Trying Again: Repartnering after Dissolution of a Union

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BHPS data provide the academic community, policymakers and private sector with a unique national resource and allow for comparative research with similar studies in Europe, the United States and Canada.

BHPS data are available from the Data Archive at the University of Essex
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Further information about the BHPS and other longitudinal surveys can be obtained by telephoning +44 (0) 1206 873543.

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ABSTRACT

The paper uses the first 10 waves of the British Household Panel Survey to study the length of cohabiting unions started in the 1990s, and the time it takes to find a new partner for people who dissolved a marriage or cohabiting union in the 1990s. It finds that the time spent living together in cohabiting unions before either marrying each other or the union dissolving is usually very short. Seventy percent of people leaving a 'cohabiting union' find new partners within five years. This compares with the considerably lower figure of 43% for people leaving a marriage. Older people, whether they have been married or cohabiting, typically repartner more slowly. Repartnering also happens more slowly for widows and widowers, and for individuals who have custody of a child (most of whom are women).

NON-TECHNICAL SUMMARY

It is well known that divorce has increased dramatically, that many unmarried people live together as couples and that many of these 'cohabiting unions' break up. The advent of these non-marital unions has made it increasingly difficult to gauge how long live-in partnerships last and how long it takes to find a new partner after they dissolve. The paper uses the first 10 waves of the British Household Panel Survey to study the length of cohabiting unions started in the 1990s, and the time it takes to find a new partner for people who dissolved a marriage or cohabiting union in the 1990s.

The time spent living together in cohabiting unions before either marrying each other or the union dissolving is usually very short. Within two years of their beginning, one-half of unions starting in the 1990s have either converted into marriage or dissolved, with about one-half doing each. Unions into which children are born are much less likely to be converted into marriage than childless unions, and as a consequence they are more likely to dissolve, in say 10 years, than childless unions.

The analysis of married or cohabiting couples who split up during the 1990s indicates that one-half of people leaving a 'cohabiting union' find new partners within two years, and 70% do so in five years. People who end a marriage take longer to find a new partner. Only 30% have repartnered within 2 years, and even after 5 years from leaving a marriage, only 43% are living with a new partner. A substantial part of this difference arises from the fact that those leaving cohabiting unions are much younger – an average age of 31 as opposed to 48.

Older people, whether they have been married or cohabiting, typically repartner more slowly. Repartnering also happens more slowly for widows and widowers, and for individuals who have custody of a child (most of whom are women). For instance, the percentage repartnering within 5 years is about 15 percentage points lower for those who have custody of a child. Divorcees tend to repartner at the same rate as people who are separated.

It is well known that divorce has increased dramatically, that many unmarried people live together as couples and that many of these 'cohabiting unions' break up. The advent of these non-marital unions has made it increasingly difficult to gauge how long live-in partnerships last and how long it takes to find a new partner after marriages or cohabiting unions dissolve. The paper uses the first 10 waves of the British Household Panel Survey to study the length of cohabiting unions started in the 1990s and the time it takes to find a new partner for people who dissolved a marriage or cohabiting union in the 1990s. The first section discusses the background and estimates the length and outcomes of cohabiting unions; the second analyzes the time it takes to find a new partner after the dissolution of a cohabiting union, and the third does the same for people whose marriage ends.

1. Background and the length of cohabiting unions

First marriage has been occurring increasingly later in Britain. For instance, 84% of British women born in 1956 had married by their 30th birthday; but this proportion was only 63% for those born 11 years later. Figure 1 shows (from marriage registration data) that, at each age, the proportion of women who have ever married was lower for each succeeding cohort from the 1961 birth-cohort onwards (and the same is true for men).

This decline is associated with the rise in cohabitation without legal marriage. Among first unions formed in the 1970s, about one-third cohabited in their first partnership, but in the 1990s about four-fifths of first partnerships were cohabiting unions. Partnership is also being postponed in young people's lives. Half of women born in the 1950s had lived in a partnership by the age of 21, but this median age of first partnership had increased to 24 for those born two decades later.

