Väestöliitto

Marika Jalovaara

THE EFFECTS OF MARRIAGE PARTNERS' SOCIO-ECONOMIC POSITIONS ON THE RISK OF DIVORCE IN FINLAND

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Marika Jalovaara
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Abstract

The high and increasing incidence of divorce, with the various consequences for adults and children, has aroused interest among social scientists in understanding the contributory factors. Prominent economic and psychosocial theories suggest that the husband's social and economic resources tend to stabilize a marriage, whereas the wife's economic success tends to destabilize it (the gendered hypothesis). Register-based follow-up data from Statistics Finland on first marriages in Finland that were intact at the end of 1990 and divorces in 1991–93 (n=21,309), and Poisson regression were used to analyze the impact of the socio-economic positions of the spouses on the risk of divorce. This thesis consists of three articles published in international refereed journals, and a summary article. The aim of sub-study I was to disentangle the influences of various aspects of the spouses' socio-economic positions on divorce risk and to reveal the causal pathways through which each socio-economic factor was related to it. Sub-study II investigated the joint effects of both spouses' socio-economic positions. Finally, sub-study III explored the possibility that the effect of spouses' socio-economic positions on divorce risk might vary according to the duration of the marriage.

When examined individually, divorce risk was inversely associated with socio-economic status for all its various indicators (i.e. each spouse's education, occupational class, economic activity, and income, as well as housing tenure and housing density) except the wife's income. All of these factors had an independent effect. The independent effect was weak for both spouses' occupational rankings and housing density, however, and it was positive for the wife's income. The divorce risk for couples with both partners at the lowest educational level was lower than expected on the basis of its overall inverse association with each spouse's education. Employed and homemaker women with employed husbands had comparatively stable marriages, whereas couples in which the husband, the wife, or both partners were unemployed had an elevated risk of divorce. The husband's high income decreased the risk, and the wife's high income increased it regardless of the level of the other spouse's income, but the divorce-promoting effect of the wife's high income was especially strong when the husband's income was low. The comparatively high divorce risks for spouses with little formal education and those in manual-worker occupations were found to be specific to marriages of relatively short duration. In contrast, factors such as unemployment, the wife's high income, and living in a rented dwelling were found to increase the risk regardless of marital duration.

Overall, the socio-economic resources of the spouses, irrespective of which spouse had contributed them, decreased the risk of divorce, supporting the gender-neutral hypothesis. However, some aspects of the wife's resources (absolute and relative to those of her husband) tended to increase the risk. The finding that the less structural socio-economic factors affected divorce risk in a very similar way in marriages of varying duration highlights their importance as factors predicting marital stability.

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1 Background and aims of the study

1.1 Introduction

The increase in divorce that began in the late 19th century and accelerated in the 1960s is one of the most significant demographic and family trends in almost all Western countries, including Finland. At the beginning of the 20th century nearly all marriages in Finland ended in the death of a spouse. With the increase in divorce as well as the lowering of adult mortality in the 20th century, the share of divorce as the immediate cause of marital dissolution increased spectacularly. Since the rise in divorce levels following the switch to exclusive no-fault legislation in 1988 (see Chapter 1.3), Finland has had one of the highest divorce rates in Europe. For instance, in 1994–2005 the total (period) divorce rate (the sum of duration-specific divorce percentages) varied between 47 and 51 (Statistics Finland 2006b).

This rise in the divorce rate, which has occurred in nearly all Western nations, reflects many interrelated developments in the demographic, social, economic, and ideological spheres. Divorce legislation has been adjusted to comply with changes in families and society in general. The high frequency of divorce has led to greater social acceptance: the social stigma connected with it has gradually faded, and it is increasingly viewed as a legitimate and normal life transition. With the decline of the traditional family economy, the increase in married women's participation in the wage-earning labor force, and improvements in social security, the economic consequences of marital dissolution have become less dramatic. Divorce, although temporarily stressful, may represent a new chance for happiness for adults and an escape from a dysfunctional home environment for children (Amato 2000).

However, divorce still has significant consequences for the lives of family members. As divorcing spouses move to separate households, they experience single parenthood, new stages of living alone, nonresidential parenting, as well as the formation and dissolution of new unions and reconstituted families. With all its accompanying changes, divorce is still a major life event that requires significant adjustments from the divorcing adults and their children, and affects their social and economic circumstances. There is fairly strong evidence that it has negative consequences for the well-being of adults and children. However, it is difficult to take account of selectivity, whereby some individuals have characteristics that both increase the likelihood of divorce and lead to poorer well-being afterwards, and that problems after divorce may result from pre-existing family experience. For some individuals, the deterioration in well-being is transitory, while some adults and children experience more severe and long-term effects. (For reviews, see Amato 2000; Furstenberg 2001; Smock, Manning, and Gupta 1999).

The high and increasing incidence of divorce, with its various consequences for the lives of the divorcing adults and their offspring, has aroused interest among social scientists in understanding factors that contribute to divorce or hold marriages together. Approaches to this question within the field of family demography can be divided into two wide categories. One type explores the effects of various macro-social factors on rates of divorce through the use of time series or cross-national data, focusing on the effects of, for instance, cultural values (e.g., Jones 1997), changes in divorce legislation (e.g., van Poppel and de Beer 1993), and economic factors such as the rate of women's labor-force participation or economic cycles (e.g., South 1985; Trent and South 1989). Macro-social analyses are necessary in order to understand the great changes in divorce rates over time, and the wide variations between different societies. For instance, an increase in the lifetime probability of divorce from 10 percent to 50 percent cannot be explained on the micro level; it needs to be explained in terms of changes in the institutions that structure individual lives (White 1990). The micro-level approach is used in this study. The starting point is the perception that the incidence of divorce varies across population subgroups, the assumption being that knowledge of these differentials promotes understanding of the individual and couple-level factors that contribute to marital stability or encourage divorce in given societal contexts. This line of research, focusing on the relative risk of marital disruption at the individual and couple level, has related many demographic, life-course, socio-economic, and social psychological factors with divorce (for reviews, see White 1990; White and Rogers 2000).

This study focuses on the effects of marriage partners' socio-economic positions on the risk of divorce (socio-economic position here is taken as a broad concept referring to the position or ranking of individuals and couples in systems of socio-economic stratification). The socio-economic position of individuals and couples is known to affect their life chances and choices (affecting health-related behavior, health, and mortality, for example; for a recent review, see e.g., Pensola 2003), and the chances and choices related to family formation and dissolution are no exception. The family is traditionally an important economic unit, the task of which is to ensure the economic security of its members, including those who do not participate in the labor market, and it establishes their social status (Ross and Sawhill 1975). The decline of the traditional family economy proceeding hand in hand with industrialization and urbanization, and the improving social and economic status of married women are often viewed as root causes of the rise in divorce rates in the Western world during the 20th century (Phillips 1991; Scanzoni 1979; see also Greenstein 1990 and Oppenheimer 1997 for reviews of the arguments). The role that each spouse's economic resources may play in marital instability nowadays has been a topic of much research, especially in the US but also in Europe (see Chapter 1.5). However, it is still somewhat unclear how the social and economic resources of couples and individual spouses affect the likelihood of marital disruption in contemporary Western societies, where the significance of marriage for the economic security of each individual has diminished.

