriages in general, especially on the part of widows. A complementary explanation for the decrease in the remarriage would be the development of new forms of social security and pension systems during the nineteenth century, while at the same time a change in preferences took place as Victorian moral and the ideal of romantic weddings was spreading.

The decline of the propensity of remarriage, a general pattern found in Europe in the second half or in the last quarter of 19th century, is found in East Asia as well particularly among women. Compared to the earlier period (eighteenth century), remarriage became significantly less likely for women in East Asia towards the end of the observation. For male remarriage, such a clear and linear change over period was not recognized. The longitudinal change in remarriage pattern thus can be observed more clearly among females than males.

Household factors

We now turn to household context where these widows and widowers resided. Table 6 shows estimated relative risks of remarriage, controlling for all the variables used in Table 5. The first panels of Table 6 try to demonstrate how coresiding parents might affect remarriage chances of widows and widowers. In general, presence of at least one or both parents in the household, compared to no parents, is expected to have positive effects on both male and female remarriages. Presence of parents meant economic and social stability of the household and, in turn, support for re-formation of their son's family. To add, having only one parent might have meant a household necessity of replacing the loss/absence of one parent.

-- Table 6 about here

The clearest and the most significant results were found in Liaoning and Shuangcheng. Widowers and widows with at least one parent or both parents were 1.4 to 2.1 times more likely to remarry compared

[14] Interactions between time period and socioeconomic status are not shown in Table 5.

to those without parents. The presence of parent(s) was clearly in advantage for widowers in finding the next partners. Widowers in Shimomoirya and Niita who lived with both parents shared the same advantage as widows and widowers in Liaoning and Shuangcheng. The results for widows in Shimomoirya and Niita are not clear in Table 6. A separate analysis not shown here suggests that the presence of parent(s) had positive effect only when they were from the uxorilocal marriage (i.e. they married at their parental household) (Kurosu 2007). The positive effect of parents probably was similar on both male and female remarriages as long as they were with their own parents: they helped finding partners and also encouraged family perpetuity. In this sense, the significant and positive effect of the presence of parents on widow's remarriage in Liaoning and Shuangcheng might present another side of patriarchal tendency where widows, whose position has become very weak without their husbands, had to leave the household using the venue of remarriage.

In Casalguidi, living with mother (but not with father) or both parents, in contrast to living without any parents, had negative (although not statistically significant) effects on widower's remarriage. This suggests that widowers did not have to remarry when supportive network of relatives were available (Breschi et al 2007). As for widows in Casalguidi, they were generally discouraged from remarrying for she normally lost both inheritance rights to her husband's goods, properties, and guardianship of her children; while husband's relatives fear that they would have to return the widow's dowry upon her remarriage (Breschi et al 2007). Both of these cultural premises should act against remarriage of widows. However, the results were the opposite. Although not significant, the presence of mother or both parents enhanced the chance of remarriage of widows. There might be an interaction with child variable here that widows with very young children may represent such a high cost to a sharecropping complex household that no obstacle would be raised to her marriage (Breschi et al 2007).

Finally, we turn to the effect of having children present in the household.[15] First, compared to those who had only adult children, widows with no coresiding children or with only minor children in all these communities were highly likely to remarry. The same strong effects were found among widowers in Casalguidi and Scania. The contrasting effect was found among Liaoning and Shuangcheng, and Shimomoriya and Niita widowers where the effect of having no coresiding children meant negative effect on remarriage.

Second, sex composition of children shows three different patterns. First, the results in Casalguidi show the strong effect of no coresiding children just as it was the case above. In other words, having at least 1 son and 1 daughter might have been a proxy for having adult children in Casalguidi. Compared to those who had at least 1 son and 1 daughter, widows and widowers in Casalguidi were twice or 6 times

[15] Chinese results are estimated using the combined data of Liaoning 1789-1906 and Shuangchengpu 1870-1916 here.

more likely to remarry. It was necessary for those widows to find partners and probably, without having children, it was easier for them to find partners.

The signs and significance levels in East Asian communities suggest the sex balance of children meant more than the mere age composition or number of children. In Liaoning and Shuangcheng, widowers were 30-75% less likely to remarry when they did not have coresiding children or when their children's sex balance was incomplete; while widows in the same situation were 1.2-2.3 times more likely to remarry when they had no children or only daughters or sons. Further, the effect was stronger when they had no children. This was not the case for those with only son(s). The strong positive effect of no coresiding children or daughter(s) might have meant that widows without children could marry out because in the absence of a status as a mother, they were marginal within the household.

The estimates for Shimomoriya and Niita in Table 6 suggest there was no effect of sex composition of children on female remarriage. However, this was in fact a compounding effect of two different causal mechanisms (Kurosu 2007). Women who married uxorilocally and who had no children or only son(s) or daughter(s) were more than twice as likely to remarry as those who had at least one son and daughter. Remarriage was sought by those women who married at their natal households. Such difference by previous marriage type is not found among males. Compared to men who had at least one son and one daughter, those who had only son(s) were 43 percent less likely to remarry. These findings were unexpected because the presence of both male and female children was thought to reduce the incentive for remarriage since securing the succession and continuing the family line has not been assured. Together with the parent variable, the presence of son and daughter may indicate social and economic stability. Thus, those who reside with parents as well as at least one son and daughter were pressured to remarry in order to find a replacement for the spousal loss and to recompose the family and household as soon as possible. Those with only son(s) (but not only daughter(s)) or without any children might have been at liberty (or pressured) to choose alternatives (for example, migration) to recomposing the family. It is interesting to note that uxorilocally married females were prone to remarriage regardless of the gender of children, in contrast to males who were susceptible to the sex composition of children. This point is further confirmed in the next set of analysis.