The time spent living together in cohabiting unions before either marrying each other or the union dissolving is usually very short. To study this, cohabiting unions that started during 1991-99 in the British Household Panel Study (BHPS) are followed until either the union dissolves or is converted into marriage, or they leave the panel, or until 2000. Table 1 shows these data in the form of a lifetable (using the woman in the couple as a "marker"), in which a marriage or dissolution can only be observed to have occurred or not between the annual waves of the panel. It shows that the annual rate of ending cohabiting unions (by marriage or dissolution) falls with

duration, and that the median duration of cohabiting unions is about 2 years. Overall, about one-half of the cohabiting unions starting in the 1990s turned into marriage, and one-half dissolved.

Table 2 examines all cohabiting unions involving never-married women aged under 35 that are observed in progress during 1991-1999 and can be followed up in at least the next year. About 28% of these unions ended each year, with 51% ending in marriage.[1] It is apparent from Table 2A that the unions into which children are born are much less likely to be converted into marriage in the following year than childless unions.[2] If these rate differentials are sustained, those who become parents would cohabit for longer, but 65% of these unions would dissolve, compared with 45% for childless couples. Appendix Table 1 shows that this negative impact of being a mother on the marriage rate is also statistically significant in a competing risk hazard model that controls for age, year, student status and her partner's earnings in the previous year. We may be observing a selection mechanism in which some couples who are not sure whether or not to marry each other have a child in a cohabiting union, while cohabiting couples who plan to marry, marry first and then have children. This differential is increasingly important because childbearing within cohabiting unions has become more common, with 22 per cent of children being born into such unions in 1997, compared with 2 per cent 20 years earlier.

Table 2B shows that unions in which the male partner does not have a job are less likely to convert into marriage and more likely to dissolve. Appendix Table 1 shows that this relationship is still apparent when controlling for other variables, and also that couples in which the man earns more are more likely to marry. While there is some evidence that couples in which the woman has a job are more likely to marry, the impact of the woman's job status is not statistically significant after controlling for the man's job status and earnings. Thus, the unions that convert to marriage tend to be those in which the man contributes more income to the couple, explaining in part why married couples tend to have higher incomes than cohabiting couples. Furthermore, motherhood is more likely to commence in cohabiting unions with a

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[1] It appears that the rate at which cohabiting unions convert into marriage fell over the 1990s while the union dissolution rate rose slightly (see Appendix Table 1). The net effect of these trends is a slight increase in average duration, but a larger proportion of unions eventually dissolving.

jobless male partner—the first birth rate is more than double that for unions in which the man has a job—and we have seen the cohabiting unions with children are less likely to turn into marriages.

2. Repartnering after dissolution of a cohabiting union

The extent to which marriage is delayed for the women who dissolve their union clearly depends on how quickly they find another partner. This analysis includes all people in the BHPS who dissolved a cohabiting union during 1991-99, including men and those previously married. They are followed until they have formed a new union, either a cohabiting union or marriage, or they leave the panel, or until 2000. Table 3 shows these data in the form of a lifetable, in which repartnering can only be observed to have occurred or not between the annual waves of the panel. It shows that about one-half of people dissolving a cohabiting union repartner in about 2 years. Indeed, 12% changed partners between years of the panel; that is, they were not observed without a partner before acquiring a new one.[3] The repartnering rate declines with duration without a partner, but this could of course just reflect heterogeneity in repartnering rates.

The ability to examine repartnering differentials non-parametrically is limited by the small sample size, but a discrete time proportional hazard model is estimated in order to incorporate heterogeneity among persons.[4] Exploratory analysis found no significant gender difference, irrespective of what other covariates were included in the model. Table 4 shows estimates of such a model in which a person's age, marital status and custody of child are measured at the first time that they are observed after the dissolution.

There is evidence of a decline in the repartnering rate with time since dissolution.[5] Use of dichotomous variables for duration produces similar results, with

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[2] Ermisch and Francesconi (2000) show that distinguishing (imperfectly) those who had the child within the particular union from the others indicates an even larger negative impact on marriage for those having the child within the union.