Much of our knowledge about the socio-economic antecedents of divorce is based on research from the US – which is where the prominent theories of marital stability have been developed, and where a considerable proportion of the empirical research has been conducted. While factors affecting the risk of marriage disruption had attracted some attention in Finnish demographic research before the launching of this project (e.g., Finnäs 1996, 1997; Lutz 1993; Lutz, Wils, and Nieminen 1991; Nikander 1996), knowledge about the socio-economic precursors of divorce was scant. Furthermore, research on the effects of socio-economic factors on the risk of divorce in a Finnish setting may also be interesting to international readers. Finland is different in terms of work life, gender relations, and social welfare, and therefore offers the possibility to challenge or develop the theories originating from the US. Moreover, to the extent that the Nordic countries are forerunners in terms of gender and family change, knowledge of Nordic patterns could prove useful for predicting the future of the family institution in other countries.

As far as the availability of empirical data is concerned, the Nordic countries offer exceptional possibilities for research on the antecedents of divorce. The system of personal identity codes used in these countries enables the computerized linking of census and other records, including data on vital events. In Finland, demographic research based on linked register data has long roots, above all in the area of health and mortality (see Alho 1999; Valkonen, Koskinen, and Martelin 1998). For more than 20 years demographers at the Department of Sociology, University of Helsinki, have been using large register-based data sets compiled in cooperation with Statistics Finland by linking records from the national population registers and from various other registers (see Valkonen and Martelin 1999). Recently, members of the research unit have been making increasing use of linked register-based data sets not only in health and mortality research but also in other areas of demographic study, including that of the family. The present study is based on an extensive register-based data set that includes information on several aspects of the socio-economic positions (and other characteristics) of both partners, as well as on the timing of the relevant vital events.

This summary article synthesizes the results of a dissertation research project focusing on the impact of socio-economic factors (i.e. the socio-economic positions of the wife, the husband, and the couple) on the risk of divorce in Finland in the early 1990s. The sub-studies are reported in three original reports:

I. Jalovaara, M (2001): Socio-economic status and divorce in first marriages in Finland 1991–93. *Population Studies* 55(2):119–133.

II. Jalovaara, M (2003): The joint effects of marriage partners' socioeconomic positions on the risk of divorce. *Demography* 40(1):67–81.

III. Jalovaara, M (2002): Socioeconomic differentials in divorce risk by duration of marriage. *Demographic Research* 7:537–564. (Available online as open access)

The papers are reproduced with the permission of the publishers: The Population Investigation Committee, London School of Economics and Political Science (I), the Population Association of America (II), and the Max Planck Institute for Demographic Research (III). Here the original reports are referred to as sub-studies I, II, and III.

Certain basic concepts are used in varying ways in different research contexts. Moreover, empirical studies use different measures: some focus on judicial divorce while others include data on moving apart. In this report divorce refers to the legal termination of marriage by court decree. Marital disruption is used as a more general term, referring to the end of marital life through (permanent) separation or divorce. Marital dissolution refers to the termination of a marriage through either divorce or the death of a spouse.

1.2 The changing patterns of union formation and disruption

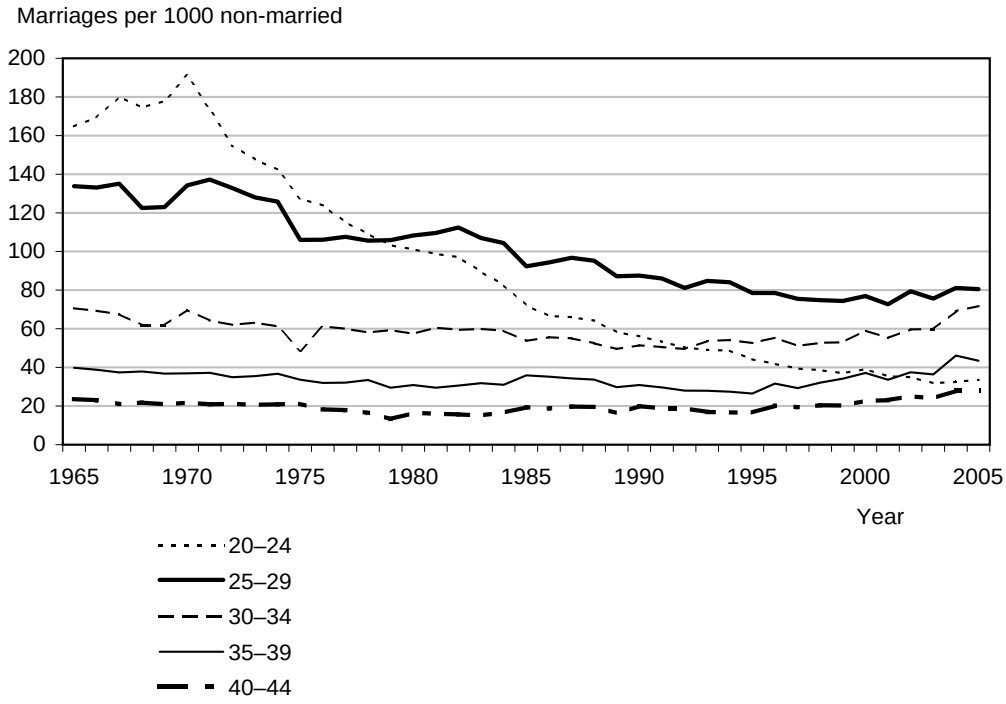
1.2.1 Trends in union formation

During the 20th century, and especially after the Second World War, the Western world, including Finland, saw extensive changes in the family institution. Prominent features of this included a decline in the rates of first marriage, an increase in the prevalence of cohabiting unions, an acceleration of the increase in divorce, and a decline in fertility to below the replacement level. This family change is often associated with the concept of the second demographic transition (see van de Kaa 1987, 2003; Lesthaeghe 1995). It is argued that the driving force of this transition is the change in value systems, involving the rejection of external institutional authority, the increasing importance of individual autonomy and self-fulfillment, as well as rising minimal standards of interpersonal-relationship quality (as evaluated by individuals) (ibid.). The Nordic countries are considered forerunners in this context, with other European countries following (Lesthaeghe 1995), although there are differences, especially between southern and other parts of Europe that may prove persistent (see e.g., Pitkänen and Jalovaara 2007). In any case, increasing freedom to choose is reflected in a greater diversity in individual biographies as well as in family structures (e.g., Roussel 1993). This section briefly describes the recent trends and patterns of union formation and disruption in Finland. The main focus is on the prevailing patterns during the follow-up period of this study (1991–93) and a few decades preceding it, but some data concerning later developments are also presented. For a more extensive review of the literature on families and family formation in Finland, see Pitkänen and Jalovaara (2007).

Marriage rates in Finland fell rapidly in the 1970s and 1980s, and more modestly in the 1990s. During the last 10 years, they have slightly increased, especially in older age groups. Figure 1 shows newly married per 1,000 non-married of the mean population in the respective five-year age groups in Finland in 1965–2005 for women aged 20–44.

