

Working Paper

Marital Status Behavior of Women in the Former USSR: Regional Aspects

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WP-93-43
August 1993



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ABSTRACT

This paper uses the most recent data and life table analysis to describe the marital behavior of women in the republics of the former USSR. For the first time a multistate life table analysis was used to describe the marital careers of women from all of the 15 republics. In the near future, such a comparative analysis will no longer be possible due to the unavailability or incompatibility of statistical data, especially in some of the Asian states.

The first part of the paper gives a historical background of the marital processes in the former USSR as well as an analysis of statistical data. In the second part, results from a multistate life table analysis are presented.

The analysis shows that despite 70 years of influence by Soviet ideology and lifestyle, the institution of marriage was less subjected to rapid change, and retained its traditions for each culture and its ethnic features.

The analysis shows a remarkable diversity of first marriage, remarriage and divorce patterns among the geographical groups of European, Asian and Caucasian republics.

Marriage was a universal institution in the former USSR. The majority of the women in all of the former republics entered marriage at least once. The mean age at first marriage varies from 20.5 in Moldavia to 22.8 in Azerbaijan. The proportion of marriages that end in divorce differs from 16% in Georgia to 41% in Latvia. On average more than 30% of divorced women remarry in Latvia and Ukraine and less than 5% in Georgia.

TABLE OF CONTENTS

1. Introduction	1
2. Historical Background	1
3. Data Source	2
4. Methodological Approach	3
5. Model Specification and Data Analysis	3
6. Results	9
7. Conclusion	19
References	20
Appendix A: Tables 1-15	21
Appendix B: Figures B1-B3	37

MARITAL STATUS BEHAVIOR OF WOMEN IN THE FORMER USSR: REGIONAL ASPECTS

Leonid Darsky and Sergei Scherbov

1. INTRODUCTION

This paper is devoted to the construction and analysis of the marital multistate life tables for the former USSR female population, and covers 15 states that constituted the former USSR. All of the tables were created using the same approach (Willekens 1987). They all relate to the same year, 1989, and thus can be used for comparison between each other.

During the analysis of the data given below, one should keep in mind the ethnic heterogeneity of the population living in the same territory. That is especially important in Central Asia and Kazakhstan. The proportion of the population of European ethnicity is very high in these regions, but their demographic behavior differs very little from the one prevalent in the European part of the former USSR. Thus deep demographic analysis requires consideration of ethnic composition. But ethnic composition makes up a basis for regional differentiation. Ethno-demographic statistics included in multistate analyses are rather poor, at least at the current stage. Thus we tried to approach the ethnic analysis by building regional multistate marital tables (for each state in the territory of the former USSR).

The comparative analysis for these countries is interesting for several reasons. Until very recently, these countries were part of the same state. But even more important is that this is a unique case because these countries with such different cultures, like Estonia, Tajikistan, Azerbaijan, Russia, Georgia, Kazakhstan, etc., have completely compatible statistical information.

2. HISTORICAL BACKGROUND

Today we can definitely say that the experiment of rapidly merging these different populations and cultures into an ordinary ethnic composition has failed. That is the reason for the demographic heterogeneity of the former USSR. Of course some features of the lifestyle and human behavior were changed, and different attributes of western lifestyle were established at places located far from big cultural centers. For example, in the Muslim republics of the former USSR, polygamy virtually disappeared, though individual cases still do exist. But the woman's role in the family and in society there changed much less than can be observed at first glance. To a great extent, changes in the external features of behavior without corresponding changes in the system of human values and orientation took place. Alien types of behavior (virtually Western cultural norms) very often remained superficial and were never integrated into daily life. Demographic behavior and especially matrimonial behavior, apparently less than other spheres of human behavior, were subjected to westernization. State ideology did not influence matrimony very much; it was less subjected to regulation by party and government.

Religion is one of the crucial factors of ethnic differentiation. But one should not subdivide the territory of the former USSR simply in two parts: Asian-Muslim and European-Christian. The diversity is much bigger. First of all the border between Europe and Asia does not correspond to the border between Christianity and Islam. For instance Christian Armenia is geographically located in Asia, next to an almost totally Christian Georgia. Also there are considerable Muslim

populations living in the European part of Russia (Tatars, Bashkirs). A number of the territories of the North Caucasus are settled by Muslims. Huge territories of Siberia and the Far East are settled by Christians. Also, neither Muslims nor Christians share similarities in culture, history or even confession. There are Shiites (Azerbaijanis) living among Muslims, as well as Sunnis (the largest part of the native inhabitants of Central Asia). The Christian part of the population is also heterogeneous. Catholics (Lithuanians) and Protestants (Latvians) differ in their confessional tradition from Armenians and Georgians. The largest part of the population by tradition is Orthodox (Russians, Ukrainians, etc.).

Religion is important but it is not the only source of difference in demographic behavior. At the time of the Russian empire, people had different histories. The people of the Baltic states were influenced by the European reformation and modernization; the people of Central Asia had a traditional lifestyle. Widespread community land use and serfage significantly impacted all spheres of life. Large groups outside the central parts of Russia had never experienced serfage. In the same way liberal reforms conducted in the second part of the 19th - beginning of the 20th centuries were not equally spread over the territory of the empire. For a long period, inhabitants of the former USSR preserved their socio-cultural peculiarities and remained simultaneously at different stages of social and economic development. Traditional types of production and consumption significantly influenced the demographic behavior. The life and family styles of traditional farmers (Uzbeks, Tajiks) differ remarkably from Kazakhs and Kirghiz, who traditionally were involved in cattle-raising. In the western part, a remarkable difference exists between Latvians and Estonians, with their farmer-style of agricultural economy and settlements, and Russians and others, with their economy of agricultural community and system of village settlements. Within the united empire, the different populations retained the basic features of their cultures, their family and lifestyles. Under the communist rule, the tradition of obeying customs and rituals were to a large extent destroyed. Many features of religious affiliation were wiped out. But in the sphere of family behavior, cultural norms were preserved. That is the reason why demographic processes differ so much by ethnic groups.

3. DATA SOURCE

A few words should be added about the unique nature of the statistical data used in our analysis. From 1926 until 1979 in Soviet censuses, the question of marital status was asked too narrowly. In the censuses of 1937, 1939, 1959 and 1970, a person was asked whether he/she is married or not. In 1979 the question was replaced by the traditional "marital status" (married, never married, widowed, divorced, separated). But adequate statistics of marriages and divorces for adjacent years was not available. For 1989, data on marital status from the census and statistics on marriages and divorces from the registration system for 1989 are available.

Moreover, the 1989 census was the first census in the USSR where the structure of the population in reproductive ages was not affected by human losses of World War II. In the previous census of 1979, women aged 45 and older had a lack of marital partners. The cohort of men born in the period 1900-1927 shrunk considerably due to the war, and this in turn had an impact on the marital fortune of several young generations. By the end of the 1980s, the nuptial processes in the USSR were normalized and the asymmetry of age-sex structure moved toward upper ages (Darsky and Ilyina 1990). Thus for the first time in many years, we have statistical data suitable for comparative analysis which is not directly affected by the consequences of World War II. Now after the dissolution of the Soviet Union, we may not expect to obtain so quickly compatible information for all of the states that formed the USSR.

4. METHODOLOGICAL APPROACH

Multistate marital tables have one main advantage over conventional marital tables: they consider not only first marriages, but also remarriages of widowed and divorced, divorces and loss of spouses. These tables allow us to obtain a complete picture of marital state changes during the life of the hypothetical cohort, and to capture the marital structure of the stationary population under the accepted assumptions on transition rates between different marital states. Using the tables we can evaluate conditional probabilities for a person at a certain marital status by a certain age. We can also decompose life expectancy by the number of years spent by a person in different marital states.

There are several ways to make this decomposition. The task could be simplified by regarding a population's marital composition according to age groups at the time of the census as stationary, and by combining it with life expectancies (Tolts 1979). The closer matrimonial structure and dynamics are to stationarity, the more precise is this procedure. But under the circumstances, when transition rates from one state to another change in time, this approach could provide misleading results. For example, as a result of an imbalance between men and women in certain generations, a phenomenon known as "marriage squeeze" may occur for that gender having excess potential marriage partners. As a result this particular gender will have too high a proportion of those married (e.g. males after World War II in those countries having big human losses). These high proportions of married could not occur in a stationary population unless the marriage market has significant deformations in the sex balance. The preceding history affects marital structure as well as overall population structure. And if we want to evaluate the marital structure that corresponds to current intensities, we may not replace stationary structure with the one we have now.

Apart from conventional multi-decrement marital tables, multistate marital tables take into account transitions between all marital states. The main assumption we accepted is that transition probabilities between different states depend only upon age and current state, and do not depend upon the history of the process, such as the length of marriage, the number of children or time since the last divorce, etc. Introduction of these new variables into our considerations would have greatly complicated our analysis. From another point of view, the age variable is the only universal independent variable which influences all demographic functions, and only age can serve as an independent variable in a complicated model with several interrelated variables.

5. MODEL SPECIFICATION AND DATA ANALYSIS

In our model we considered four major marital states: single, married, divorced and widowed. Only "single" could not be entered from any other state. The rest of the states are transient. They could be reentered several times within a life span. A person can experience divorce, widowhood and marriage several times.

From the scheme one can see that out of 16 transitions, only nine are feasible. Out of these nine, four determine the chance to remain at the same state (diagonal elements). Age-specific rates for the other five transitions define all future evaluations.

F R O M

	S	M	D	W
T	S	+	+	X
O	M	X	+	+
	D	X	+	X
	W	X	+	+

For the majority of females in reproductive ages, the transition rates from unmarried (single, divorced, widowed) to married are higher than transition rates from married. As an illustration, Figures 1 and 2 present transition rates for Russia.

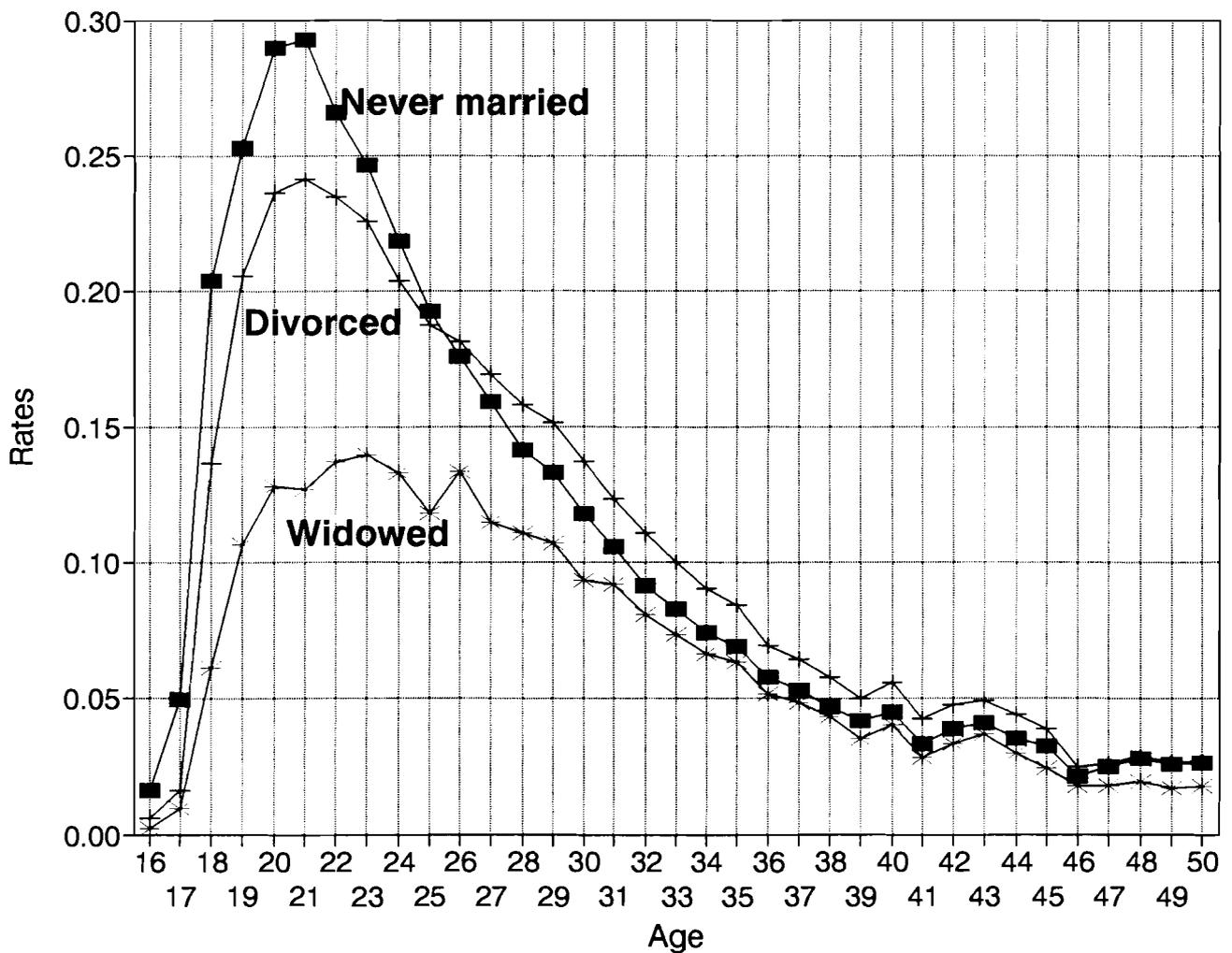


Figure 1. Age-specific marriage rates for never married, divorced and widowed, women, Russia, 1989.

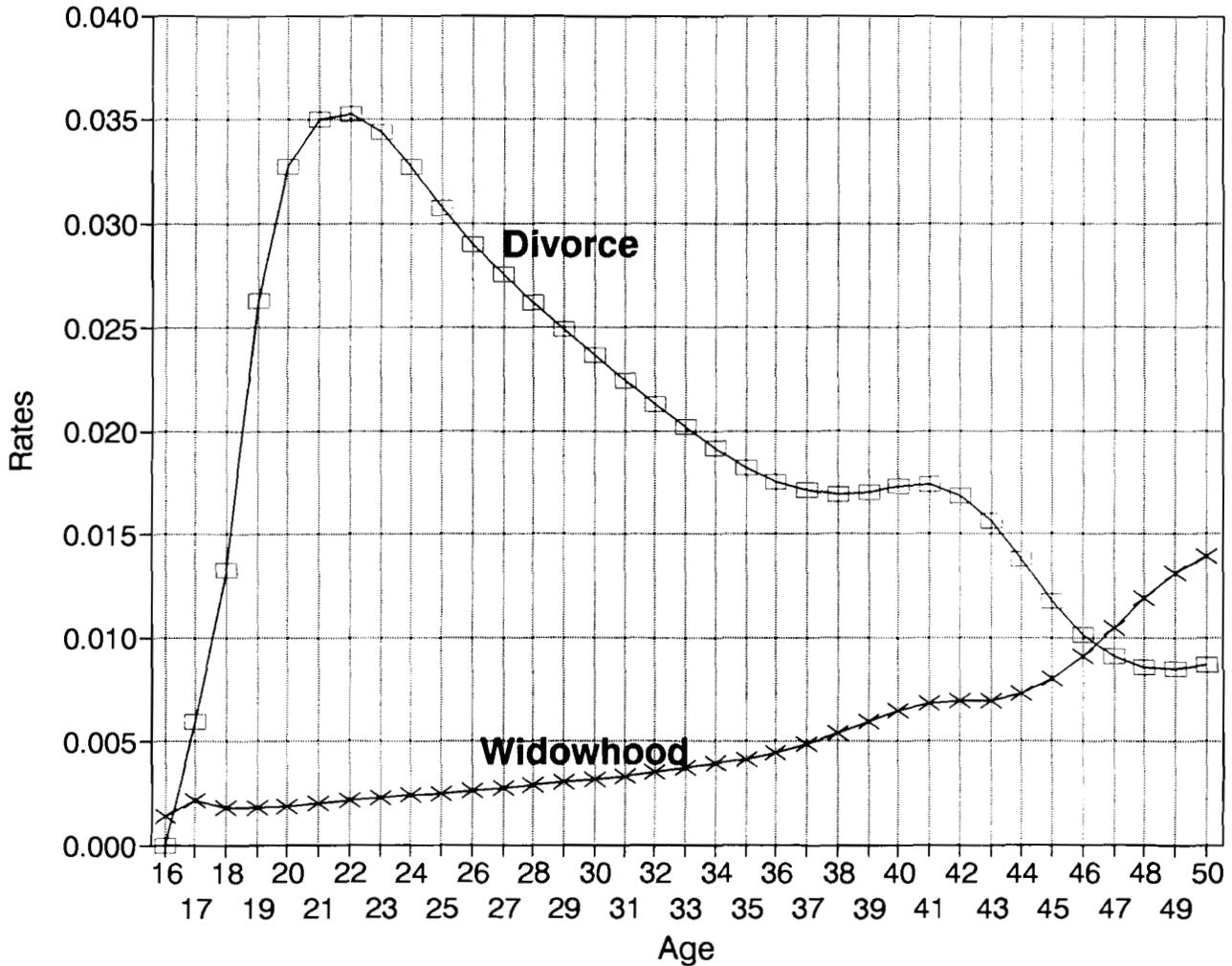


Figure 2. Age-specific divorce and widowhood rates, women, Russia, 1989.

It can be clearly observed that all curves except widowhood rates have one maximum in the younger ages. These curves are obtained directly from statistical data. They may be inaccurate due to systematic and random errors in the initial information. Usually at the first stage of analysis, it is reasonable to adjust the rates. For first-marriage rates, data adjustment has often been applied using Coale-Trussel (1974) and some other models. There is also prior experience in fitting other transition rates to different functions (Rogers and Plank 1983), though this method is not so often used in practice. We decided not to "smooth" the data mainly because major irregularities occurred for very small population groups, mostly at the youngest fertile ages. Moreover the set of curves that otherwise would have been analyzed was too heterogenous (from Estonia to Turkmenia). It would have been very difficult to select the same model to work with all this data.

Transition rates were obtained by dividing the number of marriages by single, divorced and widowed by single, divorced and widowed population in each marital status taken from the 1989 census. Divorce rates were obtained by dividing the number of divorced by married from the 1989 census. All data were available by age, excluding widowhood. We also included widowhood for completeness of the model, using the following approach. We assumed that widowhood rates for females are equal to mortality rates for married males who are two years older than women at risk to become widows. This is a rather standard approach (Maison 1974), and has been

applied for Soviet data by several authors (Volkov 1986; Willekens and Scherbov 1993). Furthermore widowhood transition rates at the ages below 50 were relatively low compared to divorce rates even though male mortality in the working ages was high in the USSR, especially in the 1980s.

Comparison of transition intensities by single years of age between different marital statuses for 15 countries is complicated by the large number of indicators. To simplify readability of these indicators we aggregated intensities into five-year age groups. For aggregation we used a standard arithmetic mean. Table 1 presents average transition rates for a five-year age interval in 1989.

Table 1. Average transition rates for broad age groups, women, republics of the former USSR.

Age	Russia	Ukraine	Byelorussia	Uzbekistan	Kazakhstan	Georgia	Azerbaijan	Lithuania	Moldavia	Latvia	Kirghizia	Tajikistan	Armenia	Turkmenia	Estonia
Transition rate from never married to married															
16-19	0.136	0.164	0.122	0.144	0.112	0.099	0.090	0.089	0.160	0.100	0.127	0.150	0.161	0.050	0.087
20-24	0.263	0.300	0.293	0.373	0.280	0.167	0.195	0.254	0.355	0.238	0.362	0.381	0.265	0.303	0.207
25-29	0.161	0.171	0.183	0.215	0.177	0.125	0.145	0.152	0.187	0.138	0.227	0.238	0.143	0.339	0.120
30-34	0.094	0.100	0.105	0.156	0.110	0.087	0.093	0.082	0.112	0.076	0.154	0.171	0.081	0.198	0.068
35-39	0.054	0.056	0.057	0.112	0.072	0.055	0.077	0.043	0.060	0.045	0.108	0.124	0.060	0.102	0.036
40-44	0.039	0.036	0.037	0.103	0.067	0.039	0.064	0.025	0.043	0.026	0.124	0.104	0.054	0.080	0.021
45-49	0.026	0.025	0.022	0.086	0.052	0.020	0.041	0.015	0.031	0.018	0.099	0.081	0.046	0.081	0.017
50-54	0.025	0.021	0.018	0.116	0.068	0.024	0.053	0.012	0.032	0.013	0.135	0.104	0.043	0.069	0.010
Transition rate from widowed to married															
16-19	0.046	0.158	0.061	0.036	0.073	0.008	0.042	0.055	0.006	0.027	0.046	0.037	0.023	0.029	0.096
20-24	0.133	0.182	0.167	0.054	0.115	0.017	0.056	0.128	0.060	0.125	0.097	0.069	0.011	0.074	0.101
25-29	0.117	0.120	0.138	0.044	0.074	0.007	0.027	0.109	0.067	0.122	0.068	0.058	0.017	0.056	0.085
30-34	0.081	0.076	0.091	0.024	0.054	0.012	0.022	0.066	0.054	0.074	0.040	0.032	0.009	0.025	0.076
35-39	0.048	0.042	0.046	0.014	0.032	0.006	0.012	0.042	0.021	0.042	0.024	0.017	0.007	0.013	0.042
40-44	0.034	0.029	0.028	0.008	0.019	0.004	0.009	0.028	0.018	0.026	0.010	0.013	0.007	0.008	0.027
45-49	0.019	0.017	0.016	0.005	0.012	0.004	0.005	0.021	0.011	0.021	0.008	0.006	0.006	0.005	0.013
50-54	0.015	0.013	0.011	0.005	0.011	0.003	0.004	0.014	0.008	0.012	0.009	0.005	0.004	0.002	0.010
Transition rate from divorced to married															
16-19	0.095	0.108	0.129	0.040	0.050	0.015	0.135	0.093	0.020	0.101	0.015	0.037	0.013	0.047	0.057
20-24	0.228	0.227	0.268	0.084	0.133	0.044	0.117	0.224	0.137	0.238	0.059	0.093	0.045	0.124	0.196
25-29	0.170	0.165	0.183	0.084	0.114	0.037	0.089	0.156	0.122	0.163	0.062	0.083	0.042	0.101	0.161
30-34	0.113	0.108	0.117	0.062	0.087	0.035	0.069	0.097	0.083	0.104	0.053	0.068	0.038	0.061	0.098
35-39	0.065	0.062	0.066	0.040	0.055	0.024	0.051	0.063	0.050	0.062	0.039	0.040	0.034	0.039	0.059
40-44	0.048	0.044	0.043	0.030	0.040	0.018	0.042	0.039	0.035	0.045	0.035	0.032	0.036	0.028	0.043
45-49	0.029	0.028	0.026	0.020	0.025	0.011	0.026	0.029	0.025	0.031	0.021	0.019	0.032	0.022	0.026
50-54	0.025	0.024	0.021	0.021	0.023	0.014	0.026	0.024	0.022	0.021	0.020	0.020	0.023	0.022	0.022
Transition rate from married to divorced															
16-19	0.011	0.016	0.011	0.004	0.005	0.002	0.003	0.007	0.006	0.010	0.003	0.002	0.001	0.004	0.008
20-24	0.034	0.035	0.030	0.012	0.022	0.009	0.009	0.024	0.023	0.036	0.014	0.012	0.007	0.012	0.031
25-29	0.028	0.027	0.025	0.011	0.019	0.010	0.010	0.023	0.019	0.033	0.014	0.012	0.008	0.011	0.030
30-34	0.021	0.021	0.018	0.009	0.016	0.009	0.009	0.021	0.014	0.026	0.011	0.008	0.008	0.009	0.025
35-39	0.017	0.016	0.015	0.007	0.013	0.008	0.009	0.017	0.011	0.022	0.009	0.006	0.007	0.007	0.019
40-44	0.016	0.014	0.013	0.006	0.011	0.006	0.010	0.014	0.011	0.018	0.009	0.006	0.007	0.007	0.017
45-49	0.010	0.008	0.008	0.004	0.007	0.003	0.006	0.010	0.007	0.012	0.006	0.005	0.004	0.003	0.011
50-54	0.008	0.007	0.006	0.003	0.007	0.003	0.006	0.008	0.005	0.010	0.005	0.004	0.004	0.004	0.008
Transition rate from married to widowed															
16-19	0.002	0.002	0.001	0.003	0.004	0.003	0.004	0.001	0.004	0.002	0.001	0.003	0.004	0.005	0.001
20-24	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002
25-29	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002
30-34	0.004	0.003	0.003	0.003	0.004	0.002	0.002	0.003	0.003	0.003	0.004	0.002	0.003	0.003	0.003
35-39	0.005	0.004	0.004	0.004	0.005	0.004	0.003	0.004	0.004	0.004	0.004	0.005	0.003	0.004	0.003
40-44	0.007	0.006	0.007	0.005	0.007	0.005	0.005	0.007	0.007	0.006	0.007	0.005	0.006	0.006	0.005
45-49	0.011	0.010	0.010	0.008	0.011	0.007	0.008	0.010	0.010	0.009	0.010	0.007	0.009	0.009	0.009
50-54	0.015	0.014	0.014	0.013	0.016	0.010	0.013	0.013	0.014	0.014	0.015	0.011	0.013	0.016	0.013

From Table 1 we can see that as usual, first-marriage rates for females reach the maximum within the age group 20-24, though the exact age is different for different countries. Only for Turkmenia, the age that corresponds to the maximum marriage rate lies in the interval 25-29. In the group 20-24 in general, the Central Asian countries have higher first-marriage rates than other countries. In this age group first-marriage rates in Turkmenia, Tajikistan, Kirghizia and Uzbekistan exceed 0.3. In the European republics this happens only in the case of Moldavia. The minimal first-marriage rates in the age group 20-24 are in Georgia and Azerbaijan; here it is below 0.2. Despite such big differences in the values of rates, in particular ages, almost all females do marry. Celibacy is not widespread. In the older ages from 30 until 40, first-marriage rates are substantially higher in Central Asia than in Europe; the minimum value is in Estonia.

In general, marriage statistics in Central Asia need special examination; one cannot rely only on the official data. The native populations of this region practiced polygamy until the 1920s, and women married at very young ages. Under Soviet rule, a female emancipation movement started. Polygamy and young marriages were pronounced illegal; legislation allowed only one wife, not younger than 18 years of age. The old traditions could not be easily wiped out, and different methods appeared to hide young wives and second wives from the authorities. It is natural that these features were retained in real life longer than they were reflected in the statistical data. In the census of 1926, the number of women among the Asian populations in the age groups 13-17 was significantly underestimated--young and second wives were hidden (Andreev et al. 1990). In official statistical accounts this was no longer observed, but young marriages, polygamy and "kalim" (payment for a bride), according to the literature and other sources, could be still found. Although these phenomena are now less common than in former times, they still affect marriage processes and are implicitly reflected in the statistical data.

According to all statistical sources, a rapid increase in the age at first marriage was observed during the last 60 years in the republics of Central Asia (Ilyina 1991). Marriages of extremely young girls aged 11-13 are no longer common. Nowadays, early marriages involve girls 15-16 years old. Some women desire and obtain middle and higher education before marriage. This also increases the age at marriage.

Because of the custom, the marriage of a daughter or son is costly. Explicit or implicit payment for a bride, expensive presents for the parents, a luxury dinner with many guests are all obligatory rituals. If there are several sons in a family, after the marriage of the oldest son, the family needs several years to save enough money for the marriage of the next one.

In addition, there is the problem of housing, not only in the cities where procuring an apartment is very difficult and expensive, but also in the rural areas of many Central Asian regions, because many villages are already over-constructed, and to find a place for new building is not easy. All of the above complicate marriages and lead to their postponement.

One should also keep in mind that the marriage rates we used were based on the data on marital state as given by the people to the census-taker. Therefore the number of couples whose marriages were legitimately registered differs from the number of couples who live together and consider themselves married. For instance, if a bride has not yet reached 18 years of age, which is the legal age for marriage, then especially in the rural areas of Central Asia, her age may be adjusted. Or it is possible to marry according to Shariat and to register the marriage several years later. Based on the statistics of births out of wedlock, when a child is registered according to the statement of both parents, we know that in Asia there is quite a number of unregistered marriages (Bondarskaya and Darsky 1990). But we may only suspect that part of these are unregistered second wives, and another part Shariat marriages. A married woman who is not

registered at the time of the census naturally identifies herself as married. This in turn decreases the number of legitimately single in that particular age group.

In the European states these irregularities are also possible. But the absence of traditions that contradict the law makes them less significant. In Russia and the other states that constituted the former USSR, the West European type of premarital cohabitation (when a young couple forms a union without any obligation or public sanction, and which can be dissolved at any time or could gradually transform into a strong consensual union and only later be legitimately registered as a marriage) is not widespread. Unregistered marriages do exist, but in most cases these are second marriages. Actual creation of the union and its registration according to the law mostly coincide in time and thus, in demographic analysis, we can use the data on legitimate marriage registration at least for first marriages. As far as remarriages are concerned, it is possible that some of them are not officially legitimated and thus not registered. Due to this fact, analysis of remarriages based on the data of current registrations should be done with caution. Unfortunately we do not know of any studies done in this direction.

With regard to nuptiality, a unique situation arises in Georgia and Armenia. As we will see later on, there are very low marriage rates and high ages of marriage in these states. There is no reason to suspect inaccuracy in the statistics. The sharp increase in marriage age and low nuptiality established during the last decades has become a reality, and needs deeper investigation. One of the most likely assumptions is that the increase in marriage age in these countries is the result of demographic transition. Limiting the number of children or postponing their births contradicts the traditional image of a real man (husband, supporter, father of a large family) in both Georgia and Armenia. And thus many men postpone marriage until they reach a certain level of wealth, income and social status. In these populations higher education is of great importance, both for males and females. Many women marry only after getting a higher education. Perhaps financial motives--enormous expenditures for traditional marriages--also influence the age of marriage. Age at first marriage is now the highest in Georgia and Armenia, although at the beginning of the century it was one of the lowest. Family ties are very strong, and this strengthens the family. Divorces rarely occur and are condemned. In general, the Armenian and Georgian people inherited many ethnic customs which have not been adjusted to fit Eastern or Western family models.

When comparing first-marriage and remarriage rates (Table 1), it is clear that the rates for never-married are higher below the age of 25 than for those who remarry. One reason for this is that a young woman wishing to marry is subjected to close scrutiny, and by the age of 25-30 the proportion of women deemed unsuitable for marriage increases, thus the probability of marriage goes down. Although remarriage rates for divorced, especially at the ages above 25-30, seem to be very high in the European states, remarriage cannot compensate completely for divorce. The proportion of divorced is increasing with age. This is clearly observed in the graphs and tables for each state and in Appendices A and B that show the evaluation of nuptial structure by age. Only part of the remarriages after divorce are simply a legitimation of a change in marital partner, which immediately follows divorce. Competition among other divorced is not high on the marriage market. Some of them are disappointed in the institution of marriage; others have several children, making their chances for remarriage slim.

One should keep in mind that divorced women (as well as widows) in the European republics often enter a marital union without legitimate registration. There may be a number of reasons for this, such as the absence of legitimate registration of divorce. Currently the legislation on divorce is rather liberal, favoring mostly undisputed divorces (when both parties mutually agree to divorce). If one of the partners objects, the process may take a long time, especially if the couple has underage children. That is why occasionally remarriages remain unregistered. There

are also some ethnic customs that concern remarriage of widowed and divorced. For example, among the Central Asian people, a young widow is a desirable wife, because no "kalim" (payment) is paid for her. In Georgia and Armenia there is a long tradition of "extended" family (where relatives of the deceased husband take care of the widow and her children) and a remarriage is regarded as inappropriate. There is a small number of divorced; they are not respected and are not popular on the marriage market.

For widows, the chance to remarry is usually lower than for divorced. In most cases remarriage rates for widows above 30 years of age are lower than marriage rates for never-married. Exceptions are the rates for Latvia and Estonia in older ages. Though the remarriage rates for widowed are lower there than remarriage rates for divorced, they are higher than first-marriage rates. One should take care when drawing conclusions from this analysis, because the number of widows below the age of 50 is small, and random variations are possible.

