UNMARRIED COHABITATION AND UNION STABILITY: TESTING THE ROLE OF DIFFUSION USING DATA FROM 16 EUROPEAN COUNTRIES*

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Cohabitors and married people who cohabited before marriage have higher risks of union dissolution than people who married without prior cohabitation. However, these differences in union stability vary markedly between countries. We hypothesize that the impact of cohabitation on union stability depends on how far cohabitation has diffused within a society. We test this hypothesis with data from 16 European countries. The results support our hypothesis: former cohabitors run a higher risk of union dissolution than people who married without prior cohabitation only in societies in which cohabitation is a small minority or a large majority phenomenon.

Since the 1970s, unmarried cohabitation has become an increasingly popular living arrangement, in both the United States and Europe (Bumpass and Lu 2000; Kiernan 2002). The emergence of unmarried cohabitation has raised important new research issues, such as whether it constitutes a prelude or an alternative to marriage, or even an alternative to singlehood (Manning and Smock 2002; Rindfuss and VandenHeuvel 1990), and whether cohabitors structure their relationships differently than married people (Brines and Joyner 1999). Another issue that has received considerable attention is how unmarried cohabitation influences the stability of unions. Cohabitors have been found to have a higher risk of union dissolution than married people (Hoem and Hoem 1992; Klijzing 1992; Manting 1994; Teachman, Thomas, and Paasch 1991; Trussell, Rodríguez, and Vaughan 1992). Among married couples, former cohabitors—those who cohabited with their spouses prior to marriage—tend to have lower marital stability than noncohabitors—those who married without prior cohabitation (Balakrishnan et al. 1987; Bennett, Blanc, and Bloom 1988; Berrington and Diamond 1999; Bracher et al. 1993; DeMaris and Rao 1992; Hall and Zhao 1995; Haskey 1992; Hoem and Hoem 1992; Lillard, Brien, and Waite 1995; Manting 1994; Schoen 1992; Trussell et al. 1992).

A recent study (Kiernan 2002), however, suggested that the increased risk of union dissolution among former cohabitors might not be as universal as is often assumed. Comparing union dissolution rates for nine European countries, Kiernan reported that in five of them, former cohabitors do not have higher union dissolution rates than women who married without prior cohabitation. At the same time, she reported considerable differences in the excess risk of union dissolution for current cohabitors compared with women who married without prior cohabitation, ranging from about a 50% excess risk in former East Germany to almost a fivefold excess risk in Norway and Switzerland. These variations in relative union dissolution risks are so large that taking a closer look at their magnitude and possible explanation seems warranted.

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In this article, we study the impact of cohabitation on union stability in a comparative framework. We examine the union dissolution risks across European countries of current cohabitors, former cohabitors, and married women who did not cohabit. We expand Kiernan's study in a number of important ways. First, we focus on 16 rather than 9 European countries spread across the continent. Second, we control for a host of factors that could account for the differences in union dissolution risks between current, former, and noncohabitors. Third, and most important, we test the hypothesis that these differences in the effect of union type across Europe are related to the level of diffusion of nonmarital cohabitation within a population.

THE ROLE OF UNMARRIED COHABITATION IN UNION DISSOLUTION

With few exceptions (Axinn and Thornton 1992; Skinner et al. 2002), theoretical accounts of the impact of unmarried cohabitation on union dissolution start from the assumption that cohabitation functions as a kind of "trial marriage" (Balakrishnan et al. 1987; Bennett et al. 1988; DeMaris and Rao 1992; Klijzing 1992; Lillard et al. 1995).[1] By cohabiting outside of marriage, partners can get to know each other without having to make the investments needed for marriage (Oppenheimer 1988). Because the investments in unmarried cohabitation are expected to be relatively low, terminating such a union does not entail high costs. Therefore, unions with a poor chance of success will be terminated relatively soon and will probably not be transformed into marriage. This process has been described as *weeding*—matches of poor quality are weeded out. As a result, the pool of remaining matches increases in quality. If those matches are transformed into marriages, the resulting marriages will be of particularly good quality. Therefore, weeding implies an increased risk of union dissolution for current cohabitors but a decreased risk of union dissolution for former cohabitors because only cohabitors with good union prospects convert their unions into a marriages.[2] Within this perspective, the impact of unmarried cohabitation is due to the amount of increased information that partners have about each other (Brüderl and Kalter 2001). Depending on the type of new information that partners receive during their cohabitation, they will opt either for ending the relationship or for continuing it.

Research to date provides, at best, mixed support for the weeding hypothesis. As expected, union dissolution risks among current cohabitors are generally higher than those among married people (Hoem and Hoem 1992; Klijzing 1992; Manting 1994; Teachman et al. 1991; Trussell et al. 1992). However, contrary to expectation, the stability of marital unions of former cohabitors is usually found to be lower than that of noncohabitors (Balakrishnan et al. 1987; Bennett et al. 1988; Berrington and Diamond 1999; Bracher et al. 1993; DeMaris and Rao 1992; Hall and Zhao 1995; Haskey 1992; Hoem and Hoem 1992; Manting 1994; Schoen 1992; Trussell et al. 1992).

Most studies that observe an increased risk of marriage dissolution among former cohabitors suggest that selection is at work. Cohabitors have characteristics that differ from those of people who enter into marriage without prior cohabitation, and these characteristics increase their risk of union dissolution, both during the period of unmarried cohabitation and during subsequent marriage. Several reasons for this selectivity are suggested. First, cohabitors are thought to hold more unconventional values and attitudes than noncohabitors (Axinn and Thornton 1992; Balakrishnan et al. 1987; Berrington and Diamond 1999; DeMaris and MacDonald 1993; DeMaris and Rao 1992; Lillard et al. 1995). Second, cohabitors are thought to have a weaker commitment to marriage in general or to hold higher

1. Axinn and Thornton (1992) suggested that the experience of unmarried cohabitation can produce attitudes and values among cohabitors that decrease marital stability. As a result, marriages of former cohabitors are expected to be less stable than marriages of noncohabitors. To date, this hypothesis has not been explicitly tested.

2. In this article, we use the following shorthand descriptions: *current cohabitors* for people who cohabit without being married; *former cohabitors* for married people who cohabited with their partners prior to marriage; *noncohabitors* for married people who did not cohabit before marriage.

expectations about the quality of unions (Bennett et al. 1988; DeMaris and Rao 1992; Lillard et al. 1995; Teachman et al. 1991; Thomson and Colella 1992). Finally, cohabitors are thought to possess socioeconomic or personality characteristics that are linked to an increased risk of union dissolution (Berrington and Diamond 1999; Hall and Zhao 1995). The selection argument is used mainly to explain the lower marital stability of people who cohabited prior to marriage but can also be applied to explain the high union instability of current cohabitors. Current cohabitors may be more selective than both former cohabitors and noncohabitors in their attitudes, commitment, or socioeconomic characteristics and therefore have higher union dissolution rates than both of these other groups.

A number of studies provide evidence that selection is at work. For instance, the difference in the risk of marriage dissolution between former cohabitors and noncohabitors becomes smaller after controls for characteristics that distinguish former cohabitors and noncohabitors (Berrington and Diamond 1999; Hall and Zhao 1995; Thomson and Colella 1992). Lillard et al. (1995) reported that the differences between former cohabitors and noncohabitors in union stability disappear completely when statistical controls for selectivity are introduced. Finally, a German study by Brüderl, Diekmann, and Engelhardt (1997) showed that, when the risk of entry into cohabitation and the risk of marriage dissolution are modeled simultaneously, cohabitation decreases the risk of marriage dissolution.