It is evident that the decrease in the marriage rate was especially large in the youngest age groups (20–24 and 25–29), which probably reflects an increase in the proportion of people who never marry, and postponement of the first marriage to higher ages. For instance, the mean age at first marriage for women was 23.3 during the period 1971–75, 25.9 for the period 1986–90, and 29.6 in 2005 (Statistics Finland 1996, 2006b). During the same decades, the proportion of marriages involving the remarriage of one or both partners increased. For instance, the proportion of first marriages of all marriages contracted by women decreased from 90 percent in 1971–80 to 80 percent in 1991–2000, and was 77 percent in 2005 (Statistics Finland 2006a). The rates of remarriage have slowly risen in recent decades (Pitkänen and Jalovaara 2007; Statistics Finland 2006a), which is notable given the tendency of divorced individuals to live in cohabiting unions and the emergence of part-time cohabiting or "living apart together" relationships (Lesthaeghe 1995).

Figure 1. Marriage rate by age (marriages per 1,000 of the non-married mean population in the respective age-group), women aged 20–44, 1965–2005



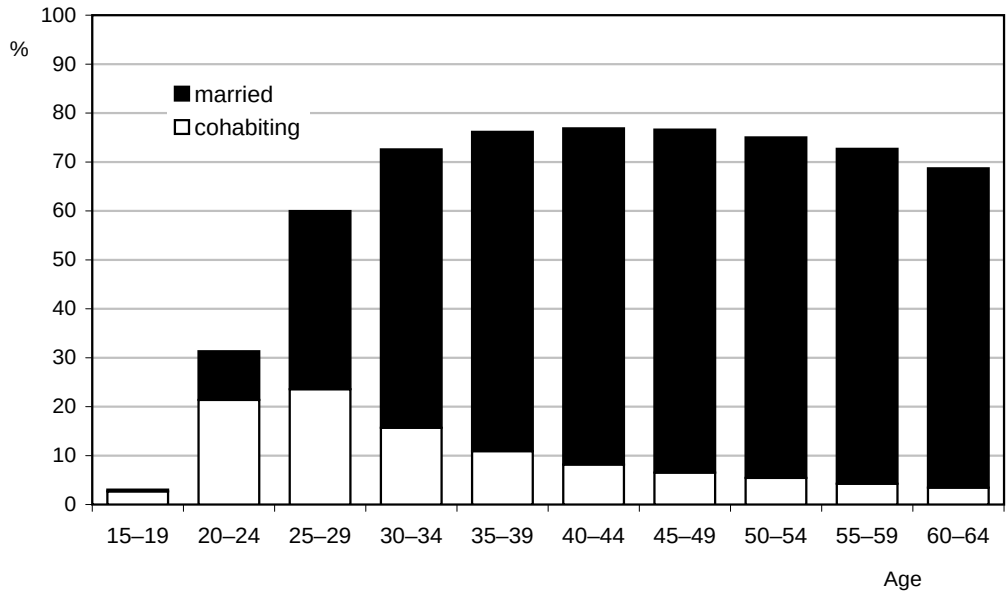
Source: Statistics Finland, various annual volumes of vital statistics, Official Statistics of Finland

Another significant shift that has occurred during the last three decades has been the increase in the prevalence of cohabiting unions. The change in attitudes and behavior has been rapid. At the beginning of the 1960s it was socially unacceptable and uncommon

for a man and a woman to live together if they were not married to each other, but by the early 1990s unmarried cohabitation had become the usual way to begin a union – at the end of the 1980s only one in ten couples were married when they moved in together (Finnäs 1993, 1995). Indeed, although young Finns postpone marriage to higher ages and some forgo marriage entirely, they do not postpone moving in together. The increase in cohabiting unions has counterbalanced the decrease in marriage: the decline in the marriage rate has largely resulted from the fact that cohabitation has replaced marriage as the first union among the young, and that the average duration of pre-marital cohabitation has increased (Finnäs 1993; Pitkänen and Jalovaara 2007).

During the follow-up period of the present study (1991–93) the great majority of cohabiting unions were childless unions that resulted in either marriage or separation within a few years. The transformation of the union to formal marriage was still closely connected to the birth of the first child. Disruption risks for cohabiting unions were much higher than for marriages, even if there were children involved. (Finnäs 1995, 1996; Nikander 1996) Figure 2 demonstrates the fact that the proportion of people in cohabiting unions was small in the older age groups compared to the proportion of married people. Moreover, at higher ages a large proportion of the cohabitants were divorced or widowed (Nikander 1996), which means that as far as first unions were concerned cohabitation was usual only in the youngest groups.

Figure 2. The percentage of cohabiting and marriage partners of the total population by age; women aged 15–64 in 1990



Source: the author's calculations from Statistics Finland (1993b)

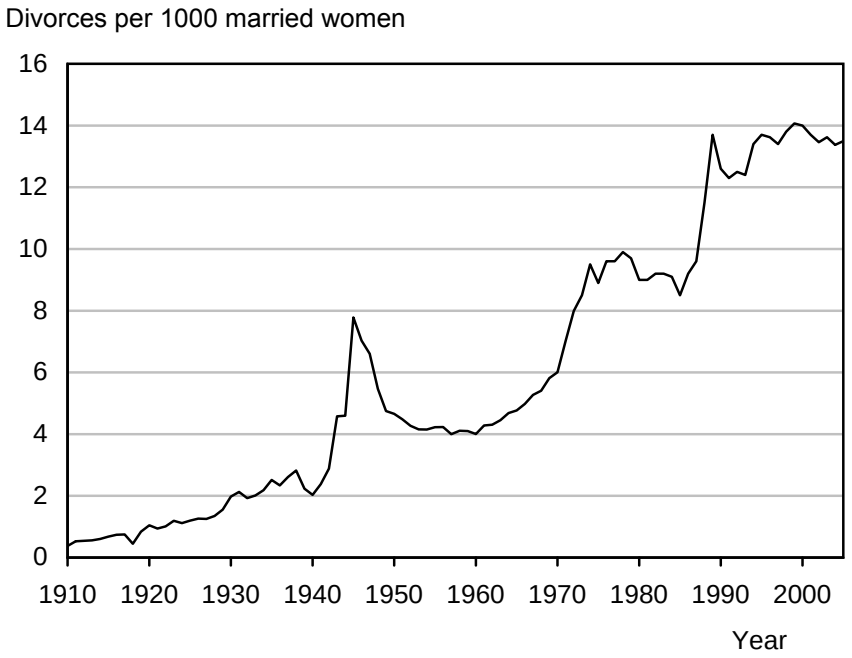
Still, cohabiting unions are heterogeneous. For some couples cohabitation is an intensified form of dating: they may live together mainly because it is convenient and economical (given the time they spend together in any case); and not because of an intention to marry or have children together (Lichter, Qian, and Mellott 2006; Sassler 2004). For others, it is more of a stepping-stone to marriage or a testing stage for determining the viability of the relationship before marrying. For an increasing proportion, however, cohabitation represents a long-term alternative to marriage (see e.g., Kravdal 1999; Seltzer 2000). In Finland too, longer-lasting cohabiting unions, which could in many respects be considered social substitutes for marriage, are becoming more common, and a growing proportion of children are not only born to but also raised by cohabiting parents. Before the study period the signs that cohabitation was becoming an alternative to marriage were clearest in the lower socio-economic strata: women from these groups were more likely to enter cohabiting unions, less likely to marry their cohabiting partner, and less likely to marry before the birth of the first child than those from higher socio-economic groups (Finnäs 1995).