Marriage disruption rates have different age patterns for divorce and widowhood. The chances of divorce are the highest at young ages, usually in the age interval 20-24. They decline with age, and by the age of 50 reach a very low level. Exceptions are Armenia and Azerbaijan, where divorce rates are generally very low and the maximum frequency of divorces fall into the age groups above 25 years. The widowhood rates, which correspond to the male mortality rates, increase gradually with age. They are very low at the younger ages, but above the age of 45, widowhood rates exceed divorce rates.

The highest divorce levels are in Russia, Ukraine, Latvia and Estonia where in the age group 20-24, more than 30 per 1000 married women divorce. Moreover, in Latvia this level is sustained until the age of 30. The divorce level reaches its minimum in the Caucasus, where the highest age-specific annual level does not exceed 10 per 1000. As mentioned earlier, the widowhood level reflects the male mortality rates and its highest level at the age of 50 is observed in Russia, Ukraine, Byelorussia and Kazakhstan, where more than 1% of the married women aged 45-49 become widows each year.

6. RESULTS

Only by using multistate marital tables is it possible to measure the nuptiality level. If we consider the degree at which each generation is involved in the institute of marriage, or as a portion of life spent in marriage, then for cohort data one can imagine methods to measure the nuptiality level. But for period data, multistate tables provide the only appropriate approach. If we want to concentrate our analysis only on women of reproductive ages (16-50 years of age), then the maximum number of years that could be spent in marriage is 34, and these 34 years of life will be distributed somehow among different marital statuses. This distribution will define the level of nuptiality: the expected number of years spent in marriage will be a direct measure and the number of years spent never married, divorced and widowed could comprise a complementary measure. Table 2 presents such data for the former Soviet republics. From this table one can observe that while an Estonian woman of reproductive age (16-50) spends 21 years in marriage, a woman from Tajikistan is married almost 5 years longer. At the same time Armenian and Azerbaijani women will stay divorced about 2 years, which is half that of Latvian women.

Table 2. Years spent in different marital states during reproductive ages (16-50 years), women, republics of the former USSR.

Republic	Never married	Married	Divorced	Widowed
Armenia	6.28	24.79	1.98	0.96
Azerbaijan	8.18	23.21	1.90	0.72
Byelorussia	6.25	23.85	3.19	0.71
Estonia	8.57	21.06	3.81	0.57
Georgia	8.75	22.38	2.09	0.78
Kazakhstan	6.51	23.51	3.06	0.93
Kirghizia	5.56	24.50	2.90	1.04
Latvia	7.57	21.64	4.11	0.68
Lithuania	7.45	22.54	3.29	0.72
Moldavia	5.37	24.51	3.18	0.94
Russia	6.38	23.15	3.66	0.81
Tajikistan	5.27	25.89	2.13	0.72
Turkmenia	6.89	24.19	1.98	0.95
Ukraine	5.58	23.93	3.75	0.73
Uzbekistan	5.27	25.63	2.23	0.88

Total rates obtained from the multistate table depend only upon the intensity of the processes taken into account, and reflect nuptial processes for a particular moment. In Table 3 we present the total rates for major events of matrimonial dynamics in 1989 for all former Soviet republics. The states are ordered by first-marriage total rates. They reflect the average number of events per female never married at age 16. First-marriage total rate (FMTR) can be interpreted as the probability that a woman will eventually marry by age 50. It is clear that, at least theoretically, this indicator could not exceed 1 or closely approach 1. In each generation and in each population there is a number of women who cannot marry for different reasons, perhaps associated with health problems, or religious (nuns and monks). In each society there is a different level of celibacy, but it does exist. Thus there are no generations with total nuptiality; there are always people who do not marry even though they want to.

The rates approaching 1 in the upper rows of the table reflect the influence of two factors. The first factor might be a well-known effect for a hypothetical generation, that is invoked by a decrease of marriage age; the second may be a simple distortion of information on the count of marriages. In the 1980s in the USSR there were certain privileges and financial benefits for those marrying for the first time. Thus it was advantageous to hide the order of marriage. For example, those who married for the first time had a substantial discount on the purchase of gold rings. They also had some privileges in organizing the marriage ritual. Apparently all that led to

overestimation of the proportion of first marriages in the total number of marriages. But despite the influence of the two factors mentioned above, one could definitely say that the number of never married was very small. The fact that Central Asian republics occupy the upper rows of Table 3 seems quiet natural. According to all sources, including censuses, they have the lowest level of celibacy. It is also natural that the Baltic states occupy the bottom rows of the table. The European style of nuptiality has been popular there for a long time (Hajnal 1965). Excluding Estonia, the overall celibacy level was lower than 6%, but in comparison with the other states, this may be considered as a low level (UN 1988). We can conclude that by this indicator, there is not much difference between the former Soviet republics. However, the picture differs with remarriages.

Table 3. Average number of events per woman aged 16-50, republics of the former USSR.

Republic	Total Marriages	First Marriages	Remarriages of		Divorces
			Divorced	Widowed	
Tajikistan	1.106	0.998	0.098	0.011	0.204
Kirghizia	1.130	0.997	0.114	0.019	0.259
Uzbekistan	1.105	0.997	0.098	0.010	0.206
Turkmenia	1.093	0.997	0.086	0.011	0.190
Moldavia	1.201	0.989	0.190	0.021	0.346
Kazakhstan	1.192	0.985	0.184	0.024	0.337
Ukraine	1.315	0.983	0.305	0.027	0.482
Byelorussia	1.269	0.981	0.263	0.025	0.427
Armenia	1.056	0.978	0.070	0.007	0.173
Russia	1.306	0.975	0.298	0.033	0.481
Azerbaijan	1.066	0.967	0.091	0.007	0.208
Lithuania	1.209	0.959	0.225	0.025	0.402
Latvia	1.289	0.954	0.311	0.025	0.522
Georgia	0.992	0.942	0.046	0.004	0.162
Estonia	1.210	0.931	0.261	0.018	0.463

Total remarriage rates (accounting for remarriages of divorced and widowed) could not be interpreted directly as the probability of a woman to remarry, because some women marry several times and some do not, but for the majority of those who do, remarriage takes place only once. Thus the average number of remarriages will probably not exceed the number of women who remarry. Total remarriage rates differ substantially between countries.

The maximum average number of remarriages per person after divorce is found in Latvia, Russia and Ukraine. This is not surprising because the highest frequency of divorce is observed in these countries. In Armenia and Georgia, where divorces are rare, total remarriage rates are the

lowest. But in Latvia the number of remarriages of divorced is about 60% of divorces. In Georgia this number would be half. In Georgia only about 5% of the women enter a second marriage. In Russia, Latvia and Ukraine more than one-third of the women remarry.

The distribution of matrimonial events in different countries differ by age. But in general relations between the average ages are preserved. The average age at first marriage is everywhere lower than the same indicator for divorced, and for widowed it is higher than for divorced (Table 4). In Russia and Ukraine, divorced remarry on average 11.4 years later than those never married. In Armenia and Georgia these figures are 16.9 and 15.3 years, respectively. In Russia widows remarry on average 4.1 years later than divorced women, in Central Asia 1-2 years later, and in Kirghizia there are no differences. The average age of marriage for all marital states is the average of the marriage age of never married and the remarriage age for divorced and widowed, weighted by the number of first marriages, remarriages of divorced and widowed, respectively.

The mean age of divorce is the lowest in Ukraine--30.6 years of age; the mean age of marriage there is 23.5. The highest age of divorce is in Azerbaijan--34.6 years. For other states the differences in average age at divorce are not large.

Table 4. Mean age at marriage and divorce for women aged 16-50, republics of the former USSR.

Republic	Total Marriages	First Marriages	Remarriages of		Divorces
			Divorced	Widowed	
Azerbaijan	24.047	22.795	36.293	37.423	34.592
Georgia	23.367	22.682	36.006	38.727	32.810
Turkmenia	23.387	22.293	34.515	36.433	32.406
Estonia	24.818	22.178	33.423	36.875	32.220
Latvia	24.826	21.801	33.170	37.141	31.893
Lithuania	24.321	21.793	33.629	37.765	32.445
Kazakhstan	23.752	21.581	33.829	36.237	31.888
Byelorussia	23.744	21.187	32.085	36.313	31.297
Russia	24.143	21.169	32.523	36.663	31.385
Armenia	22.386	21.149	38.001	39.259	33.443
Kirghizia	22.679	20.966	35.527	35.653	32.155
Tajikistan	21.993	20.685	33.928	35.848	31.631
Uzbekistan	21.989	20.668	34.041	35.870	31.365
Ukraine	23.527	20.580	31.945	36.014	30.607
Moldavia	22.782	20.544	32.959	36.403	31.192

The differences in mean age at first marriage are also insignificant. But the lowest first-marriage ages in Ukraine and Moldavia attract attention. In the past, Central Asian states used to have the lowest age at first marriage, as did the Caucasus republics. Uzbekistan, Tajikistan and Kirghizia now follow the Ukraine and Moldavia with respect to mean age at first marriage. Turkmenia, which belongs to the same socio-cultural environment as the above-mentioned Central Asian republics, has a higher mean age at first marriage than the Baltic states. Azerbaijan and Georgia, which used to contract very young marriages (Sifman 1966), are now distinguished by the highest age at first marriage.

Multistate marital tables give us the opportunity to estimate the marital structure of the stationary population. One of two approaches may be selected: either to consider female mortality or not. The use of the first approach is limited by the availability of reliable and detailed statistical data on mortality by marital status. Because the female mortality level below the age of 50 is relatively low, we decided to use the second approach. This choice partly influenced the selection of the upper age boundary of 50 that we considered in our analysis. To study the marital structure dynamics in the older ages, one needs reliable data on mortality disaggregated by a marital status.

Stationary age structures by marital status obtained from a multistate model are given in Appendix A (Tables 1-15) for females aged 16-50. Stationary marital population age structure is the result of interaction of all the transitions. The population could have had this structure if the transition rates had stayed constant during the cohort's life. The total number of females in each age category equals 100%. The first marital state, single, could not be entered from any other state. The corresponding column indicates the proportion of single, in the same way as in the ordinary table for first marriages. The other columns for married, widowed and divorced could be obtained only by using a multistate approach. The proportion of married is of special interest. At a relatively young age most of the women are married. Thus in Moldavia by the age of 21, 60.6 percent of the women are married. At about the same age, the majority of the women in Ukraine and Byelorussia are also married. In Georgia, Azerbaijan, Kazakhstan and the Baltic states, the age is 22; for Turkmenia, 23. Only in Turkmenia the proportion of married women reaches 90 percent at the ages 30-33. In the other states this proportion lies between 80 and 90 percent. Exceptions are Estonia and Latvia, where the highest proportion of married women does not exceed 77 percent. After reaching its maximum, the proportion of married women begins to decline. Divorces and widowhood occur more often than marriages. Only in Uzbekistan and Tajikistan the proportion of married exceeds 80 percent by age 50. In Latvia and Estonia it falls below 70 percent.

The proportion of divorced is monotonically accumulated with age although divorce rates decline with age after 25. In a stationary population the proportion of divorced reaches its maximum in the older ages. In our table by the age of 50 in Latvia and Estonia, the proportion of divorced exceeds 20 percent; in Russia, Byelorussia, Lithuania, Kazakhstan, Moldavia and Ukraine the proportion of divorced by age 50 is between 15 and 18 percent. In other states it is slightly higher than 10 percent. In the Ukraine the proportion of divorced reaches 10 percent by the age of 28, but in Tajikistan this level is reached only by the age of 46 (Figures 3 and 4).

The proportion of widowed also accumulates with age, but within the fecund ages their share is small, and reaches 10 percent only for Kirghizia and Turkmenia by the age 50.

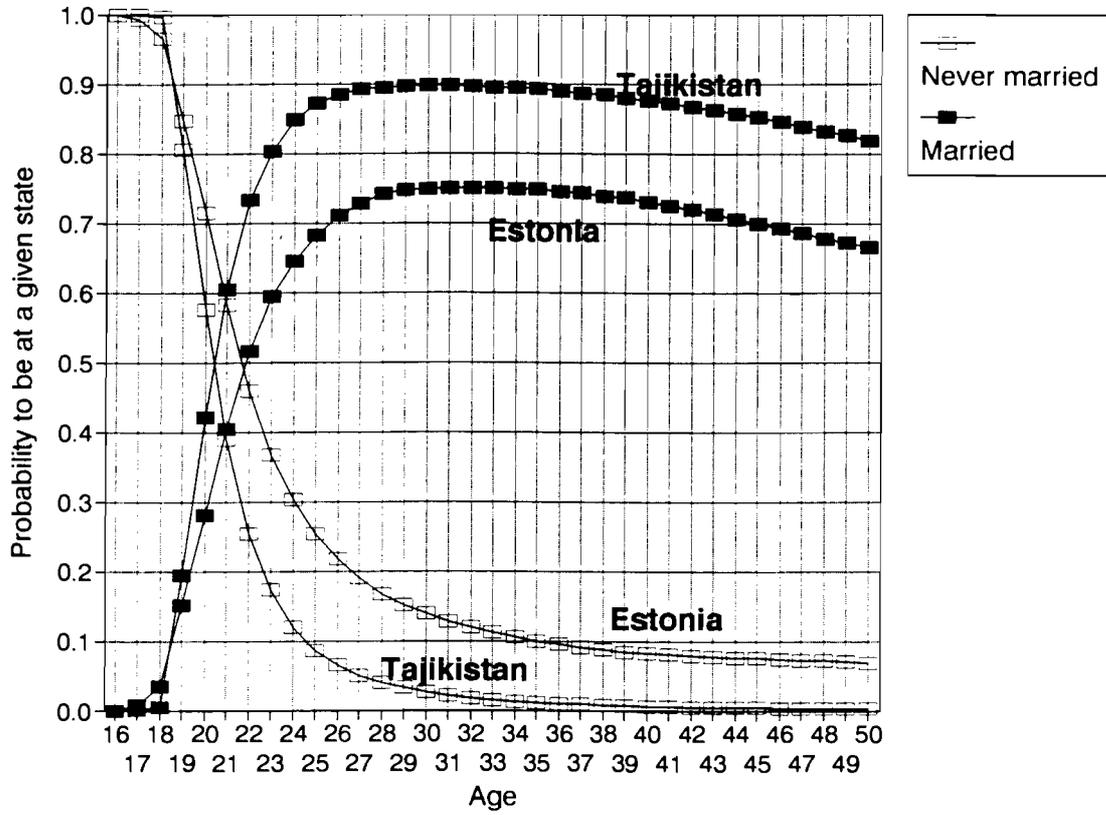


Figure 3. Probability to remain never married and to marry for a woman never married at age 16, Estonia and Tajikistan.

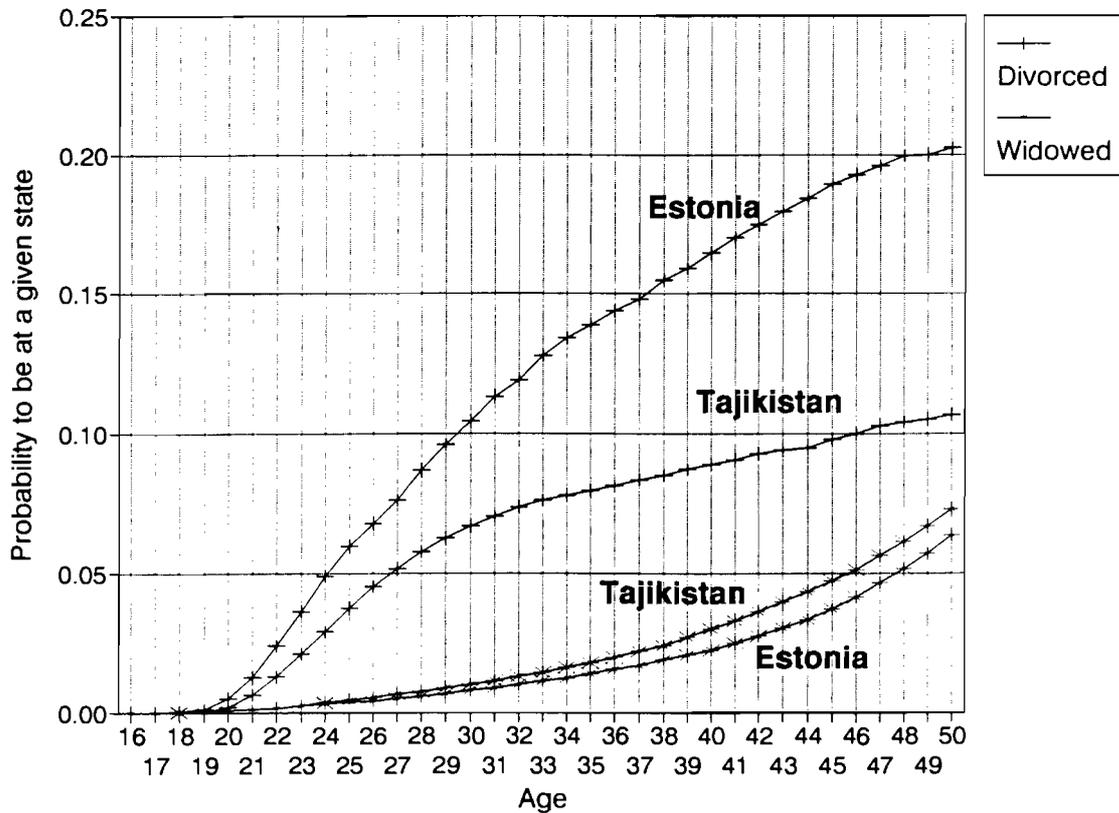


Figure 4. Probability to be divorced or widowed for a woman never married at age 16, Estonia and Tajikistan.

Multistate tables also facilitate answers to questions about the nuptial future of those who have reached a certain age with a certain marital status. For example, of the women living in Russia who were never married at age 16, by the age of 30, 81.2 percent will be married and only 7.2 percent will remain unmarried. If we consider women at age 20 who were never married and live in Russia, then by age 30 only 77.8 percent will be married, and 12.1 percent will not marry (Table 5).

Table 5. Probability of being in a given marital state at age 30, by marital state at age 20, women, republics of the former USSR.

Republic	Marital state at age 20									
	Never married				Married			Divorced		
	NM	M	D	W	M	D	W	M	D	W
Armenia	0.131	0.817	0.041	0.011	0.922	0.061	0.017	0.337	0.660	0.003
Azerbaijan	0.183	0.772	0.037	0.008	0.929	0.059	0.012	0.610	0.384	0.006
Byelorussia	0.093	0.817	0.082	0.008	0.885	0.105	0.010	0.807	0.185	0.008
Estonia	0.196	0.707	0.091	0.007	0.854	0.136	0.010	0.733	0.260	0.007
Georgia	0.234	0.717	0.041	0.008	0.911	0.074	0.015	0.315	0.682	0.003
Kazakhstan	0.102	0.807	0.079	0.012	0.876	0.109	0.016	0.647	0.345	0.008
Kirghizia	0.053	0.857	0.077	0.014	0.885	0.099	0.017	0.422	0.573	0.005
Latvia	0.153	0.737	0.101	0.008	0.848	0.141	0.011	0.755	0.237	0.008
Lithuania	0.132	0.782	0.078	0.008	0.883	0.106	0.011	0.768	0.225	0.008
Moldavia	0.067	0.837	0.085	0.011	0.878	0.107	0.015	0.663	0.330	0.007
Russia	0.121	0.778	0.092	0.010	0.864	0.123	0.013	0.766	0.224	0.010
Tajikistan	0.046	0.885	0.060	0.009	0.915	0.075	0.011	0.552	0.444	0.004
Turkmenia	0.042	0.898	0.050	0.010	0.919	0.068	0.014	0.634	0.359	0.007
Ukraine	0.096	0.798	0.097	0.009	0.864	0.125	0.011	0.763	0.229	0.008
Uzbekistan	0.053	0.878	0.059	0.011	0.912	0.075	0.013	0.535	0.460	0.005

It is interesting to compare the fate of women who belong to different unmarried states. Using a status-based multistate life table, we find out that in Russia both never married and divorced women at age 20 have about the same chance to be married by age 30 (78 and 77 percent, respectively). Under the same conditions, in Georgia in comparison with never married women, a divorced woman has half the chance to be married by age 30 (31.5 and 71.7 percent). The same big differences are found in Armenia and Kirghizia. In Georgia 68.2 percent of the women who were divorced at age 20 will remain divorced by age 30. In Byelorussia this figure will be only 18.5 percent.

After the age of 30 (Table 6) all the intensities are lower. Again in Russia, of the never married women at age 30, only 52.1 percent will be married by age 50, and of the divorced, 57 percent. In Georgia, where the chances for divorced and widowed to remarry are very small, only 31 percent of divorced at age 30 will be married by age 50, but of those never married at age 30, 55.2 percent will marry.

It would be interesting to examine all these probabilities, but the tables that contain them are too large. Therefore we produced a set of pictures to aid our analysis (Appendix B, Figures B1). Examining the differences between the countries in state probabilities for those who reached age 20, one can observe that there are no essential differences for single or for married females (Appendix B, Figures B2) between the states. In all the countries, the number of women who had

not married by the age of 20 and remain single is declining with age. The probability to remain never married rapidly declines with age. The extreme cases are shown in Figure 5.

Table 6. Probability of being in a given marital state at age 50, by marital state at age 30, women, republics of the former USSR.

Republic	Marital state at age 30									
	Never married				Married			Divorced		
	NM	M	D	W	M	D	W	M	D	W
Armenia	0.301	0.610	0.040	0.049	0.827	0.085	0.088	0.443	0.525	0.032
Azerbaijan	0.252	0.639	0.061	0.048	0.814	0.110	0.077	0.521	0.441	0.038
Byelorussia	0.331	0.541	0.077	0.051	0.768	0.149	0.084	0.578	0.367	0.054
Estonia	0.493	0.401	0.075	0.031	0.736	0.196	0.068	0.535	0.424	0.041
Georgia	0.365	0.552	0.041	0.041	0.826	0.096	0.078	0.310	0.668	0.022
Kazakhstan	0.223	0.640	0.074	0.063	0.772	0.133	0.095	0.530	0.417	0.053
Kirghizia	0.089	0.759	0.075	0.077	0.788	0.113	0.099	0.442	0.517	0.041
Larvia	0.437	0.439	0.085	0.038	0.725	0.200	0.075	0.547	0.406	0.047
Lithuania	0.442	0.447	0.072	0.040	0.754	0.166	0.079	0.547	0.405	0.048
Moldavia	0.293	0.580	0.069	0.058	0.778	0.129	0.093	0.511	0.440	0.049
Russia	0.345	0.521	0.084	0.050	0.746	0.169	0.086	0.570	0.375	0.055
Tajikistan	0.092	0.798	0.056	0.055	0.850	0.081	0.069	0.487	0.482	0.031
Turkmenia	0.100	0.765	0.059	0.076	0.820	0.084	0.096	0.456	0.502	0.041
Ukraine	0.338	0.535	0.078	0.048	0.763	0.156	0.081	0.567	0.382	0.051
Uzbekistan	0.102	0.779	0.054	0.065	0.834	0.082	0.084	0.466	0.497	0.036

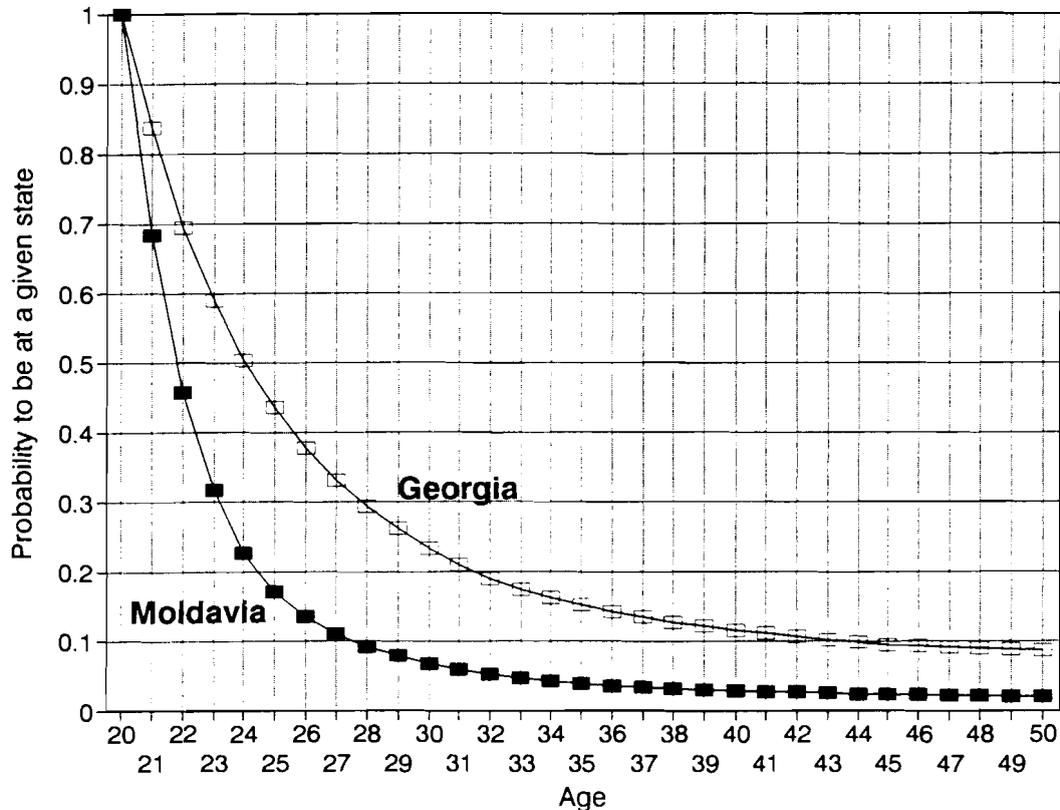


Figure 5. State probability for never married at age 20 to remain never married, Georgia and Moldavia.

There is also an insignificant difference in the curves showing the probability to remain in a married state for those who are married. However, the differences between the countries for those who are widowed and divorced are remarkable (Figure 6).

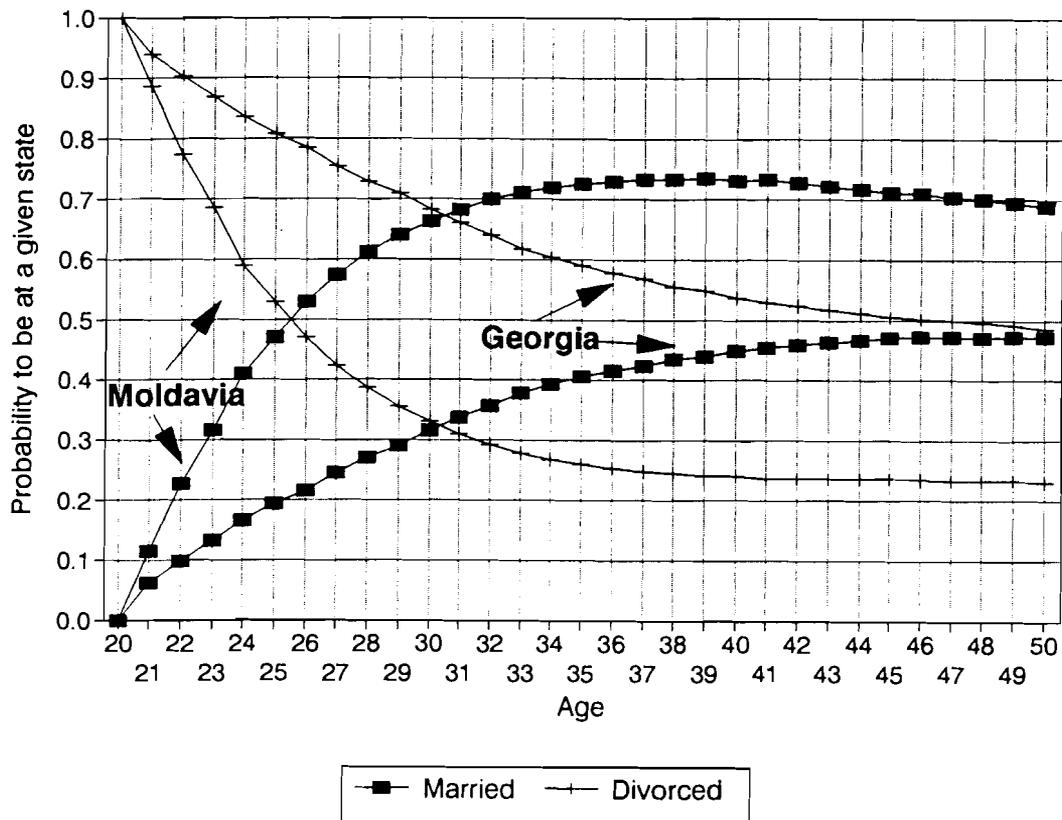


Figure 6. Probability for divorced at age 20 to remain divorced and to become remarried, Georgia and Moldavia.

Even bigger differences are found when comparing state probabilities for those who are in a certain marital state at age 30 (Appendix B, Figures B3). Thus in Latvia, 50% of the women who were divorced at age 30 will be remarried by age 40; in Georgia, only 25% of the women will remarry. In Latvia, only 40% of the women who were in a divorced state at age 30 will remain divorced by age 50; in Georgia, 67% of the women will remain divorced. In Central Asia, Armenia and Georgia, half or almost half of those who were in a divorced state at age 30 will remain divorced at age 50. In the European republics this proportion is much less. For 30-year old widows from Russia, Byelorussia, Ukraine and the Baltic states, the chances to remain in the same state by age 50 are less than 50 percent. In this respect Moldavia seems to be closer to the Central Asian and Caucasus republics. The chances for a 30-year old widow to change her marital status are much lower there because on average, widows in these regions have more children and thus their prospects differ significantly from the prospects for divorced. But there are very few widows at these ages, much less than those who are divorced (Appendix A, Tables 1-15).

For the majority of the women, their marital fortune by age 30 has already been established. But transition between different states continues. Out of 20 years of expected life until the age of 50, the average woman spends more than half of the time in a married state (Table 7), but this depends of course upon the marital status at age 30. Thus in Russia those who were never

married at age 30 may expect to spend 8.2 years in marriage; those who were married, 17.1 years; divorced, 9.2; and widowed, 7.5 years. The composition of expected number of years spent in different states depends very much upon the current marital status as well as upon the country. In Tajikistan those divorced at age 30 may expect to live in a marriage 7.1 years, and never married at age 30 12.8 years. In Estonia the relationship is the opposite: divorced will stay in marriage 8.5 years and never married 6.3 years. In Georgia this would be 4.2 and 8.4 for divorced and never married, respectively. The widows at age 30 in Georgia may expect to spend the shortest time in marriage--1.4 years. The longest will be for married women of Tajikistan--18.5 years.

Table 7. Expected number of years spent to the age of 50 in each marital state, by marital state at age 30, women, republics of the former USSR.

Republic	Marital status at age 30												
	Never married				Married			Divorced			Widowed		
	NM	M	D	W	M	D	W	M	D	W	M	D	W
Armenia	10.84	8.48	0.39	0.29	18.22	1.11	0.67	5.33	14.49	0.17	1.43	0.06	18.51
Azerbaijan	9.79	9.36	0.56	0.28	18.11	1.31	0.58	7.46	12.31	0.23	2.63	0.16	17.21
Byelorussia	10.11	8.77	0.81	0.31	17.42	1.96	0.62	9.47	10.19	0.34	7.84	0.73	11.44
Estonia	12.78	6.27	0.76	0.19	16.88	2.60	0.52	8.45	11.30	0.25	6.84	0.83	12.33
Georgia	10.92	8.38	0.43	0.27	18.15	1.23	0.62	4.24	15.63	0.13	1.42	0.07	18.51
Kazakhstan	9.16	9.69	0.76	0.39	17.50	1.75	0.75	8.15	11.52	0.33	5.53	0.43	14.04
Kirghizia	6.85	11.88	0.75	0.51	17.75	1.44	0.81	6.15	13.59	0.26	4.30	0.27	15.44
Latvia	11.97	6.90	0.89	0.24	16.69	2.71	0.60	8.66	11.04	0.30	6.69	0.86	12.45
Lithuania	11.78	7.21	0.75	0.26	17.16	2.21	0.63	8.59	11.11	0.31	6.63	0.67	12.71
Moldavia	9.62	9.30	0.71	0.38	17.60	1.67	0.74	7.83	11.86	0.31	5.11	0.38	14.51
Russia	10.60	8.20	0.88	0.32	17.07	2.24	0.68	9.19	10.45	0.36	7.45	0.79	11.77
Tajikistan	6.33	12.76	0.55	0.36	18.45	1.01	0.54	7.08	12.72	0.19	3.69	0.15	16.16
Turkmenia	6.04	12.81	0.64	0.51	18.14	1.10	0.75	6.59	13.16	0.26	2.88	0.13	16.99
Ukraine	10.33	8.53	0.84	0.30	17.25	2.14	0.61	9.03	10.65	0.32	7.06	0.69	12.25
Uzbekistan	6.81	12.21	0.56	0.42	18.27	1.07	0.66	6.68	13.10	0.22	2.88	0.13	17.00

The proportion of marriages that end in divorce can also be derived by using the multistate approach. Figure 7 presents this measure for all 15 republics of the former USSR. It is not surprising that women in Georgia and Armenia have the lowest proportion of marriage ending in divorce--about 16%. We have already discussed the attitude in those republics toward divorce. Muslim republics occupy an intermediate position in respect to this indicator--around 20%. In Kazakhstan, with less than half of its population composed of Kazakhs, about 28% of the marriages end in divorce. As we could have expected, the Baltic and Slavic republics have the highest indicator, which exceeds 40% in Latvia.