VIEWING THE RISE IN COHABITATION AS A DIFFUSION PROCESS

Most studies on the impact of cohabitation on union stability are limited to one country. However, a large variation between countries exists in the relative magnitude of the differences between union types. For instance, Manting (1994) reported that Dutch former cohabitors have a one-third higher risk of marital dissolution compared with noncohabitors, whereas Bracher et al. (1993) reported that Australian former cohabitors have a risk of marital dissolution that is more than twice as high as that of women who did not cohabit prior to marriage. Even more telling, Kiernan (2002), in a comparative analysis of nine European countries, reported huge variation in the relative union dissolution risks across Europe. In her analysis, the relative risks of union dissolution among cohabitors compared with women who married straightaway vary from 1.5 in former East Germany to almost 5 in Norway and Switzerland. The relative risks of union dissolution among former cohabitors compared with noncohabitors vary from 0.85 in Norway to 1.5 in Sweden. These findings raise the question as to how this variation in the effect of union type on union stability can be explained.

Our hypothesis is that between-country variation in the impact of cohabitation on union stability depends on the level of diffusion of the practice of unmarried cohabitation within a society. If very few people cohabit, they will probably constitute a very selective part of the total population. The same is true for people who marry without prior cohabitation in a population in which most people opt for unmarried cohabitation. In both instances, we expect a strong difference in union stability between people who marry without prior cohabitation and others. Between these two extremes, the differences in union stability between cohabitors and people who marry without cohabitation will be much smaller.

Several theoretical explanations can be given for a decrease in variation in union stability between union types as the popularity of cohabitation increases. First, norms against unmarried cohabitation may weaken and social support for cohabitors may increase as cohabitation becomes more common (Skinner et al. 2002). For instance, the percentage of U.S. women who agree with a statement that living together is a good idea increased from 33% in 1976–1977 to 59% in 1997–1998 (Thornton and Young-DeMarco 2001). As a result, cohabitors now tend to be less stigmatized and receive more social support, presumably leading to a strengthening of their unions. A second explanation is based on the literature on the diffusion of innovations. Within this perspective, unmarried cohabitation is viewed as an innovation and its growing popularity is seen as a diffusion process (De Feijter 1991; Jaakkola, Aromaa, and Cantell 1984). According to this literature, innovations usually start among a small group of innovators before spreading throughout the larger community (Rogers and Shoemaker 1971). As a rule, innovators do not constitute a cross section of society but are part of the cultural or economic elite (Basu and Amin 2000). More specifically, De Feijter (1991) summarized a number of characteristics of innovators: they are not highly integrated into society; they tend to be upwardly mobile, highly exposed to sources of information, highly educated, and nondogmatic; and they generally have low levels of risk aversion. As an innovation spreads across a population, it will be adopted by larger segments of the population who do not share the specific characteristics of the innovators.[3] As a result, the differences in characteristics between adopters and nonadopters become smaller with a growing acceptance of the adoption.

To date, only Schoen (1992) has drawn the conclusion that the selectivity argument implies that differences between union types in union dissolution rates become smaller as cohabitation becomes more common and cohabitors and noncohabitors grow more alike. He tested this hypothesis on cohort data. The pattern of results fit his hypothesis, but his data and method did not allow a strong test of this hypothesis. On the other hand, Teachman (2002), who tested the stability of a number of divorce risk factors across cohorts, found no evidence that the impact of premarital cohabitation on divorce rates had changed in the relatively short period between 1969 and 1984.

Hoem and Hoem (1992), in discussing the situation in Sweden, a country in which cohabitation has become a majority phenomenon, suggested that people who marry straightaway, rather than those who cohabit before marriage, constitute a selective category within society. The diffusion perspective outlined above can accommodate this observation. After an innovation has diffused to the large majority of a population, pockets of resistance may remain. However, just as innovators usually constitute a selective subpopulation, so do "anti-innovators" or laggards. They may, for instance, be recruited mainly from among religious fundamentalists who view marriage as sacrosanct, thus rejecting both separation and sexual relationships outside marriage. This reasoning implies that the differences in union stability between people who cohabit, people who marry after prior cohabitation, and people who marry straightaway will be relatively large if either a small minority or a large majority of the population has cohabited. If just a small proportion of people have cohabited, cohabitors constitute a selective subpopulation, whereas if almost everyone has cohabited, noncohabitors constitute a selective subpopulation. If the proportion of cohabitors and noncohabitors is more or less in equilibrium, selection processes might still be operative, but certainly to a lesser extent than when the proportion of cohabitors is either very low or very high. As a result, the difference in union dissolution rates of people who marry after cohabitation and of people who marry straightaway will be much smaller. At the same time, the union dissolution rates of current cohabitors will still be higher than those of people who marry straightaway because a process of weeding will presumably still be at play among people who cohabit. However, because selection does not play such a large role, the difference in dissolution rates between current cohabitors and people who marry straightaway will be much smaller than in a situation in which either cohabitation or direct marriage is confined to a small minority.

In summary, we hypothesize that the variation in relative union dissolution risks for current cohabitors, former cohabitors, and noncohabitors observed by Kiernan (2002) throughout Europe is related to the level of diffusion of unmarried cohabitation in the different European countries. This relationship is expected to be U-shaped. The relative differences should be the greatest if hardly anyone or almost everybody has experienced extramarital cohabitation, and the relative differences should be the smallest if about half the population has experienced extramarital cohabitation.

3. Our focus is not on the diffusion process itself. See Casterline (2001) for an overview of this literature.

METHODOLOGY

Data and Operationalization

We use data from the Fertility and Family Surveys (FFS), collected between 1988 and 1998 in 23 countries of the region of the United Nations Economic Commission for Europe (UNECE). The data collection was coordinated by the Population Activities Unit of the UNECE. In the various countries, between 1,700 and 5,000 women were interviewed (Festy and Prioux 2002). For this article, we use data from 16 European countries spread across all parts of Europe.[4] To enhance comparability, we focus on women born between 1953 and 1967.[5]

The way in which union stability is conceptualized and measured varies between studies. Some studies focus on the duration of the total union, irrespective of whether a union was started by marriage or by unmarried cohabitation (DeMaris and Rao 1992; Kiernan 2002; Klijzing 1992; Manting 1994; Schoen 1992; Teachman et al. 1991). Other studies focus on marital stability rather than on union stability and use the duration since marriage as the dependent variable (Balakrishnan et al. 1987; Bennett et al. 1988; Berrington and Diamond 1999; Bracher et al. 1993; Hall and Zhao 1995; Lillard et al. 1995). These studies estimate whether the duration of marriage differs between couples who have experienced premarital cohabitation and couples who have not. This latter approach underestimates the stability of unions that started as consensual unions because time spent together living as a couple before marriage is disregarded. In our view, the timing of entry into a first union is the natural starting point for studying union stability and the role of cohabitation and marriage in determining union stability. Therefore, the dependent variable in our analyses is the duration of the first union. For all women, the date (month and year) of the start of the union and, if relevant, the date of the end of the union is known. If women did not experience a union dissolution, they were censored at the date of the interview. Women who experienced a union dissolution as a result of the death of their partner were considered to have left the population at risk at the date of their partner's death.[6]

By comparing the date of the start of the union and the date of marriage, a time-varying covariate for type of relationship is constructed. Three possible states are distinguished: cohabiting outside of marriage, married after prior cohabitation, and married without prior cohabitation. If cohabitors marry, they move from the "cohabiting outside of marriage" state to the "married after prior cohabitation" state.