Finally, the last model tests the effect of the presence of minor and adult sons and daughters in household---a combination of sex and age variables tested above. In general, the presence of minor children is expected to increase the probability of remarriage and the presence of adult children to decrease the probability of remarriage. The Scanian case seems to follow this expectation although the effects are not always statistically significant.[16] It is particularly notable that while widowers with

[16] There is a strong interaction with the age of widows and widowers with children. When age is not included in the regressions, most coefficients become statistically significant (Lundh 2007).

minor son(s) sought their partners, both widowers and widows with a grown-up daughter living in the household did not. A grown-up daughter could help the widow or widower with domestic work tasks. Adult son(s) did not show such general effects on remarriage. In a previous paper which tested these effects separately for peasants and non-peasants (Lundh 2005), it was found that the presence of an adult son decreased the risk of remarriage among peasants, but not among non peasants. Probably this is because of retirement arrangements among peasants so that a grown up son could take over the farm. If the widow or widower could retire having a grown-up son, he or she did not have to remarry.

While the general pattern of the effect of minor and adult children are the same in Shimomoriya and Niita, the role of son(s) and daughter(s) was different from that of Scania. It was when widows and widowers had son(s), they were less likely to remarry and this was statistically significant. In a stem family society, it was imperative to have an heir and having an adult son was clearly an assurance for the next generation. Widows and Widowers therefore did not feel the necessity of remarrying. It is also clear for widows of Shimomoriya and Niita that they had a strong urge to remarry when they had minor children (disregard of the sex of the children). East Asian widows and widowers were unlikely to remarry once they had an adult son. In case of widows in Liaoning and Shuangcheng, once they had a son, minor or adult, their risk of remarriage reduced significantly as their status in household were already secured.

Concluding Remarks

While numerous studies on remarriage exist, this is probably is one of the first attempts to test comparatively and with multivariate analysis remarriages in rural communities in pre-industrial Europe and Asia in the eighteenth and nineteenth centuries. We applied event-history analysis to longitudinal individual-level data and demonstrate how individual demographic characteristics as well as socioeconomic, socio-cultural and household organization influence on the likelihood of remarriage. Using the same kind of data, method and models we found that the individual response to explanatory factors was sometimes the same across study areas and sometimes quite different.

We found three demographic features which were shared in all the study areas. First, age was the major determining factor of remarriage for both males and females across study areas. Second, compared to men, the negative effect of age on the likelihood of remarriage was much more pronounced among women in any society. Third, remarriage usually occurred within a very short time after the dissolution of the previous marriage. Another interesting and common feature was the decline of the propensity of remarriage in the nineteenth century; and this was particularly pronounced among women in all the observed communities (except Casalguidi whose observation period is too short to demonstrate any longitudinal change).

Controlling for these variables, socioeconomic factors affected the chance of remarriage, but in contrasting ways for men and women. On the one hand, wealth encouraged remarriage of widowers in East Asia, probably by giving them a bargaining power in the marriage market. On the other hand, wealth seems to have had a negative effect on the likelihood of remarriage among East Asian women and Casalguidi and Scanian women and men. In a complex household system, higher household socioeconomic status meant that household could afford to support or keep widowed persons in the household instead of pushing them for remarriage. In a more individualistic context, access of resources opened up alternatives to remarriage like making over the farm to one of the children in exchange for lifelong board and lodging as in the case of Scania.

The effect of short-term economic stress had in general negative effect on remarriage. This is the same tendency that has previously been found in the analyses of first marriage and fertility in the Eurasia project: When times were bad, marriage and reproduction were postponed. One exception from this was the strong and positive effect of food prices on the likelihood of remarriage among females in Liaoning and Shuangcheng. Considering their weak position in the Chinese household they might have been "gotten rid of" from the household by "remarrying-off" at the time of economic hardship. Both the negative and positive effects of food prices indicate that the household lacked savings and were very sensitive to short-term economic stress.

Further, controlling for these demographic and economic factors, we found that the presence of parents and children significantly influenced individuals' likelihood of remarriage. The way and the magnitude of the effects of coresiding children depended highly on the socio-cultural and household organization of each society. Presence of parents meant economic and social stability of the household and, in turn, support for re-formation of their children's family. We also found significant roles of children in promoting or hindering remarriage. While in previous studies the role of children has usually been tested solely in terms of the number of children either ever born from previous marriage or alive at the moment of retirement, we examined the age and sex composition of children and found at least three types of effects: no child effect, minor child effect, and son vs. daughter effect.