Fertility rates have remained higher in Finland than in most other European countries, and they have been notably stable since the 1980s: in 1990–2005 the total (period) fertility rate (TFR) varied between 1.67 (in 2001) and 1.91 (in 1991 and 1994) (Statistics Finland 1996, 2006b). Childbearing outside marriage has increased significantly in recent decades, hand in hand with the increase in the prevalence of cohabitating unions. At the end of the 1960s about five percent of live births were to mothers who were not married; this increased to around 15 percent in the mid-1980s and in 2005 more than half of first children and 40 percent of all children were born outside marriage (Statistics Finland 2006b; Pitkänen and Jalovaara 2007). For a recent review on fertility in Finland, see Ruokolainen and Notkola (2007).

1.2.2 Divorce on the increase

Of the changes that the Finnish family has undergone in recent decades, the increase in divorce rates is among the most drastic. Figure 3 shows the annual number of divorces per 1,000 married women between 1910 and 2005. Before this period the role of divorce as an immediate cause of marital dissolution was very small (for a longer time series, see Pitkänen 1986). The rate fluctuated during the period but there is a clear upward trend, and rapid rises between the plateaus. The post-war divorce boom of the 1940s was followed by a drop and a leveling off. There was a sharp increase in the 1960s and during the first half of the 1970s, and then a further leveling of at a new plateau. After the reform of the divorce legislation in 1988 (see Chapter 1.3) there was an immediate increase in the rate, which produced a temporary peak, but it rose again in the 1990s and has remained at a much higher level than before the law reform. Note that during the follow-up period of this study (1991–93) the temporary peak following the 1988 reform had just passed and the increase of the 1990s had not yet begun.

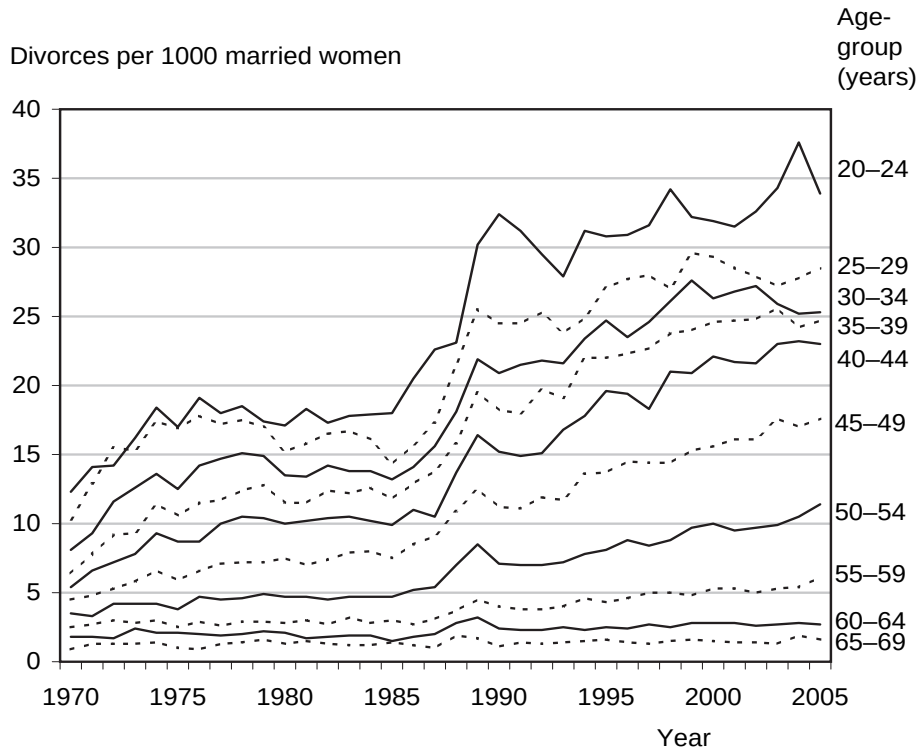
Figure 3. Divorce rate for women (divorces per 1,000 of the married mean population), 1910–2005



Source: Statistics Finland, various annual volumes of vital statistics, Official Statistics of Finland. For the years 1910−1950 the denominator was estimated (by the author) by means of linear interpolation from the census years 1910, 1920, 1930, 1940 and 1950.

Figure 4 shows the divorce rates by age (divorces per 1,000 of the married mean population in respective 5-year age-groups) for women aged 20–69 in 1970–2005. There is a consistent decrease in the rate with increasing age. The rate more than doubled between 1970 and 2005 in all the five-year age groups below the age of 60, and increased at least threefold in the groups between 30 and 55.

Figure 4. Divorce rate by age (divorces per 1,000 of the married mean population in the respective age-groups), women aged 20–69, 1970–2005



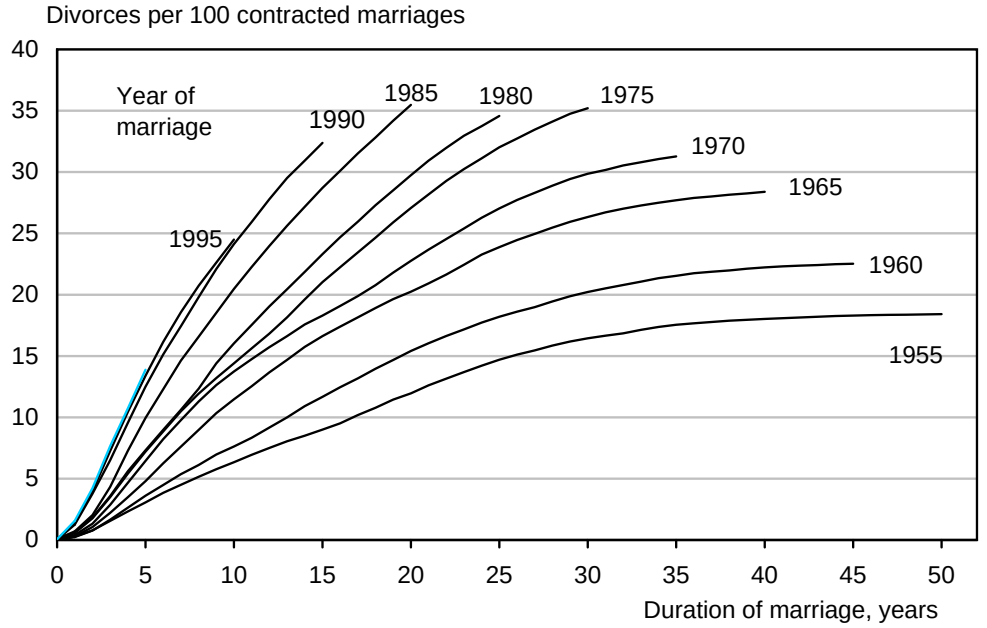
Source: Statistics Finland, various annual volumes of vital statistics, Official Statistics of Finland

The total period divorce rate (TDR), calculated as the sum of duration-specific divorce percentages, gives the percentage of a cohort of marriages that would end in divorce provided that, at each successive year of duration, they were subject to the divorce (and death) rates of the current period. The total divorce rate varied between 28 and 31 between 1980 and 1987, then rose sharply following the reform of the divorce legislation, and increased further in the 1990s from 41 in 1990 to 51 in 1999. Since then it has varied between 50 and 51 (the last point of observation being 2005). It was 43 in all the three follow-up years covered by this study (1991, 1992, and 1993). (Statistics Finland 1992b, 1999, 2006b).