Differences in union stability between union types could completely or partly result from differences between respondents in terms of other characteristics that are correlated with union type. To control for this possibility, we add to our analyses a number of covariates known to be related to the stability of unions. These are briefly described below.[7]

4. The countries are Norway, Sweden, and Finland in northern Europe; Flanders (the Flemish-speaking part of Belgium), the former West Germany, France, and Austria in western Europe; Italy and Spain in southern Europe; and Hungary, the Czech Republic, Slovenia, Latvia, Lithuania, Poland, and the former East Germany in eastern Europe. Insufficient data on cohabitation and divorce is available for Portugal and Bulgaria. For the Netherlands, insufficient information is available on the labor market careers of women. Non-European countries that participated in the FFS (the United States, Canada, and New Zealand) are kept out of the analysis, given our focus on variation in dissolution rates in Europe. Finally, data on Greece and Switzerland were not available at NIDI during the analysis phase of the project.

5. See Festy and Prioux (2002) for a discussion of comparability issues in using data from the FFS Project.

6. For marriages, the FFS questionnaire instruction was to use the date at which a woman actually stopped living in the same household as her partner rather than the date of the official divorce. Therefore, the assumption is that the date at which the relationship ended for both married and cohabiting women is the date when the couple stopped living together.

7. The range of control covariates available in FFS surveys is limited. As with most cross-sectional surveys, the main limitation is the absence of information on values and norms that could causally influence both union formation and union dissolution patterns (Axinn and Thornton 1992).

Birth cohort. The exact birth cohorts included in the FFS differ between countries. To ensure maximum comparability, we focus on those cohorts that were represented in all countries included in our analysis. Three birth cohorts are distinguished, namely 1953–1957, 1958–1962, and 1963–1967. The oldest women (born between 1953 and 1957) constitute the reference category.[8]

Parental divorce. Children whose parents have experienced a divorce are more likely to experience a divorce themselves (Kiernan and Cherlin 1999). We construct a time-constant covariate indicating whether respondents experienced the separation or divorce of their parents before they turned 18. This appeared to be the case for about 5% of all respondents.[9]

Place of residence during childhood. Women who were raised in urban settings usually experience higher union dissolution rates than women who were raised in rural areas (Balakrishnan et al. 1987; Lillard et al. 1995). This has often been attributed to the fact that city life exposes people to more unconventional cultural milieus (Fischer 1995). In most surveys, a question was posed on the number of inhabitants of the locality where the respondent was living *up to* age 15.[10] A dummy covariate indicating that a woman was raised in an "urban area" is created if that woman was raised in a town with more than 100,000 inhabitants.

Age at the start of the union. Most unions that start during the teenage years are found to be more fragile than other unions (Berrington and Diamond 1999; White 1990). Presumably, partners who enter into unions at an early age have invested few resources in searching for a partner, resulting in a greater likelihood of a poor match (Oppenheimer 1988). However, little research has focused on unions that are contracted relatively late. One could argue that these unions are relatively fragile as well because partners have had a long time to acquire a taste for privacy and may have a hard time adjusting their lives to the married state (Waite, Goldscheider, and Witsberger 1986). To allow for this possible nonlinearity of the effect of age at the start of the union, both linear and squared age terms are included in the analyses.

Educational attainment. Research into the impact of educational attainment on union stability has generated contradictory results. Whereas highly educated women have sometimes been found to have relatively high union dissolution risks (Blossfeld et al. 1995; Hall and Zhao 1995), some studies have found no effect at all (Bracher et al. 1993; Lillard et al. 1995) or have found that highly educated women have relatively low dissolution risks (Berrington and Diamond 1999). In the FFS, the comparability of the direct question on educational attainment is low (Dourleijn, Liefbroer, and Beets 2002; Festy and Prioux 2002). For this reason, we construct an alternative time-varying educational attainment covariate based on information from the educational histories (see Dourleijn et al. 2002 for details). This variable measures the number of years after completion of primary school needed to complete the level of education reached by the respondent.

Activity status. Working women have often (Bracher et al. 1993; South 2001), but not always (Berrington and Diamond 1999; White 1990), been found to have higher divorce

8. In Sweden and Norway, women of birth cohorts five years apart were interviewed (i.e., 1954, 1959, and 1964 for Sweden and 1955, 1960, and 1965 for Norway). Women born in these years are assumed to be representative of the complete five-year birth cohort they belonged to.

9. In some countries, up to a few percent of all respondents gave a nonresponse to this question. In the analyses, an additional "no response" category was added. Generally speaking, women in this category do not differ from women whose parents did not experience a divorce. To save space, we do not present the results in the tables. For Norway, no data on parental divorce are available.

10. In Latvia, Lithuania, and Poland, the information refers to the locality where the respondent was living at age 15. As with the case of parental divorce, an additional "no response" category was added to the analyses to ascertain whether nonrespondents differed from others. Generally speaking, women in this category do not differ from women who were brought up in a rural area. The results are therefore not presented in the tables. In the FFS for Flanders, Finland, and France, no information on place of residence during childhood is available.

rates than women who do not have jobs. It has also been suggested that women who are enrolled in education might have higher union dissolution rates than women without jobs (Hoem and Hoem 1992). Based on information about their educational and labor force careers, three time-varying activity statuses are distinguished. If a woman has a paid job, she is classified as employed. If a woman is enrolled in education and is not employed, she is classified as enrolled in education. The reference category is women who are neither employed nor enrolled in education. Whether their joblessness is voluntarily or involuntarily is unknown.

Parenthood. Children are often viewed as union-specific capital that cements the relationship between union partners (Brines and Joyner 1999; Kalmijn 1999; Waite and Lillard 1991). This could explain the lower likelihood of divorce among pregnant women (Berrington and Diamond 1999; Lillard et al. 1995) and mothers (Bracher et al. 1993; Teachman et al. 1991). Based on the fertility histories in the FFS, we construct two time-varying covariates, one indicating whether a woman is pregnant and one indicating whether a woman has one or more children.

Proportion of cohabitors. To test our hypothesis about the impact of the level of diffusion of cohabitation on the union dissolution rates of women in different union types, we need to construct a covariate that indicates how common unmarried cohabitation is among a birth cohort. We use the proportion of women in a cohort who started their unions by cohabitation relative to the total proportion of women in that cohort who entered into a union as our indicator. Because the number of women per one-year birth cohort in the national samples is relatively small, we grouped respondents into five-year birth cohorts before calculating the proportion of cohabitors.

Analytical Approach

We start with the presentation of life-table (Kaplan-Meier) estimates of the proportion of first unions that terminate within five years of initiation. We do this for all countries and for each of the three birth cohorts. These nonparametric estimates give an impression of the differences in the stability of unions within Europe. Next, we present the results of a multivariate analysis of the determinants of union dissolution across Europe. We use a Cox proportional hazard model to estimate the impact of union type and other covariates on the rate of union dissolution (Blossfeld and Rohwer 1995). We perform separate analyses for all the countries included in this study. The results of these multivariate analyses allow us to ascertain whether current and former cohabitors have higher rates of union dissolution than noncohabitors across Europe, or whether this heightened risk of union dissolution is present in some countries but absent in others. Finally, to test the hypothesis that (former) cohabitation increases the risk of union dissolution, particularly in contexts in which either cohabitation or marriage without prior cohabitation is a minority phenomenon, we pool data for all countries and estimate a Cox model for all countries together. In this model, dummy variables for each country, as well as variables on the popularity of unmarried cohabitation and its interaction with union type, are added to the base model. In addition, we test whether the impact of a variable in a specific country differs from the overall effect across Europe by including interactions terms between substantive variables and the dummy variables for country. In the final model, all statistically significant interaction effects are retained.

RESULTS

How common is union dissolution across Europe, and has it become more common among recent cohorts? To answer these questions, we calculated the percentage of unions that have dissolved within five years of their initiation for birth cohorts born in 1953–1957, 1958–1962, and 1963–1967 in all 16 countries. The results are presented in Table 1.