First, when the widowed persons did not have children, there were two different responses---either that they were extremely likely to remarry compared to those who had children as were the cases of Casalguidi men and women, Liaoning and Shuangcheng women, and Shimomoriya and Niita men and women; or that they were much less likely to remarry as were the cases for Scanian men and Liaoning and Shuangcheng men. In the former case, widowed persons sought to remarry for reproduction; while in the latter case, these widowers were not pressured to remarry. Without having any children, Scanian men probably were able to behave like bachelors, and remarried elsewhere (out of the parish) or sought for alternatives to remarriage.

Second, when widows and widowers had minor children, they were much more likely to remarry to find care takers or to replace economic and service support. This seems to be a general tendency shared in almost all communities. On the contrary, when they had children who were independent and were capable of contributing to domestic and productive work, their remarriage necessity had declined.

Third, the sex composition of children adds another dimension to the minor child effect. There was a "son effect" in East Asia. If the widowed party had at least one surviving adult son, the remarriage risk was significantly lower. In the case of Liaoning and Shuangcheng widows, their remarriage risk reduced once they had at least one son regardless of his age. In East Asia where patrilineal succession was favored, marriage had an important function in securing a family continuity by having a son. Once this was achieved, remarriage was no longer necessary. We also found a "daughter effect" in Scania. Once widows and widowers in Scania had at least an adult daughter, they were not pressured to remarry at all, as she could help out with domestic duties---she could replace her mother's place in the household for her widowed father; or she could contribute with extra work and take over some of her widowed mother's work tasks.

To conclude, the interpretation of the influence of socioeconomic and household-related factors on individuals' likelihood of remarriage in European and Asian communities needs to take into account differences in social norms in societies with different family system and socio-cultural background. Our study suggests that age and gender asymmetries were embedded in the intricate socio-cultural context; and that the remarriage risk of widows and widowers was highly dependent on their necessities and availabilities of support shaped by their socioeconomic status and kin organization of the household in relation to economic and demographic pressure in the larger context.

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Table 1 Rates of remarriage per 1,000 population at risk by gender and age in Scania (Sweden) 1766–1894; Casalguidi (Italy) 1819-1859, Liaoning (China) 1789-1840 and Shuangcheng (China) 1870-1912, and Shimomoriya and Niita (Japan) 1716–1870

Age	*Scania*		*Casalguidi*		*Liaoning*		*Shuangcheng*		*Shimomoriya&Niita*	
	Men	***Women***	***Men***	***Women***	***Men***	***Women***	***Men***	***Women***	***Men***	***Women***
<35	332.6	165.3	310.7	173.3	88.0	30.1	135.6	44.7	281.3	205.6
35–49	166.2	55.2	212.6	30.2	27.3	7.3	42.8	10.9	97.5	53.2
50-64	42.4	4.0	53.1	1.7	7.3	1.0	11.5	1.5	40.6	14.2
all	86.4	25.4	127.4	19.6	25.5	4.2	45.2	7.4	94.5	39.8
mean age at remarriage	45.8	40.1	41.6	35.6	38.0	39.4	36.2	37.6	38.3	38.0
(s.d.)	9.0	8.2	9.8	8.8	11.3	10.4	10.8	10.0	12.4	13.1
male/female remar rate	3.4		6.5		6.1		6.1		2.4	
male-female age@remar	5.7		6.0		-1.4		-1.4		0.3	
#remarriage	209	235	115	51	1,981	875	678	452	1,968	3,292
Pop. at risk	528	1,192	903	2,600	27,466	70,196	15,063	59,926	186	131

Table 2: Types of Marriages
Scania 1766-1894, Casalguidi 1819-59, and Shimomoriya and Niita 1716-1870

male and female	*Scania*		*Casalguidi*		*Shimomoriya&Niita*	
	N	*%*	*N*	*%*	*N*	*%*
1st mar & 1st mar	1,503	81.3	750	77.6	287	57.2
remar & 1st mar	152	8.2	145	15.0	39	7.8
1st mar & remar	149	8.1	29	3.0	50	10.0
remar & remar	44	2.4	42	4.3	126	25.1
Total identified	1,848	100.0	966	100.0	502	100.0
Total observed	2,423		1,079		1,202	

Notes: The figures include marriages which took place during the observation period. When spouse migrated into the communities upon marriage, his/her marital status cannot be identified. The figures for Shimomoriya and Niita include remarriages of divorced. The Liaoning data do not record the prior marital status of brides. Among men first recorded in the registers by the time they were 10 (48,580 cases), 91.4% are first marriage and 8.6% are remarriage. The Scanian calculation does not include data from Kågeröd parish.

Table 3: Remarriage by own and partner's age in Scania 1766–1894, Casalguidi 1819-1859, Liaoning 1789-1840 and Shuangcheng 1870-1912 and Shimomoriya and Niita 1716-1870

Scania

	partner's age							
Male	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	46	88.5	6	11.5	0	0.0	52	
35-49	45	67.2	20	29.9	2	3.0	67	
50-64	11	31.4	19	54.3	5	14.3	35	
							154	221
Female	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	55	74.3	18	24.3	1	1.4	74	
35-49	30	37.5	31	38.8	19	23.8	80	
50-64	5	27.8	7	38.9	6	33.3	18	
							172	275