The TDR is a period indicator and is affected by changes in the timing of divorce, among other things. Therefore, it does not necessarily reflect the actual percentages of marriages ending in divorce in real marriage cohorts. Figure 5 shows the percentage of marriages that had ended in divorce by the end of 2005 according to the duration of marriage in every fifth marriage cohort between 1955 and 2000. The younger the cohort, the higher the divorce proportion is at any given duration. The highest cumulative

proportion was reached by the 1985 cohort, in which 35 percent of the marriages had ended in divorce by the end of 2005. The more recent cohorts have reached very high cumulative proportions in a short time. For instance, of the marriages contracted in 1990, 32 percent had ended in divorce during the first 15 years, and of those contracted in 1995, over 24 percent had ended in divorce during the first ten years.

Figure 5. The percentage of marriages that had ended in divorce by the end of 2005 by duration in every fifth marriage cohort between 1955 and 2000



Source: Statistics Finland, various annual volumes of vital statistics, Official Statistics of Finland

Given the current low rates of adult mortality, marriages that end in bereavement tend to last much longer than those ending in divorce. For instance, the median duration of marriages ending in the death of the husband was 46.9 years in 2005, while the median duration of marriages ending in divorce was 11.3 years. Consequently, divorcing individuals tend to be much younger than widowing individuals. For instance, in 2005, the mean age at divorce was 41.3 for women and 43.8 for men, whereas the mean age at widowhood was 70.7 for women and 72.9 for men. (Statistics Finland 2006b.)

The difference in the ages of divorcing and widowed spouses is obviously one reason why the consequences of divorce and bereavement are different. For instance, divorcing spouses often have dependent children. Indeed, parental divorce has become a common experience for Finnish children. In 2005, more than one fifth of 17-year-olds had experienced the divorce of their mother during their lifetime (Statistics Finland

2007). There is less data on the dissolution of cohabiting unions. However, it is known that children of cohabiting parents are even more likely to experience the breakup of their parents' union than children of married couples, even when the children in the family are shared children of the cohabiting partners (Statistics Finland 2007). The majority of children live with their mother after divorce, thus having the father as the nonresidential parent. In most cases divorcing parents keep joint legal custody of their children. (Litmala 2000; Stakes 2000; Statistics Finland 2007.)

As mentioned above, the rise in divorce rates is common throughout the Western world. However, there have been differences in the pace of change, and there are differences in the levels of divorce (Council of Europe 2004; Haskey 1993; Roussel 1993). Table 1 shows the total period divorce rates for selected European countries for the years 1970, 1980, 1990, 2000, and 2002 or 2003. The rates increased throughout Europe during the period, although divorce is still infrequent in the Roman Catholic and Orthodox countries of Southern Europe. Divorce legislation was very strict in many of these countries until recently, although the rates have risen slowly following the liberalization of the laws (Pitkänen and Jalovaara 2007). The former Soviet Republics and Eastern Europe are heterogeneous groups as far as divorce rates are concerned: these countries are at the top and at the bottom of the European list.

Table 1. Total (period) divorce rates[1] for selected European countries in 1970, 1980, 1990, 2000, and 2002 or 2003

	1970	1980	1990	2000	2002/ 2003
Finland	17	28	42	51	51
Denmark	25	40	44	45	47
Estonia	…	50	46	47	48
France	12	22	32	38	43
Germany	17	25	29	41	…
Greece	5	10	9	18	…
Hungary	22	25	27	38	42
Italy	5	3	8	…	13
Poland	14	14	15	17	20
Portugal	1	7	12	26	39
Russian Federation	34	42	40	50[2]	…
Spain	…	…	10	…	10
Sweden	23	42	44	55	54
United Kingdom	16	38	42	…	…

[1] The total divorce rate for year n is the sum of divorce rates (per 100 marriages) at the various durations of marriage.

[2] 1995

…: Information not available

Source: Council of Europe 2004.

Nowadays divorce rates in Finland and the Scandinavian countries are among the highest in Europe. Finland, however, reached its present high levels relatively late – in the 1990s, following the change in legislation in 1988. For instance the 1985 TDR in Finland was much lower than in the Scandinavian countries, and closer to the levels in Central Europe (Council of Europe 2004; Haskey 1993; Roussel 1993).

For the US, crude divorce rates in the 1990s and at the beginning of the 2000s show much higher rates in almost all states than in the European countries with the highest rates (National Center for Health Statistics 2004; Council of Europe 2004). According to recent estimates for the US, approximately half of all marriages end in divorce or separation (Raley and Bumpass 2003; Schoen and Standish 2001).

It should be borne in mind that an increase in divorce is often accompanied by an increase in cohabiting unions, in which separations are frequent. This seriously hampers international comparisons of separation frequency. For instance, the current rates of divorce in Northern European countries underestimate the totality of all union disruptions.

1.3 The judicial divorce process in Finland

This section briefly reviews the Finnish divorce legislation prevailing during the study period (as well as at present). Earlier changes are well-documented and have been discussed in previous literature (e.g., Aarnio and Helin 1988; Allardt 1953; Anttila 1977; Jaakkola 1989; Litmala 2001; Mahkonen 1980; Savolainen 2002).

The old fault divorce system was eliminated in the reform of the marriage legislation (411/1987) effective from the beginning of 1988. This reform had been under preparation for almost two decades in several committees and working groups. Under the new legislation (Marriage Act of 1929 as amended by the Act of 16 April 1987/411), married couples have an unconditional right to obtain a divorce on mutual or unilateral demand after a reconsideration period of six months, when it is granted upon renewed application by one or both spouses. The renewed application has to be made within 12 months from the beginning of the reconsideration period. (If the partners want to divorce later they have to start the proceedings all over again.) No reconsideration period is required if the spouses have resided apart for the previous two years without interruption. Immediate divorce is also allowed in cases of bigamy and when the spouses are within prohibited degrees of consanguinity, but these cases are rare.