Quite distinct patterns emerge for the four regions of Europe. The union dissolution pattern in the Nordic countries can be characterized as *high and rising*. Compared with

Table 1. Percentages of Women Whose Unions Were Dissolved Within Five Years of Initiation, by Country and Birth Cohort

	Birth Cohort		
Country	1953–1957	1958–1962	1963–1967
Northern Europe			
Sweden	18.3	28.4	33.7
Norway	15.6	23.0	34.0
Finland	12.2	19.8	31.2
Western Europe			
Flanders	5.4	6.3	9.2
France	8.9	13.6	20.0
Former West Germany	9.5	15.9	20.9
Austria	8.4	15.7	15.9
Southern Europe			
Spain	2.8	4.2	7.1
Italy	3.1	3.4	4.8
Central and Eastern Europe			
Former East Germany	9.3	13.3	18.2
Poland	3.2	4.8	4.6
Hungary	8.8	8.9	10.8
Czech Republic	7.5	7.5	8.6
Latvia	15.4	14.3	20.7
Lithuania	9.6	9.6	11.5
Slovenia	7.8	6.6	7.5

other European regions, union dissolution is clearly the most common in these countries. About 15% of women born between 1953 and 1957 experienced a union dissolution within five years of the start of a union. Among women born between 1963 and 1967, the incidence of union dissolution during the first five years of the union increased to about one-third of all unions.

In western Europe, the pattern might be described as *medium and rising*. The incidence of union dissolution is lower than in northern Europe but shows a marked increase across cohorts. Just below 10% of all unions dissolved within five years among women born between 1953 and 1957, and this increased to more than 15% among cohorts born between 1963 and 1967. At the same time, considerable diversity exists within western Europe. Flanders, for example, exhibits relatively low levels of union dissolution, compared with the other countries in this region.

The union dissolution pattern of southern Europe might best be described as *low and rising*. About 3% of all unions contracted by women born between 1953 and 1957 dissolved within five years. Among women born between 1963 and 1967, union dissolution within five years was still very rare, but nonetheless rose to about 5% in Italy and 7% in Spain.

Finally, the situation in central and eastern Europe could be characterized as *medium and fairly stable*. The level of union dissolution among women born between 1953 and 1957 is comparable to that among western European countries. However, central and eastern European countries, with the exception of the former East Germany, did not experience

Table 2. Relative Union Dissolution Hazard Risks for Union Type and Other Covariates, by Country: Sweden, Norway, Finland, Flanders, France, West Germany, and Austria

Variable	Sweden	Norway	Finland	Flanders	France	West Germany	Austria
Cohort 1953–1957	1	1	1	1	1	1	1
Cohort 1958–1962	1.27**	1.07	1.21†	0.93	1.18	1.40**	1.23*
Cohort 1963–1967	1.49**	1.40*	2.00**	1.20	1.25	1.65**	1.27*
Married Without Prior Cohabitation	1	1	1	1	1	1	1
Married With Prior Cohabitation	1.77*	0.65**	1.12	1.27	1.62**	1.09	1.02
Cohabiting Outside of Marriage	3.59**	3.11**	3.82**	2.73**	4.84**	3.64**	3.29**
Parents Not Divorced	1		1	1	1	1	1
Parents Divorced	1.28*		1.54**	2.01**	1.03	1.83**	1.47**
Raised in a Rural Area	1	1				1	1
Raised in an Urban Area	1.53**	1.84**				1.48**	1.64**
Age at the Start of the Union	0.94**	0.96†	0.95**	0.78**	0.98	0.94**	0.97*
Age at the Start of the Union, Squared	1.01**	1.00	1.01	1.03**	1.00	1.00	1.00
Years in Education	0.98	0.98	1.01	1.08*	0.99	1.01	1.00
No Work or Education	1	1	1	1	1	1	1
Enrolled in Education	0.98	1.14	1.70**	1.15	0.98	1.69*	1.10
Employed	0.89	1.09	1.69**	0.81	0.71**	1.46**	1.63**
No Child	1	1	1	1	1	1	1
Pregnant	0.29**	0.55**	0.66**	0.36**	0.51*	0.54**	0.49**
Parent	0.49**	0.65**	0.99	0.47**	0.61**	0.97	0.89**
Number of Events	749	472	447	283	652	467	538
Log-Likelihood	–5,212	–3,186	–3,048	–1,795	–2,274	–2,468	–4,329

†$p < .10$; *$p < .05$; **$p < .01$

the strong rise in union dissolution that characterized western European countries. What is clear, however, is that diversity in the level of union dissolution is quite high among central and eastern European countries.

Do women who cohabit outside of marriage or who marry after having cohabited face higher union dissolution risks than women who marry without prior cohabitation? To answer this question, we performed separate hazard analyses for each country. The results are presented in Tables 2 and 3.

The results that have a direct bearing on this issue are given in the rows that show the relative risks of "married with prior cohabitation" and "cohabiting outside of marriage." These risks are relative to those of women who married without prior cohabitation. A relative risk above 1 implies a higher rate of union dissolution, and a risk below 1 implies a lower rate than that of women who married without prior cohabitation. The relative risks for cohabitors and former cohabitors are graphically represented in Figure 1. Figure 1 shows that current cohabitors have a very high risk of union dissolution across Europe. In most European countries, they have a three to four times higher risk than women who

Table 3. Relative Union Dissolution Hazard Risks for Union Type and Other Covariates, by Country: Spain, Italy, East Germany, Poland, Hungary, Czech Republic, Latvia, Lithuania, and Slovenia

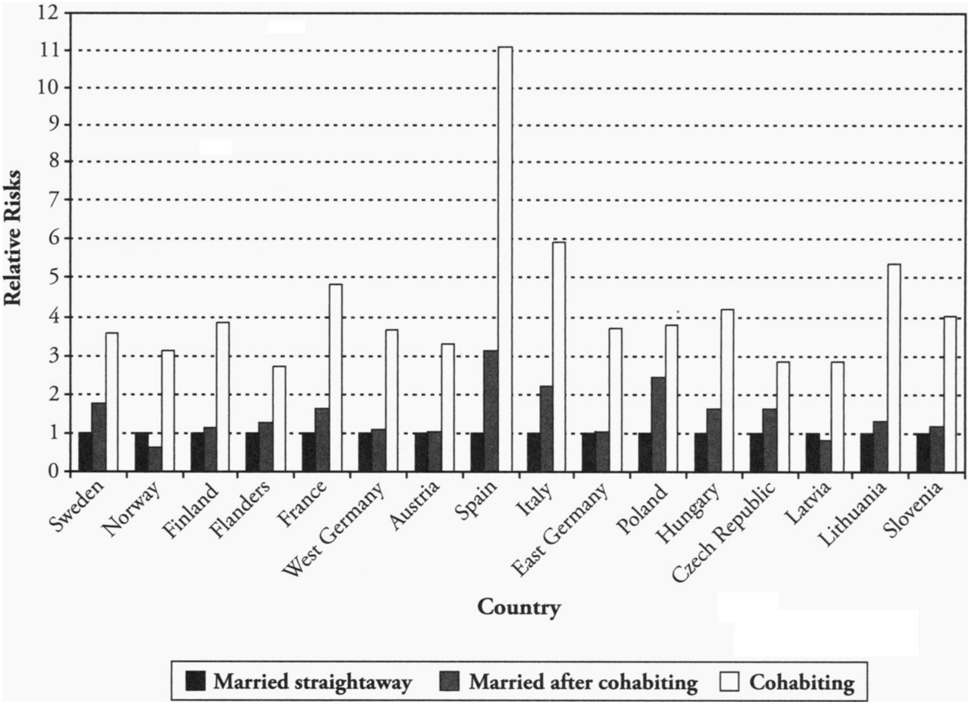
Variable	Spain	Italy	East Germany	Poland	Hungary	Czech Republic	Latvia	Lithuania	Slovenia
Cohort 1953–1957	1	1	1	1	1	1	1	1	1
Cohort 1958–1962	0.84	0.94	1.30*	1.60*	0.90	1.02	0.82†	1.04	0.77
Cohort 1963–1967	1.17	1.78**	1.36*	1.51	1.01	1.05	0.95	1.11	0.77
Married Without Prior Cohabitation	1	1	1	1	1	1	1	1	1
Married With Prior Cohabitation	3.13**	2.21*	1.02	2.45*	1.64**	1.64**	0.82	1.29	1.16
Cohabiting Outside of Marriage	11.14**	5.91**	3.72**	3.80**	4.19**	2.85**	2.85**	5.36**	4.02**
Parents Not Divorced	1	1	1	1	1	1	1	1	1
Parents Divorced	1.04	3.00**	1.57**	1.09	1.13	1.48*	1.15	1.48*	1.76*
Raised in a Rural Area	1	1	1	1	1	1	1	1	1
Raised in an Urban Area	1.68**	1.24	1.36**	1.76**	1.75**	1.53*	1.51**	1.39*	1.74**
Age at the Start of the Union	0.89**	0.93*	0.94**	1.07	0.94**	0.91**	0.92**	0.91**	0.91**
Age at the Start of the Union, Squared	1.01**	1.01**	1.01	0.99	1.00	1.01	1.01†	1.01*	1.01**
Years in Education	0.96*	1.03	0.98	0.94	1.00	0.99	1.03	1.03	1.01
No Work or Education	1	1	1	1	1	1	1	1	1
Enrolled in Education	0.85	1.58	1.43	1.82	0.82	1.66	0.70	1.95†	1.05
Employed	1.39	1.87**	1.17	2.08**	1.15	1.18	0.68**	1.48*	0.85
No child	1	1	1	1	1	1	1	1	1
Pregnant	0.60	0.27*	0.64	0.56	0.41**	0.17*	0.63†	0.43*	0.39*
Parent	0.53**	0.29**	0.93	0.56*	0.47**	0.60*	0.65**	0.32**	0.48**
Number of Events	160	142	523	104	457	219	401	250	186
Log-Likelihood	–1,065	–897	–2,895	–719	–3,254	–1,365	–2,657	–1,633	–1,256