Casalguidi

	partner's age							
Male	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	33	94.3	2	5.7	0	0.0	35	35
35-49	50	83.3	10	16.7	0	0.0	60	60
50-64	8	24.2	19	57.6	6	18.2	33	34
							128	129
Female	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	17	60.7	9	32.1	2	7.1	28	30
35-49	4	15.4	8	30.8	14	53.8	26	28
50-64	0	0.0	1	25.0	3	75.0	4	4
							58	62

Liaoning

	partner's age							
Male	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	788	97.5	19	2.4	1	0.1	808	
35-49	408	63.6	227	35.4	7	1.1	642	
50-64	41	18.3	126	56.3	57	25.4	224	
							1,674	

Shuangcheng

	partner's age							
Male	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	344	97.5	5	1.4	1	0.3	350	
35-49	146	64.3	80	35.2	1	0.4	227	
50-64	11	16.7	37	56.1	18	27.3	66	
							643	

Shimomoriya&Niita

	partner's age							
Male	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	74	100.0	0	0.0	0	0.0	74	81
35-49	32	50.8	29	46.0	2	3.2	63	63
50-64	1	2.5	19	47.5	20	50.0	40	42
							177	186
Female	*<35*		*35-49*		*50-64*		*Total*	
	N	*%*	*N*	*%*	*N*	*%*	*identified*	*observed*
<35	37	72.5	14	27.5	0	0.0	51	59
35-49	4	11.4	21	60.0	10	28.6	35	40
50-64	0	0.0	2	11.1	16	88.9	18	32
							104	131

Notes: "Males" and "Females" are widowers and widows, while "Partner" includes unmarried. In Scania, age is unknown for 67 males and 103 females. In Casalguidi, the total figures here reported do not match those previously indicated (2006) because they include some unions recorded on Marriage registers but that were not linked to people on *Status Animarum.*

Table 4: Means of the Covariates Used for Event History Analysis of the Probability of Remarriage: Males and Females in Scania 1766-1894, Casalguidi 1820-58, Liaoning 1789-1840 and Shuangcheng 1870-1912, and Shimomoriya and Niita 1716-1870

	Scania		*Casalguidi*		*Liaoning*		*Schuangcheng*		*Shimoriya&Niita*	
	Male	***Female***	***Male***	***Female***	***Male***	***Female***	***Male***	***Female***	***Male***	***Female***
Age										
< 35 (reference)	0.042	0.042	0.113	0.058	0.137	0.056	0.177	0.063	0.146	0.086
35-49	0.269	0.285	0.284	0.281	0.358	0.256	0.367	0.338	0.328	0.229
50+	0.689	0.673	0.603	0.662	0.505	0.687	0.456	0.598	0.525	0.684
DURATION OF WIDOWHOOD										
< 3 yr (reference)	--	--	0.359	0.172	0.073	0.592	0.224	0.509	0.349	0.265
3-9 yrs (Liaoning 4-9)	--	--	0.272	0.283	0.391	0.303	0.469	0.329	0.439	0.478
10+ yrs	--	--	0.117	0.169	0.535	0.105	0.307	0.162	0.212	0.256
Duration unknown	--	--	0.253	0.376	--	--	--	--	--	--
SOCIOECONOMIC STATUS										
Low	0.553	0.599	0.229	0.587	0.062	0.066	0.852	0.790	0.075	0.101
Middle	0.282	0.287	0.595	0.330	0.863	0.820	0.099	0.112	0.705	0.671
High	0.166	0.113	0.177	0.083	0.075	0.114	0.049	0.098	0.220	0.228
Log of price at t	-0.004	0.001	-0.010	-0.011	-0.036	-0.051	0.000	-0.037	-0.229	-0.215
Log of price at t-1	0.000	0.002	0.001	-0.005	--	--	--	--	--	--
Presence of parents (ref. no paren	--	--	0.812	0.829	0.741	0.833	0.663	0.811	0.656	0.824
only father	--	--	0.029	0.000	0.064	0.030	0.048	0.025	0.151	0.055
only mother	--	--	0.069	0.168	0.124	0.097	0.186	0.119	0.080	0.035
both parents	--	--	0.090	0.004	0.071	0.040	0.103	0.045	0.112	0.086
Coresiding children (A)										
only adult children	0.109	0.155	0.481	0.628	0.046	0.073	0.081	0.130	0.124	0.494
no children	0.492	0.601	0.175	0.137	0.299	0.098	0.275	0.068	0.264	0.234
only minor children	0.262	0.137	0.142	0.080	0.064	0.033	0.035	0.015	0.135	0.066
both minor and adult children	0.137	0.106	0.202	0.155	0.591	0.796	0.609	0.787	0.478	0.477
Coresiding children (B)										
at least 1 son and 1 daughter (ref)	0.245	0.199	0.425	0.444					0.432	0.514
no child	0.492	0.601	0.175	0.137	0.299	0.098	0.275	0.068	0.255	0.205
only son(s)	0.120	0.101	0.271	0.256	0.535	0.693	0.404	0.471	0.186	0.175
only daughter(s)	0.143	0.099	0.130	0.162	0.039	0.023	0.050	0.031	0.127	0.106
Coresiding children (C)										
at least 1minor-age son	0.277	0.161	0.250	0.155	0.613	0.799	0.585	0.756	0.632	0.565
at least 1 minor-age daughter	0.283	0.17	0.219	0.158	0.153	0.191	0.273	0.394	0.633	0.567
at least 1 adult son	0.144	0.192	0.530	0.614	0.608	0.843	0.631	0.879	0.769	0.803
at least 1 adult daughter	0.178	0.18	0.430	0.529	0.112	0.160	0.292	0.436	0.622	0.629
Time Period										
Scania (ref. 1766-1809)	0.327	0.194								
1810-1859	0.404	0.450								
1860-1894	0.269	0.356								
Casalguidi (ref. 1820-39)			0.468	0.433						
1840-58			0.532	0.567						
Shimomoirya&Niita (ref.1716-59)									0.325	0.202
1760-99									0.258	0.282
1800-39									0.257	0.307
1840-70									0.160	0.209
Liaoning/Schuancheng					48.014	53.672	86.893	93.447		
Parish/Village										
Hög (reference)	0.083	0.111								
Kävlinge	0.104	0.125								
Halmstad	0.242	0.166								
Sireköpinge	0.175	0.204								
Kågeröd	0.396	0.393								
Shimomoriya (reference)									0.510	0.586
Niita									0.490	0.414