For those who were never married and for those who were divorced, there is an age where future life is subdivided into two equal parts. The expected number of years that would be spent in a current state and in marriage becomes equal when the lines of the expected number of years cross each other. This happens quickly for divorced women in Uzbekistan--at 22 years of age. They may expect to live in a divorced state and in a married state an equal number of years--13. The latest this occurs is for never married women in Tajikistan (35 years). Until the age of 50 they may expect to spend equal time in marriage and in their current state. For widows, this does not occur for Moldavia, Georgia, Armenia, Azerbaijan, Turkmenia, Uzbekistan, and Tajikistan. In these countries the expected number of years to be spent in a widowed state for any age is

higher than the expected number of years in a married state. In Kirghizia, the crossing point is observed before the age of 21, in the other states between 23 years of age in Estonia and 27 in Byelorussia. However, the data on widowhood are unreliable, and do not allow a very deep analysis.

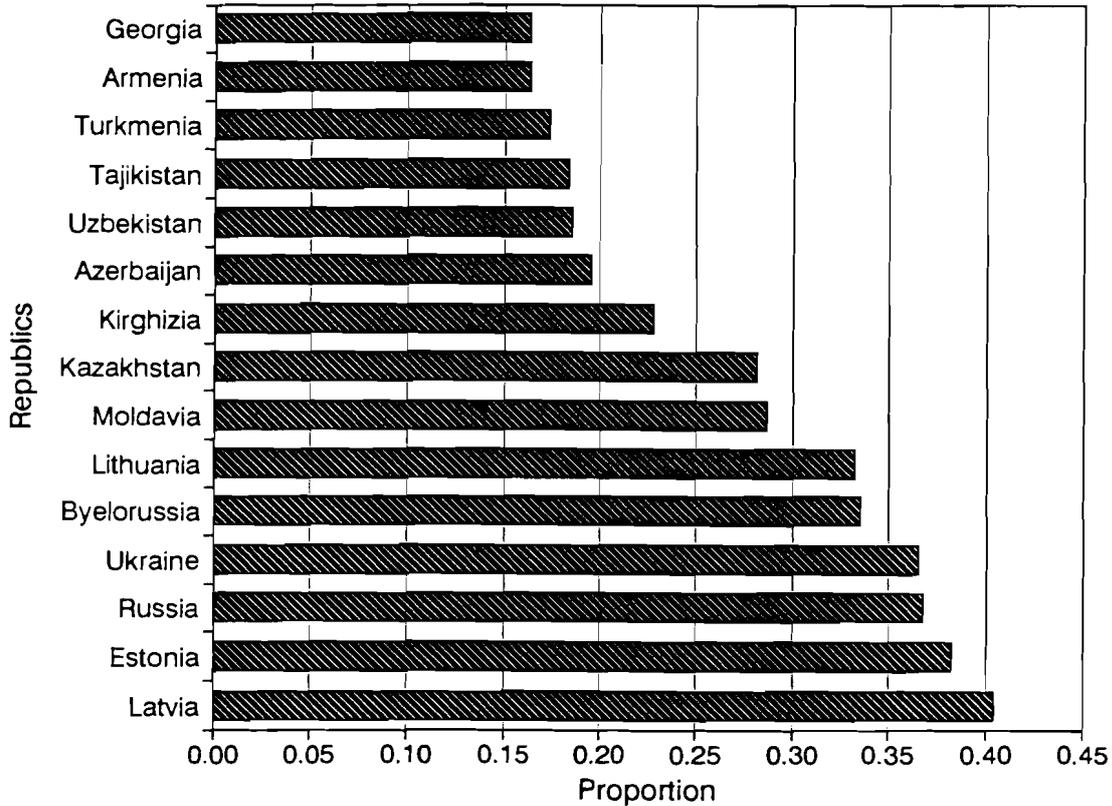


Figure 7. Proportion of marriages ending in divorce, former Soviet republics, 1989.

7. CONCLUSION

We used the most recent and suitable (for comparative purposes) data on marital status and transition between different statuses for 15 former Soviet republics. For the first time, a multistate life table analysis was used to describe the marital careers of women from all of the 15 republics. In the near future, such a comparative analysis will not be possible because of the unavailability or incompatibility of statistical data, especially in some of the Asian States.

Our analysis shows that despite 70 years of strong Soviet ideology and lifestyle, the institution of marriage was less subjected to rapid change, and retained its traditions for each culture and its ethnic features.

Analysis shows a remarkable diversity of first-marriage, remarriage and divorce patterns among geographical groups of European, Asian and Caucasian republics. Often, even between republics that belong to the same geographical and religious group, differences could be found in respect to marital behavior.

Marriage was a universal institution in the former USSR. The majority of women married at least once in all of the former republics. The percent of ever-marrying varies from more than 99% in some Central Asian republics to 93% in Estonia. Mean age at first marriage varies from

20.5 in Moldavia to 22.8 in Azerbaijan. About 57% of the women living in Russia and divorced at age 30 will be married at age 50. In Georgia this number will be 31%.

The proportion of marriages that end in divorce differs, from 16% in Georgia to 41% in Latvia. On average, more than 30% of divorced women remarry in Latvia and Ukraine, and less than 5% in Georgia.

The former USSR was a microcosm in respect to marital processes. They followed a large number of different patterns. We hope that by highlighting these processes, we have helped the reader better understand the very complicated problem of changes in marital structures.

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APPENDIX A: TABLES 1 - 15

Armenia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	100.0	0.0	0.0	0.0
17	100.0	99.2	0.8	0.0	0.0
18	100.0	87.1	12.9	0.0	0.0
19	100.0	64.3	35.6	0.1	0.1
20	100.0	47.9	51.6	0.3	0.2
21	100.0	35.7	63.4	0.7	0.3
22	100.0	26.6	71.9	1.1	0.4
23	100.0	20.6	77.2	1.7	0.5
24	100.0	16.4	80.8	2.2	0.6
25	100.0	13.4	83.1	2.8	0.8
26	100.0	11.4	84.4	3.3	0.9
27	100.0	9.9	85.3	3.8	1.1
28	100.0	8.6	85.8	4.4	1.2
29	100.0	7.6	86.1	4.9	1.4
30	100.0	6.9	86.2	5.4	1.6
31	100.0	6.3	86.0	5.9	1.7
32	100.0	5.8	85.9	6.4	1.9
33	100.0	5.4	85.7	6.8	2.2
34	100.0	5.0	85.4	7.2	2.4
35	100.0	4.7	85.1	7.6	2.6
36	100.0	4.4	84.7	8.0	2.9
37	100.0	4.1	84.3	8.4	3.2
38	100.0	3.9	84.0	8.6	3.5
39	100.0	3.7	83.7	8.9	3.8
40	100.0	3.5	83.2	9.2	4.1
41	100.0	3.3	82.7	9.5	4.5
42	100.0	3.1	82.2	9.8	4.9
43	100.0	3.0	81.7	10.0	5.3
44	100.0	2.8	81.3	10.1	5.8
45	100.0	2.7	81.0	10.1	6.3
46	100.0	2.6	80.6	10.0	6.8
47	100.0	2.5	79.9	10.1	7.5
48	100.0	2.4	79.2	10.3	8.2
49	100.0	2.2	78.5	10.3	9.0

Azerbaijan					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	100.0	0.0	0.0	0.0
17	100.0	99.7	0.3	0.0	0.0
18	100.0	92.5	7.5	0.0	0.0
19	100.0	77.6	22.3	0.1	0.0
20	100.0	65.0	34.6	0.3	0.0
21	100.0	53.6	45.7	0.6	0.1
22	100.0	43.5	55.4	0.9	0.1
23	100.0	35.6	62.8	1.4	0.2
24	100.0	29.4	68.5	1.8	0.3
25	100.0	24.6	72.7	2.3	0.4
26	100.0	20.9	75.8	2.7	0.5
27	100.0	18.0	78.2	3.2	0.6
28	100.0	15.7	79.9	3.7	0.7
29	100.0	13.8	81.2	4.1	0.9
30	100.0	12.3	82.1	4.6	1.0
31	100.0	11.2	82.7	5.0	1.1
32	100.0	10.2	83.2	5.4	1.3
33	100.0	9.3	83.5	5.8	1.4
34	100.0	8.5	83.7	6.2	1.6
35	100.0	7.8	83.8	6.6	1.8
36	100.0	7.2	83.8	7.0	2.0
37	100.0	6.8	83.6	7.4	2.2
38	100.0	6.3	83.4	7.8	2.5
39	100.0	5.8	83.2	8.2	2.8
40	100.0	5.4	82.8	8.7	3.1
41	100.0	5.0	82.3	9.2	3.5
42	100.0	4.7	81.8	9.6	3.9
43	100.0	4.4	81.3	10.1	4.2
44	100.0	4.1	80.8	10.5	4.6
45	100.0	3.9	80.2	10.8	5.0
46	100.0	3.8	79.5	11.2	5.5
47	100.0	3.6	78.9	11.4	6.1
48	100.0	3.5	78.2	11.5	6.7
49	100.0	3.4	77.5	11.7	7.4

Byelorussia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.6	0.4	0.0	0.0
17	100.0	97.5	2.5	0.0	0.0
18	100.0	88.9	11.1	0.1	0.0
19	100.0	71.8	27.7	0.4	0.0
20	100.0	54.6	44.2	1.2	0.1
21	100.0	39.9	57.8	2.2	0.1
22	100.0	28.8	67.7	3.4	0.2
23	100.0	21.3	73.9	4.5	0.3
24	100.0	16.4	77.7	5.5	0.4
25	100.0	13.1	80.0	6.5	0.4
26	100.0	10.6	81.7	7.2	0.5
27	100.0	8.7	82.8	7.9	0.6
28	100.0	7.4	83.5	8.4	0.7
29	100.0	6.3	84.0	8.9	0.8
30	100.0	5.5	84.3	9.3	0.9
31	100.0	4.9	84.4	9.7	1.0
32	100.0	4.3	84.4	10.1	1.2
33	100.0	4.0	84.3	10.5	1.3
34	100.0	3.6	84.1	10.8	1.5
35	100.0	3.3	83.9	11.2	1.6
36	100.0	3.1	83.5	11.6	1.8
37	100.0	2.9	83.0	12.0	2.0
38	100.0	2.8	82.4	12.5	2.3
39	100.0	2.7	81.7	13.1	2.6
40	100.0	2.6	80.9	13.6	2.9
41	100.0	2.5	80.1	14.1	3.3
42	100.0	2.4	79.3	14.5	3.8
43	100.0	2.3	78.7	14.9	4.2
44	100.0	2.2	77.9	15.2	4.7
45	100.0	2.1	77.1	15.6	5.2
46	100.0	2.1	76.4	15.8	5.8
47	100.0	2.0	75.5	16.0	6.4
48	100.0	2.0	74.7	16.2	7.1
49	100.0	2.0	73.9	16.3	7.8

Estonia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.6	0.4	0.0	0.0
17	100.0	97.9	2.1	0.0	0.0
18	100.0	91.1	8.9	0.0	0.0
19	100.0	78.1	21.6	0.3	0.0
20	100.0	64.8	34.3	0.9	0.1
21	100.0	51.9	46.2	1.8	0.1
22	100.0	41.0	55.8	3.0	0.2
23	100.0	33.3	62.2	4.3	0.3
24	100.0	27.7	66.5	5.4	0.3
25	100.0	23.5	69.8	6.4	0.4
26	100.0	20.4	72.0	7.2	0.5
27	100.0	17.9	73.5	8.1	0.5
28	100.0	15.8	74.4	9.1	0.6
29	100.0	14.5	74.7	10.0	0.7
30	100.0	13.4	74.9	10.9	0.8
31	100.0	12.4	75.0	11.6	0.9
32	100.0	11.6	75.0	12.3	1.1
33	100.0	10.9	74.8	13.1	1.2
34	100.0	10.3	74.8	13.6	1.3
35	100.0	9.7	74.7	14.1	1.5
36	100.0	9.3	74.5	14.6	1.6
37	100.0	8.9	74.1	15.2	1.8
38	100.0	8.6	73.7	15.7	2.0
39	100.0	8.4	73.3	16.2	2.1
40	100.0	8.2	72.7	16.7	2.3
41	100.0	7.9	72.2	17.2	2.6
42	100.0	7.8	71.6	17.7	2.9
43	100.0	7.7	71.0	18.2	3.2
44	100.0	7.5	70.3	18.7	3.5
45	100.0	7.4	69.6	19.1	3.9
46	100.0	7.2	68.9	19.4	4.4
47	100.0	7.2	68.2	19.8	4.9
48	100.0	7.1	67.5	20.0	5.4
49	100.0	7.0	66.9	20.1	6.0

Georgia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.9	0.1	0.0	0.0
17	100.0	98.5	1.5	0.0	0.0
18	100.0	90.3	9.7	0.0	0.0
19	100.0	75.2	24.6	0.1	0.1
20	100.0	62.5	37.1	0.2	0.1
21	100.0	52.1	47.2	0.6	0.2
22	100.0	43.7	55.1	1.0	0.2
23	100.0	37.2	61.1	1.5	0.3
24	100.0	32.0	65.6	2.0	0.4
25	100.0	27.7	69.2	2.6	0.5
26	100.0	24.1	72.1	3.2	0.6
27	100.0	21.2	74.2	3.8	0.8
28	100.0	18.9	75.8	4.4	0.9
29	100.0	16.9	77.1	5.0	1.0
30	100.0	15.1	78.2	5.5	1.2
31	100.0	13.6	79.0	6.0	1.3
32	100.0	12.4	79.6	6.5	1.5
33	100.0	11.5	79.9	7.0	1.7
34	100.0	10.7	80.0	7.4	1.9
35	100.0	10.0	80.1	7.9	2.1
36	100.0	9.4	80.0	8.3	2.3
37	100.0	8.9	79.9	8.7	2.6
38	100.0	8.4	79.7	9.1	2.9
39	100.0	8.0	79.4	9.4	3.2
40	100.0	7.7	79.0	9.8	3.5
41	100.0	7.4	78.6	10.1	3.9
42	100.0	7.1	78.2	10.4	4.3
43	100.0	6.8	77.9	10.7	4.6
44	100.0	6.6	77.5	10.9	5.0
45	100.0	6.4	77.2	11.1	5.3
46	100.0	6.3	76.7	11.3	5.8
47	100.0	6.2	76.2	11.4	6.2
48	100.0	6.0	75.6	11.5	6.8
49	100.0	5.9	75.0	11.6	7.5

Kazakhstan					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	100.0	0.0	0.0	0.0
17	100.0	98.9	1.1	0.0	0.0
18	100.0	90.4	9.5	0.0	0.0
19	100.0	73.6	26.2	0.2	0.1
20	100.0	57.4	41.7	0.7	0.1
21	100.0	43.1	55.2	1.6	0.2
22	100.0	31.8	65.3	2.6	0.3
23	100.0	23.9	71.9	3.8	0.4
24	100.0	18.3	76.3	4.9	0.5
25	100.0	14.4	79.0	5.9	0.7
26	100.0	11.8	80.7	6.7	0.8
27	100.0	9.8	81.8	7.5	1.0
28	100.0	8.3	82.5	8.2	1.1
29	100.0	7.2	82.8	8.8	1.3
30	100.0	6.2	83.0	9.3	1.4
31	100.0	5.5	83.2	9.7	1.6
32	100.0	4.9	83.2	10.1	1.8
33	100.0	4.4	83.1	10.5	2.0
34	100.0	4.0	82.8	10.9	2.2
35	100.0	3.7	82.6	11.3	2.4
36	100.0	3.4	82.3	11.6	2.7
37	100.0	3.2	81.8	12.0	3.0
38	100.0	2.9	81.4	12.4	3.3
39	100.0	2.8	80.8	12.8	3.6
40	100.0	2.6	80.2	13.2	4.0
41	100.0	2.5	79.5	13.6	4.5
42	100.0	2.3	78.8	13.9	4.9
43	100.0	2.2	78.3	14.2	5.3
44	100.0	2.0	77.8	14.5	5.8
45	100.0	1.9	77.2	14.7	6.3
46	100.0	1.8	76.5	14.9	6.8
47	100.0	1.7	75.8	15.0	7.5
48	100.0	1.6	75.0	15.1	8.3
49	100.0	1.5	74.0	15.3	9.2

Kirghizia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	100.0	0.0	0.0	0.0
17	100.0	99.5	0.5	0.0	0.0
18	100.0	91.0	8.9	0.0	0.0
19	100.0	71.9	27.9	0.1	0.0
20	100.0	52.6	46.9	0.5	0.1
21	100.0	36.0	62.7	1.1	0.2
22	100.0	24.3	73.4	2.0	0.3
23	100.0	16.7	79.8	3.1	0.4
24	100.0	11.9	83.4	4.1	0.6
25	100.0	8.8	85.3	5.2	0.7
26	100.0	6.8	86.2	6.1	0.9
27	100.0	5.4	86.6	7.0	1.1
28	100.0	4.4	86.7	7.7	1.2
29	100.0	3.6	86.7	8.3	1.4
30	100.0	3.0	86.5	8.9	1.6
31	100.0	2.5	86.3	9.3	1.8
32	100.0	2.2	86.1	9.7	2.0
33	100.0	1.9	85.6	10.2	2.3
34	100.0	1.6	85.2	10.7	2.5
35	100.0	1.4	84.7	11.1	2.8
36	100.0	1.3	84.2	11.5	3.0
37	100.0	1.1	83.7	11.8	3.4
38	100.0	1.0	83.1	12.1	3.7
39	100.0	0.9	82.5	12.4	4.1
40	100.0	0.9	81.9	12.7	4.6
41	100.0	0.8	81.1	13.0	5.1
42	100.0	0.7	80.5	13.3	5.6
43	100.0	0.6	79.9	13.5	6.0
44	100.0	0.5	79.3	13.6	6.6
45	100.0	0.5	78.7	13.8	7.1
46	100.0	0.4	77.9	14.0	7.6
47	100.0	0.4	77.1	14.3	8.3
48	100.0	0.4	76.2	14.5	9.0
49	100.0	0.3	75.3	14.5	9.8

Latvia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.6	0.4	0.0	0.0
17	100.0	97.9	2.1	0.0	0.0
18	100.0	90.6	9.3	0.0	0.0
19	100.0	75.9	23.7	0.3	0.0
20	100.0	60.8	38.0	1.1	0.1
21	100.0	47.0	50.6	2.2	0.2
22	100.0	35.9	60.3	3.5	0.2
23	100.0	28.3	66.6	4.8	0.3
24	100.0	22.9	70.6	6.1	0.4
25	100.0	19.1	73.1	7.4	0.5
26	100.0	16.2	74.7	8.6	0.5
27	100.0	14.1	75.7	9.6	0.6
28	100.0	12.5	76.3	10.5	0.7
29	100.0	11.1	76.9	11.1	0.8
30	100.0	10.0	77.2	11.9	0.9
31	100.0	9.1	77.2	12.6	1.1
32	100.0	8.4	77.1	13.3	1.2
33	100.0	7.9	76.9	13.8	1.4
34	100.0	7.4	76.7	14.4	1.5
35	100.0	7.0	76.4	15.0	1.6
36	100.0	6.6	76.0	15.5	1.9
37	100.0	6.3	75.4	16.2	2.1
38	100.0	6.0	74.8	16.9	2.3
39	100.0	5.8	74.1	17.5	2.6
40	100.0	5.6	73.4	18.1	2.9
41	100.0	5.5	72.8	18.6	3.2
42	100.0	5.3	72.0	19.1	3.6
43	100.0	5.2	71.3	19.5	4.0
44	100.0	5.1	70.7	19.9	4.4
45	100.0	4.9	70.1	20.2	4.8
46	100.0	4.8	69.5	20.5	5.2
47	100.0	4.8	68.8	20.7	5.7
48	100.0	4.7	68.2	20.9	6.2
49	100.0	4.6	67.5	21.0	6.8

Lithuania					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.5	0.5	0.0	0.0
17	100.0	97.7	2.3	0.0	0.0
18	100.0	91.4	8.6	0.0	0.0
19	100.0	78.3	21.5	0.2	0.0
20	100.0	63.5	35.8	0.6	0.1
21	100.0	49.2	49.3	1.4	0.1
22	100.0	37.0	60.5	2.3	0.2
23	100.0	28.1	68.4	3.3	0.3
24	100.0	22.1	73.3	4.3	0.3
25	100.0	18.1	76.3	5.2	0.4
26	100.0	15.0	78.4	6.1	0.5
27	100.0	12.9	79.6	7.0	0.6
28	100.0	11.2	80.3	7.7	0.7
29	100.0	9.9	80.9	8.3	0.8
30	100.0	8.9	81.1	9.0	1.0
31	100.0	8.0	81.1	9.8	1.1
32	100.0	7.4	80.9	10.4	1.3
33	100.0	6.9	80.5	11.1	1.5
34	100.0	6.5	80.1	11.8	1.7
35	100.0	6.1	79.9	12.2	1.8
36	100.0	5.8	79.6	12.6	2.0
37	100.0	5.5	79.1	13.1	2.3
38	100.0	5.3	78.5	13.7	2.5
39	100.0	5.1	77.9	14.2	2.7
40	100.0	4.9	77.3	14.7	3.0
41	100.0	4.8	76.6	15.3	3.3
42	100.0	4.7	75.8	15.7	3.7
43	100.0	4.6	75.0	16.2	4.2
44	100.0	4.5	74.3	16.6	4.6
45	100.0	4.4	73.6	16.8	5.1
46	100.0	4.3	72.9	17.1	5.6
47	100.0	4.3	72.2	17.3	6.2
48	100.0	4.2	71.6	17.4	6.8
49	100.0	4.2	70.9	17.6	7.4

Moldavia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.6	0.4	0.0	0.0
17	100.0	97.6	2.4	0.0	0.0
18	100.0	86.3	13.7	0.0	0.0
19	100.0	64.9	34.7	0.3	0.1
20	100.0	45.9	52.8	1.1	0.2
21	100.0	30.9	66.6	2.2	0.3
22	100.0	20.9	75.1	3.5	0.5
23	100.0	14.7	80.0	4.8	0.6
24	100.0	10.8	82.7	5.9	0.7
25	100.0	8.3	84.1	6.8	0.8
26	100.0	6.6	84.8	7.6	0.9
27	100.0	5.5	85.2	8.3	1.0
28	100.0	4.6	85.4	8.9	1.1
29	100.0	4.0	85.4	9.4	1.3
30	100.0	3.4	85.3	9.8	1.4
31	100.0	3.0	85.2	10.2	1.6
32	100.0	2.7	85.1	10.5	1.8
33	100.0	2.4	84.7	10.9	2.0
34	100.0	2.2	84.4	11.2	2.2
35	100.0	2.0	84.1	11.5	2.4
36	100.0	1.9	83.6	11.8	2.7
37	100.0	1.8	83.1	12.2	2.9
38	100.0	1.7	82.6	12.5	3.2
39	100.0	1.6	82.0	12.9	3.6
40	100.0	1.5	81.4	13.2	3.9
41	100.0	1.5	80.7	13.5	4.4
42	100.0	1.4	79.8	14.0	4.9
43	100.0	1.3	78.9	14.4	5.4
44	100.0	1.3	78.1	14.7	5.9
45	100.0	1.2	77.3	15.0	6.5
46	100.0	1.2	76.6	15.1	7.1
47	100.0	1.2	75.9	15.2	7.7
48	100.0	1.1	75.1	15.4	8.4
49	100.0	1.1	74.3	15.5	9.1

Russia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.2	0.8	0.0	0.0
17	100.0	96.0	4.0	0.0	0.0
18	100.0	85.5	14.4	0.1	0.0
19	100.0	67.7	31.7	0.5	0.1
20	100.0	51.6	46.8	1.5	0.1
21	100.0	38.5	58.5	2.8	0.2
22	100.0	29.0	66.5	4.2	0.3
23	100.0	22.5	71.6	5.5	0.4
24	100.0	17.8	75.0	6.6	0.5
25	100.0	14.5	77.2	7.7	0.6
26	100.0	12.1	78.7	8.5	0.7
27	100.0	10.2	79.8	9.2	0.9
28	100.0	8.8	80.5	9.8	1.0
29	100.0	7.7	81.0	10.3	1.1
30	100.0	6.7	81.3	10.7	1.2
31	100.0	6.0	81.4	11.2	1.4
32	100.0	5.5	81.4	11.6	1.5
33	100.0	5.0	81.2	12.1	1.7
34	100.0	4.6	81.0	12.5	1.9
35	100.0	4.3	80.7	12.9	2.1
36	100.0	4.1	80.3	13.3	2.3
37	100.0	3.8	79.8	13.8	2.5
38	100.0	3.6	79.2	14.3	2.8
39	100.0	3.5	78.5	14.9	3.1
40	100.0	3.3	77.8	15.4	3.5
41	100.0	3.2	76.9	16.0	3.9
42	100.0	3.1	76.0	16.6	4.3
43	100.0	3.0	75.4	17.0	4.7
44	100.0	2.9	74.8	17.3	5.0
45	100.0	2.8	74.3	17.5	5.5
46	100.0	2.7	73.6	17.8	6.0
47	100.0	2.6	72.8	18.0	6.6
48	100.0	2.6	72.0	18.2	7.3
49	100.0	2.5	71.2	18.3	8.0

Tajikistan
Distribution of females by age and marital status
in a stationary population (without female mortality)

age	Total	Never married	Married	Divorced	Widowed
16	100.0	100.0	0.0	0.0	0.0
17	100.0	99.8	0.2	0.0	0.0
18	100.0	91.0	8.9	0.0	0.0
19	100.0	69.1	30.8	0.1	0.0
20	100.0	47.9	51.7	0.4	0.1
21	100.0	31.6	67.3	1.0	0.1
22	100.0	21.0	77.2	1.7	0.2
23	100.0	14.4	82.8	2.5	0.3
24	100.0	10.1	86.1	3.3	0.4
25	100.0	7.5	87.9	4.1	0.5
26	100.0	5.8	88.8	4.8	0.6
27	100.0	4.5	89.4	5.4	0.7
28	100.0	3.6	89.5	6.0	0.8
29	100.0	3.0	89.6	6.5	0.9
30	100.0	2.4	89.7	6.8	1.1
31	100.0	2.0	89.7	7.2	1.2
32	100.0	1.6	89.5	7.5	1.3
33	100.0	1.4	89.4	7.7	1.5
34	100.0	1.2	89.3	7.8	1.7
35	100.0	1.0	89.1	8.0	1.9
36	100.0	0.9	88.8	8.2	2.1
37	100.0	0.8	88.5	8.4	2.3
38	100.0	0.7	88.1	8.6	2.5
39	100.0	0.6	87.7	8.8	2.8
40	100.0	0.6	87.4	9.0	3.1
41	100.0	0.5	86.9	9.2	3.4
42	100.0	0.5	86.4	9.3	3.8
43	100.0	0.4	86.0	9.4	4.2
44	100.0	0.4	85.5	9.6	4.5
45	100.0	0.3	84.9	9.9	4.9
46	100.0	0.3	84.2	10.1	5.4
47	100.0	0.3	83.5	10.4	5.8
48	100.0	0.3	82.9	10.5	6.4
49	100.0	0.3	82.2	10.6	7.0

Turkmenia					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	100.0	0.0	0.0	0.0
17	100.0	99.6	0.4	0.0	0.0
18	100.0	96.0	4.0	0.0	0.0
19	100.0	87.4	12.5	0.1	0.0
20	100.0	76.3	23.4	0.3	0.0
21	100.0	62.2	37.1	0.6	0.1
22	100.0	47.5	51.3	1.0	0.1
23	100.0	33.9	64.3	1.6	0.2
24	100.0	22.8	74.6	2.2	0.3
25	100.0	15.4	81.3	2.9	0.5
26	100.0	10.6	85.4	3.5	0.6
27	100.0	7.4	87.8	4.0	0.8
28	100.0	5.4	89.2	4.6	0.9
29	100.0	4.0	89.9	5.1	1.0
30	100.0	3.0	90.3	5.5	1.2
31	100.0	2.4	90.3	5.9	1.4
32	100.0	2.0	90.1	6.3	1.6
33	100.0	1.6	89.8	6.7	1.9
34	100.0	1.4	89.4	7.1	2.1
35	100.0	1.2	89.0	7.4	2.4
36	100.0	1.1	88.5	7.7	2.7
37	100.0	1.0	87.9	8.0	3.1
38	100.0	0.9	87.4	8.3	3.4
39	100.0	0.8	86.8	8.6	3.8
40	100.0	0.7	86.1	9.0	4.2
41	100.0	0.7	85.3	9.4	4.6
42	100.0	0.6	84.5	9.7	5.1
43	100.0	0.6	83.8	10.0	5.6
44	100.0	0.5	83.1	10.2	6.2
45	100.0	0.5	82.4	10.3	6.8
46	100.0	0.5	81.9	10.3	7.4
47	100.0	0.4	81.2	10.3	8.1
48	100.0	0.4	80.4	10.4	8.8
49	100.0	0.4	79.6	10.5	9.6

Ukraine					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.1	0.9	0.0	0.0
17	100.0	93.1	6.9	0.0	0.0
18	100.0	80.2	19.5	0.2	0.0
19	100.0	62.5	36.6	0.9	0.1
20	100.0	45.3	52.5	2.1	0.1
21	100.0	32.2	64.2	3.5	0.2
22	100.0	23.2	71.6	4.9	0.3
23	100.0	17.3	76.0	6.3	0.4
24	100.0	13.4	78.7	7.5	0.5
25	100.0	10.8	80.2	8.4	0.6
26	100.0	8.9	81.2	9.2	0.7
27	100.0	7.4	82.0	9.9	0.8
28	100.0	6.3	82.4	10.4	0.9
29	100.0	5.5	82.6	11.0	0.9
30	100.0	4.8	82.8	11.4	1.1
31	100.0	4.2	82.8	11.8	1.2
32	100.0	3.8	82.6	12.3	1.3
33	100.0	3.5	82.4	12.6	1.5
34	100.0	3.2	82.1	13.0	1.6
35	100.0	3.0	81.8	13.4	1.8
36	100.0	2.8	81.4	13.8	2.0
37	100.0	2.6	80.9	14.2	2.3
38	100.0	2.5	80.4	14.6	2.5
39	100.0	2.4	79.7	15.1	2.8
40	100.0	2.3	79.2	15.5	3.1
41	100.0	2.2	78.5	15.9	3.4
42	100.0	2.1	77.8	16.4	3.8
43	100.0	2.0	77.2	16.6	4.1
44	100.0	2.0	76.6	16.9	4.5
45	100.0	1.9	76.0	17.1	5.0
46	100.0	1.9	75.3	17.3	5.6
47	100.0	1.8	74.5	17.5	6.2
48	100.0	1.8	73.8	17.6	6.8
49	100.0	1.7	73.0	17.6	7.6

Uzbekistan					
Distribution of females by age and marital status in a stationary population (without female mortality)					
age	Total	Never married	Married	Divorced	Widowed
16	100.0	99.9	0.1	0.0	0.0
17	100.0	96.4	3.6	0.0	0.0
18	100.0	86.1	13.8	0.0	0.0
19	100.0	68.1	31.6	0.2	0.1
20	100.0	48.8	50.5	0.6	0.1
21	100.0	32.7	65.9	1.3	0.2
22	100.0	21.4	76.3	2.0	0.3
23	100.0	14.7	82.1	2.8	0.4
24	100.0	10.5	85.4	3.6	0.5
25	100.0	7.9	87.1	4.3	0.6
26	100.0	6.2	88.1	5.0	0.8
27	100.0	5.0	88.6	5.5	0.9
28	100.0	4.1	88.9	6.0	1.0
29	100.0	3.4	89.0	6.5	1.2
30	100.0	2.8	89.0	6.9	1.3
31	100.0	2.4	89.0	7.2	1.4
32	100.0	2.0	88.9	7.5	1.6
33	100.0	1.8	88.7	7.8	1.8
34	100.0	1.5	88.4	8.0	2.0
35	100.0	1.3	88.1	8.3	2.3
36	100.0	1.2	87.8	8.5	2.5
37	100.0	1.1	87.4	8.7	2.8
38	100.0	0.9	87.0	9.0	3.1
39	100.0	0.9	86.4	9.2	3.5
40	100.0	0.8	85.9	9.5	3.8
41	100.0	0.7	85.3	9.8	4.2
42	100.0	0.6	84.6	10.1	4.7
43	100.0	0.6	84.1	10.2	5.1
44	100.0	0.5	83.6	10.4	5.5
45	100.0	0.5	83.0	10.6	6.0
46	100.0	0.4	82.3	10.7	6.5
47	100.0	0.4	81.7	10.8	7.1
48	100.0	0.4	81.0	10.8	7.8
49	100.0	0.3	80.3	10.8	8.5

APPENDIX B: FIGURES B1 - B3

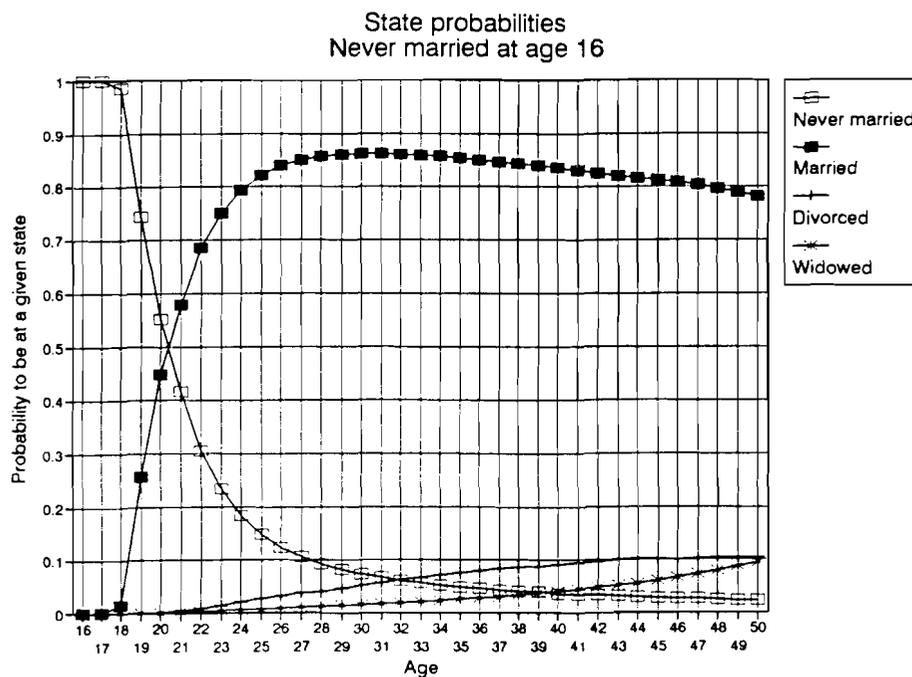
In the set of Figures B1, population-based, life-table measures are presented. They are state probabilities showing that a member of a cohort of females, irrespective of the previous marital state (we assume that at age 16 no one is married), will occupy a particular marital state at exact age x . As a contrast, Figures B2-B3 present status-based, life-table measures, giving the marital status at a particular age by marital status at the reference age (Willekens 1987).