†$p < .10$; *$p < .05$; **$p < .01$

have entered into marriage without prior cohabitation. In southern European countries, the excess risk of cohabitors is even higher; in Spain, up to 11 times as high as that of women who marry straightaway.

The results for women who marry after prior cohabitation are much less clear-cut. Former cohabitors have a statistically higher rate of union dissolution than married women who did not cohabit before marriage in 7 of the 16 countries (Sweden, France, Spain, Italy, Poland, Hungary, and the Czech Republic). In these countries, former cohabitors have an excess dissolution rate that varies between 60% and 310%. The union dissolution rates of married women who did and who did not cohabit outside of marriage before their marriages do not differ statistically in 8 of the 16 countries. In Norway, former cohabitors even show a lower rate of union dissolution than women who married without prior cohabitation.

Figure 1. Relative Risk of Union Dissolution for Women in Different Types of Union, by Country



The results in Tables 2 and 3 also show clear differences in the relative risk of union dissolution between women who cohabit and women who marry after cohabitation. Formal tests show that in all countries except Poland and the Czech Republic, the differences in union dissolution risks between these two groups is statistically significant at the .01 level. In the Czech Republic, the difference is marginally statistically significant (p = .06). In Poland, the difference in union dissolution risks between current and former cohabitors is not significant, but keep in mind that very few people cohabit in Poland, making it hard for this difference to reach statistical significance.

Although our focus is on the impact of union type on union dissolution, some observations on the pattern of findings for other covariates seem in order as well. A cohort trend toward higher union dissolution rates, even after we control for the shift toward unmarried cohabitation, is visible in most northern, western, and southern European countries. In eastern Europe, union dissolution seems to have remained relatively stable when the shift toward unmarried cohabitation is taken into account. Parental divorce leads to higher union dissolution rates in 10 out of 15 countries. Being raised in an urban area increases union dissolution rates across Europe, Italy being the sole exception. The age at which women enter into a union has a significant effect in 14 of the 16 countries. In most countries, the effect is linear, with lower union dissolution rates at higher ages of entry into a union. However, six countries (Sweden, Flanders, Spain, Italy, Lithuania, and Slovenia) show a curvilinear pattern, suggesting that unions entered into at a relatively later age have an increased risk of union dissolution as well. Level of education exerts hardly any effect on union dissolution rates. The two exceptions to this rule are Flanders, where educational attainment has a positive effect on the dissolution rate, and Spain, where it has a negative effect. Enrollment in education increases union dissolution rates in just two countries. However, the proportion of women who cohabit and are enrolled in education is relatively low in most countries, making it hard to generate a reliable estimate of the effect of enrollment in education. Being employed increases the risk of union dissolution in 6 of the 16 countries. In two countries (France and Latvia), being employed lowers women's rate of union dissolution. Being pregnant strongly reduces the union dissolution rate across Europe. Finally, having children reduces the union dissolution rates in 13 of the 16 countries.[11]

Our final issue concerns the extent to which the impact of union type depends on the incidence of unmarried cohabitation. We hypothesized that the impact of union type would be stronger if unmarried cohabitation was either very uncommon or very common in a society than if unmarried cohabitation was practiced by anywhere between a sizable minority to a small majority of the population. To test this hypothesis, we pooled the data for the 16 countries, added information on the proportion of women from each five-year cohort who had entered into their first union through unmarried cohabitation, and reestimated our model with the addition of the appropriate parameters to test our hypothesis. To obtain the hypothesized U-shaped effect, we would need to find statistically significant interactions between (1) the proportion of cohabitors in a cohort and the dummy variables for union status and (2) the squared proportion of cohabitors in a cohort and the dummy variables for union status. Without the second of these interactions, the effect of union status on union dissolution risks would show a linear, rather than curvilinear, relationship with the proportion of cohabitors within a cohort. The results of this analysis are presented in Table 4.

The results show no statistically significant effect of proportion of cohabitors as such, but the interaction terms between proportion of cohabitors and union type are statistically significant. To enhance the interpretation, we graphed the relative risks of current and former cohabitors according to the proportion ever cohabiting in a population. The results are shown in Figure 2. For both current and former cohabitation, the results are in line with our hypothesis. Women who cohabit outside of marriage have a higher rate of union dissolution than women who marry without prior cohabitation. However, this excess dissolution rate is at its nadir if 50% of the population practices unmarried cohabitation but is much higher if only a very small minority has ever been in a consensual union or if almost everybody has been in a consensual union. Among former cohabitors, the same situation exists. If hardly anyone cohabits, the rate of union dissolution among former cohabitors is more than twice as high as that of married women who did not cohabit prior to marriage. This difference becomes smaller as unmarried cohabitation becomes more widespread. If the number of cohabitors in a population more or less equals the number of noncohabitors, the differences between both groups disappear. As cohabitation becomes a majority experience, however, former cohabitors again experience an ever-increasing excess union dissolution rate.[12] A

11. Evidently, our measure of the impact of having children on union dissolution rates is rather crude. The impact of having children could depend on both the age and the number of children (Bracher et al. 1993; Waite and Lillard 1991). Examining these specific effects falls outside the scope of this analysis.