Notes: For Liaoning and Shuangcheng, Liaoning price is used which is detrended with a lowess smoother with bandwidth 0.4; time period is year-1000. See text for SES categories.

Table 5: Effects of Demographic and Household Socioeconomic Status on Remarriage: Males and Females in Scania 1766-1894, Casalguidi 1820-58, Liaoning 1789-1840 and Shuangcheng 1870-1912 and Shimomoriya and Niita 1716-1870

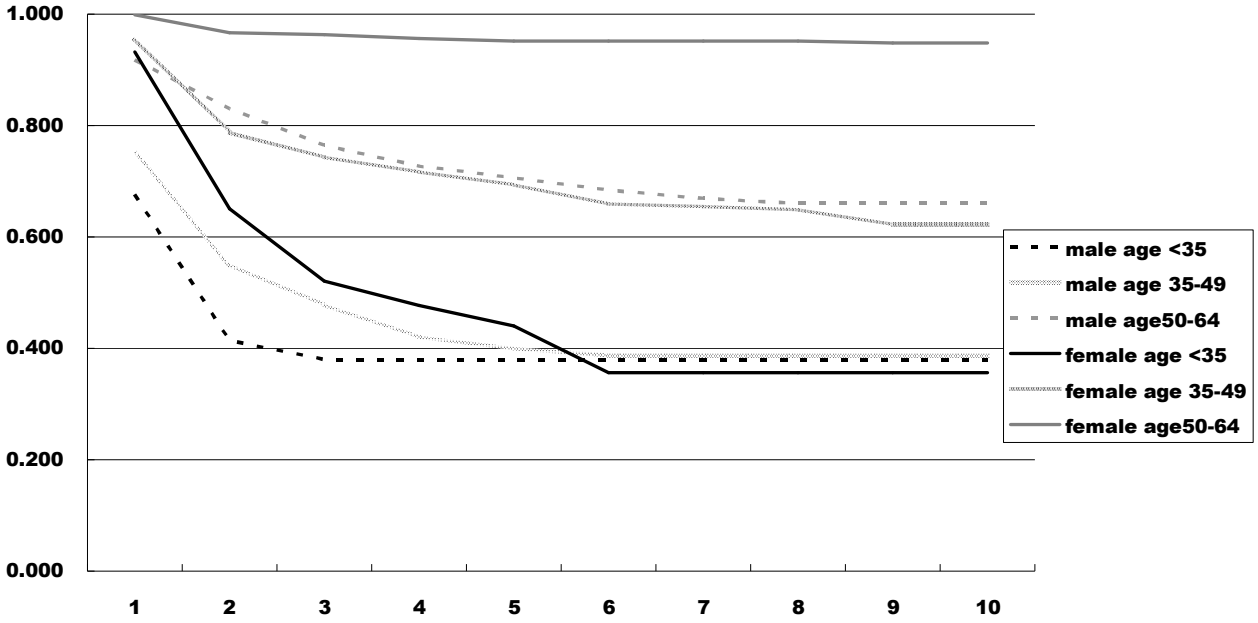
	Scania				**Casalguidi**				**Liaoning**				**Shuangcheng**				**Shimomoriya&Niita**			
	Male		**Female**		**Male**		**Female**		**Male**		**Female**		**Male**		**Female**		**Male**		**Female**	
	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value
AGE (ref. <35 yrs)	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.
35-49	0.748	0.177	**0.497**	**0.000**	0.807	0.363	**0.164**	**0.000**	**0.349**	**0.000**	**0.272**	**0.000**	**0.354**	**0.000**	**0.307**	**0.000**	**0.327**	**0.000**	**0.269**	**0.000**
50+	**0.282**	**0.000**	**0.057**	**0.000**	**0.208**	**0.000**	**0.010**	**0.000**	**0.097**	**0.000**	**0.038**	**0.000**	**0.103**	**0.000**	**0.050**	**0.000**	**0.157**	**0.000**	**0.065**	**0.000**
DURATION OF WIDOWHOOD (ref. <3yr)					1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.
3-9 yrs (Liaoning 4-9)					**0.414**	**0.000**	0.527	0.109	**0.850**	**0.020**	**0.442**	**0.000**	**0.848**	**0.068**	**0.293**	**0.000**	**0.552**	**0.002**	**0.635**	**0.059**
10+ yrs					**0.057**	**0.005**	0.497	0.367	**0.518**	**0.000**	**0.234**	**0.000**	**0.526**	**0.000**	**0.112**	**0.000**	0.773	0.407	0.564	0.130
Duration unknown					**0.523**	**0.034**	0.835	0.592									--	--	--	--
Log of price at t	1.184	0.663	**0.375**	**0.007**	1.571	0.578	0.566	0.649	0.873	0.140	**2.489**	**0.000**	**0.567**	**0.000**	**0.221**	**0.000**	0.681	0.156	0.714	0.320
Log of price at t-1	**0.500**	**0.075**	0.972	0.935	0.382	0.266	0.182	0.170												
Price x Shuangchengpu																				
Household socioeconomic status																				
Low	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.			1.000	r.c.
Middle	**0.695**	**0.040**	**0.614**	**0.005**	1.005	0.983	0.745	0.868	1.050	0.614	**3.014**	**0.000**	**1.341**	**0.013**	**2.122**	**0.000**	1.157	0.614	0.726	0.223
High	0.799	0.224	1.038	0.823	**0.477**	**0.040**	0.914	0.389	**1.938**	**0.000**	**2.078**	**0.003**	**2.646**	**0.000**	0.748	0.150	1.501	0.210	**0.427**	**0.011**
Period																				
Scania (ref. 1766-1809)	1.000	r.c.	1.000	r.c.																
1810-59	0.948	0.744	**0.659**	**0.005**																
1860-94	**0.548**	**0.003**	**0.276**	**0.000**																
Casalguidi (ref. 1820-39)					1.000	r.c.	1.000	r.c.												
1840-58					1.001	0.965	1.006	0.695												
Shimomoirya&Niita (ref.1716-59)																	1.000	r.c.	1.000	r.c.
1760-99																	**0.547**	**0.005**	**0.527**	**0.007**
1800-39																	**0.345**	**0.000**	**0.257**	**0.000**
1840-70																	0.840	0.449	**0.152**	**0.000**
Liaoning/Shuangcheng (Year)									0.999	0.392	**0.986**	**0.000**	1.003	0.515	**0.962**	**0.000**				
Log-likelihood	-1164		-1440		-275.3		-183.2		-6139.67		-3793.12		-2426.00		-2189.76		-451.79		-361.76	
Wald chi2	81.1		290		94.9		112.2										146.490		228.08	
Degrees of freedom	12		12		10		10		8		8		8		8		11		11	
p-value	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	
Number of events	209		236		114		52		1,981		875		678		462		161		108	
Num. of obs./total time at risk	2,433		9,284		831		2,410		27,466		70,196		15,063		59,926		1,648		2,951	