[3] Also, 44 (4) people contribute two (three) spells at risk of repartnering after the dissolution of a cohabiting union.

[4] The discrete time hazard corresponding to an underlying continuous-time proportional hazard model is given, for the i-th person at duration t, by $h_{it} = 1-\exp[-\exp(\lambda_t + \mathbf{X}_{it}\beta)]$, where $\mathbf{X}_{it}$ are covariates and λ_t and β are parameters to be estimated. See Allison (1982), p.72.

[5] Estimates of a model in which there is allowance for Gamma-distributed unobserved heterogeneity found a variance of the Gamma distribution that was virtually zero.

little improvement in the likelihood value. Also, people who are older, who have never been married, or who have custody of a child (88% of whom are women) repartner more slowly. The magnitude of these impacts is illustrated in Table 5, which simulates the estimated model for various values of the explanatory variables.

The base case in Table 5 corresponds to person of the mean age in the sample (31) with modal other characteristics. Seventy percent of such persons are predicted to repartner within 5 years. The other rows of the table change one attribute at a time. Among persons aged 25 at the dissolution of the union, 77% repartner within 5 years. This percentage rises to 86% if they were previously married, and falls to 53% if they had custody of a child. As the average age at marriage dissolution in our sample below of persons dissolving a marriage is 48, it is also interesting to see that 48% persons of this age are predicted by the model to repartner within 5 years.

3. Repartnering after dissolution of a marriage

Divorce has become much more common. Figure 2 shows the proportion of marriages that have ended by each wedding anniversary for couples marrying in particular years. At each anniversary beyond the second, the proportion who had divorced is higher for each succeeding marriage-year cohort. The proportions of women divorced in the early years of marriage have increased more rapidly than have the proportions divorced at longer marriage durations. This is particularly evident for the last marriage-year cohort in Figure 2 (1986), in which 1.6% divorced within one year, compared with 0.2% for the 1981 cohort. Despite the big jump in divorce after 1-2 years of marriage, the peak divorce rate has remained at 3-4 years of marriage since the early 1970s, and then slowly declines as the wedding anniversaries pass. Among couples who married in the late 1970s, about 16% had already divorced in the first 7 years of marriage, and nearly 30% had divorced before their 15th wedding anniversary. At the marriage duration-specific divorce rates prevailing in the mid-1990s, it is expected that two in five marriages would end in divorce (Haskey, 1996).

In the analysis of repartnering after the dissolution of a marriage, all people in the BHPS who dissolved a marriage during 1991-99 (including those whose spouse died) are followed until they have formed a new union, or they leave the panel, or until 2000. Table 6 shows the data in lifetable form, and Figure 3 compares the proportions not repartnered by time since the union dissolution. Repartnering is

clearly slower on average after marriage dissolution than after the dissolution of a cohabiting union. The median duration exceeds six years, but it is probably less than seven years. About 8% (66 people) move immediately from a marriage to a cohabiting union with a different partner. This is why the repartnering rate in the first year after marriage dissolution is so large, after which it declines. Also, 2.6% move back together with their spouse after one year of separation. It might be argued that the marriage of these people never ended, and so they should not be included in the population at risk to repartner. But they may not have known that they would 'reconcile' a year later at the time. In any case, eliminating them from the population at risk and the number partner, only slightly raises the survival curve (by 0.022 in the first year and 0.014 in the sixth year).

Again, estimation of a discrete time proportional hazard model is used to explore issues of heterogeneity. With controls for only age and duration, women are estimated to repartner at a significantly slower rate[6]. But adding whether or not the person has custody of a child (85% of whom are women) makes the gender coefficient small and statistically insignificant. This suggests that it is the custody of a child that hinders women's repartnering relative to men's. The estimates shown in Table 7 also control for whether or not the person is a widow or widower. The repartnering rate falls with duration, and a specification that replaces log duration with a set of dichotomous duration variables produces very similar results.[7] Older people, widows (72%) or widowers (28%) and those who have custody of a child repartner more slowly. One in nine persons in the sample were legally divorced, but their repartnering rate was almost the same as that for separated persons.