12. An important question is how well this model explains country differences in relative risks. No formal approach to answer this question exists. However, an informal way to gain insight into this issue is to compare how well this model predicts the relative risks presented in Figure 1 with a model that assumes no country differences in relative risks. To obtain an estimate of how well a model that assumes no country differences performs, one can calculate the variance around the mean for the observed relative union dissolution risks shown in Figure 1. This variance is 6.36 for former cohabitors and 61.80 for current cohabitors. To obtain an estimate of how well our model explains country differences, one could calculate the variation between the country-specific relative risks of former and current cohabitors based on the model shown in Table 4 and the observed relative union dissolution risks shown in Figure 1. However, the model shown in Table 4 also includes interactions between union type and dummy variables for country that enhance the quality of the model. To test the "separate" effect of the diffusion

Table 4. Relative Hazard Risks of Union Dissolution for Union Type and Other Covariates, Pooled Data for 16 European Countries

Variable	Relative Risks, Model With Country Interactions
Married Without Prior Cohabitation	1
Married With Prior Cohabitation	2.09**
Married With Prior Cohabitation × Norway	0.65**
Married With Prior Cohabitation × Spain	2.20**
Cohabiting Outside of Marriage	4.57**
Cohabiting Outside of Marriage × Spain	2.53**
Cohabiting Outside of Marriage × Italy	1.64*
Proportion Cohabitors	0.75
Proportion Cohabitors × Cohabited Outside of Marriage	0.28*
(Proportion Cohabitors, Squared) × Cohabited Outside of Marriage	3.56*
Proportion Cohabitors × Married With Prior Cohabitation	0.07**
(Proportion Cohabitors, Squared) × Married With Prior Cohabitation	13.31**
Cohort 1953–1957	1
Cohort 1958–1962	1.07†
Cohort 1958–1962 × Former West Germany	1.36**
Cohort 1963–1967	1.23**
Cohort 1963–1967 × Former West Germany	1.43**
Cohort 1963–1967 × Finland	1.50**
Parents Not Divorced	1
Parents Divorced	1.39**
Parents Divorced × Former West Germany	1.42**
Parents Divorced × Italy	1.98*
Raised in a Rural Area	1
Raised in an Urban Area	1.58**
Age at the Start of the Union	0.96**
Age at the Start of the Union × Poland	1.08*
Age at the Start of the Union × Flanders	0.82**
Age at the Start of the Union, Squared	1.00
Age at the Start of the Union, Squared × Flanders	1.03**

(continued)

final interesting finding is that the difference in the relative rates of union dissolution of current and former cohabitors is hardly affected by fluctuations in the proportion of people

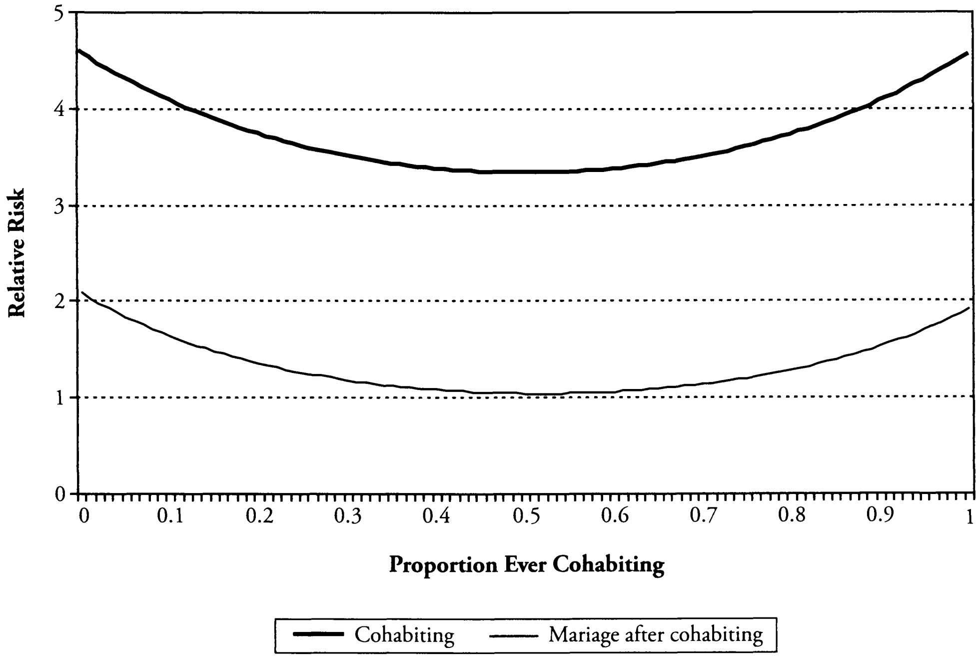
mechanism, we reestimated the model in Table 4 without the four interactions of union type by country. Based on that model, we calculated the country-specific relative risk estimates for union dissolution among former and current cohabitors; we compared how well these estimates approximated the relative risks presented in Figure 1 by calculating the variance between both sets of estimates. The variance was 3.08 for former cohabitors and 50.25 for current cohabitors. These variances are substantially smaller (by 52% for former cohabitors and by 19% for current cohabitors) than the variances that are found if one assumes no country differences in relative risks. This suggests that the diffusion mechanism offers a substantial contribution to our understanding of country differences in relative risks of union dissolution.

(Table 4, continued)

Variable	Relative Risks, Model With Country Interactions
Years in Education	1.00
Years in Education × Spain	0.95**
No Work or Education	1
Enrolled in Education	1.13*
Employed	1.02
Employed × Finland	1.28*
Employed × Former West Germany	1.35**
Employed × Austria	1.71**
Employed × Italy	1.88**
Employed × Poland	1.87**
Employed × France	0.77*
No Child	1
Pregnant	0.47**
Parent	0.56**
Parent × Finland	1.51**
Parent × Former West Germany	1.65**
Parent × Austria	1.92**
Parent × Lithuania	0.72**
Sweden	1
Norway	1.58**
Finland	0.73*
Flanders	0.54*
France	1.20
Former West Germany	0.52**
Austria	0.56**
Spain	0.41**
Italy	0.20**
Former East Germany	1.23
Poland	0.23**
Hungary	0.93
Czech Republic	1.03
Latvia	1.55*
Lithuania	1.26
Slovenia	0.52**
Number of Events	6,085
Log-Likelihood	–53,047

$^{\dagger}p < .10$; $^{*}p < .05$; $^{**}p < .01$

Figure 2. Relative Risk of Union Dissolution of Cohabitors and Former Cohabitors Compared With Women Who Marry Without Prior Cohabitation, by the Incidence of Unmarried Cohabitation



who have ever cohabited in a population. Irrespective of the popularity of unmarried cohabitation, current cohabitors have union dissolution rates that are about three times as high as those of cohabitors who have transformed their unions into marriages.[13]

Table 4 also shows that the impact of the union status variables is not homogeneous across Europe, as a few interaction effects between the union status variables and dummy variables for country reached statistical significance. These effects suggest that the excess risks of union dissolution for former cohabitors, compared with noncohabitors, is below average in Norway and above average in Spain. In addition, the excess risk of union dissolution for current cohabitors is higher in Spain and Italy than it is elsewhere in Europe.

The effects of the other covariates included in Table 4 mirror the general patterns in the data for the 16 countries separately. At the same time, the large number of statistically significant country interactions suggests that quite some heterogeneity in the factors that influence union dissolution exists across Europe. Union dissolution rates increase somewhat across cohorts, although this increase is faster in former West Germany and Finland than in the rest of Europe. Union dissolution rates are clearly higher all over Europe if parents have experienced a divorce, and particularly so in former West Germany and Italy. Women raised in urban areas have higher union dissolution rates than women raised in rural areas. Union dissolution rates decrease with increasing age at entry into the union, except in

13. These relative rates can be calculated by dividing the relative rates for current cohabitors by the relative rates for former cohabitors in Figure 2.