Table 6: Effects of Co-resident Kin and Children on Remarriage: Males and Females in Scania 1766-1894, Casalguidi 1820-58, Liaoning 1789-1840 and Shuangcheng1870-1912, and Shimomoriya and Niita 1716-1870

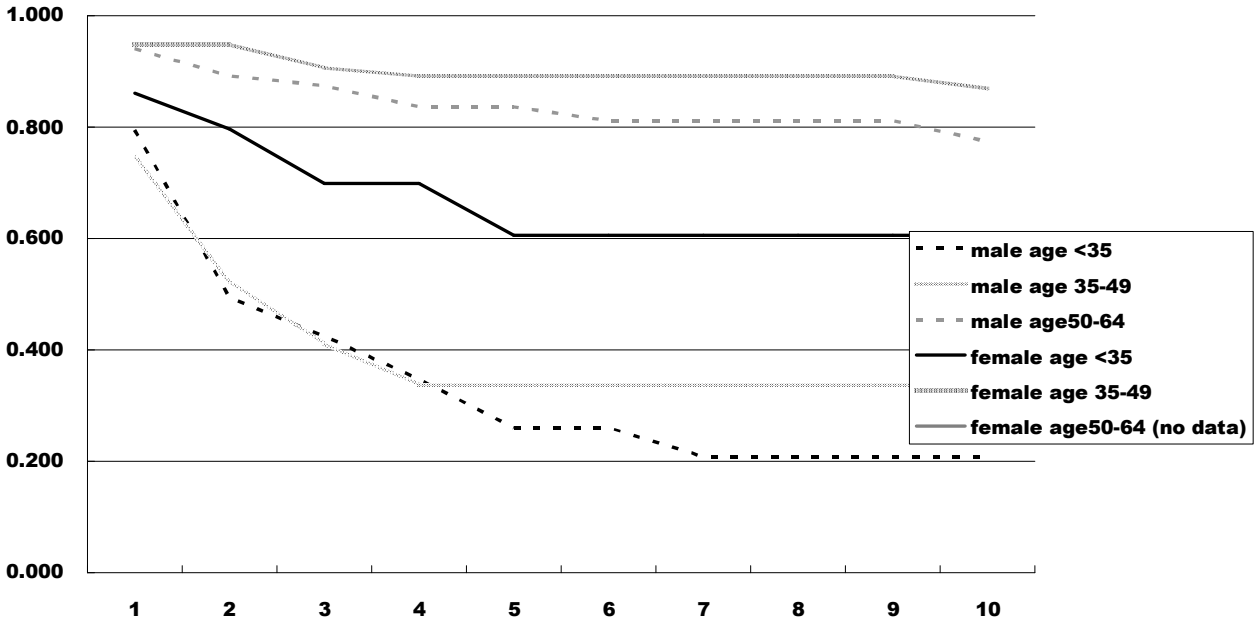
	Scania				**Casalguidi**				**Liaoning**				**Shuangcheng**				**Shimomoriya&Niita**			
	Male		**Female**		**Male**		**Female**		**Male**		**Female**		**Male**		**Female**		**Male**		**Female**	
	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value	Rel.risk	p-value
Presence of parents																				
no parents (reference)					1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.
only father					1.726	0.182	-	-	**1.475**	**0.000**	**1.317**	**0.002**	**1.361**	**0.002**	1.124	0.384	1.062	0.847	1.396	0.417
only mother					0.594	0.158	1.683	0.326	**1.395**	**0.000**	**1.826**	**0.000**	1.204	0.228	1.085	0.741	1.127	0.654	0.660	0.315
both parents					0.896	0.733	0.799	0.839	**1.993**	**0.000**	1.132	0.263	**1.500**	**0.000**	**2.112**	**0.000**	**1.520**	**0.062**	1.005	0.986
Children (A)																				
only adult children (reference)	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.
no children	2.254	0.134	1.738	0.151	**2.912**	**0.008**	**3.096**	**0.029**	**0.642**	**0.001**	**2.092**	**0.000**	0.734	0.280	**9.768**	**0.000**	0.688	0.201	**1.827**	**0.104**
only minor children	**3.844**	**0.013**	**2.349**	**0.028**	**3.604**	**0.005**	1.081	0.889	1.091	0.539	**2.250**	**0.000**	**2.261**	**0.007**	**9.814**	**0.000**	0.718	0.293	**2.815**	**0.013**
both minor and adult children	2.483	0.108	1.202	0.664	1.727	0.217	0.623	0.392	**1.259**	**0.057**	0.810	0.169	**2.324**	**0.001**	**2.801**	**0.000**	0.813	0.424	1.380	0.334
Children (B)																				