The set of Figures B2 presents the probability of being in a given marital state at age x for a subcohort of persons who are in a particular marital state at the reference age 20.

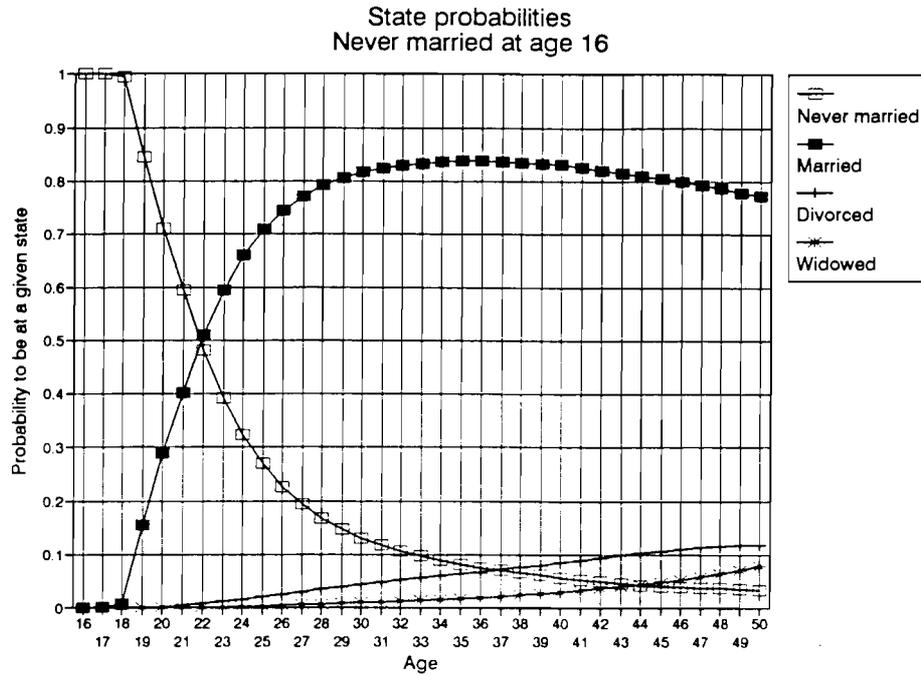
The set of Figures B3 presents the probability of being in a given marital state at age x for a subcohort of persons who are in a particular marital state at the reference age 30.

FIGURES B1

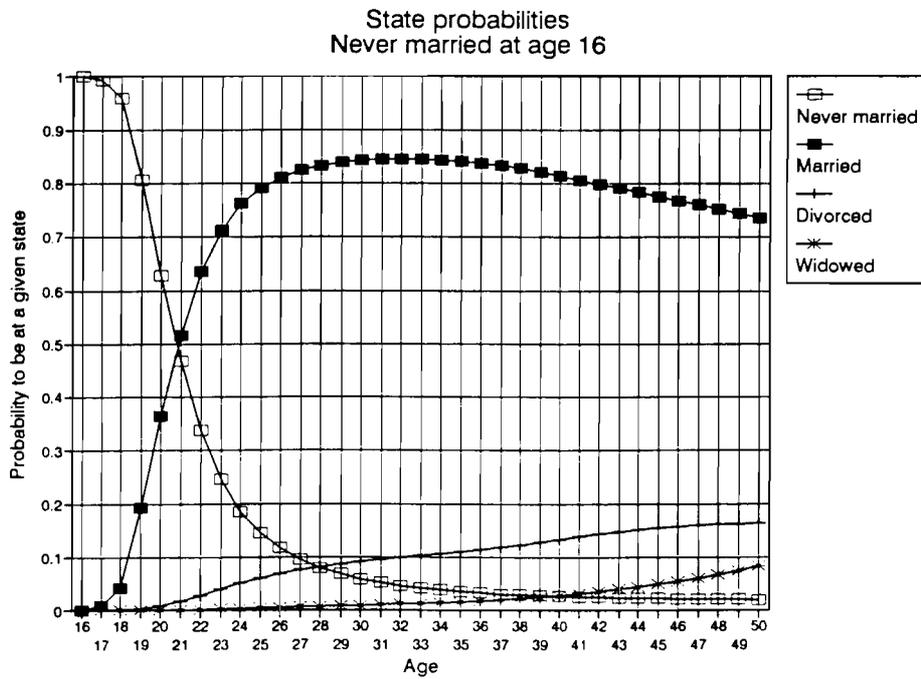
Armenia



Azerbaijan

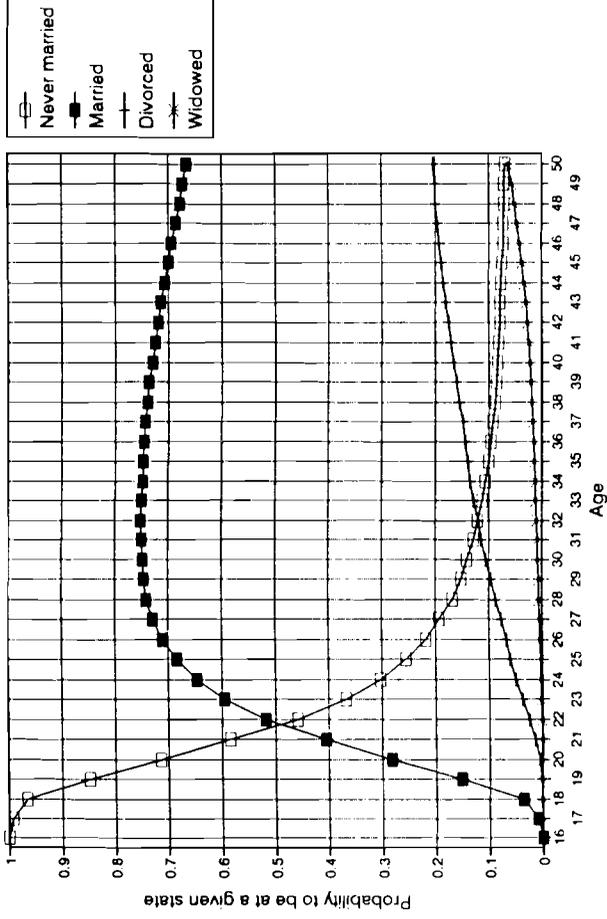


Byelorussia



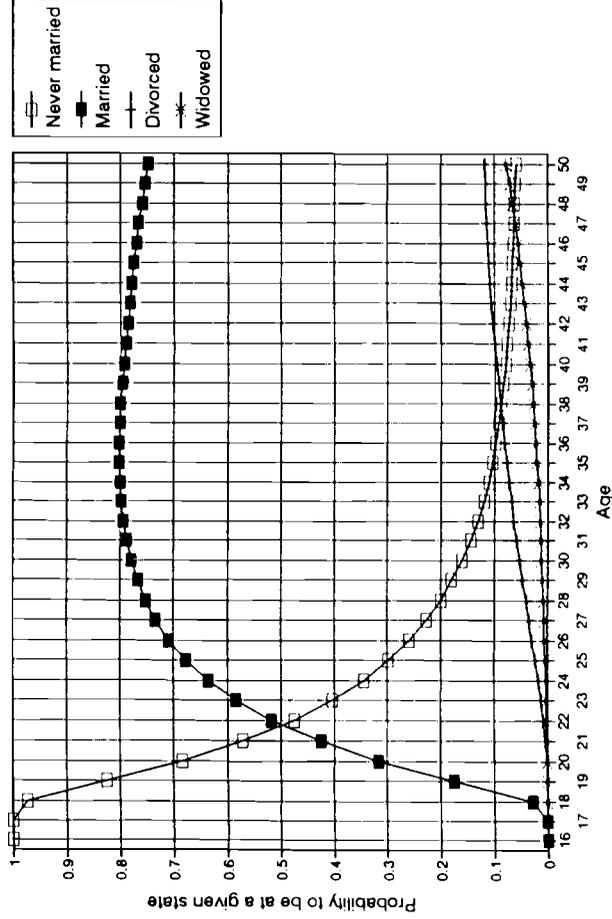
Estonia

State probabilities
Never married at age 16



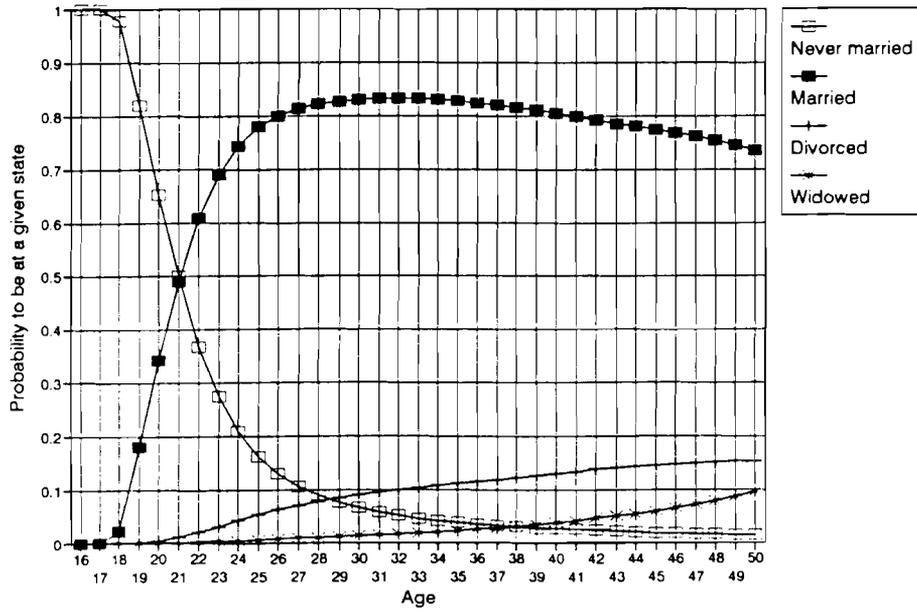
Georgia

State probabilities
Never married at age 16



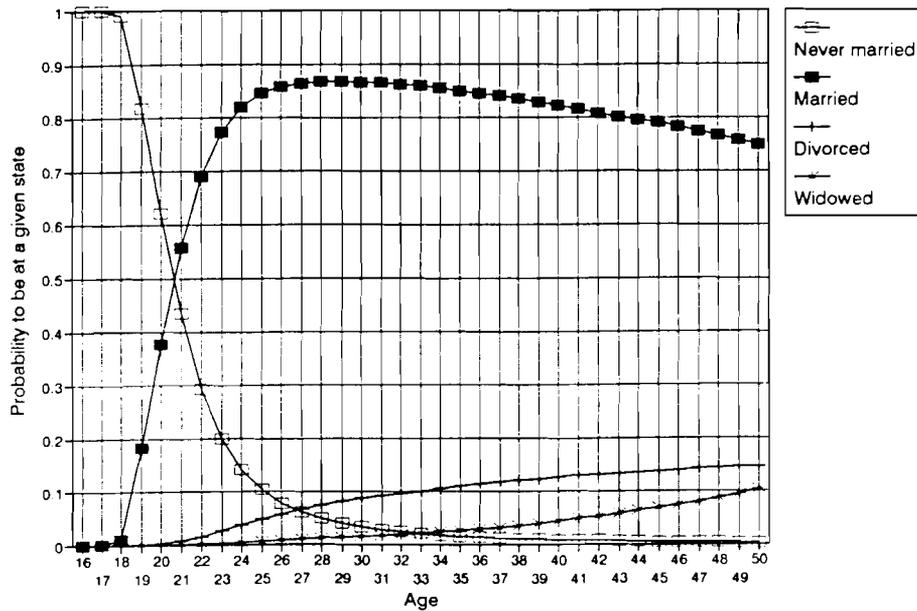
Kazakhstan

State probabilities
Never married at age 16



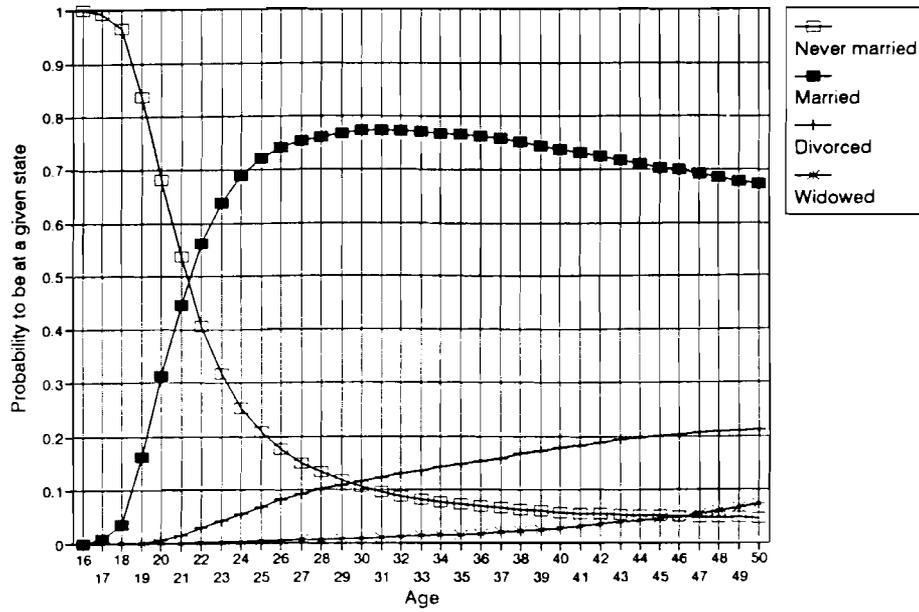
Kirghizia

State probabilities
Never married at age 16



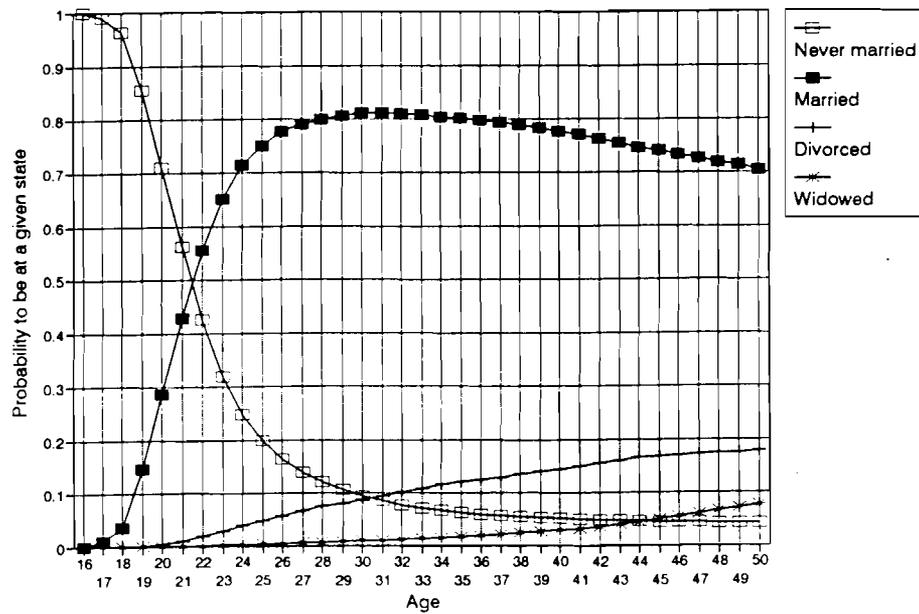
Latvia

State probabilities
Never married at age 16



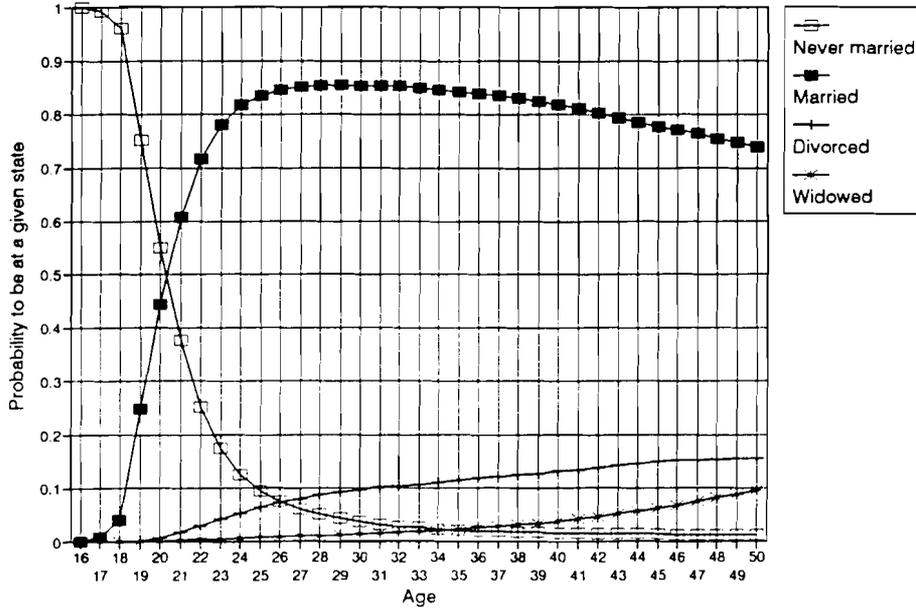
Lithuania

State probabilities
Never married at age 16



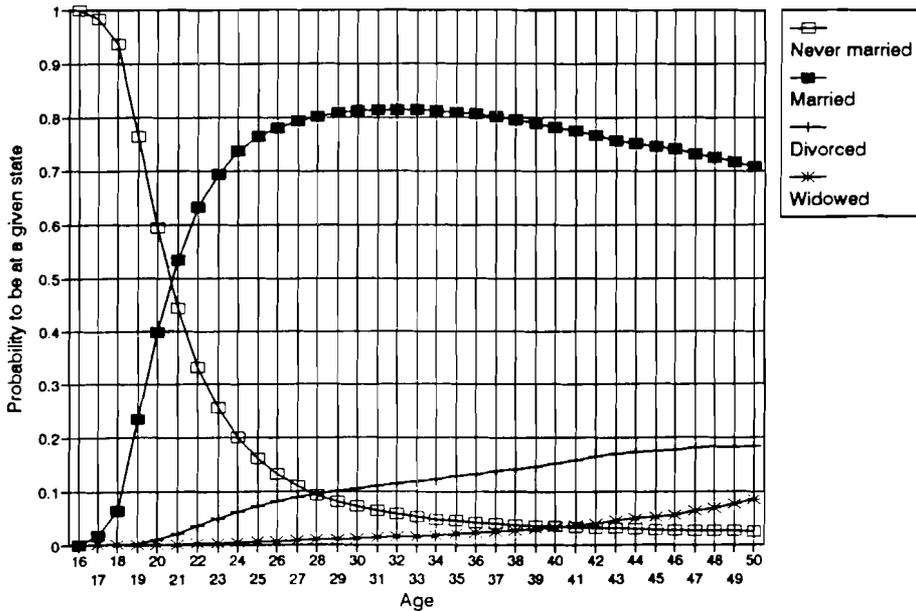
Moldavia

State probabilities
Never married at age 16



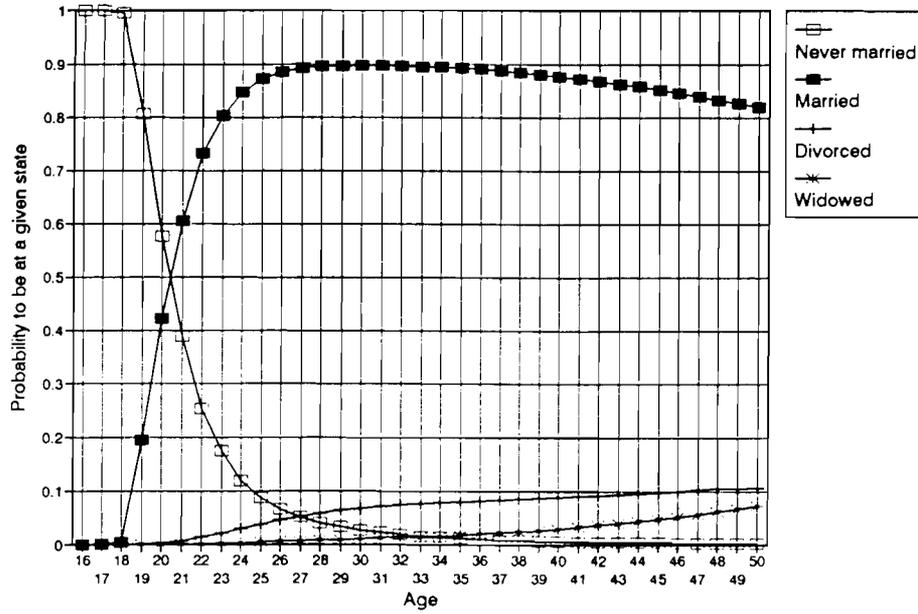
Russia

State probabilities
Never married at age 16



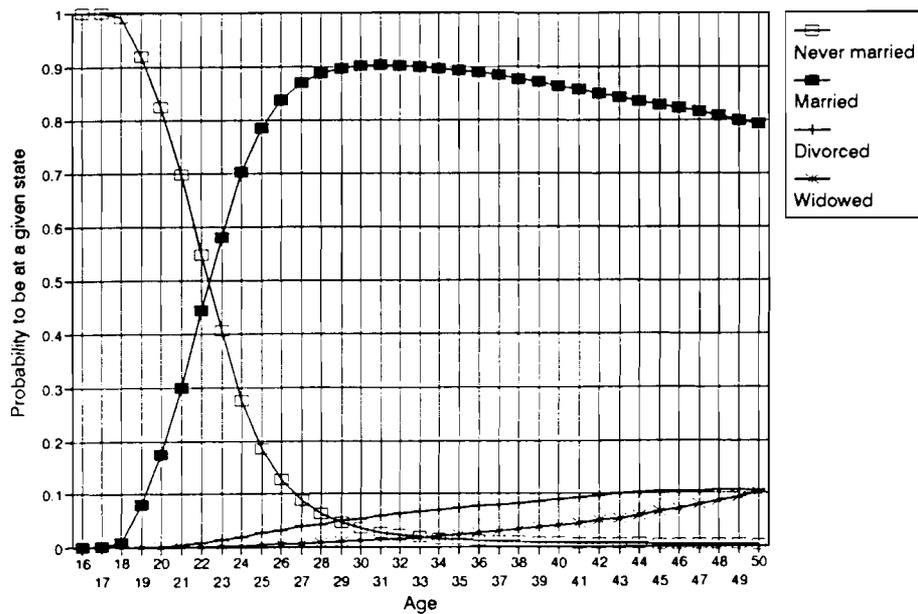
Tajikistan

State probabilities
Never married at age 16



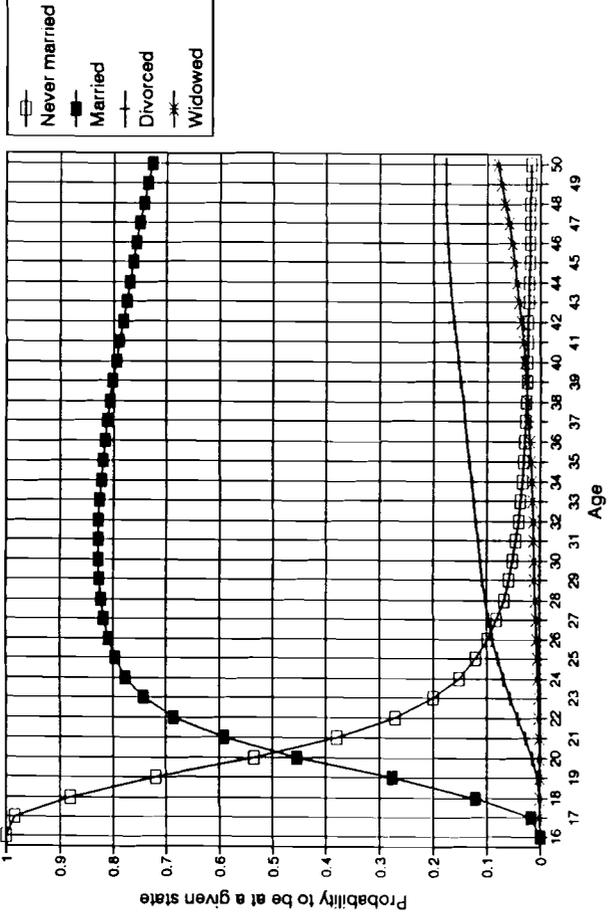
Turkmenia

State probabilities
Never married at age 16



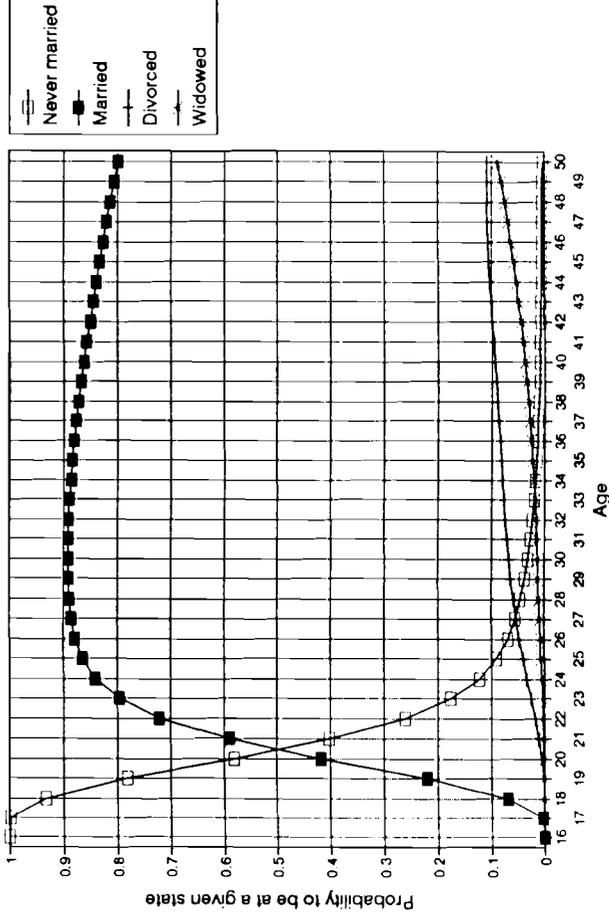
Ukraine

State probabilities
Never married at age 16



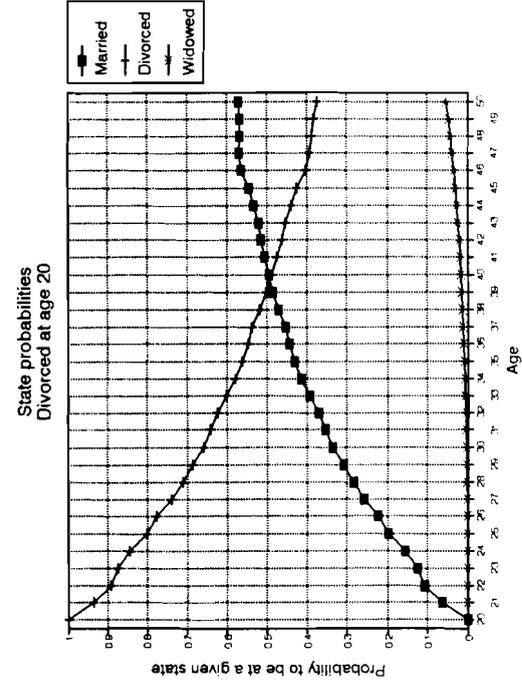
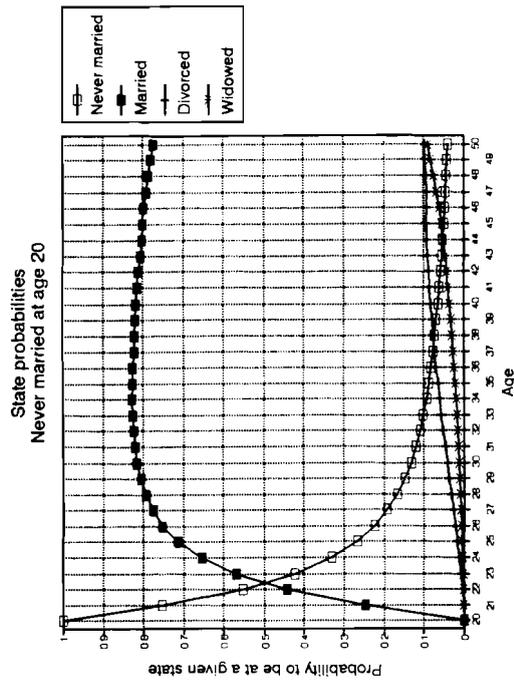
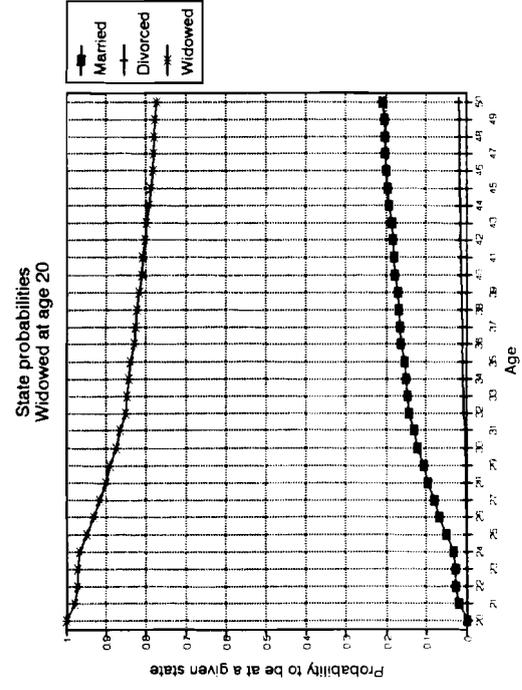
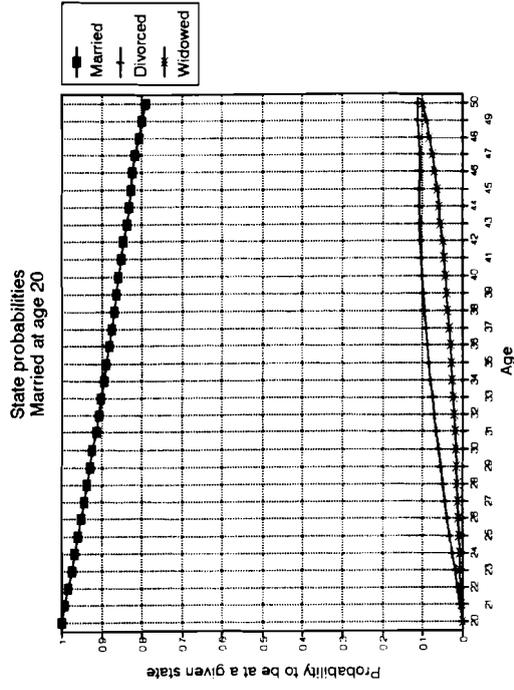
Uzbekistan