Jaakkola (1989) and Litmala (2001) studied features of divorce proceedings after the law reform that came into force in 1988. Jaakkola (1989) based his study on divorce applications filed in Helsinki during the first half of 1988. This six-month period was probably exceptional because the law reform had just come into force. Litmala (2001)

used data on a sample of divorces granted in Helsinki in 2000. Ninety percent of these divorces were granted after the expiry of the six-month reconsideration period and the remaining 10 percent were granted on the basis of two years' separation. The average time from the first to the renewed application was 8.5 months. Every fifth couple renewed the application as soon as it was possible (after six months), whereas every sixth couple waited the 12 months. The length of the proceedings did not depend on whether there were ancillary questions (e.g., maintenance or custody of children) or if it was only a question of divorce, or on whether the couple had children or not. (Litmala 2001)

It is generally agreed that the new divorce procedure is smooth-running and inexpensive, and that the privacy of the parties involved is duly protected (Savolainen 2002). In most cases the spouses file for the divorce together, and the assistance of lawyers is rarely required (Litmala 2001).

As far as the role of legislation in the increasing rate of divorce is concerned, scholars agree that law reforms making the process easier are a manifestation of shifts in attitudes and behavior that have already occurred in society rather than a cause of family changes, although the codification of liberal attitudes may also reinforce the attitudes and behavior (Allardt 1953; Mahkonen 1980; Phillips 1991; also see Pitkänen and Jalovaara 2007).

1.4 The labor market position of Finnish women

The family with two breadwinners is the predominant ideology and practice in Finland (Julkunen 1999). It was clearly still an agrarian country in the 1950s, but from the 1960s onwards the processes of urbanization and industrialization gathered speed. During the modernization of the economy women's labor was needed in both agriculture and industry. Women still worked alongside men on farms, and working-class women had to work as the wages of male workers were low and public social security was undeveloped. The wealthy, urban middle and upper classes were small in size. Consequently, the breadwinner-homemaker model was never as strong as it was in the earlier industrialized European societies and the US. (See Jallinoja 1989; Julkunen 1990, 1999) In the late 1960s and early 1970s, when the first statistical comparisons were published, the female labor-force participation rate was higher in Finland than in any other OECD country (OECD 1988).

The powerful expansion of the public sector after the Second World War provided women with further job opportunities. Eventually the welfare system began to provide services and benefits that encouraged women to combine paid employment with family life, such as family leave and day care for children. During the study period, that is in the early 1990s (as well as at present), the parents of young children were given the option of paid absence from work with full job security. Nearly all children under the age of one are cared for at home by parents on paid maternity or parenthood leave. After

this the parents may choose to care for the child at home and are entitled to paid child home-care leave until the child reaches the age of three. The other common option is local authority day care, which is available for all preschool children at a relatively low cost (Julkunen 1999). Finnish women's employment pattern now closely resembles that of men: women tend to work full-time, and they tend to be in the labor force continuously until retirement age. They tend to take lengthy family leave from work when they have young children, but they remain breadwinners during those periods as they receive allowances. (Rissanen 2001) In 1990 the labor-force participation rate among married women aged 25–54 years was 86 percent, while it was 96 percent among married men of this age (the author's calculations based on Statistics Finland 1993a). The fact that Finnish women tend to work full-time distinguishes them even from other Nordic women. In 1990 only 11 percent of employed women in Finland worked less than 30 hours per week, whereas the percentage rate for women in Sweden was 25, in Denmark 30, and in Norway 40 (OECD 2000). Part-time work has not become a common strategy for combining paid work with childbearing: the proportion is also low among mothers of preschool children. Part-time work is also more of a marginal phenomenon (indicated by the large proportion of involuntary part-time work and the higher proportion of temporary jobs) in Finland than in the other Nordic countries (Nätti 1995; Rønsen and Sundström 2002).

Thus, the family with two breadwinners has become the social standard. At least on the basis of attitudes expressed in survey, Finnish women and men agree that the responsibilities attached to breadwinning, household chores, and parenting should be shared between partners (Melkas 2004). There is also financial pressure for both partners to work, in the sense that families with two breadwinners set the usual standard of living. Taxation practices are individual, and income security arrangements do not favor the breadwinner-homemaker family (Julkunen 1999). Another significant factor is that Finnish women are highly educated (see Lehto 1999), and presumably they want to make use of their training.

The fact that the employment patterns of Finnish women and men are similar does not, however, mean that full equality has been achieved. Problems remain in that segregation of professions according to gender remains strong, wage differentials in favor of men are notable, and employment on short-term contracts is an increasing problem especially among women (Lehto 1999). Women still do most of the daily domestic work. They often consider this unequal distribution of unpaid labor unfair, and it is a common topic of disagreement between partners (Melkas 2004). Moreover, domestic violence against women is common in Finland (Heiskanen and Piispa 1998).

Single parents (the great majority of them are mothers) have high levels of labor-force participation in Finland as well as in the other Nordic countries, and their own earnings combined with various transfers generally give them a reasonable level of income

(Hakovirta 2001). The economic situation of single parents improved in the 1980s, and in the 1990s (the beginning of the study period) the poverty level of single-parent families was at the same level as that of families with two providers. During the recession of the 1990s, however, poverty rates among single parents increased more than among two-parent families (Forssén 1998), and the proportion of social transfers of all income clearly increased between the mid-1980s and the mid-1990s (Hakovirta 2001).

1.5 Earlier research concerning socio-economic divorce-risk differentials

This section reviews previous research concerning the effects of the socio-economic positions of spouses on the risk of divorce and separation. The focus is on quantitative micro-level research the aim of which is to identify individual and couple level predictors of marital disruption by following (either continuously or by means of consecutive censuses) a group (ideally a cohort) of married individuals or couples.

It appears that divorce in Western societies was more frequent in higher than in lower social strata until the early 20th century. However, when the rate of divorce then began to increase and with the reduction of the judicial obstacles and the economic costs, divorce became a realistic option for members of all social strata (Levinger 1965; Phillips 1991). In the 1960s and 1970s several observers in the US reported that divorce was less likely the higher the social and economic position of the husband (for reviews see Cherlin 1979; Levinger 1965, 1976). These early studies were based on cross-sectional data, however, and it was therefore difficult to establish causality.

During the past few decades studies concerning socio-economic and other differentials in marital disruption have not only increased in number but have also developed as far as materials and methods are concerned. Almost all the research in the US and in Europe is now based on relatively large longitudinal surveys or, in the Nordic countries, event-history data drawn from registers (e.g., Hoem 1997; Kravdal 1994; Liu and Vikat 2004; Lyngstad 2004; Nygaard Christoffersen 2002). Advanced methods such as hazard or logistic regression models are now used. Earlier research in Finland was based on both register and survey data. Finnäs has used both register data (e.g., Finnäs 1995, 2000) and survey data (Finnäs 1996), and Nikander (1996) used register data in his study of the formation and disruption of unions.

Of the studies that inform us about the socio-economic differentials in divorce risk, few have focused specifically on the socio-economic factors. Instead, most of the findings reviewed here are from studies focusing on the effects of a variety of demographic and life-course factors on the risk of marital disruption. Some of the inconsistencies probably arise from the differences between studies in terms of the (socio-economic and other) factors that are included in the models.