Poland and Flanders. In Poland, there is no effect of age at entry into the union, whereas in Flanders, the effect follows a kind of U-shape, with a particularly high excess risk at young ages. No impact of educational attainment on union dissolution rates is observed except in Spain, where more highly educated women have lower union dissolution rates than women with a low level of education. Women who are enrolled in education have higher dissolution rates than women who are neither employed nor in education. For employment, no clear pattern emerges. Employed women have higher rates of union dissolution than nonemployed women in Finland, West Germany, Austria, Italy, and Poland. In contrast, employed women in France have a lower dissolution rate than nonemployed women. Finally, union dissolution rates are much lower for pregnant women and women with children than for childless women. However, being parents is less of a protection against union dissolution in Finland, former West Germany, and Austria than in other countries.

DISCUSSION

Research and theory on the impact of unmarried cohabitation on union stability have often been at odds. Whereas theory predicts a positive effect of cohabitation on marriage stability, research has usually found a negative effect. However, Kiernan (2002) has shown that the impact of unmarried cohabitation on union stability differs quite strongly across countries. Expanding on her research, we show that large variation exists across Europe in the relative rates of union dissolution for cohabiting women, married women who cohabited prior to marriage, and women who married without prior cohabitation. Therefore, these results offer strong support for recent pleas to seriously consider the contextual dependency or path dependency of theories and empirical results (Blossfeld 1995; Lesthaeghe 1998; Liefbroer and Corijn 1999). This need is underscored by the fact that our analyses reveal quite strong cross-national variation in the impact of other covariates on the rate of union dissolution as well. Understanding the reasons behind this cross-national variation in effects will significantly enhance our understanding of the processes governing union dissolution. In particular, it will help us understand how union dissolution and related family processes are influenced by macro-sociological conditions, such as institutional arrangements, economic conditions, and cultural systems (South, Trent, and Shen 2001).

To account for the pattern of variation in the impact of unmarried cohabitation on union dissolution across Europe, we started from the selection argument and expanded it by formulating a diffusion hypothesis. We assume that the characteristics of women who opt for unmarried cohabitation become more similar to those of women who opt for marriage as the incidence of unmarried cohabitation increases. As a result, the rates of union dissolution of current cohabitors, former cohabitors, and noncohabitors should converge as unmarried cohabitation becomes more popular. However, if cohabitation becomes much more popular than direct marriage, rates are expected to diverge again as the subpopulation of people who marry without prior cohabitation becomes increasingly selective. The results of our analyses offer strong support for our hypothesis. The effects show the expected U-shaped pattern, and convergence is strongest if about 50% of the population has experienced unmarried cohabitation.

Although our findings support the selection argument, they do not rule out the possibility that other mechanisms operate at the same time. If about 50% of the population cohabits, married women who formerly cohabited have the same union dissolution risk as married women who did not cohabit. Although this still contradicts the weeding hypothesis, one could argue that even in these circumstances, women who choose cohabitation and women who choose marriage are quite distinct with respect to attitudes and commitment to relationships. If so, effective additional controls for selectivity could show that former cohabitors have lower dissolution rates than women who married straightaway.

That weeding is at least somewhat effective is clear from the fact that former cohabitors have a much lower risk of union dissolution than current cohabitors, irrespective of the popularity of unmarried cohabitation, and therefore presumably irrespective of how selective unmarried cohabitation is. The most likely interpretation is that the lower stability of unions among cohabitors reflects the fact that consensual unions are still entered into as a kind of trial period, in which the commitment of union partners is relatively low. Relatively successful matches are transformed into marriage, whereas unsuccessful ones are dissolved along the way. In addition, the higher stability of unions of former cohabitors, compared with current cohabitors, could signal that marriage as an institution protects against instability (Brines and Joyner 1999).

This analysis has shown that cross-national variation in the excess rates of dissolution among former and current cohabitors at least partly results from differences in the levels of acceptance of unmarried cohabitation. At the same time, differences in acceptance of unmarried cohabitation do not tell the whole story (cf. footnote 12). Other factors may be at play as well. For instance, the very high levels of union dissolution among cohabitors in Spain and Italy point to the potential importance of religion and family systems: both Spain and Italy are Catholic countries. It may be that the strong opposition to unmarried cohabitation by the Catholic Church leads to strong pressures on cohabitors to opt out of this living arrangement. The strong reliance on the family that characterizes Mediterranean countries (Reher 1998) may also be important. Parental and family norms against unmarried cohabitation may be stronger in these countries than in other parts of Europe, resulting in stronger normative pressures to exit from unmarried cohabitation. Differences in institutional arrangements constitute a third potential factor explaining cross-national differences in the impact of union type on union dissolution. For instance, Brines and Joyner (1999) suggested that the lack of institutional protection offered by cohabitation is one reason for its high instability. Investments in an arrangement that lacks institutional support will be less secure, and partners will, therefore, be less likely to make such investments, resulting in a high risk of dissolution. However, in response to the growth in unmarried cohabitation, a number of European countries have passed laws and regulations concerning the mutual rights of cohabitors, resulting in more institutional security for cohabitors. A comparative analysis could therefore offer a fruitful opportunity to test Brines and Joyner's hypothesis. If they are right, the difference in union stability between marriage and cohabitation would be smaller in countries where cohabitors share much of the same legal protection as married people than in countries where cohabitors are still largely unprotected.

Finally, our results show that selectivity operates not just if only few people cohabit but also if almost everyone cohabits. However, the substantive question to be answered in both instances is completely different. If few people cohabit, the question is, what is it about unmarried cohabitation or about cohabitors that explains the instability of their unions? Conversely, if almost everyone cohabits at one point or another during their life course, the question is, what makes the marriages of people who reject unmarried cohabitation so stable? Given the fact that unmarried cohabitation is rapidly becoming a majority experience all around the Western world, researchers should forget posing the first question and start answering the second one.

REFERENCES

Axinn, W.G. and A. Thornton. 1992. "The Relationship Between Cohabitation and Divorce: Selectivity or Causal Influence?" *Demography* 29:357–74.

Balakrishnan, T.R., K.V. Rao, E. LaPierre-Adamcyk, and K.J. Krotki. 1987. "A Hazard Model Analysis of the Covariates of Marriage Dissolution in Canada." *Demography* 24:395–406.

Basu, A. and S. Amin. 2000. "Conditioning Factors for Fertility Decline in Bengal: History, Language Identity and Openness to Innovations." *Population and Development Review* 26:761–94.

Bennett, N., A. Blanc, and D. Bloom. 1988. "Commitment and the Modern Union: Assessing the Link Between Premarital Cohabitation and Subsequent Marital Stability." *American Sociological Review* 53:127–38.

Berrington, A. and I. Diamond. 1999. "Marital Dissolution Among the 1958 British Birth Cohort: The Role of Cohabitation." *Population Studies* 53:19–38.

Blossfeld, H.-P. 1995. "Changes in the Process of Family Formation and Women's Growing Economic Independence: A Comparison of Nine Countries." Pp. 3–34 in *The New Role of Women. Family Formation in Modern Societies,* edited by H.-P. Blossfeld. Boulder, CO: Westview.

Blossfeld, H.-P., A. De Rose, J.M. Hoem, and G. Rohwer. 1995. "Education, Modernization, and the Risk of Marriage Disruption in Sweden, West Germany, and Italy." Pp. 200–22 in *Gender and Family Change in Industrialized Countries*, edited by K.O. Mason and A.-M. Jensen. Oxford: Clarendon Press.

Blossfeld, H.-P. and G. Rohwer. 1995. *Techniques of Event History Modeling. New Approaches to Causal Analysis*. Mahwah, NJ: Lawrence Erlbaum.

Bracher, M., G. Santow, S.P. Morgan, and J. Trussell. 1993. "Marriage Dissolution in Australia: Models and Explanations." *Population Studies* 47:403–25.