Table 8 provides simulations of the model in Table 7 for various deviations from a base case, who is a person of mean age and modal other characteristics. Fifty-four percent of such persons are predicted to repartner within 5 years of the marriage dissolution. This is not very different from the 48% produced from simulation of the model for repartnering after the dissolution of a cohabiting union for a person aged 48 (see Table 5). Furthermore, if the marriage dissolved when the person was aged 31, then the model in Table 7 predicts that 79% would repartner within 4 years, which is

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[6] The gender coefficient and its standard error are -0.274 and 0.120 respectively.
[7] Again, estimates of a model in which there is allowance for Gamma-distributed unobserved heterogeneity found a variance of the Gamma distribution that was virtually zero.

larger than in the base case in Table 5. Thus, it appears that a substantial part of the big difference in the speed of repartnering after dissolution of a marriage, compared with that after the dissolution of a cohabiting union, arises because those dissolving marriages are much older. After controlling for age, only 16% of widows or widowers repartner within 5 years. This does not appear to be an artefact of non-linearity in age, because including a quadratic or cubic in age hardly changes the coefficient of being a widow(er). Among those aged 48 who have custody of a child, only 40% repartner within 5 years of the marriage dissolving, but this rises to 65% for those aged 31 (compared with 53% in Table 5).

4. Conclusion

The analysis of married or cohabiting couples who split up in the BHPS indicates that 70% of people leaving a 'cohabiting union' find new partners within five years. This compares with the considerably lower figure of 43% for people leaving a marriage, though a substantial part of this difference arises from the fact that those leaving cohabitations are much younger – an average age of 31 as opposed to 48.

Older people, whether they have been married or cohabiting, typically repartner more slowly. Repartnering also happens more slowly for widows and widowers, and for individuals who have custody of a child (88% of whom are women). Divorcees tend to repartner at the same rate as people who are separated.

References
Ermisch, J.F. and M. Francesconi (2000), *Cohabitation in Great Britain: not for long, but here to stay,* Journal of the Royal Statistical Society, Series A*, **163***, 153-171.
Haskey, J. (1996), *The proportion of married couples who divorce: past patterns and current prospects,* Population Trends *No. 93, 25-26.*

Table 1:   Lifetable for Length of a Cohabiting Union, BHPS, 1992-2000*

Duration (years)	Population at risk	Does not end union and leaves sample	Dissolve/ Marry in year	Annual hazard	Survival	
<1	409	37	150*	0.367	0.633	
1-2	222	43	63	0.284	0.454	
2-3	116	19	28	0.241	0.344	
3-4	69	7	15	0.217	0.269	
4-5	47	14	9	0.191	0.218	
5-6	24	21	3	0.125	0.191	
Ave. 0-6	887	141	268	0.302	1.9	Median[a]
					3.3	Mean[a]

*7 of these had changed partners between years of the panel.
[a]Median (mean) implied by average rate over first six years.

Table 2: Percentages of Never Married Women Aged 17-34 in Cohabiting Unions Marrying and Dissolving their Union in the next year,

A. By whether a mother or not

Mother:	Per cent marrying	Per cent dissolving	N
Yes	7.3	13.0	478
No	17.9	14.3	1002
All	14.5	13.9	1480

Pearson Chi-square (2df)=31.60 (p=0.000)

B. By whether man had a job or not

Man has job:	Per cent marrying	Per cent dissolving	N
Yes	16.0	12.6	260
No	7.3	18.9	1216
All	14.5	13.9	1476

Pearson Chi-square (2df)=37.58 (p=0.000)

Table 3: Lifetable for Repartnering after Dissolution of a Cohabiting Union, BHPS, 1992-2000*

Duration (years)	Population at risk	Do not part. & leave sample	Partner in year	Annual hazard	Survival	
<1	440	57	144*	0.327	0.673	
1-2	239	34	63	0.264	0.495	
2-3	142	29	27	0.190	0.401	
3-4	86	19	13	0.151	0.341	
4-5	54	18	8	0.148	0.290	
5-6	28	27	1	0.036	0.280	
Ave. 0-6	989	184	256	0.259	2.3	Median[a]
					3.9	Mean[a]