The earliest studies on socio-economic divorce-risk differentials measured socio-economic position only with respect to the husbands (e.g., Cutright 1971; Haskey 1984). In contrast, some more recent analyses have focused only on women's socio-economic characteristics (e.g., Blossfeld et al. 1995; Finnäs 1996; Hoem 1997; Hoem and Hoem 1992), largely a result of data limitations in that family and fertility surveys often include only women. More recently, an increasing number of studies have included information on both partners and have used a variety of measures (e.g., Bracher et al. 1993; Finnäs 2000; Heckert, Nowak, and Snyder 1998; Liu and Vikat 2004; Ono 1998; Sayer and Bianchi 2000). Variables frequently used to indicate socio-economic position include the level of formal education, earnings, wealth, and occupation (economic activity and occupational class).

Previous studies from Finland (Finnäs 1996, 1997, 2000) and the Scandinavian countries (Hoem 1997; Kravdal and Noack 1989; Liu and Vikat 2004; Lyngstad 2004), as well as from the US (Martin 2006; Raley and Bumpass 2003; Tzeng 1992; Tzeng and Mare 1995) have reported that the risk of marital disruption is inversely associated with the spousal level of formal education. In contrast, German studies have found that the wife's education has no effect (Diekmann and Klein 1991; Babka von Gostomski, Hartmann and Kopp 1998), and studies from Italy (De Rose 1992) and the Netherlands (Poortman 2002) report a positive effect.

Some studies from the US found an increased risk of marital disruption among educationally heterogamous couples (Weiss and Willis 1997), especially if the wife was more educated than the husband (Bumpass, Castro Martin, and Sweet 1991; Tzeng 1992). In contrast, previous studies from the Nordic countries have not found the risk of divorce to be especially high among educationally heterogamous couples (Finnäs 1997, 2000; Kravdal and Noack 1989; Liu and Vikat 2004; Lyngstad 2004).

As far as interactions with individual and historical time are concerned, previous research from the US reports that the wife's low level of education is more predictive of divorce early on in marriage (Morgan and Rindfuss 1985; South 2001; South and Spitze 1986), and several recent studies from the US (see Martin 2006) suggest a divergence in disruption rates by women's educational attainment.

A Finnish study (Finnäs 2000) reported a higher risk of divorce among manual workers than among white-collar employees and entrepreneurs, and some British studies found that marital disruption was more likely among men in unskilled manual occupations than among those in professional occupations (Haskey 1984; Murphy 1985a, 1985b). A more recent British study (Berrington and Diamond 1999) found no clear effect of social class, but this study is not fully comparable as in the data (which included a fairly small number of observations) social class was measured at the age of 23, and the study focused on marital dissolution by the age of 33.

Previous research from the US (Bumpass et al. 1991; Cherlin 1979; Ono 1998; South and Spitze 1986) and from European countries (Babka von Gostomski et al. 1998; Nygaard Christoffersen 2002; Poortman 2002) has consistently reported that the husband's unemployment or unstable employment increases the risk of marital disruption.

Some studies explicitly measure the effect of the wife's unemployment (that is, available for work and seeking a job). A Danish study (Nygaard Christoffersen 2002) reported that both maternal and paternal unemployment increased the risk of family dissolution, and a British study (Berrington and Diamond 1999) reported an elevated risk of divorce among unemployed women as well as among men who were economically inactive.

The effect of the woman's paid work on the risk of divorce is usually measured by comparing "working" women to "non-working" women, or by examining the effect of the number of hours worked. Previous research from the US (Brines and Joyner 1999; Cherlin 1979; Greenstein 1990, 1995; Hiedemann, Suhomlinova, and O'Rand 1998; South and Spitze 1986; Tzeng and Mare 1995) and Europe (Babka von Gostomski et al. 1998; Beck and Hartmann 1999; De Rose 1992; Poortman 2002) commonly reports a higher risk among women who are employed or who work more hours than among non-working women or those who work fewer hours. In Sweden too, wives who work full-time have been reported to have higher rates of first-marriage disruption (Hoem and Hoem 1992; Trussell, Rodríguez, and Vaughan 1992).

A few studies have looked at whether the effect of the wife's being employed changes over (historical) time, and have produced mixed results. Studies from Australia (Bracher et al. 1993), Germany (Beck and Hartmann 1999) and the Netherlands (Poortman 2002) found that the divorce-promoting effect of the wife's employment had weakened over time, while another from the US (South 2001) found an increasingly positive effect of wives' employment on marital disruption.

Studies from the US usually report that the husband's higher earnings or income lower the risk of divorce (Hoffman and Duncan 1995; Ono 1998; South and Lloyd 1995) although some find no effect (Greenstein 1990, 1995). A Finnish study (Finnäs 2000) found that husbands' higher earnings reduced the risk of marital disruption, and that the risk of divorce increased as the wife's income increased (when a number of other socio-economic variables were controlled for).

Findings concerning the effect of the wife's income and relative incomes in the US are inconsistent. Some studies report an increased risk of marital disruption when the wife has a high income or a higher income than her husband (D'Amico 1983; Heckert et al. 1998), whereas others find no divorce-promoting effect (Greenstein 1995; Hoffman and Duncan 1995; South and Lloyd 1995). (For a review, see Sayer and Bianchi 2000.)

A recent study focusing on first marriages in Sweden (Liu and Vikat 2004) reported that the proportion of the wife's income of the couple's total income was positively related to the risk of divorce, when the couple's total income, both partners' levels of education and their interaction, and a number of demographic variables (including the age of the youngest shared child) were controlled for.

There is consistent evidence that home ownership lowers the risk of marital disruption (Finnäs 2000; Murphy 1985a; Ono 1998; Weiss and Willis 1997; for a review on early research see Levinger 1965). Moreover, Finnäs (2000) showed for Finland that the risk of divorce was slightly lower for couples living in a detached house than for those living in a flat; interestingly, controlling for the type of house explained the lower divorce risk of home owners to a very small degree.

As far as differences by marital duration are concerned, previous research from the US suggests that factors such as spousal employment, income, home ownership and monetary assets have similar effects at various durations (Booth et al. 1986, South and Spitze 1986, White and Booth 1991), although South (2001) found that the divorce-promoting impact of the wife's employment became stronger the longer the marriage had lasted.

In conclusion, previous studies have usually reported an inverse association between the socio-economic positions of spouses and the risk of divorce and separation. An exception is that the wife's economic independence, measured in terms of her being employed (as opposed to being engaged in domestic work full-time) and having a high income, may also be associated with an increased risk of divorce.

Some studies focusing on the antecedents of divorce are based on the subjective accounts of divorced individuals about the factors that had led up to their split. Frequent complaints in these retrospective studies include infidelity, verbal and physical abuse, alcohol abuse, financial problems and disagreements over money, incompatibility, and communication problems (for a review, see Amato and Previti 2003). A recent study using prospective data reported that this type of marital problem (including infidelity, drinking, spending money unwisely, and a lack of communication) predicted divorce (Amato and Rogers 1997), which supports the view that the complaints are not merely post-hoc justifications. Overall, the results of studies focusing on personal accounts on the one hand and on demographic and life course variables on the other overlap very little, and there is little integration between the two approaches (White 1990). Amato and Rogers (1997) studied marital problems, demographic and life course factors, and subsequent marital disruption simultaneously, but found no consistent evidence of factors that might mediate the effect of socio-economic factors on the risk of divorce.