State probabilities
Never married at age 16

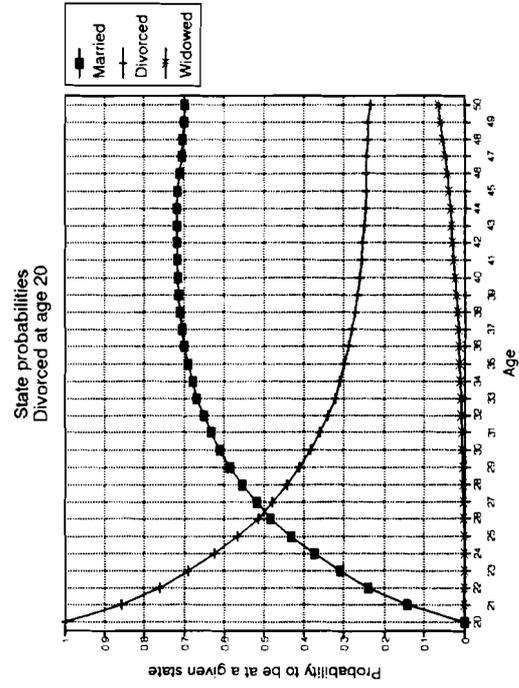
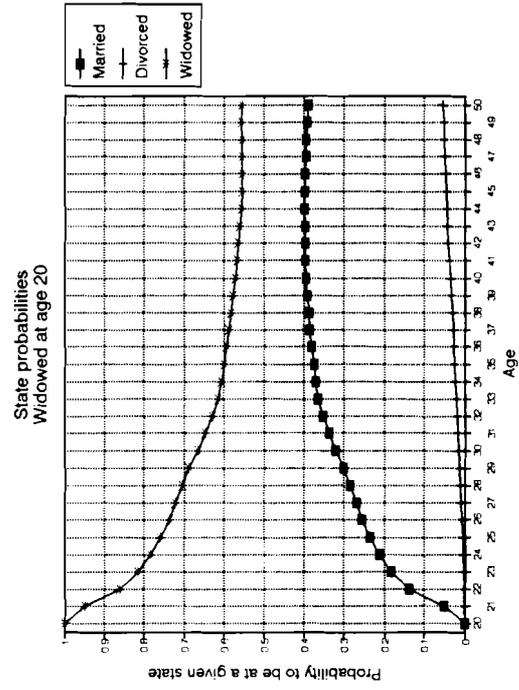
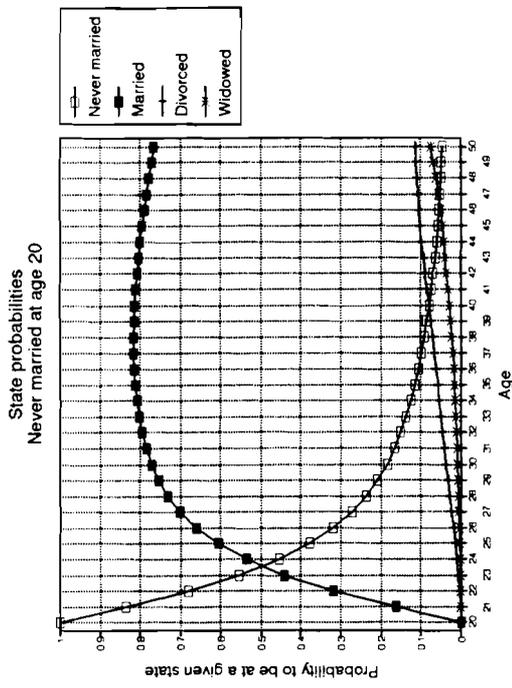
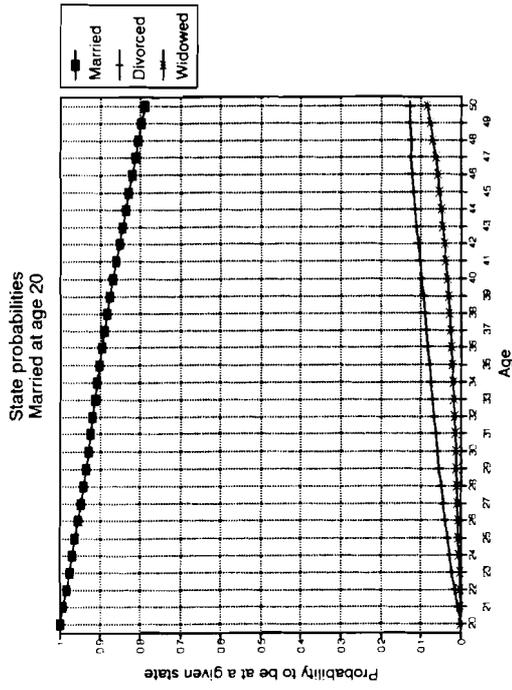


Armenia

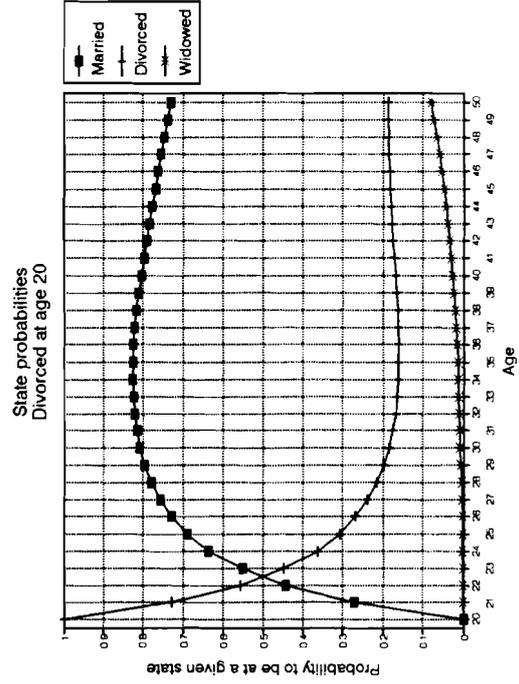
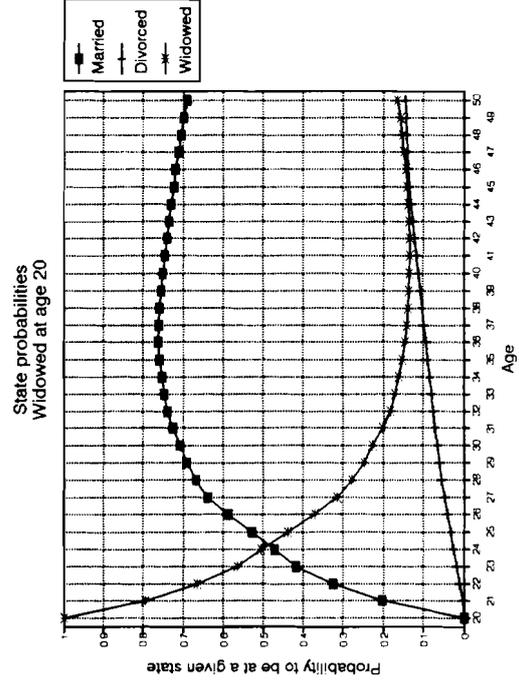
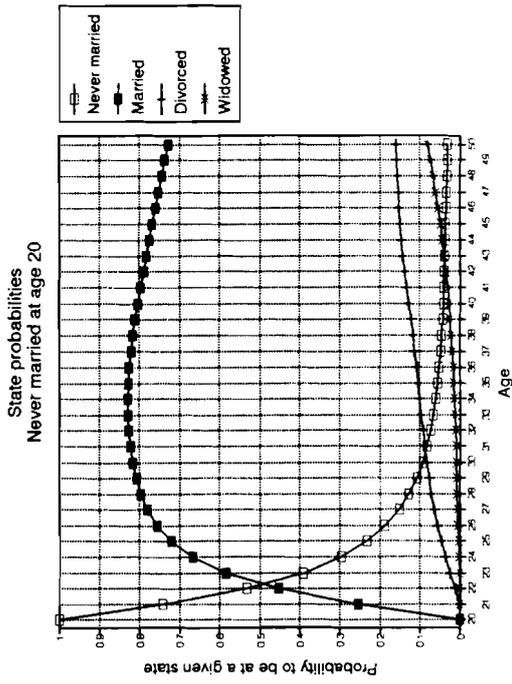
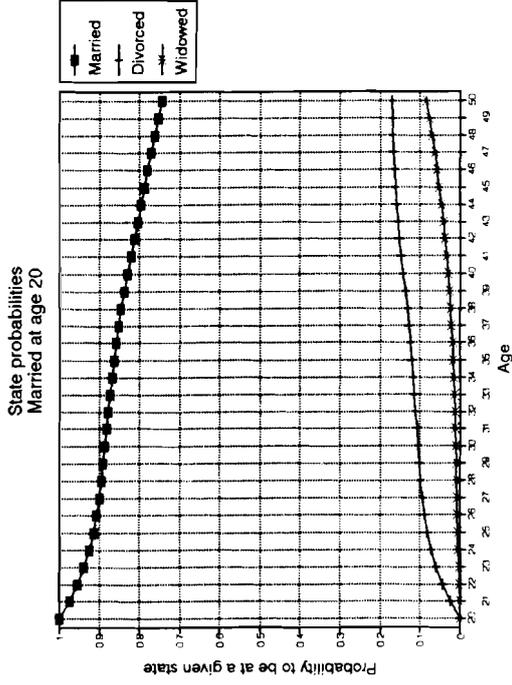
FIGURES B2



Azerbaijan

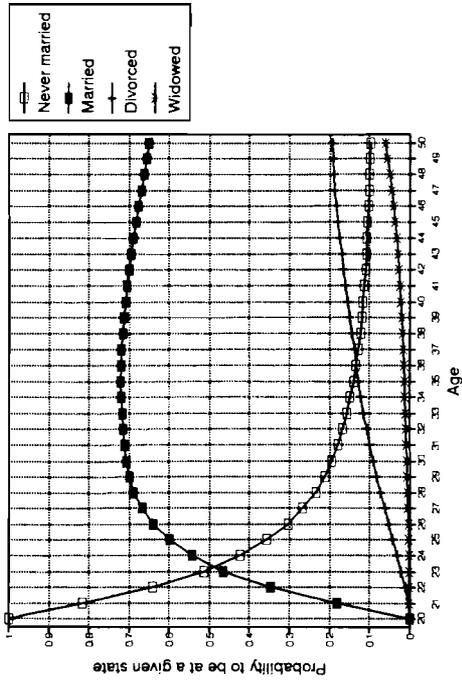


Byelorussia

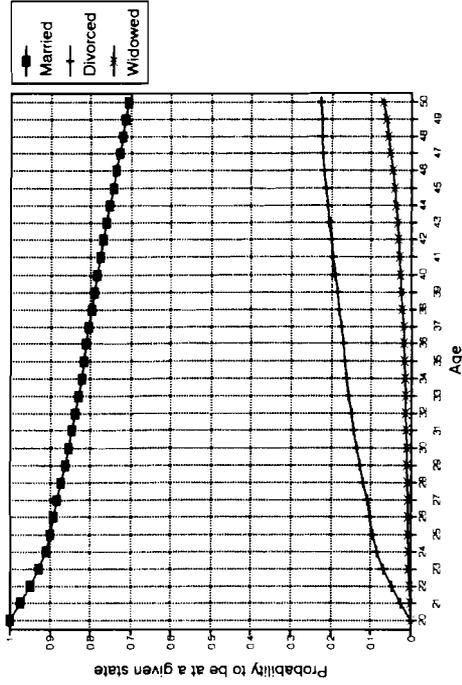


Estonia

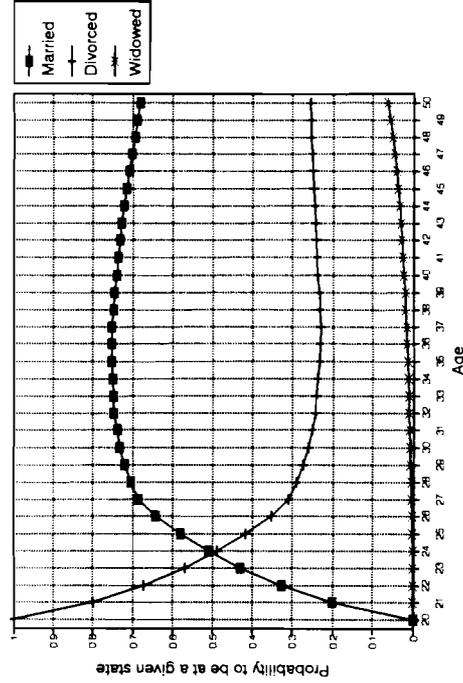
State probabilities
Never married at age 20



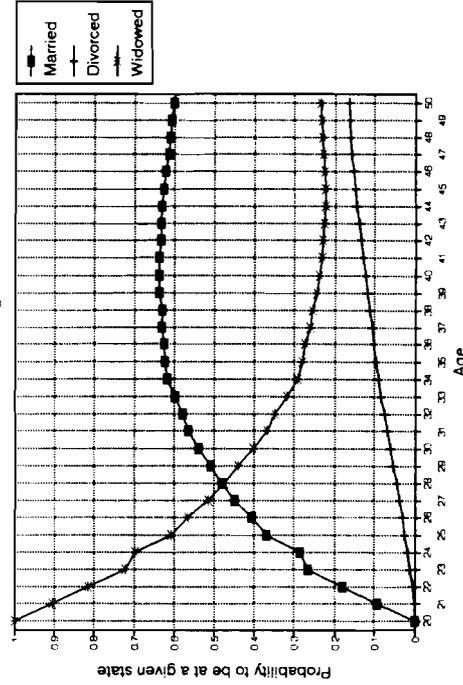
State probabilities
Married at age 20



State probabilities
Divorced at age 20

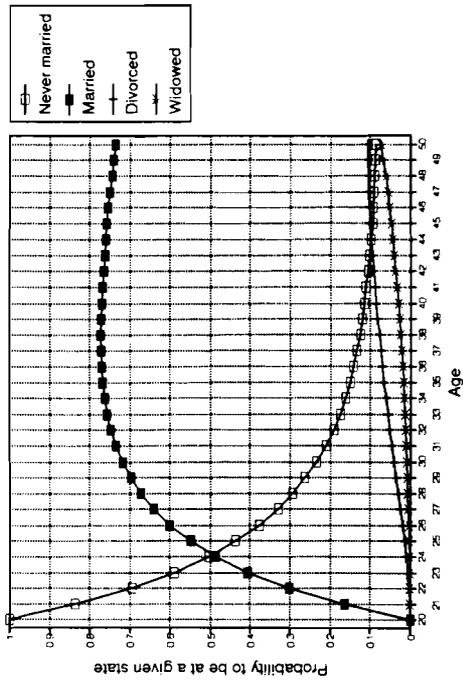


State probabilities
Widowed at age 20

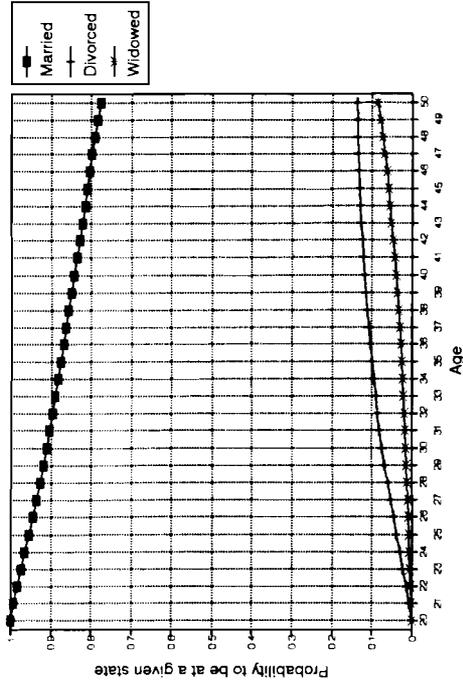


Georgia

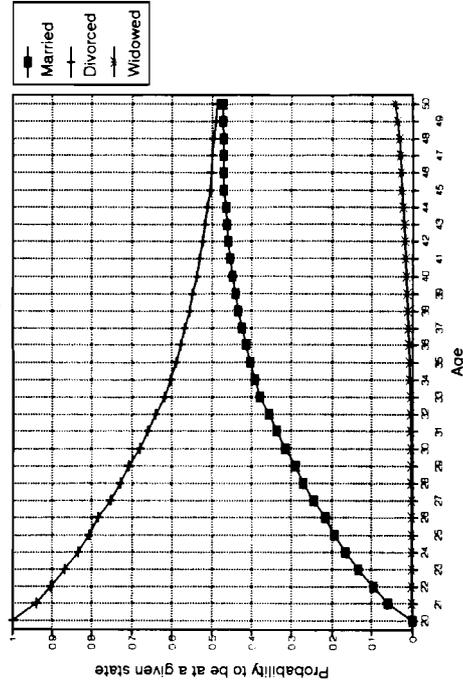
State probabilities
Never married at age 20



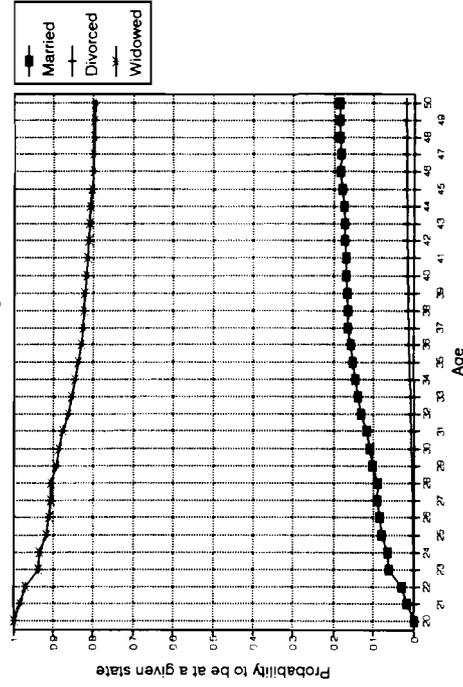
State probabilities
Married at age 20



State probabilities
Divorced at age 20

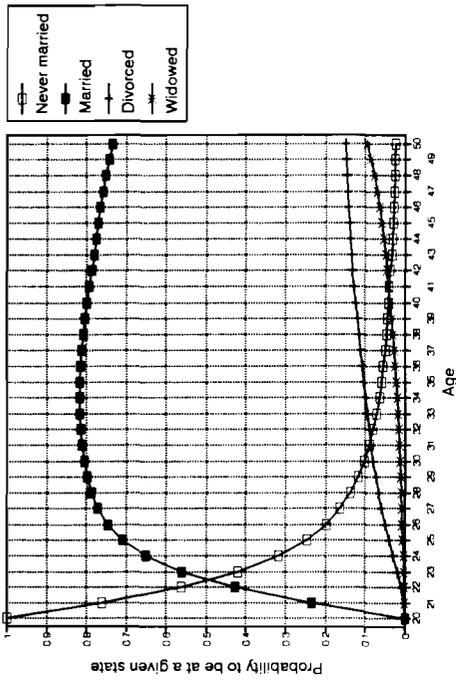


State probabilities
Widowed at age 20

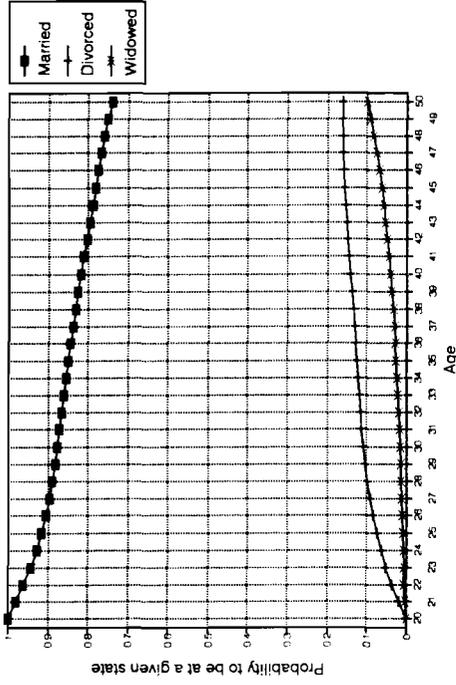


Kazakhstan

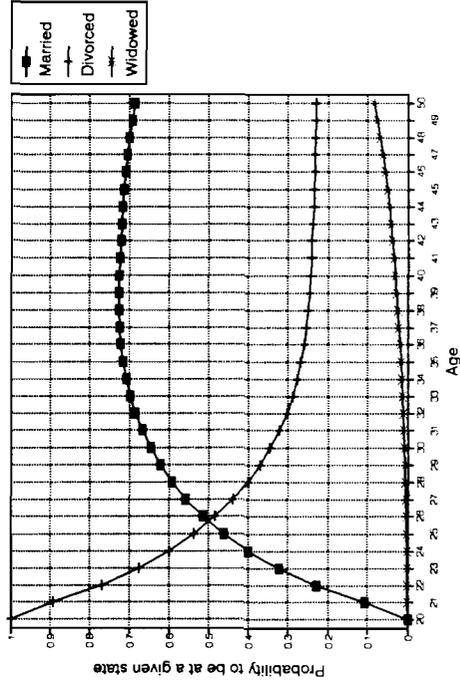
State probabilities
Never married at age 20



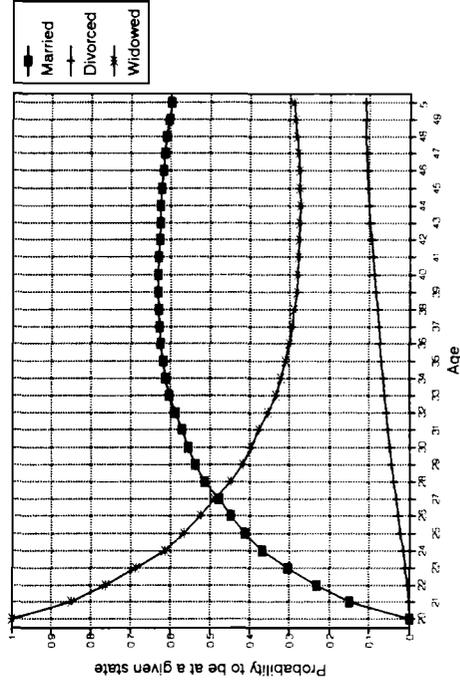
State probabilities
Married at age 20



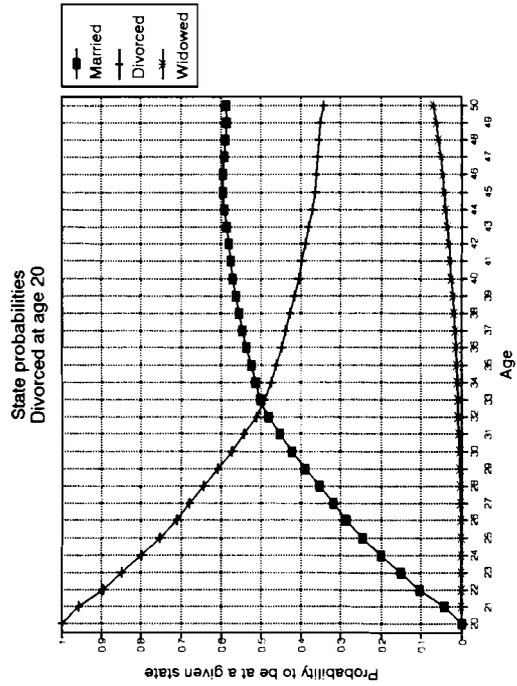
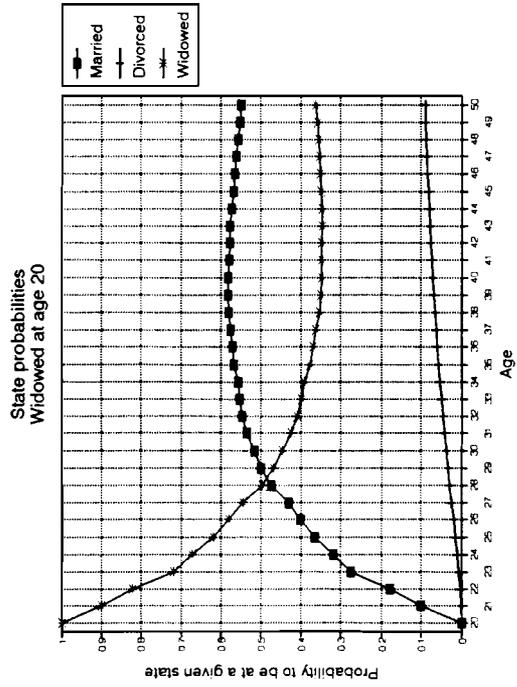
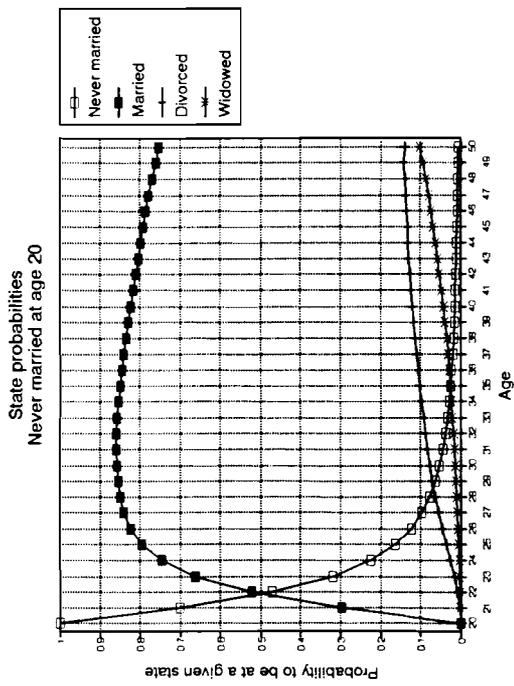
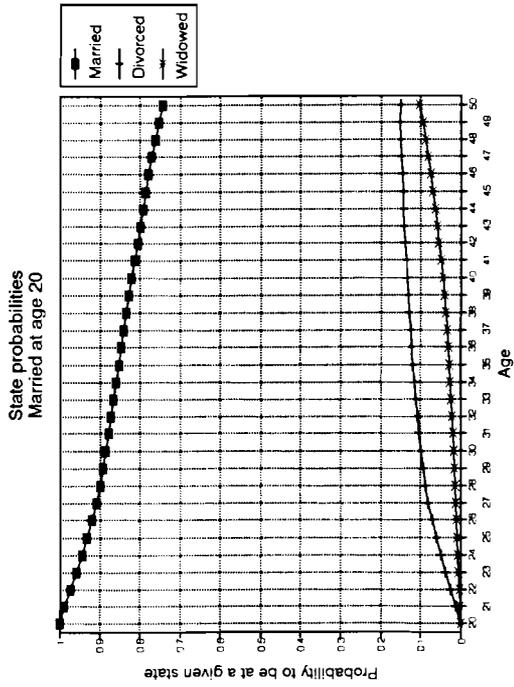
State probabilities
Divorced at age 20



State probabilities
Widowed at age 20

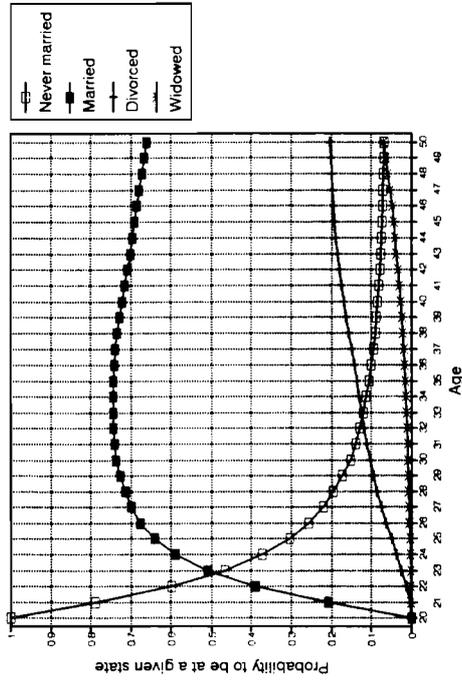


Kirghizia

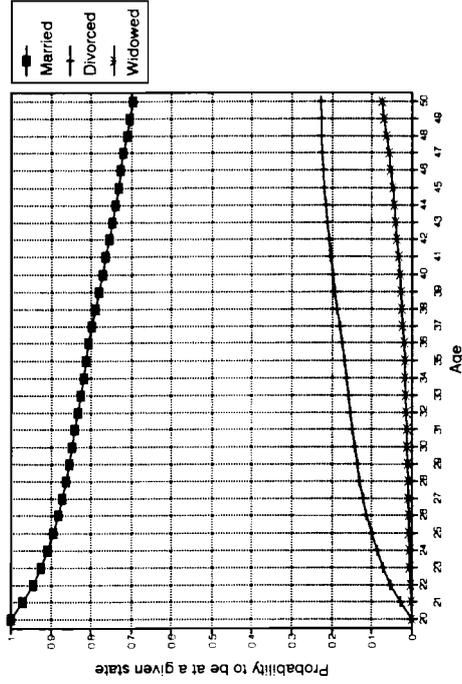


Latvia

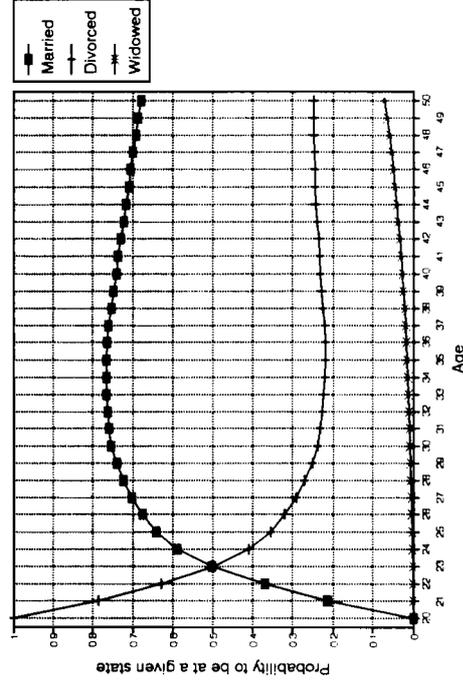
State probabilities
Never married at age 20