52 of these had changed partners between years of the panel.
[a]*Median (mean) implied by average rate over first six years*

Table 4: Proportional Hazard Model for Repartnering after Dissolution of a Cohabiting Union, BHPS, 1992-2000*

Variable, measured at start of spell:	Coefficient	Mean [SD]
ln(duration)	-0.551	0.584
	[4.66]	[0.590]
Age	-0.035	30.8
	[4.30]	[11.6]
Never married	-0.482	0.746
	[2.71]	
Child present	-0.451	0.252
	[2.86]	
Constant	0.620	N=393
	[1.79]	persons

*Ratio of coefficient to standard error in brackets
N=989 person-years, Chi-square (4df)=57.24, *p*=0.000.

Table 5: Simulated Percentage Repartnering within 3 and 5 years from the Dissolution of a Cohabiting Union (based on Table 4 model)

Case	Percent, 3 yrs.	Percent, 5 yrs.
Base case*	58	70
Age=25	65	77
Previously married	75	86
Child present	42	53
Age=48	38	48

*Base case: Person aged 31 at start of spell, never married, childless.

Table 6: Lifetable for Repartnering after Dissolution of a Marriage, BHPS, 1992-2000*

Duration (years)	Population at risk	Do not part. & leave sample	Partner in year	Annual hazard	Survival	
<1	798	119	164*	0.206	0.794	
1-2	508	77	62	0.120	0.699	
2-3	369	74	41	0.109	0.623	
3-4	254	64	12	0.046	0.594	
4-5	178	48	7	0.038	0.572	
5-6	123	123	7	0.054	0.541	
Ave. 0-6	2265	505	293	0.12936	5.0	Median[a]
					7.7	Mean[a]

*66 of these had moved from a marriage to a cohabiting union with a different partner between years of the panel, and 21 had 'reconciled' with their spouse after a year of separation.
[a]Median (mean) implied by average rate over first six years.

Table 7: Proportional Hazard Model for Repartnering after Dissolution of a Marriage, BHPS, 1992-2000*

Variable, measured at start of spell:	Coefficient	Mean [SD]
ln(duration)	-0.643 [6.00]	
Age	-0.041 [6.25]	48.3 [17.9]
Widow(er)	-1.505 [5.20]	0.362
Child present	-0.412 [3.25]	0.281
Constant	0.658 [2.57]	N=784 persons

*Ratio of coefficient to standard error in brackets
N=2265 person years, Chi-square (4df)=340.40, p=0.000.

Table 8: Simulated Percentage Repartnering within 5 years from the Dissolution of a Marriage (based on Table 7 model)

Case	Percent
Base case*	54
Age=31	79
Widow(er)	16
Child present	40
Age=31 &child present	65

*Base case: Person aged 48 at start of spell,
divorced or separated, childless.

Appendix Table 1:Discrete-time Multinomial Logit Model for the Outcome of Cohabiting Unions, Never married women aged under 35, BHPS, 1991-2000*

Variable:	Coefficient, Odds of Union Dissolution	Coefficient, Odds of Marriage
Year-1990$_t$	0.015	-0.082
	[0.47]	[2.67]
Age$_t$	-0.120	-0.0128
	[5.25]	[0.62]
Student$_{t-1}$	0.634	-1.094
	[1.78]	[1.47]
Mother$_{t-1}$	-0.401	-0.865
	[2.03]	[4.10]
Partner has a job$_{t-1}$	-0.460	0.482
	[2.09]	[1.76]
Partner's earnings per £100	0.009	0.0128
	[1.30]	[2.30]
Constant	1.623	-1.080
	[2.65]	[1.78]

*Ratio of coefficient to standard error in brackets

N=1480 (172 dissolutions, 194 marriages), Chi-square (12df)=102.85.