at least 1 son and 1 daughter (re	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.	1.000	r.c.
no child	0.732	0.125	1.057	0.762	**1.723**	**0.061**	**5.580**	**0.000**	**0.388**	**0.000**	**2.855**	**0.000**	**0.233**	**0.000**	**3.650**	**0.000**	0.798	0.337	0.829	0.508
only son(s)	1.239	0.339	1.294	0.245	**1.546**	**0.099**	1.957	0.179	**0.710**	**0.000**	**1.307**	**0.025**	**0.607**	**0.000**	0.992	0.945	**0.573**	**0.022**	0.798	0.463
only daughter(s)	0.824	0.452	1.141	0.600	1.659	0.106	**3.176**	**0.003**	**0.528**	**0.000**	**2.290**	**0.000**	**0.355**	**0.000**	**2.271**	**0.000**	1.057	0.807	0.850	0.669
Children (C)																				
at least 1minor-age son	1.470	0.026	**1.288**	**0.150**	1.299	0.281	**0.337**	**0.003**	**1.586**	**0.000**	0.971	0.755	**3.086**	**0.000**	**1.366**	**0.023**	**0.557**	**0.006**	1.482	0.127
at least 1 minor-age daughter	1.210	0.288	1.102	0.570	1.135	0.573	0.753	0.371	1.052	0.607	1.220	0.136	1.225	0.168	1.323	0.107	0.947	0.785	1.434	0.214
at least 1 adult son	**1.019**	**0.945**	0.822	0.437	**0.490**	**0.006**	0.612	0.242	**1.151**	**0.061**	**0.396**	**0.000**	0.854	0.196	**0.206**	**0.000**	0.850	0.421	**0.598**	**0.050**
at least 1 adult daughter	**0.483**	**0.012**	**0.383**	**0.002**	**0.544**	**0.015**	**0.352**	**0.013**	**1.477**	**0.000**	**0.512**	**0.000**	**1.358**	**0.038**	**0.742**	**0.087**	**1.664**	**0.016**	0.695	0.206

Note: The analysis on the presence of parents and children (A, B, C) are run separately controlling for the effects of age, duration of widowhood (for discrete model), residing communities, household socioeconomic status, log of prices, period and duration. The analysis of children A, B and C also controls for the presence of parents. Data on the presence of parents in the widowed person's household is not available for Scania.