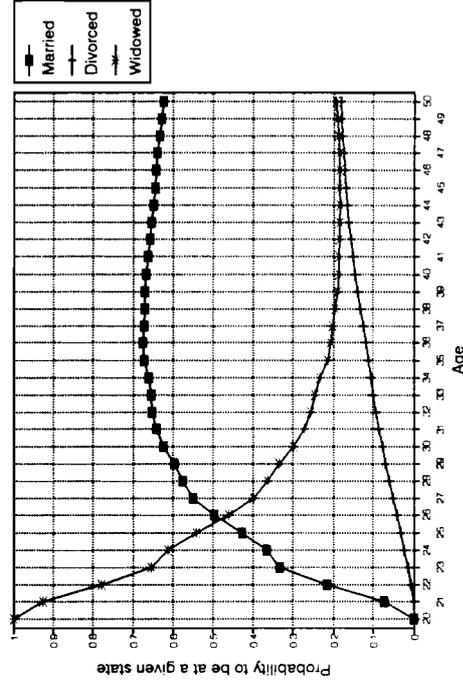
State probabilities
Married at age 20



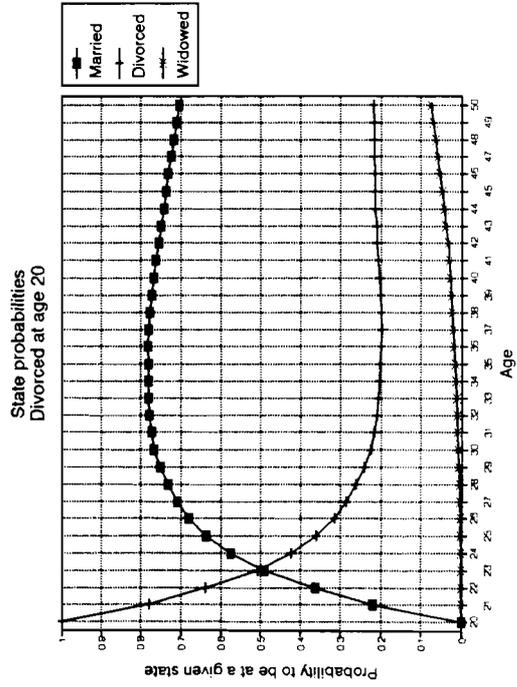
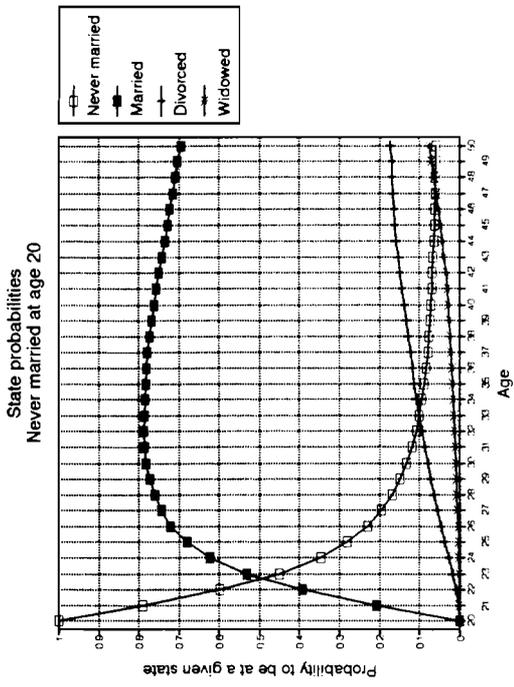
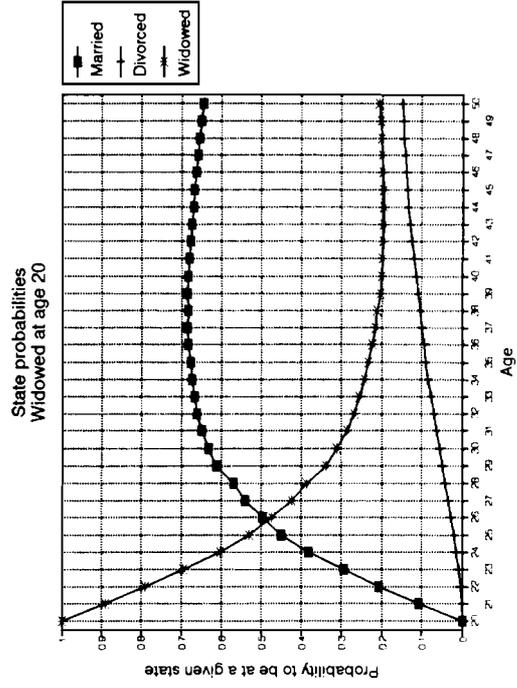
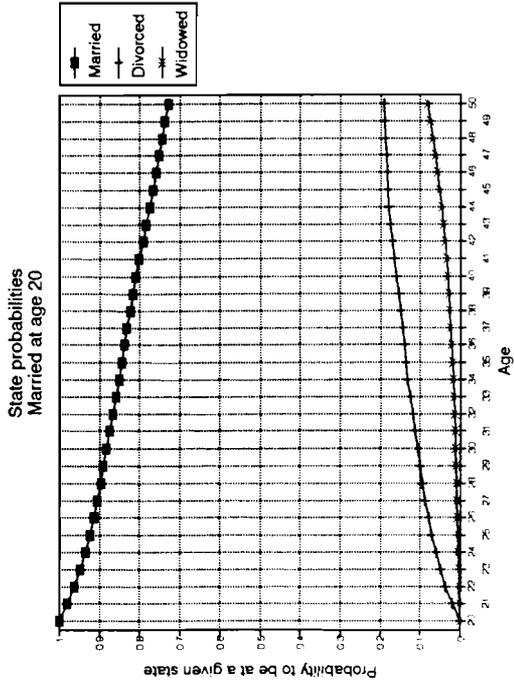
State probabilities
Divorced at age 20



State probabilities
Widowed at age 20

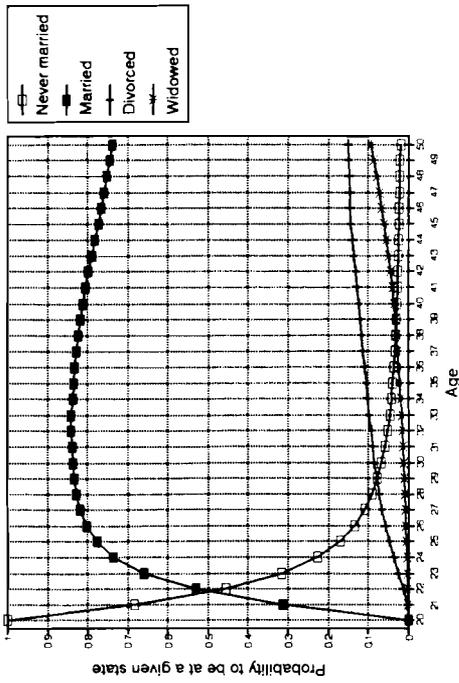


Lithuania

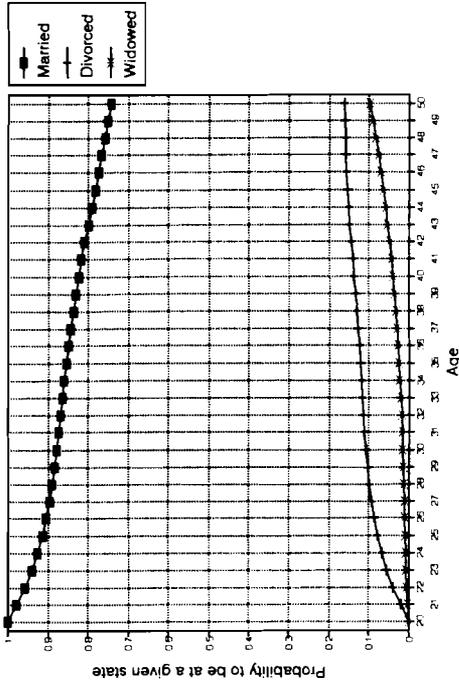


Moldavia

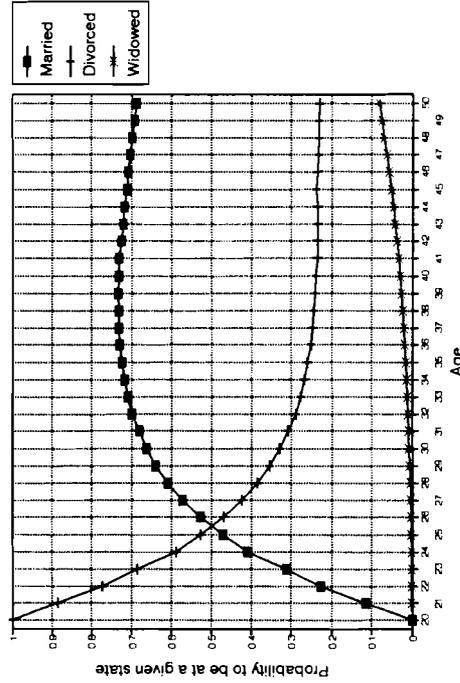
State probabilities
Never married at age 20



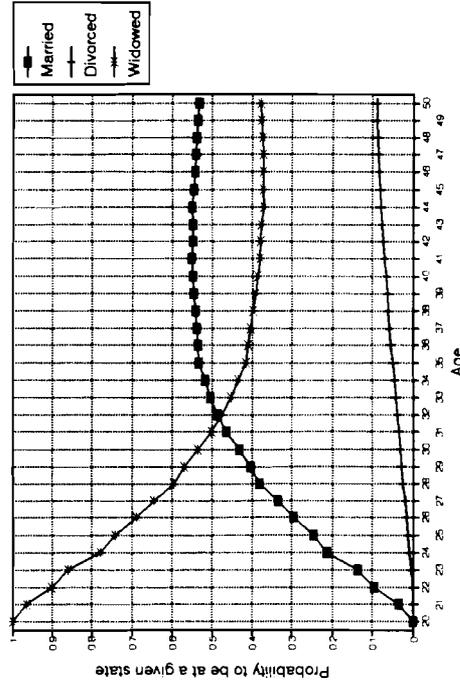
State probabilities
Married at age 20



State probabilities
Divorced at age 20

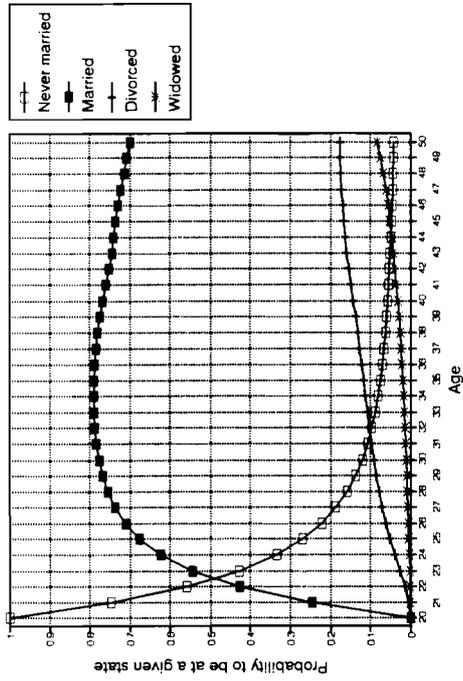


State probabilities
Widowed at age 20

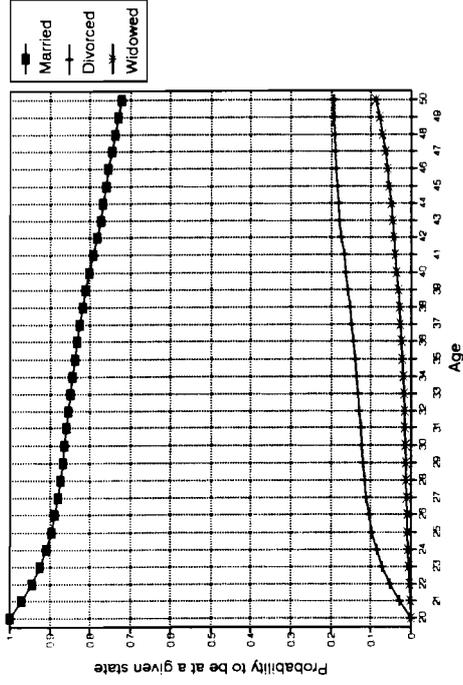


Russia

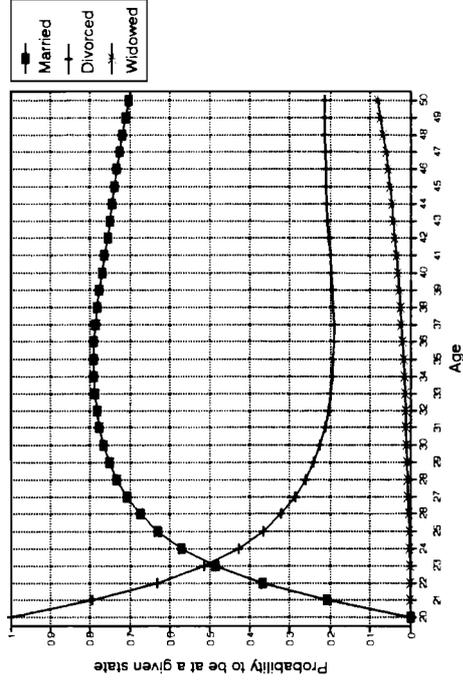
State probabilities
Never married at age 20



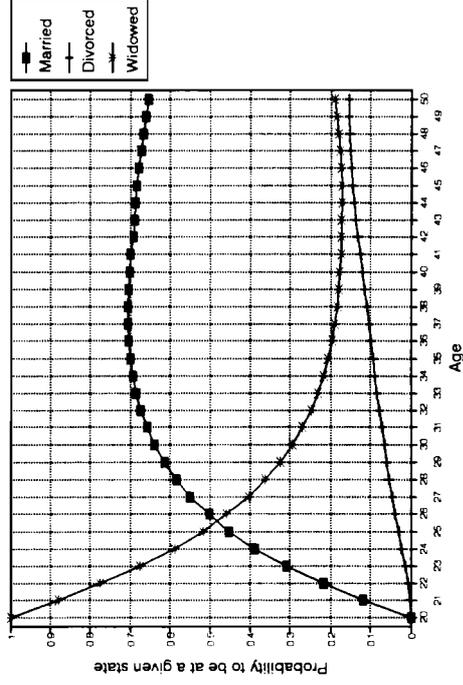
State probabilities
Married at age 20



State probabilities
Divorced at age 20

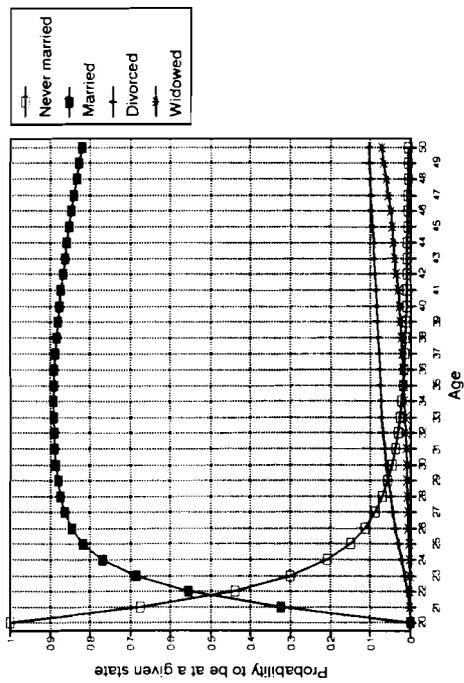


State probabilities
Widowed at age 20

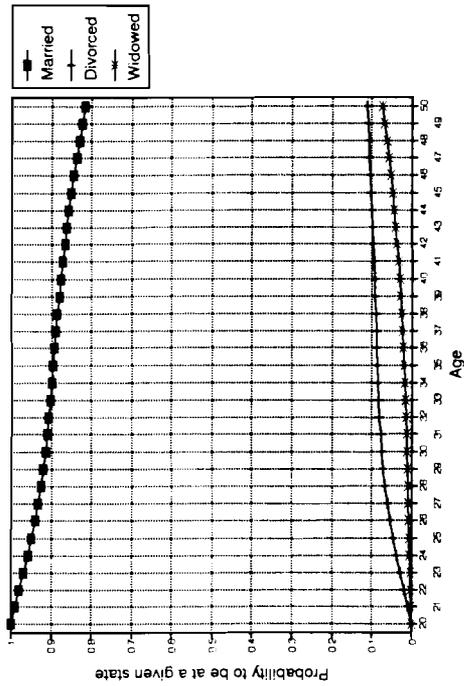


Tajikistan

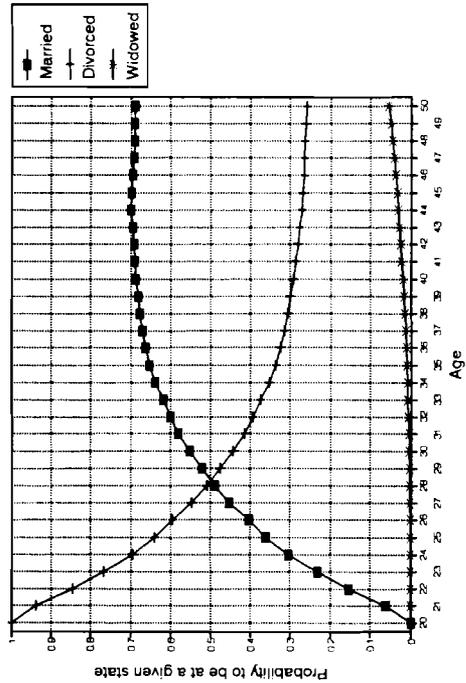
State probabilities
Never married at age 20



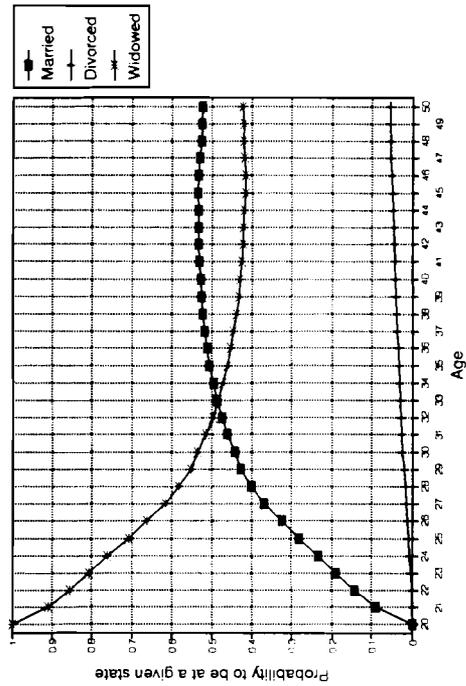
State probabilities
Married at age 20



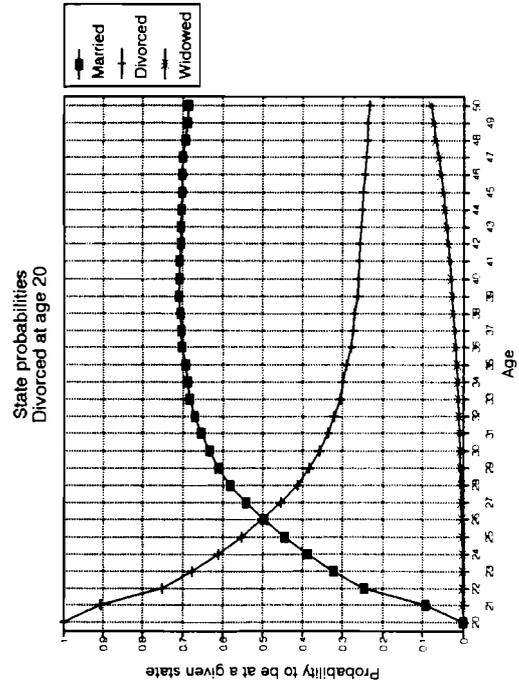
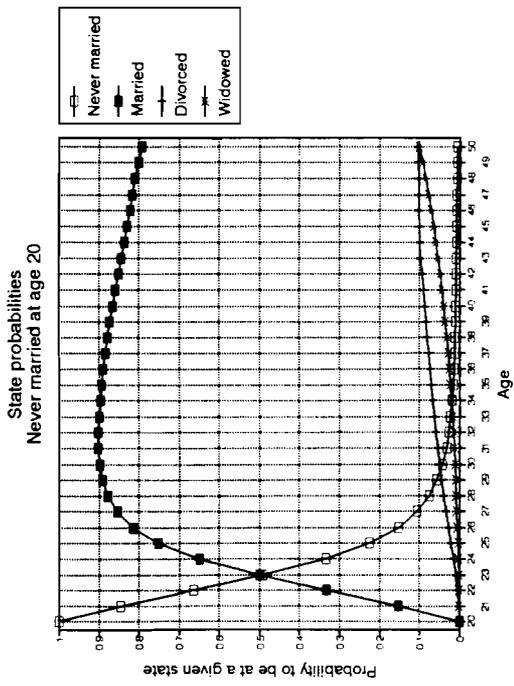
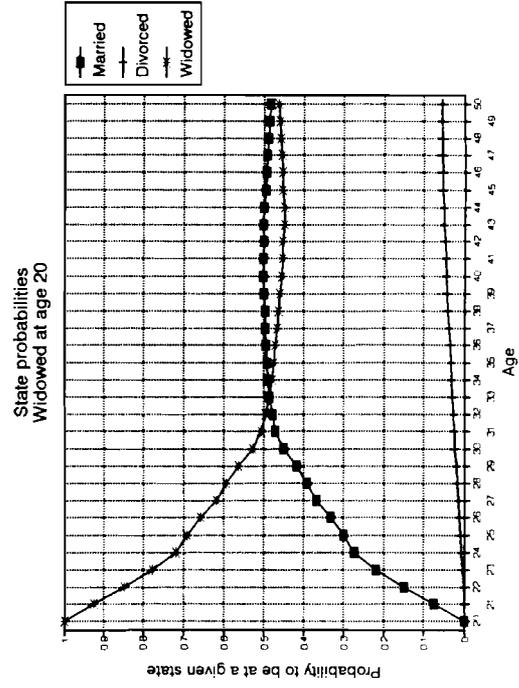
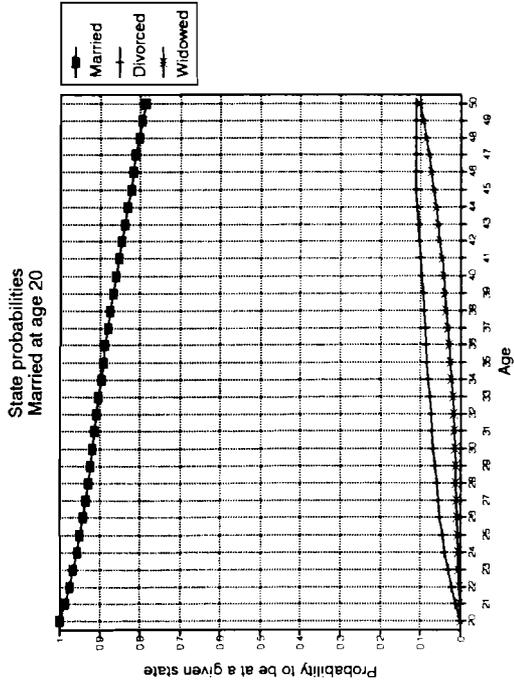
State probabilities
Divorced at age 20



State probabilities
Widowed at age 20

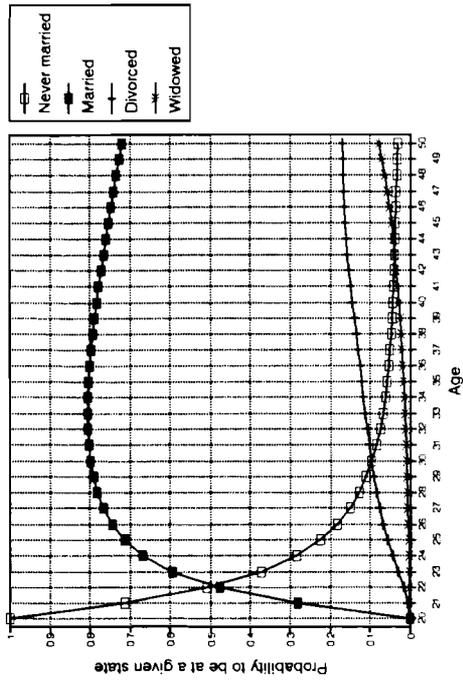


Turkmenia

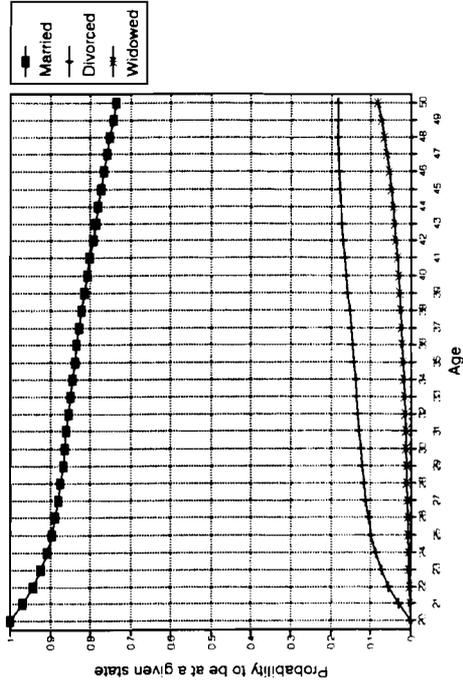


Ukraine

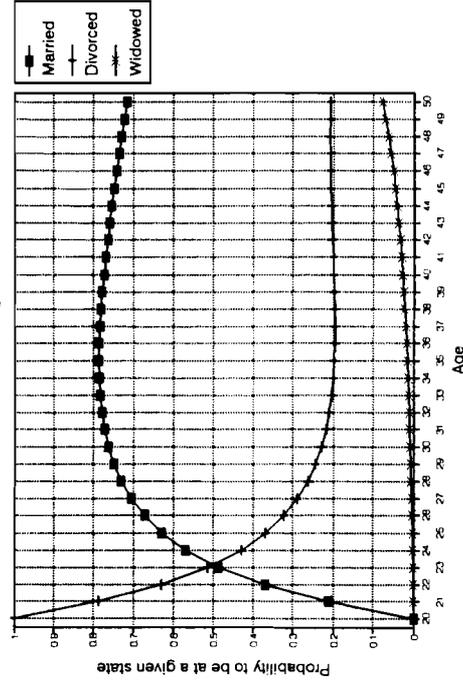
State probabilities
Never married at age 20



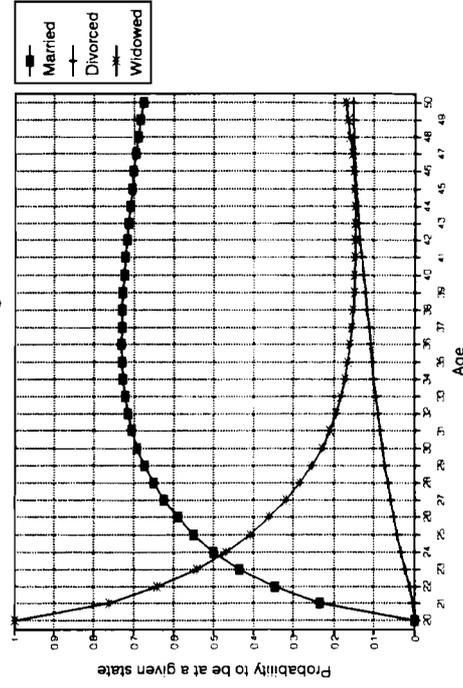
State probabilities
Married at age 20



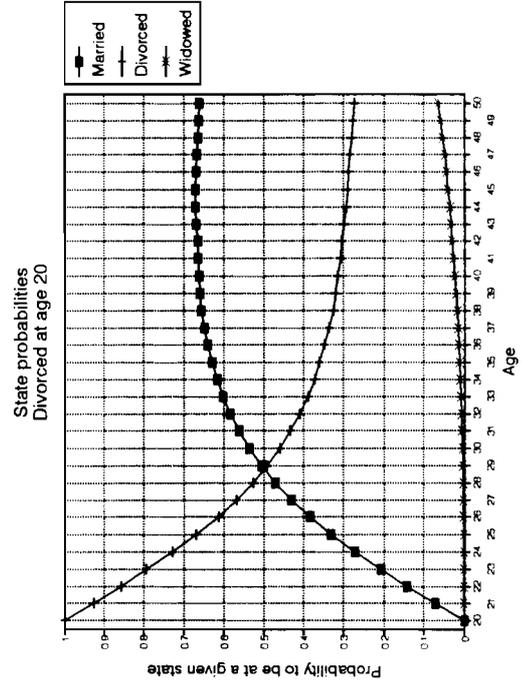
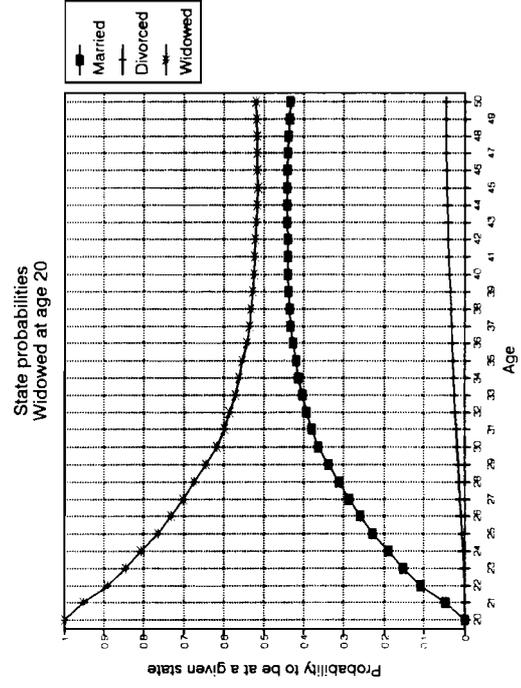
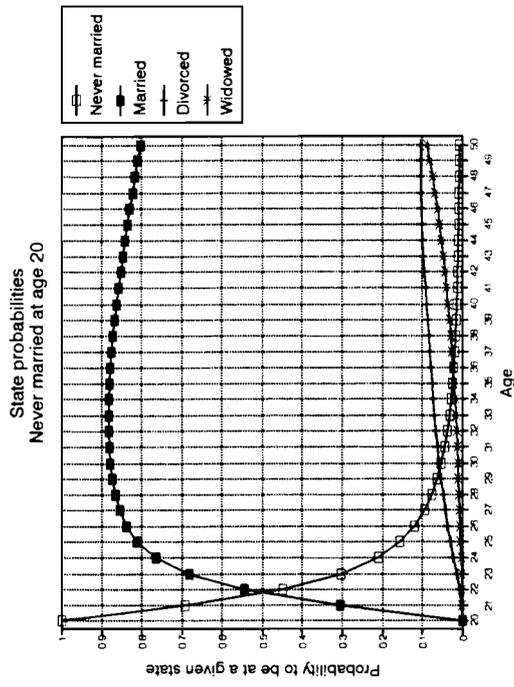
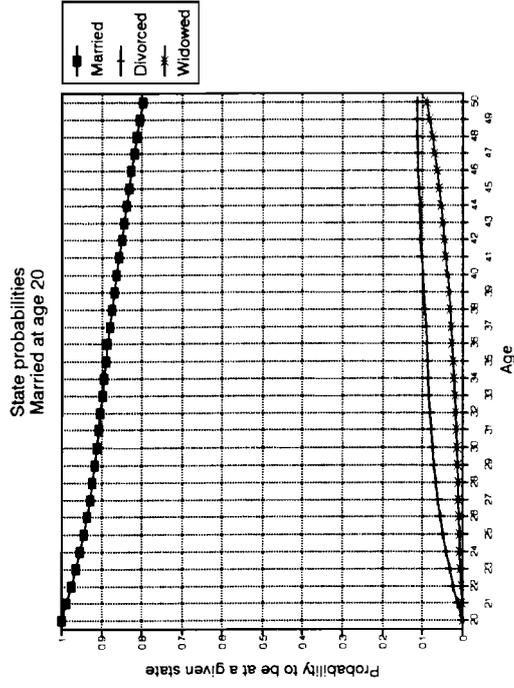
State probabilities
Divorced at age 20