Brines, J. and K. Joyner. 1999. "The Ties That Bind: Principles of Cohesion in Cohabitation and Marriage." *American Sociological Review* 64:333–55.

Brüderl, J., A. Diekmann, and H. Engelhardt. 1997. "Erhöht eine Probeehe das Scheidungsrisiko? Eine Empirische Untersuchung mit dem Familiensurvey" [Does a trial marriage increase the risk of divorce? An empirical study using the family survey]. *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 49:205–22.

Brüderl, J. and F. Kalter. 2001. "The Dissolution of Marriages: The Role of Information and Marital-Specific Capital." *Journal of Mathematical Sociology* 25:403–21.

Bumpass, L. and H.H. Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the United States." *Population Studies* 54:29–41.

Casterline, J.B., ed. 2001. *Diffusion Processes and Fertility Transition. Selected Perspectives*. Washington, DC: National Research Council.

De Feijter, H. 1991. *Voorlopers bij Demografische Veranderingen* [Forerunners in demographic changes]. The Hague: Netherlands Interdisciplinary Demographic Institute.

DeMaris, A. and W. MacDonald. 1993. "Premarital Cohabitation and Marital Instability: A Test of the Unconventionality Hypothesis." *Journal of Marriage and the Family* 55:399–407.

DeMaris, A. and K.V. Rao. 1992. "Premarital Cohabitation and Subsequent Marital Stability in the United States: A Reassessment." *Journal of Marriage and the Family* 54:178–90.

Dourleijn, E., A.C. Liefbroer, and G.C.N. Beets. 2002. "Comparing the 1988 International Standard Classification of Education (ISCED) With Retrospective Information From Educational Histories." Pp. 157–72 in *Dynamics of Fertility and Partnership in Europe: Insights and Lessons From Comparative Research,* Vol. 2, edited by E. Klijzing and M. Corijn. New York and Geneva: United Nations.

Festy, P. and F. Prioux. 2002. *An Evaluation of the Fertility and Family Surveys Project*. New York and Geneva: United Nations.

Fischer, C.S. 1995. "The Subcultural Theory of Urbanism: A Twentieth-Year Assessment." *American Journal of Sociology* 101:543–77.

Hall, D.R. and J.Z. Zhao. 1995. "Cohabitation and Divorce in Canada: Testing the Selectivity Hypothesis." *Journal of Marriage and the Family* 57:421–27.

Haskey, J. 1992. "Pre-Marital Cohabitation and the Probability of Subsequent Divorce: Analyses Using New Data From the General Household Survey." *Population Trends* 68:10–19.

Hoem, B. and J.M. Hoem. 1992. "The Disruption of Marital and Non-Marital Unions in Contemporary Sweden." Pp. 61–93 in *Demographic Applications of Event History Analysis,* edited by J. Trussell, R. Hankinson, and J. Tilton. Oxford, England: Clarendon Press.

Jaakkola, R., K. Aromaa, and I. Cantell. 1984. "The Diffusion of Consensual Unions in Finland in the 1970s." Pp. 15–25 in *Yearbook of Population Research in Finland 1984*. Helsinki: Population Research Institute.

Kalmijn, M. 1999. "Father Involvement in Childrearing and the Perceived Stability of Marriage." *Journal of Marriage and the Family* 61:409–21.

Kiernan, K. 2002. "The State of European Unions: An Analysis of FFS Data on Partnership Formation and Dissolution." Pp. 57–76 in *Dynamics of Fertility and Partnership in Europe: Insights and Lessons From Comparative Research,* Vol. 1, edited by M. Macura and G. Beets. New York and Geneva: United Nations.

Kiernan, K. and A.J. Cherlin. 1999. "Parental Divorce and Partnership Dissolution in Adulthood: Evidence From a British Cohort Study." *Population Studies* 53:39–48.

Klijzing, E. 1992. "'Weeding' in the Netherlands: First-Union Disruption Among Men and Women Born Between 1928 and 1965." *European Sociological Review* 8:53–70.

Lesthaeghe, R. 1998. "On Theory Development: Applications to the Study of Family Formation." *Population and Development Review* 24:1–14.

Liefbroer, A.C. and M. Corijn. 1999. "Who, What, Where, and When? Specifying the Impact of Educational Attainment and Labour Force Participation on Family Formation." *European Journal of Population* 15(1):45–75.

Lillard, L.A., M.J. Brien, and L.J. Waite. 1995. "Premarital Cohabitation and Subsequent Marital Dissolution: A Matter of Self-Selection?" *Demography* 32:437–57.

Manning, W.D. and P.J. Smock. 2002. "First Comes Cohabitation and Then Comes Marriage? A Research Note." *Journal of Family Issues* 23:1065–87.

Manting, D. 1994. *Dynamics in Marriage and Cohabitation: An Inter-Temporal, Life Course Analysis of First Union Formation and Dissolution.* Amsterdam: Thesis Publishers.

Oppenheimer, V.K. 1988. "A Theory of Marriage Timing." *American Journal of Sociology* 94:563–91.

Prinz, C. 1995. *Cohabitation, Married, or Single: Portraying, Analyzing and Modeling New Living Arrangements in the Changing Societies of Europe.* Avebury: Aldershot.

Reher, D.S. 1998. "Family Ties in Western Europe: Persistent Contrasts." *Population and Development Review* 24:203–34.

Rindfuss, R.R. and A. VandenHeuvel. 1990. "Cohabitation: A Precursor to Marriage or an Alternative to Being Single?" *Population and Development Review* 16:703–26.

Rogers, E.M. and F.F. Shoemaker. 1971. *Communication of Innovations.* New York: Free Press.

Schoen, R. 1992. "First Unions and the Stability of First Marriages." *Journal of Marriage and the Family* 54:281–84.

Skinner, K.B., S.J. Bahr, D.R. Crane, and V.R.A. Call. 2002. "Cohabitation, Marriage and Remarriage: A Comparison of Relationship Quality Over Time." *Journal of Family Issues* 23:74–90.

South, S.J. 2001. "Time-Dependent Effects of Wives' Employment on Marital Dissolution." *American Sociological Review* 66:226–45.

South, S.J., K. Trent, and Y. Shen. 2001. "Changing Partners: Toward a Macrostructural-Opportunity Theory of Marital Dissolution." *Journal of Marriage and the Family* 63:743–54.

Teachman, J.D. 2002. "Stability Across Cohorts in Divorce Risk Factors." *Demography* 39:331–51.

Teachman, J.D., J. Thomas, and K. Paasch. 1991. "Legal Status and the Stability of Coresidential Unions." *Demography* 28:571–86.

Thomson, E. and U. Colella. 1992. "Cohabitation and Marital Stability: Quality or Commitment?" *Journal of Marriage and the Family* 54:259–67.

Thornton, A. and L. Young-DeMarco. 2001. "Four Decades of Trends in Attitudes Toward Family Issues in the United States: The 1960s Through the 1990s." *Journal of Marriage and the Family* 63:1009–37.

Trussell, J., G. Rodríguez, and B. Vaughan. 1992. "Union Dissolution in Sweden." Pp. 38–60 in *Demographic Applications of Event History Analysis,* edited by J. Trussell, R. Hankinson, and J. Tilton. Oxford: Clarendon Press.

Waite, L.J., F.K. Goldscheider, and C. Witsberger. 1986. "Non-Family Living and the Erosion of Traditional Family Orientations Among Young Adults." *American Sociological Review* 51:541–54.

Waite, L.J. and L.A. Lillard. 1991. "Children and Marital Disruption." *American Journal of Sociology* 96:930–53.

White, L.K. 1990. "Determinants of Divorce: A Review of Research in the Eighties." *Journal of Marriage and the Family* 52:904–12.