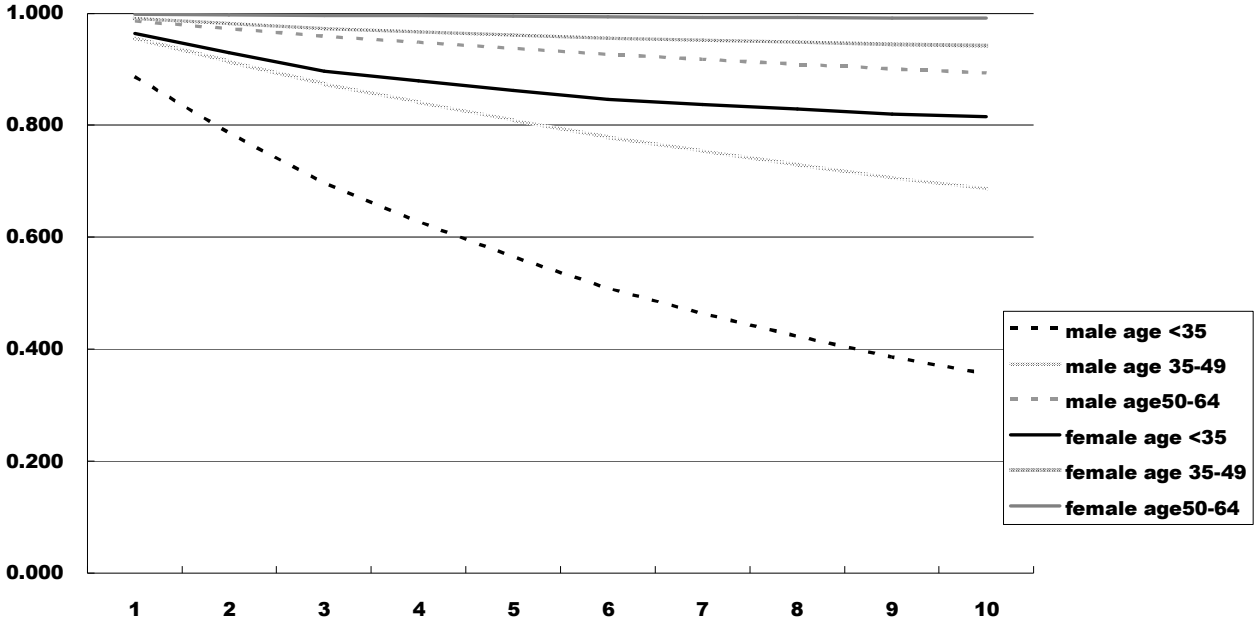
Life table (Kaplan-Myer) analysis of remarriage (remaining not remarried) by age at the start of widowhood : Scania



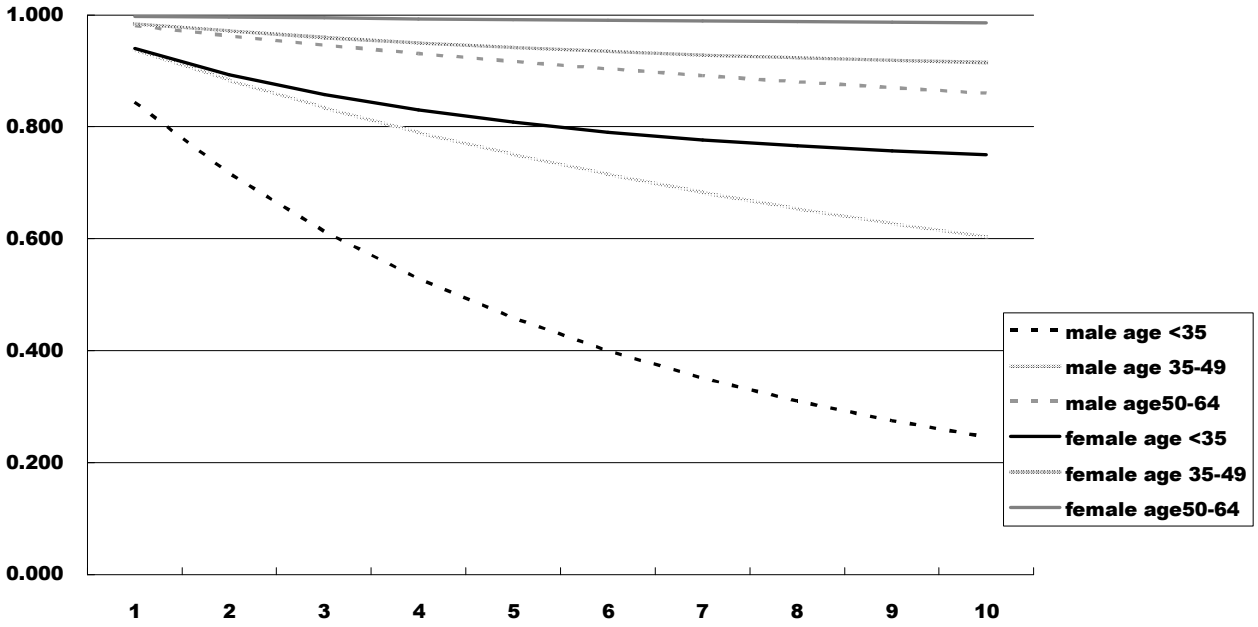
Life table (Kaplan-Myer) analysis of remarriage (remaining not remarried) by age at the start of widowhood : Casalguidi



Life table (Kaplan-Myer) analysis of remarriage (remaining not remarried) by age at the start of widowhood : Liaoning



Life table (Kaplan-Myer) analysis of remarriage (remaining not remarried) by age at the start of widowhood : Shuangcheng



Life table (Kaplan-Myer) analysis of remarriage (remaining not remarried) by age at the start of widowhood : Shimomoriya and Niita