State probabilities
Widowed at age 20

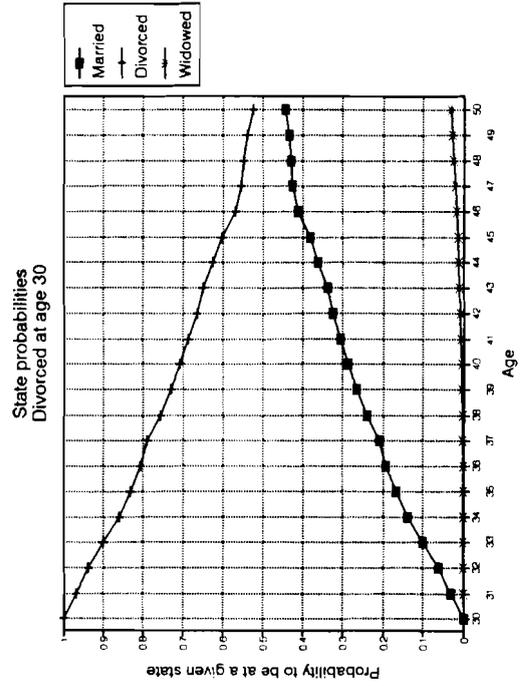
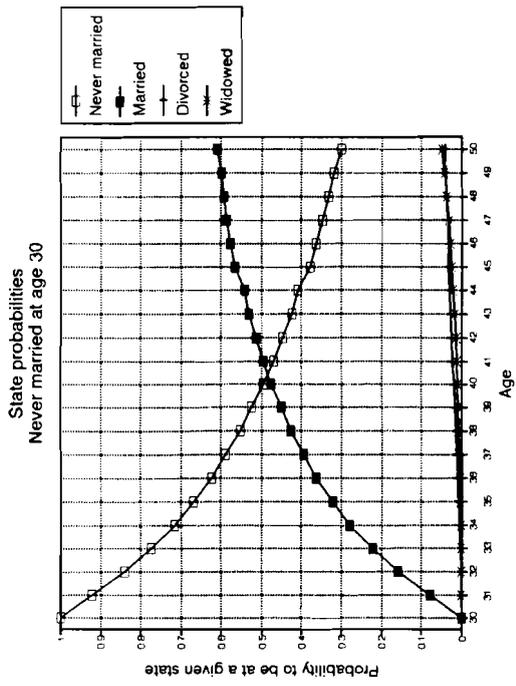
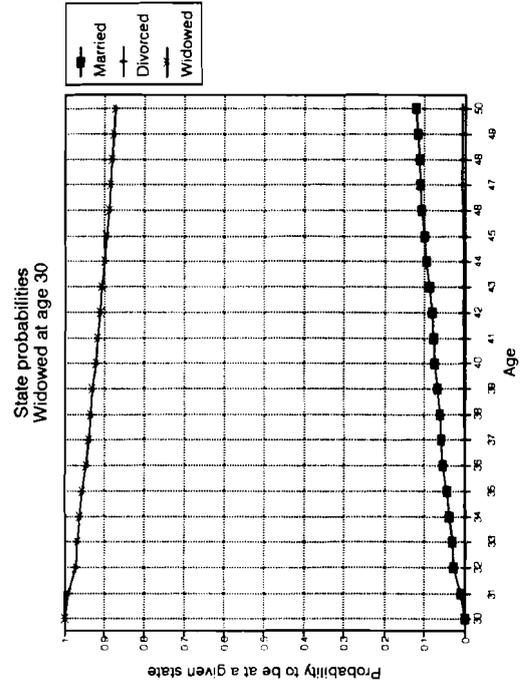
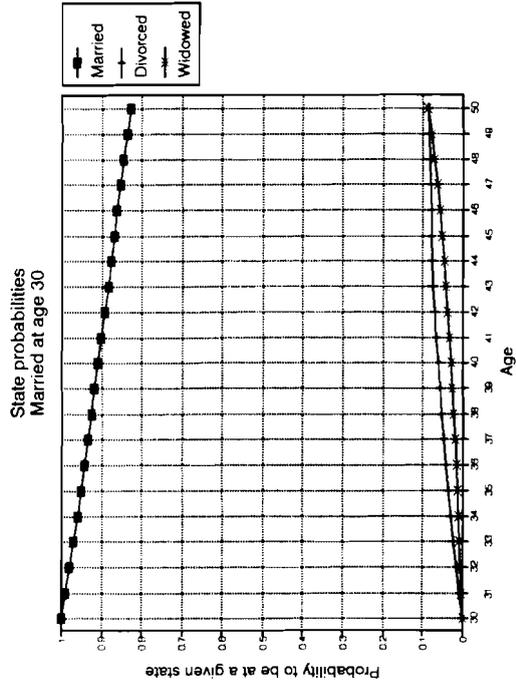


Uzbekistan

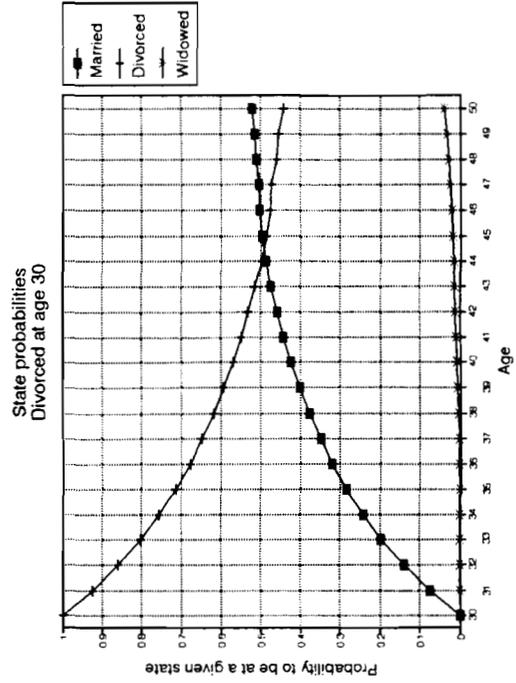
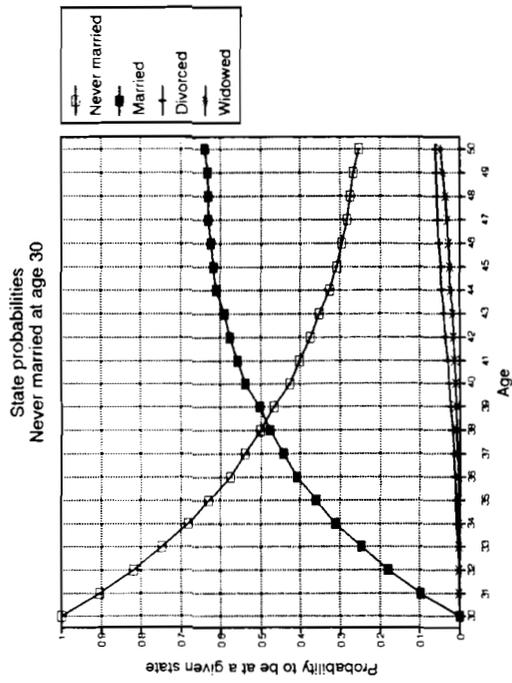
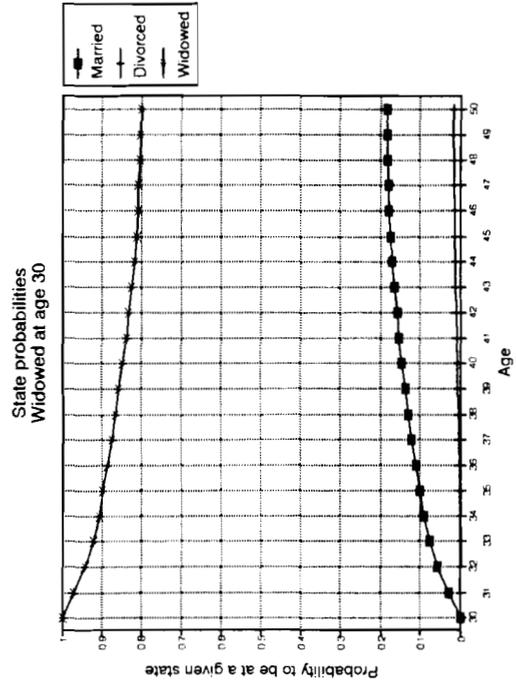
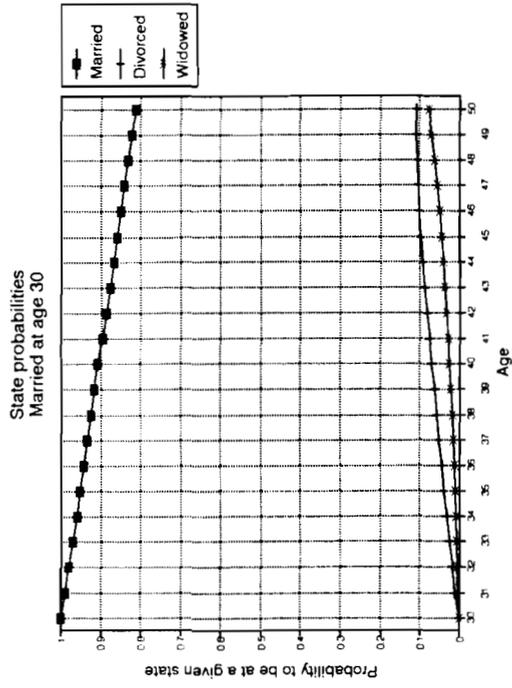


FIGURES B3

Armenia

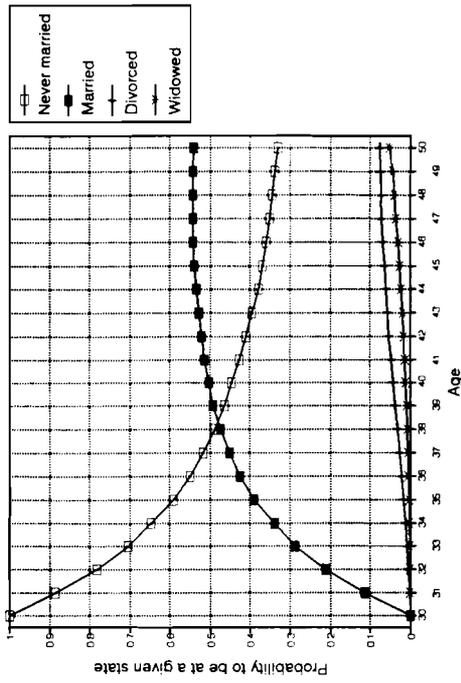


Azerbaijan

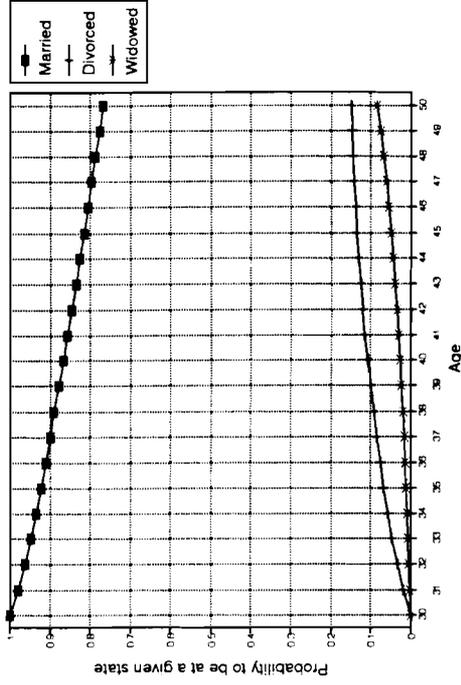


Byelorussia

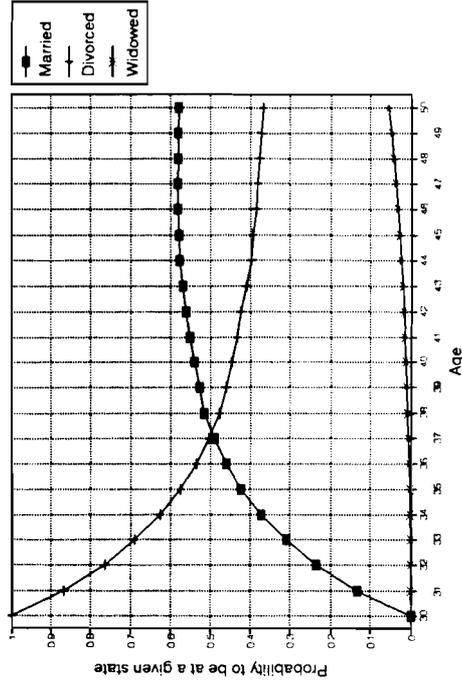
State probabilities
Never married at age 30



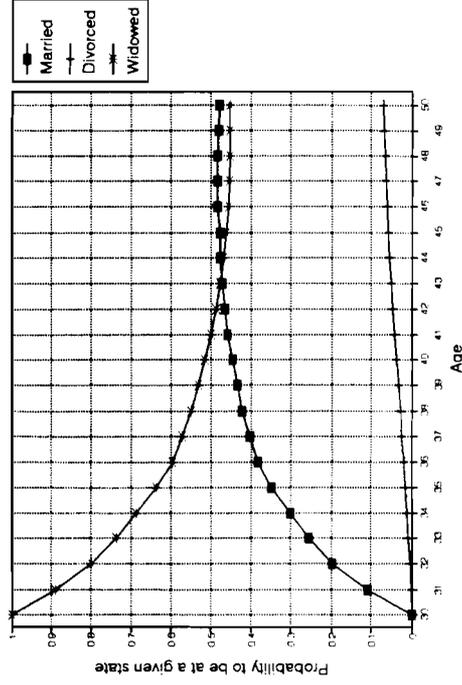
State probabilities
Married at age 30



State probabilities
Divorced at age 30

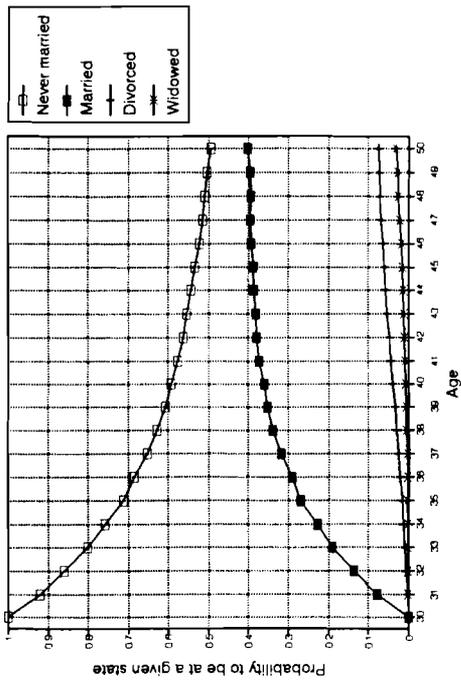


State probabilities
Widowed at age 30

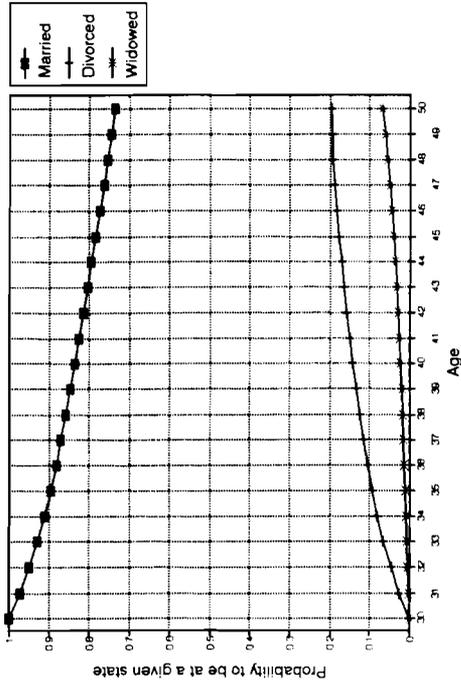


Estonia

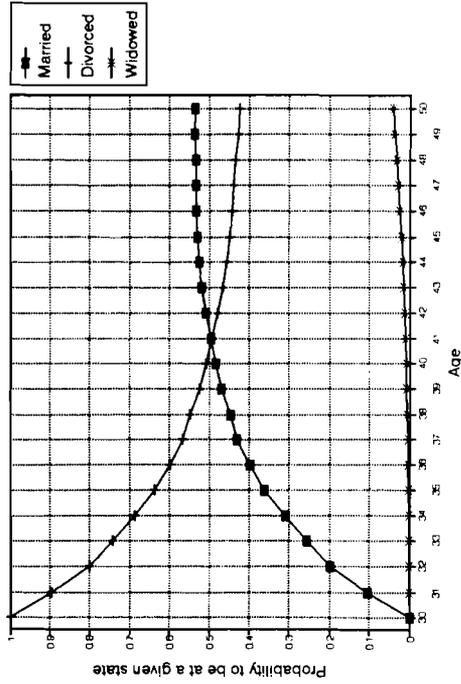
State probabilities
Never married at age 30



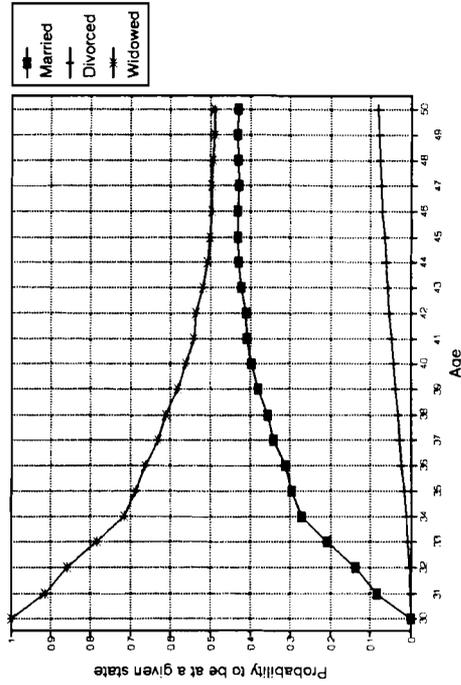
State probabilities
Married at age 30



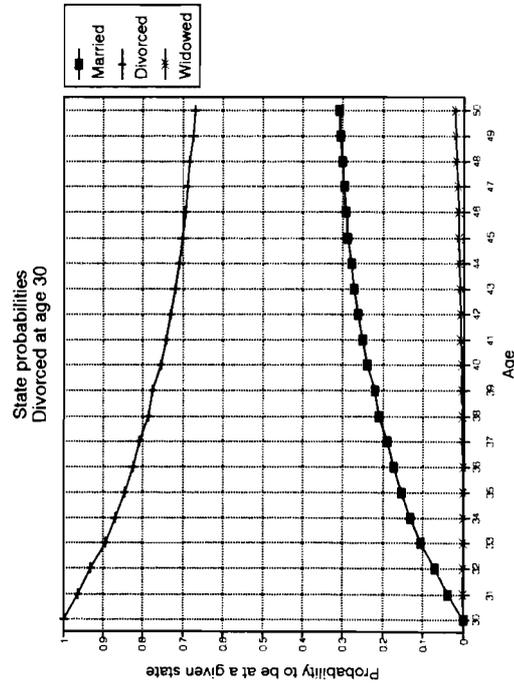
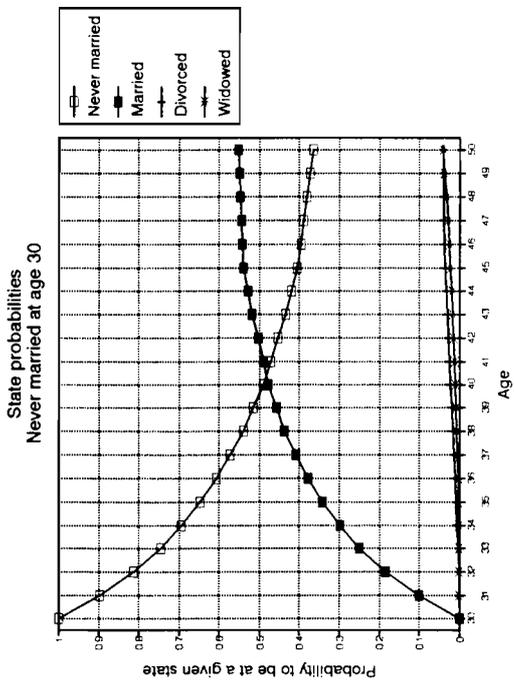
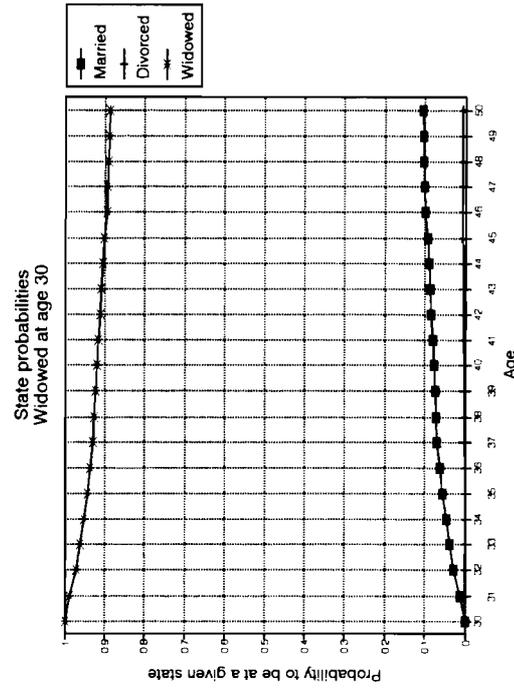
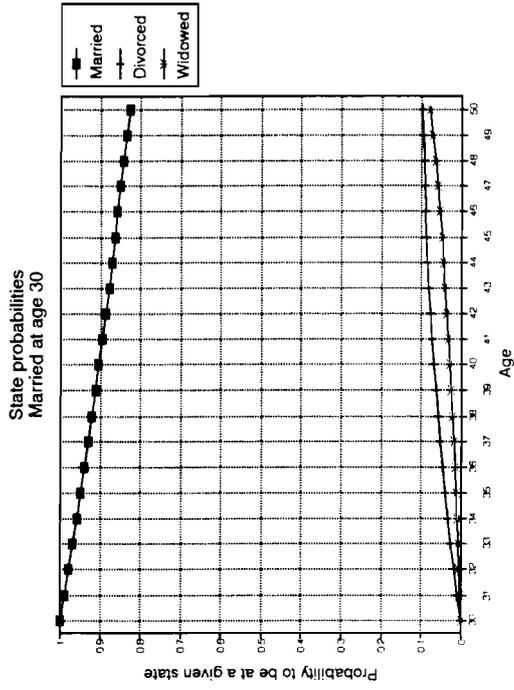
State probabilities
Divorced at age 30



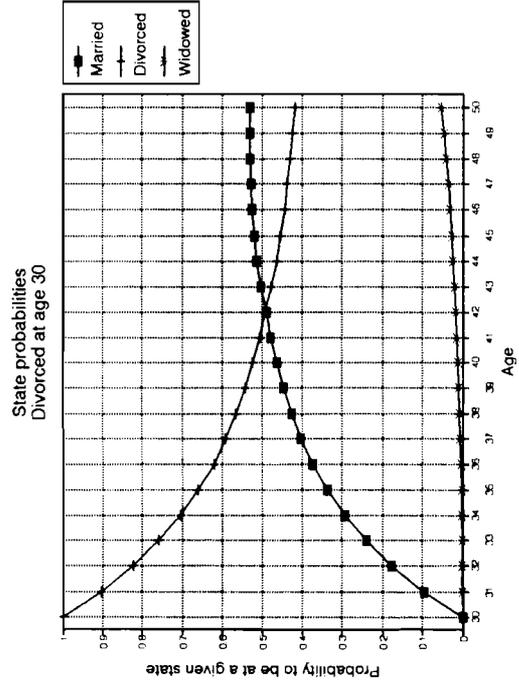
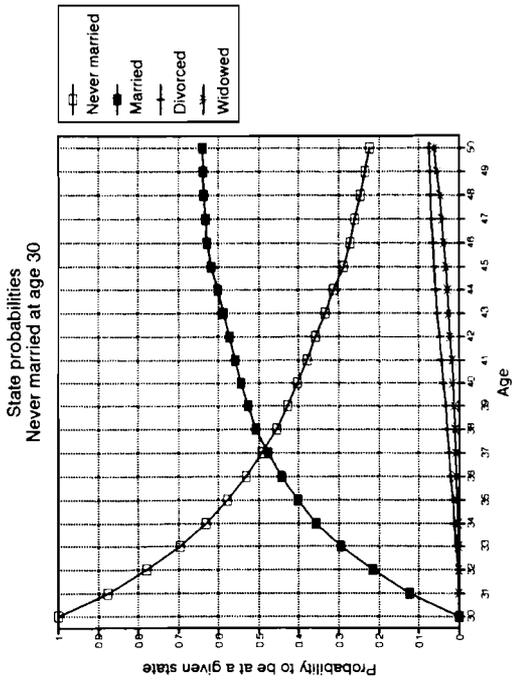
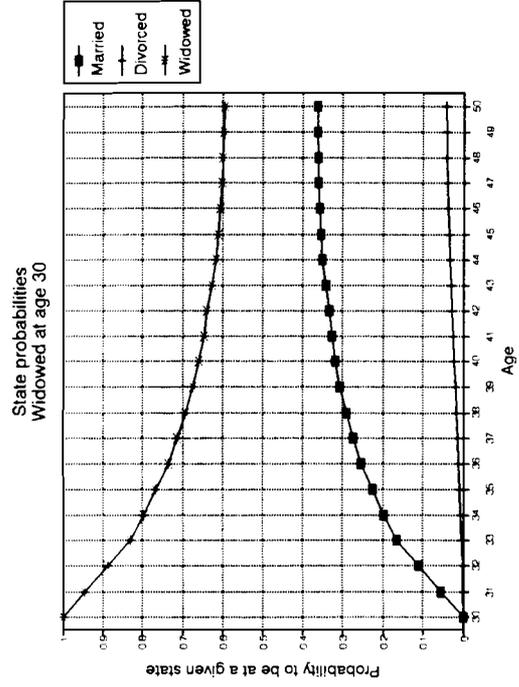
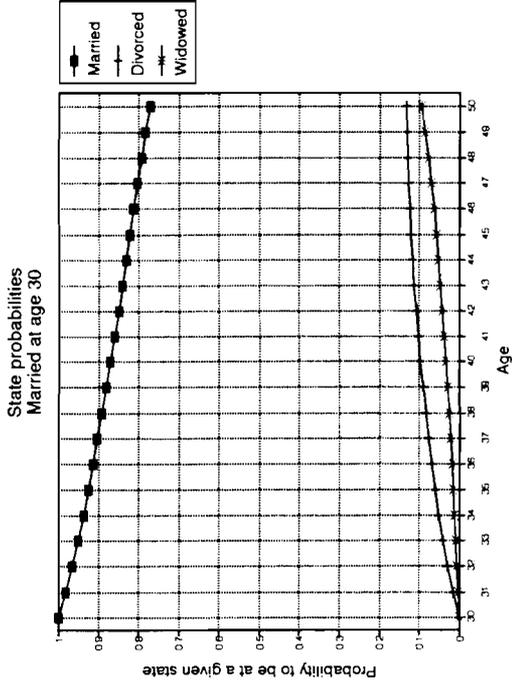
State probabilities
Widowed at age 30



Georgia

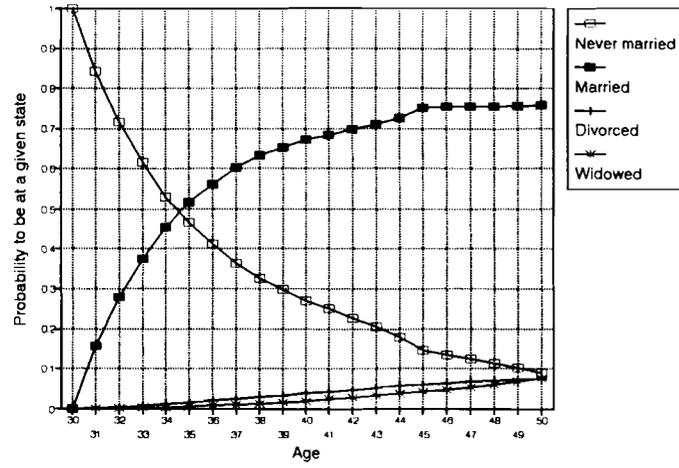


Kazakhstan

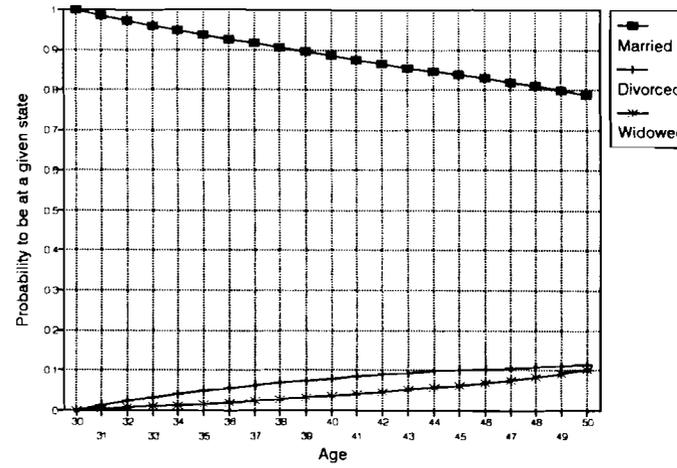


Kirghizia

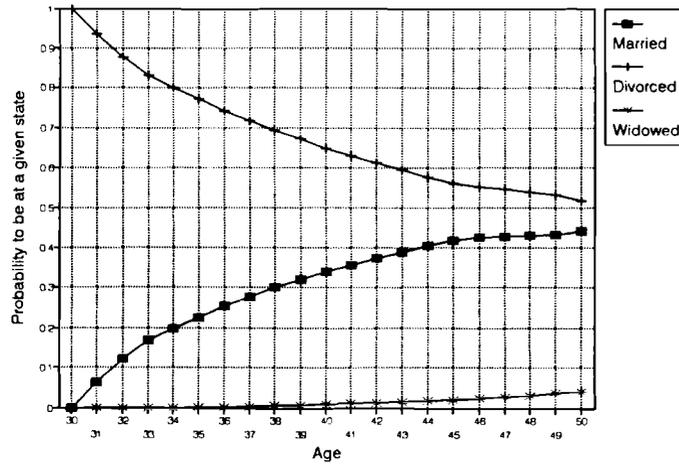
State probabilities
Never married at age 30