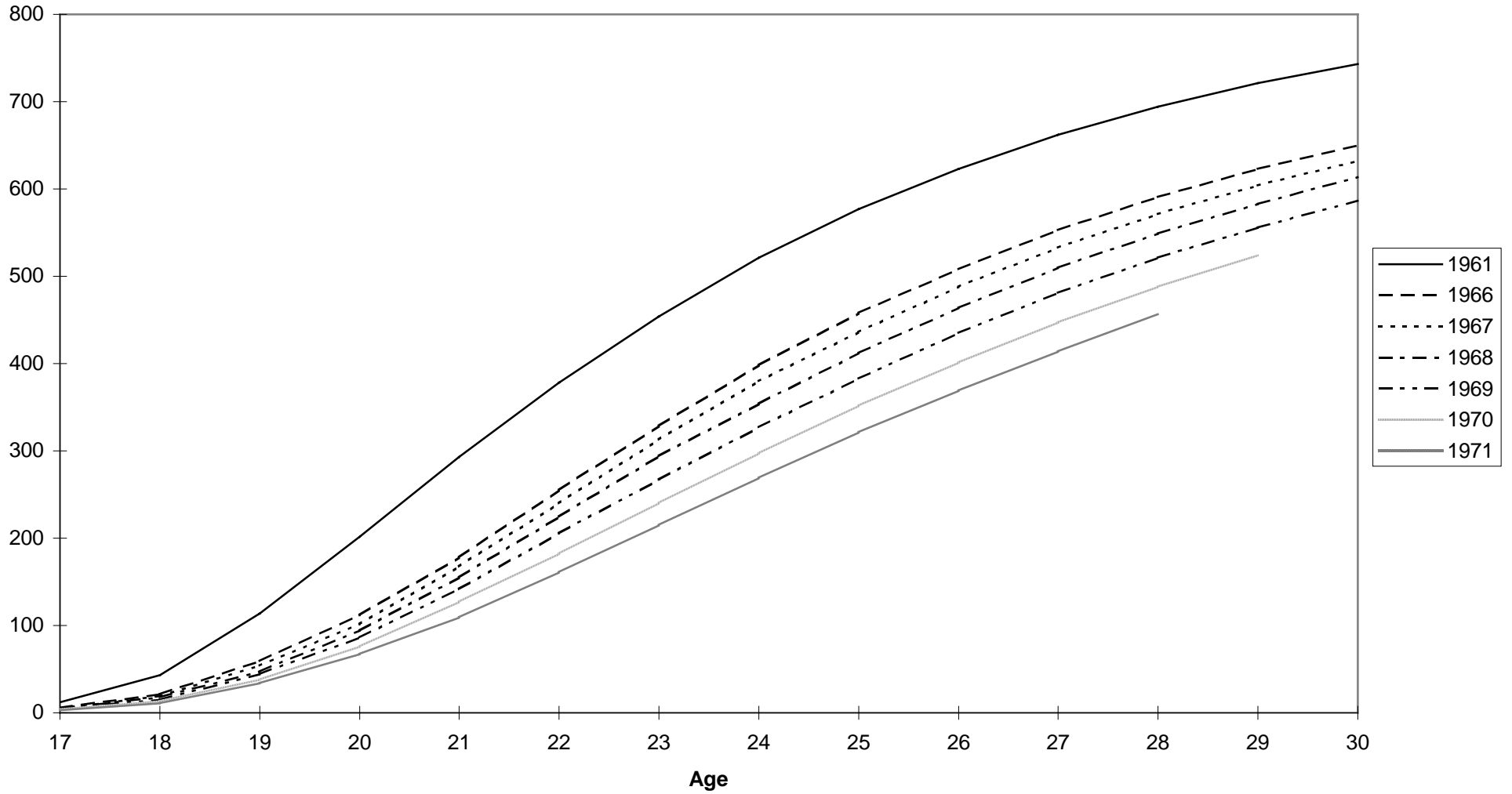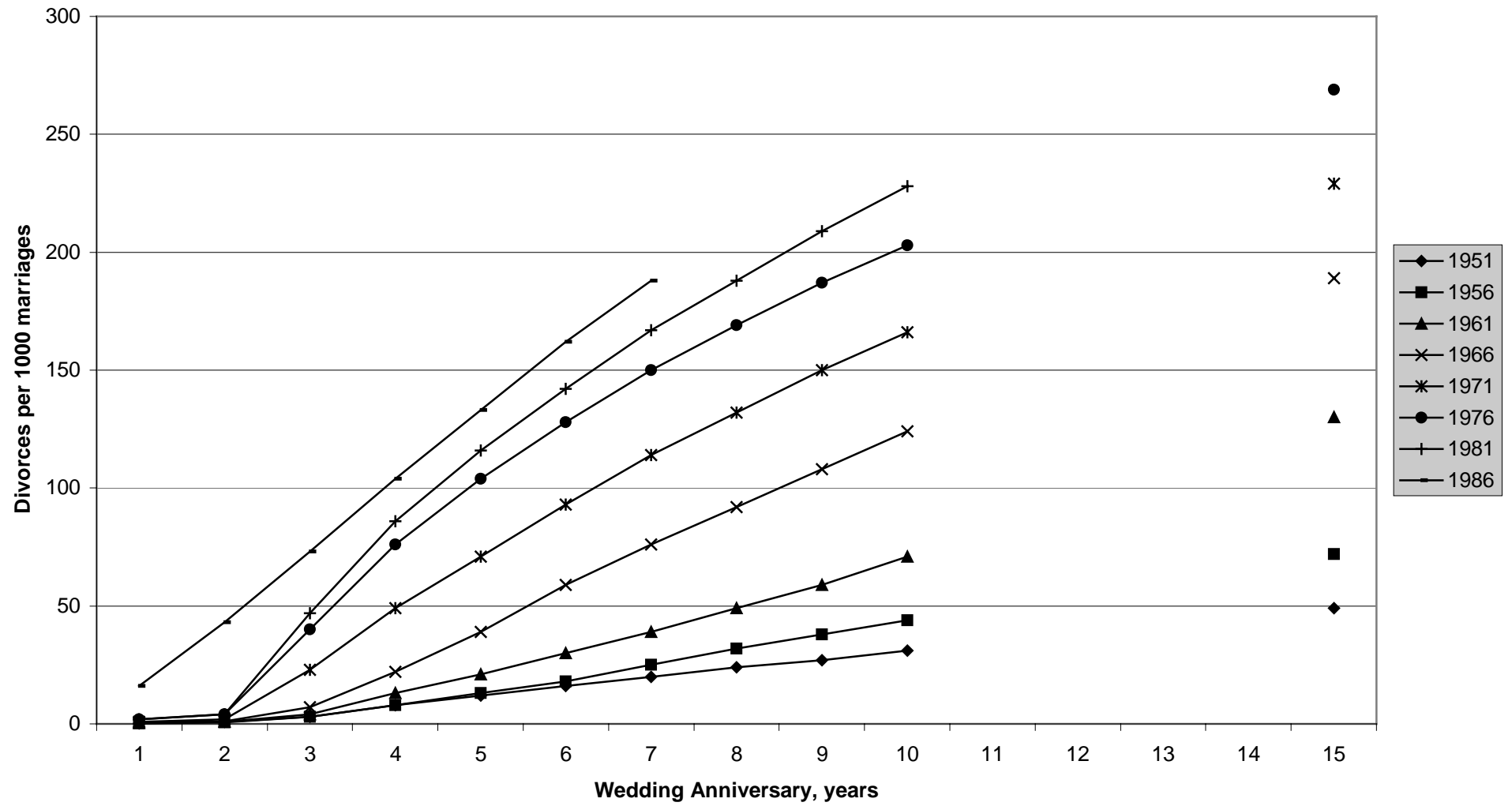**Figure 1: Proportions (per 1000) of women who had ever married**

Figure 2: Cumulative Proportions of Marriages Ending in Divorce, by Year of Marriage

Figure 3: Proportion not repartnered by years since union dissolution