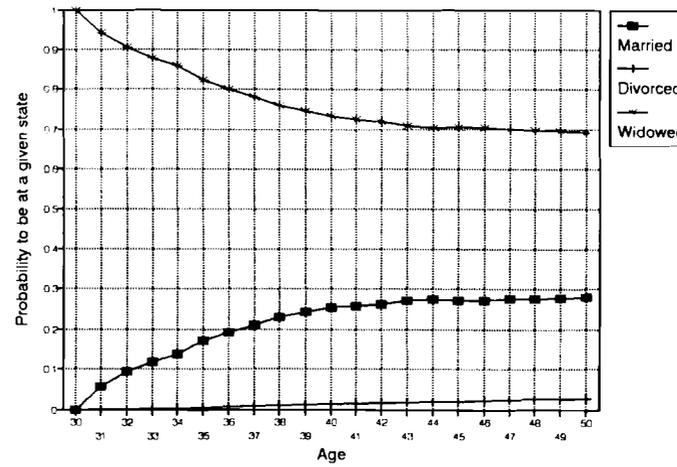
State probabilities
Married at age 30



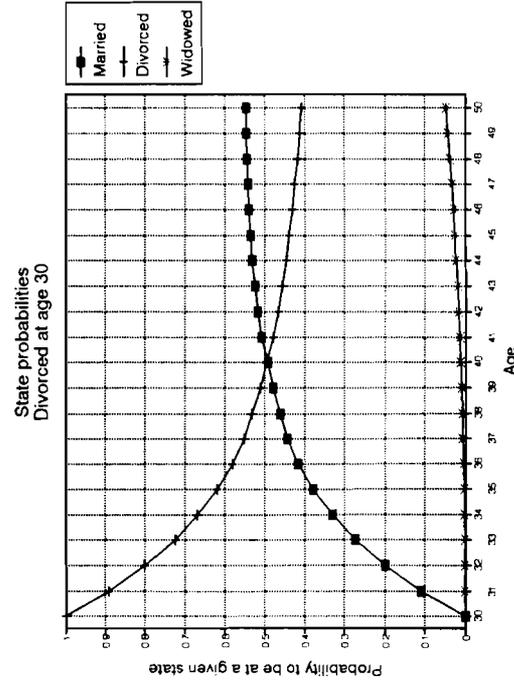
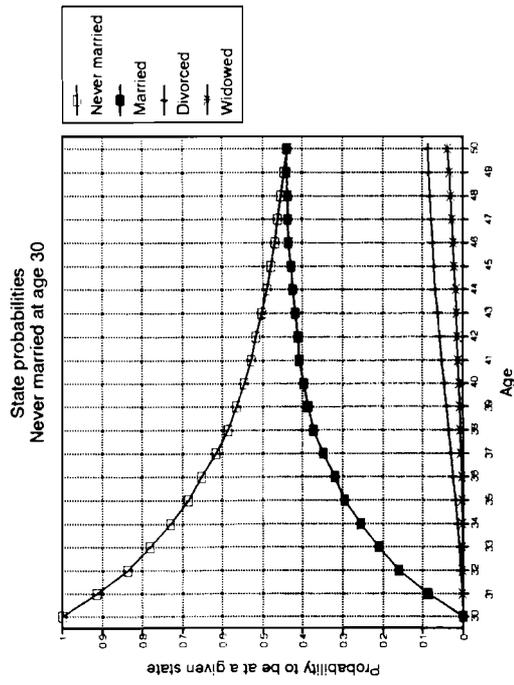
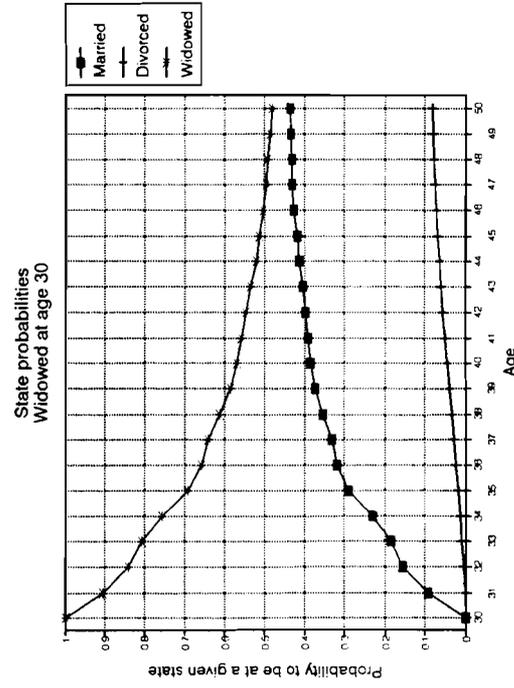
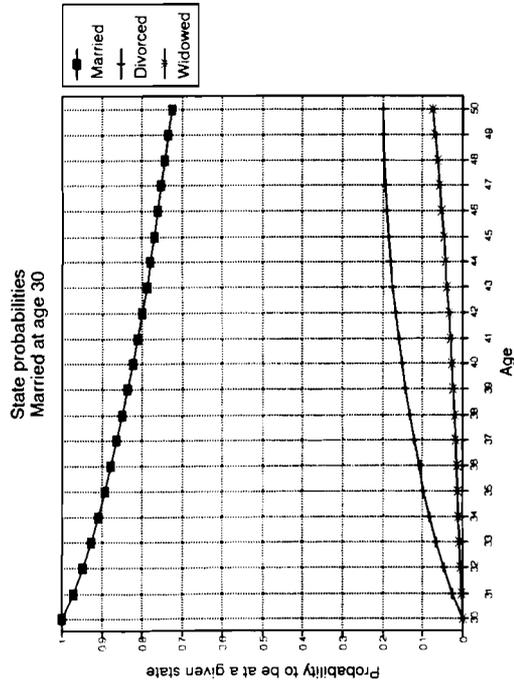
State probabilities
Divorced at age 30



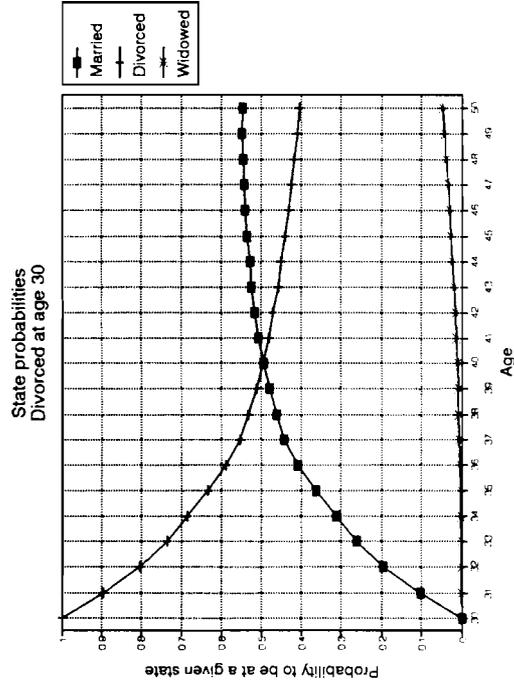
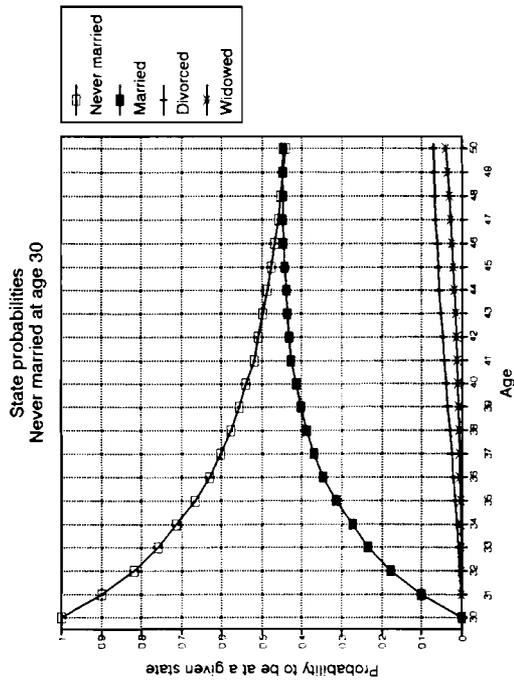
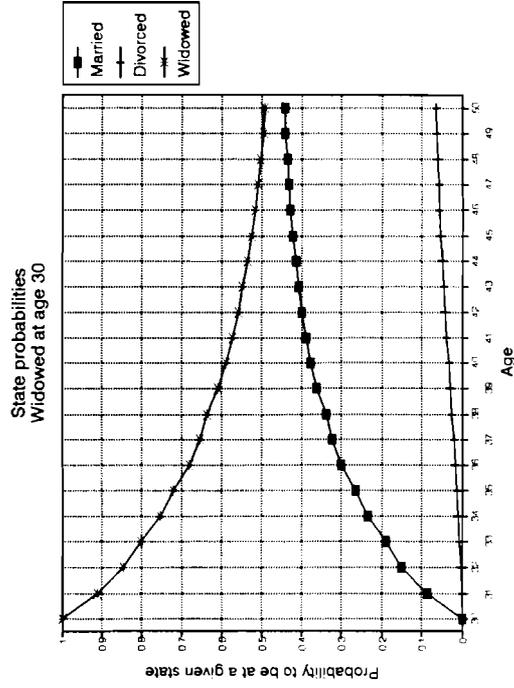
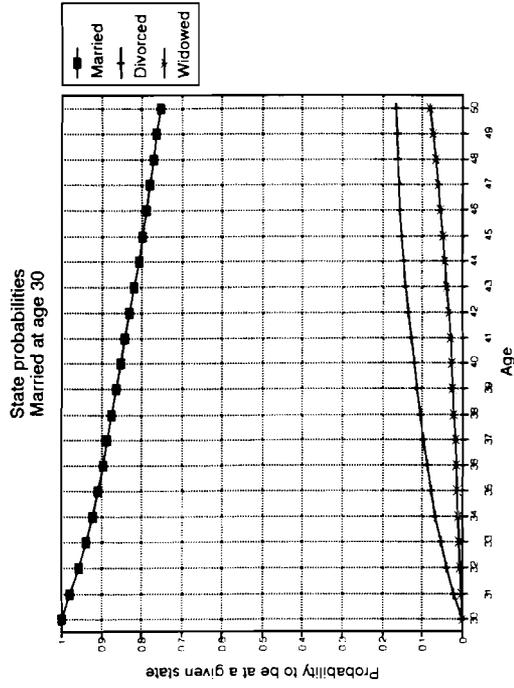
State probabilities
Widowed at age 30



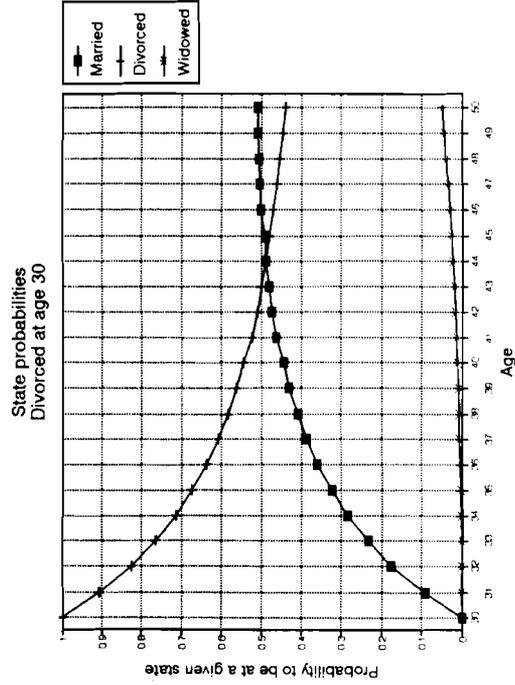
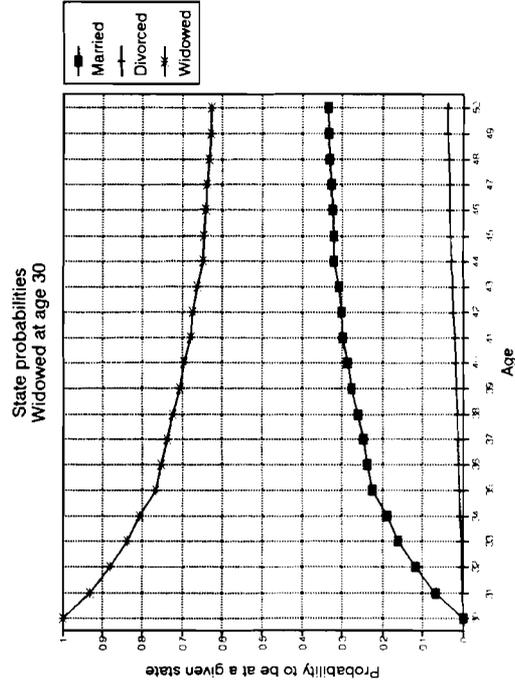
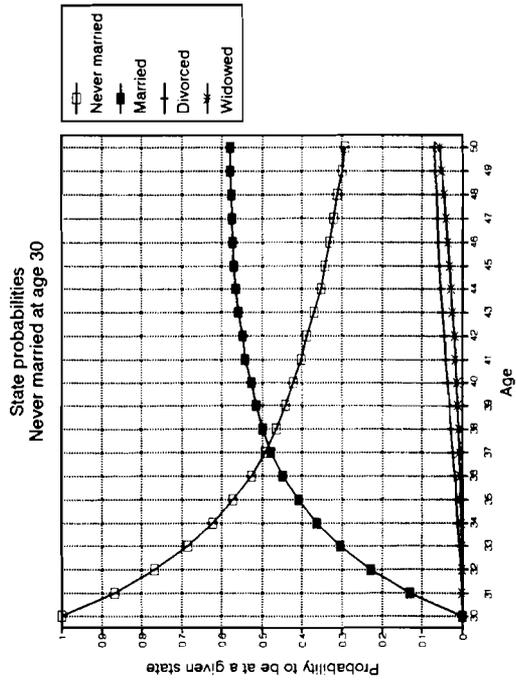
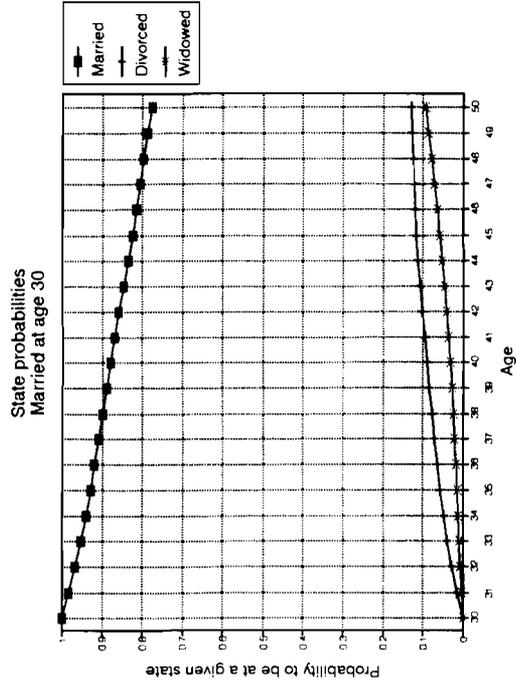
Latvia



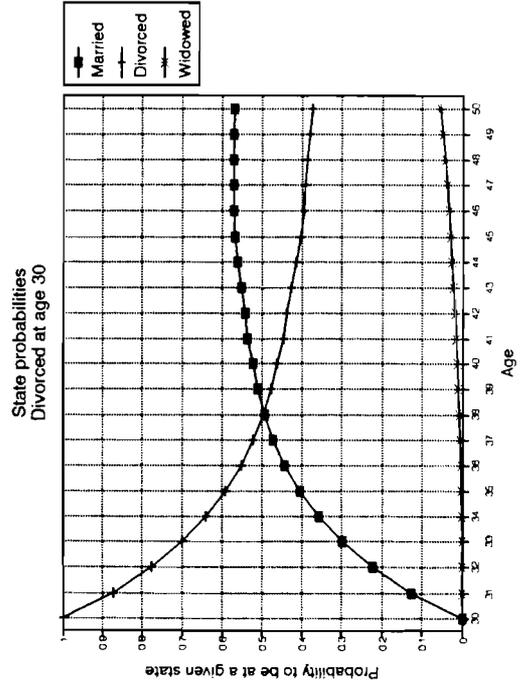
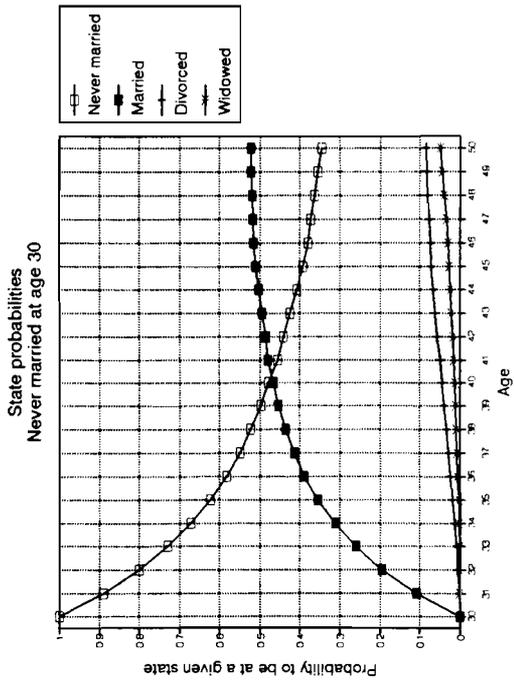
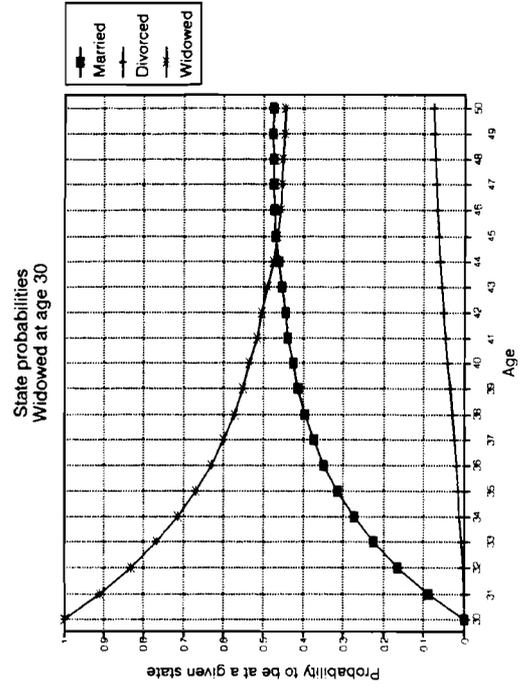
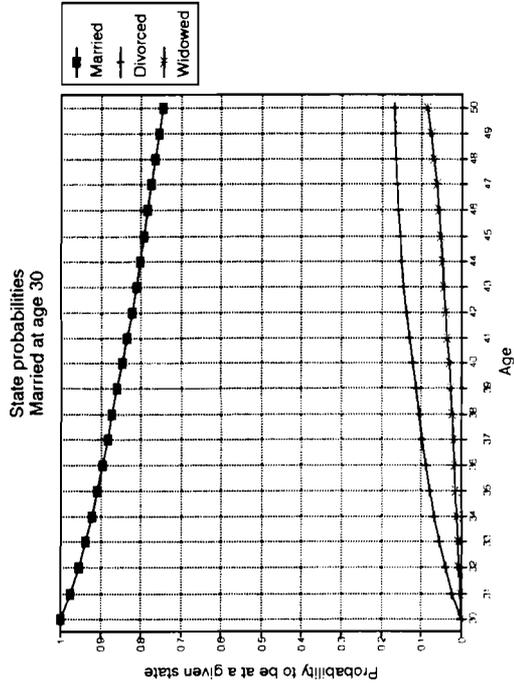
Lithuania



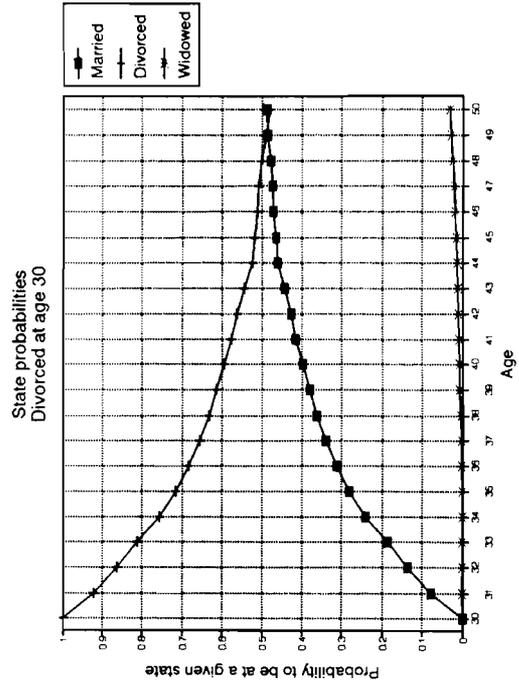
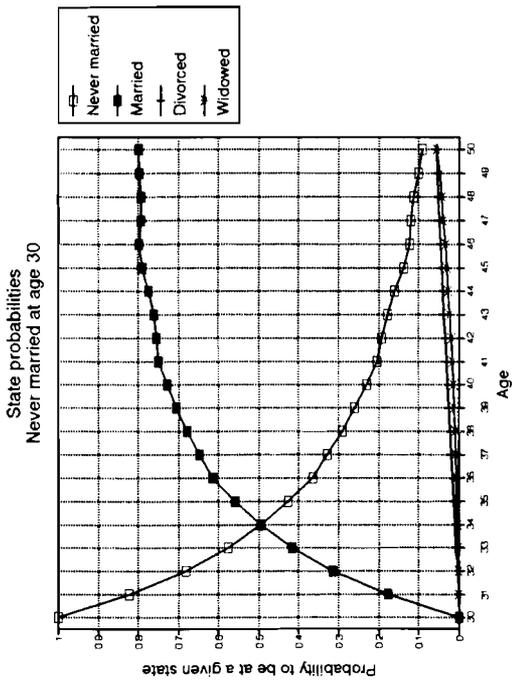
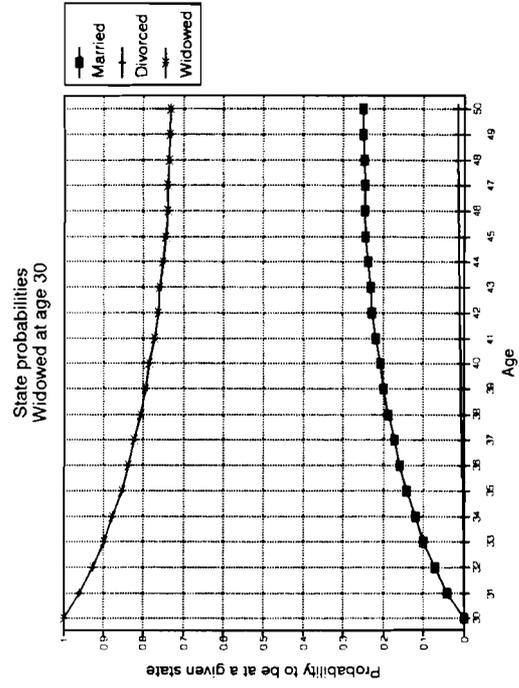
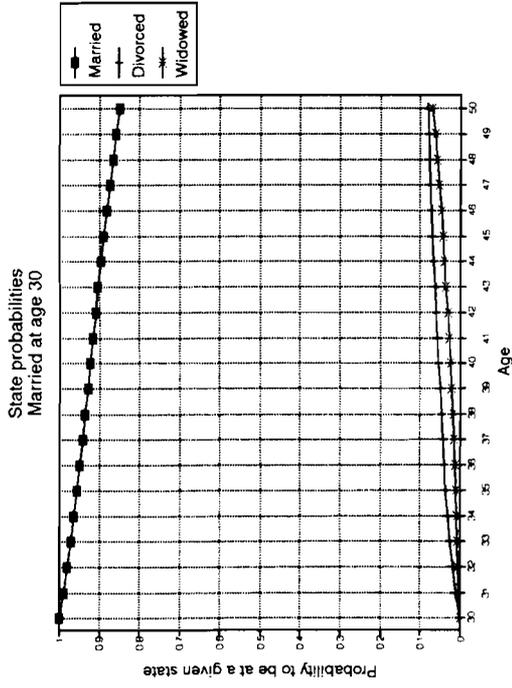
Moldavia



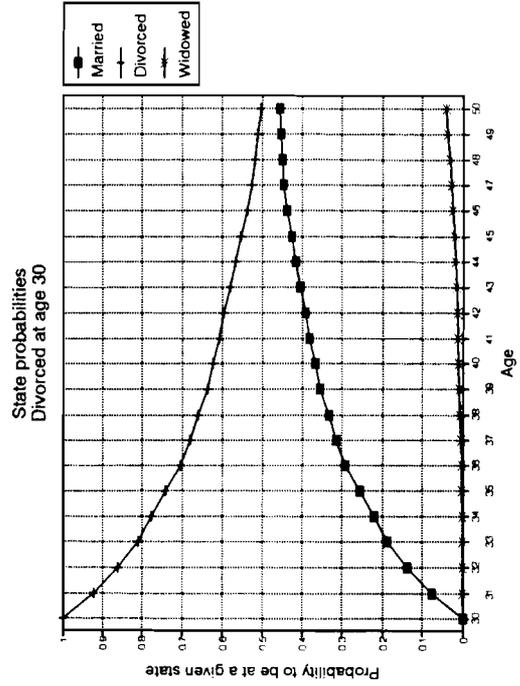
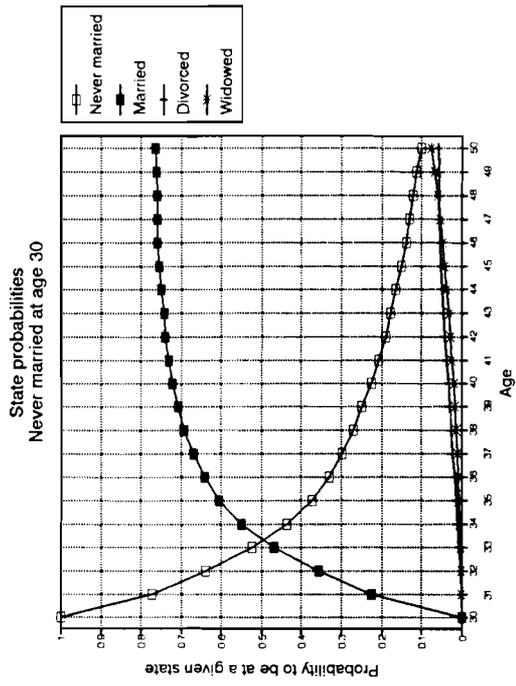
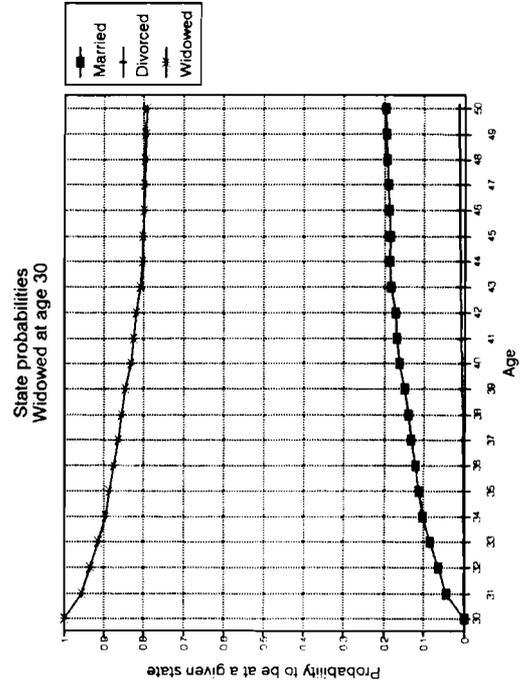
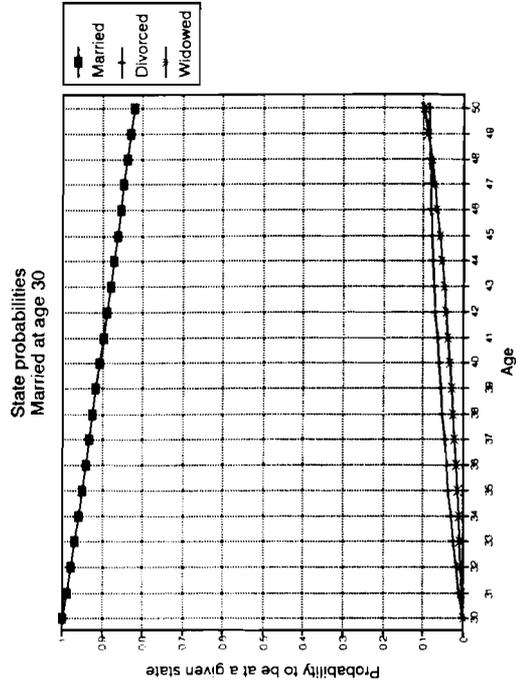
Russia



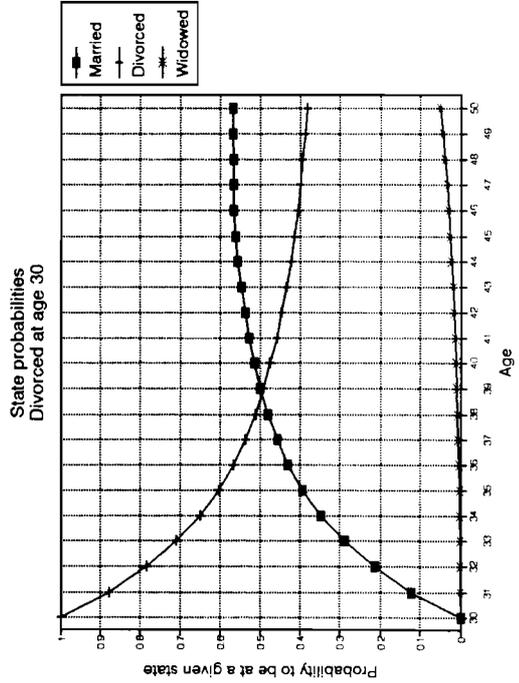
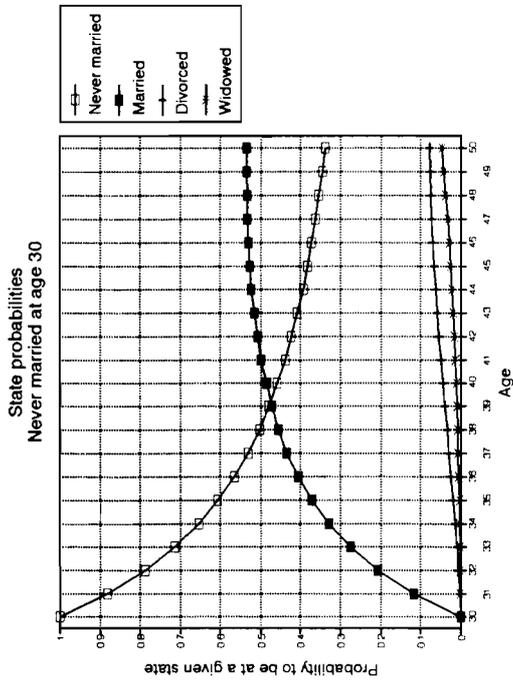
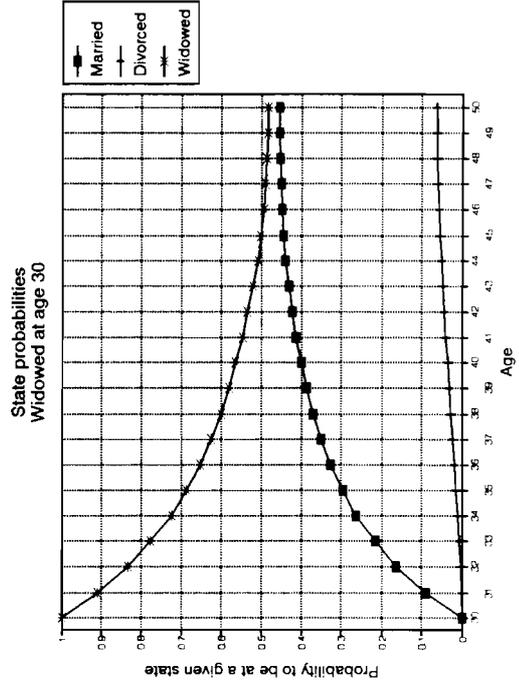
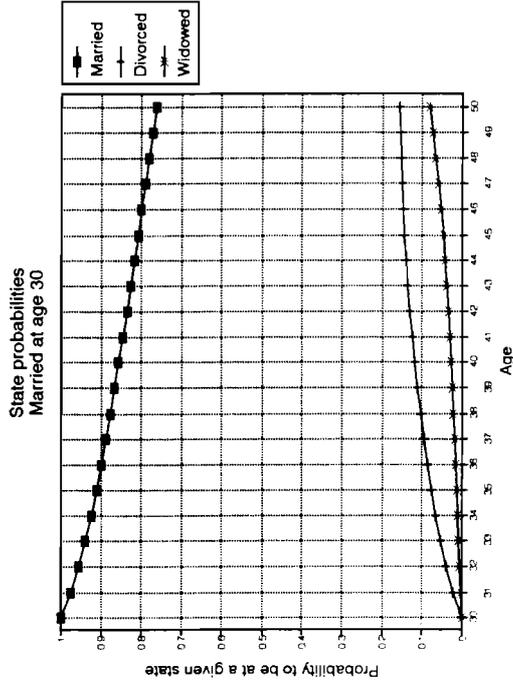
Tajikistan



Turkmenia



Ukraine



Uzbekistan