1.6 Theoretical hypotheses concerning socio-economic divorce-risk differentials

The great majority of studies on antecedents of divorce in recent decades have been guided by some form of exchange-oriented or rational choice models, such as George Levinger's (1965, 1976) social-psychological framework, or Gary Becker's (1981) New Home Economics. Levinger's framework distinguishes three categories of factors that individuals presumably assess when considering whether to break up a marriage: attraction to the marriage, barriers to disrupting the marriage, and alternatives to the current marriage. Attractions depend on perceived rewards and costs, weighted by subjective probability; barriers refer to forces stemming from sources other than the quality of the marital relationship that restrain spouses from leaving the marriage when attraction is low (e.g., normative pressures from the community, and feelings of obligation toward the spouse and dependent children); and alternative attractions refer to attractions outside the ongoing relationship that are either in conflict with or fully incompatible with the current marital bond. Generally, the socio-economic resources of the family may serve as an attraction in terms of providing material rewards (satisfying needs for physical subsistence, safety, and psychological security) as well as symbolic rewards (e.g., high social status in the community), and they may establish barriers against leaving the marriage, as spouses may be reluctant to break up the financial assets of the family (Levinger 1976).

Becker (1981; Becker, Landes, and Michael 1977) provided a more formal rational-choice framework. The central assumption is that people aim at maximizing utilities from (monetary as well as non-monetary) commodities. Individuals implicitly weigh up the social, economic, and personal costs and benefits of various marital strategies and choose the one that leads to the highest expected utility. Married individuals choose to divorce when the expected net benefits of the ongoing marriage compare unfavorably to its perceived alternatives (such as being single or being in a union with another partner). As far as the economic aspects are concerned, a significant factor is the utility stemming from the ways in which resources are combined, transferred, and exchanged within the marriage. Another important component in the theory is spousal investment in marriage-specific capital. Divorce becomes less likely with the accumulation of such capital (e.g., shared children and property), the value of which (by definition) decreases if the marriage ends in divorce.

Economic and psychosocial models posit different mechanisms through which economic resources might affect marital stability. It is nevertheless a common feature in both to suggest that the husband's economic resources add to the stability, whereas the wife's tend to destabilize the marriage (Bracher and Santow 2001; Ono 1998). Becker's (1981; Becker et al. 1977) microeconomic models of marital instability, now often called "the specialization and trading model" (Oppenheimer 1997), posits

that the major advantage of being married lies in the mutual interdependencies of the spouses, which arise out of their specialization in different productive activities and the exchange of the fruits of their different skills. In practice, the most efficient arrangement would be for the husband to specialize in market work and the wife in domestic production (and reproduction). Accordingly, when a wife's economic resources approach or exceed those of her husband, specialization decreases, the gains from marriage decrease, and the likelihood of marital disruption increases. Psychosocial theories suggest that the husband's poor performance of his role as a provider places various kinds of strains on the marriage, even if the wife also works outside the home (Cherlin 1979), and the husband's unemployment is strongly associated with distress among the partners (for a review, see Voydanoff 1991). Furthermore, a wife who is employed and independent of her husband in terms of economic resources has more opportunities outside the marriage as well as the confidence that she would be capable of maintaining an independent household should it be necessary (Nock 1995).

It is often argued that the economic resources of the wife can affect marital stability in two opposing ways, referred to as the "income effect" and the "independence effect" (Cherlin 1979; Ross and Sawhill 1975). On the one hand, they increase the total resources of the family, which in turn contributes to family stability irrespective of the source (the income effect). On the other hand, the wife's independence from her husband (in the form of her own earnings or social security benefits) decreases the gains from specialization, and lowers one barrier for her to leave a personally unsatisfying marriage (the independence effect). In principle, the independence effect applies to both genders, but it is considered to be especially important for wives since women tend to have lower actual as well as potential earnings than men.

In testing or extending the independence effect it is important to establish whether the major factor is the absolute amount of the wife's economic resources, her resources relative to those of her husband, or both. On the one hand, the specialization and trading model seems to imply that relative resources are important: as the wife's economic resources approach or exceed those of her husband, the gains from the gender differentiation of conjugal roles become lower and the wife is less reliant on her husband's income for her current standard of living (Becker et al. 1977; Cherlin 1979). On the other hand, the absolute amount of resources may matter, the critical factor being whether or not the wife's income is adequate for maintaining an independent household. (see Oppenheimer 1997)

Overall, homogamy is the norm in partner selection. The reasons for this include constraints in the marriage market, the preference for social similarity, and group control. It has also been shown that socio-economic homogamy is the norm in Western countries (Kalmijn 1998). It is assumed that homogamy generally strengthens marriage

(Lewis and Spanier 1979) because, for instance, dissimilarity in world views and tastes would complicate shared activities and hinder mutual understanding (Kalmijn 1998). The economic argument posits that as far as family functioning is concerned, spousal similarity is optimal with respect to personal characteristics, including education, intelligence and property income, whereas dissimilarity is optimal for characteristics that are good substitutes in the production of commodity income, such as wage-earning potential (Becker 1973; Becker et al. 1977). Some authors maintain, however, that similarity between spouses in terms of their economic roles might also strengthen the marriage. For instance, according to the theory of role homophily, the similarity of economic roles promotes communality in the spouses' outlooks, which in turn enhances marital solidarity, communication, and companionship (Simpson and England 1981).

It is noteworthy that the theories on the consequences of homogamy and homophily concern "marital solidarity" or "marital quality" rather than marital disruption (Lewis and Spanier 1979). Perceived attractiveness of the marital relationship is presumably a key factor in marital stability, but barriers to divorce and the attractiveness of alternatives to the current marriage may be decisive in terms of whether dissatisfaction translates into marital disruption (Levinger 1976). It should therefore be remembered that the same spousal resources that might enhance marital interaction could also give a person greater confidence to believe that he or she could manage without the spouse (Simpson and England 1981).

Several theorists have argued that as married women and men become increasingly equal in their economic and domestic roles, the effects of wives' and husbands' economic resources become more symmetrical than the specialization and trading model suggests (for a review, see Sayer and Bianchi 2000). The basic assumption of this model – that the advantages of being married result from gender-role specialization and exchange – is outdated in many Western countries in which the family with two providers has become an increasingly normal arrangement. Ross and Shill (1975) argued that as women's economic opportunities expand relative to men's, people will increasingly marry and remain married for reasons such as personal satisfaction, and less for economic reasons such as a rigid gender differentiation in marital roles. (Any remaining economic dependencies such as economies of scale would be symmetrical with respect to gender, as each partner would be equally dependent on their joint income.) As companionship gains in significance, the solidarity arising from role congruity becomes increasingly important for marital satisfaction (Simpson and England 1981). In fact, the advantages of having working wives, such as the economic resources they bring to their families (Oppenheimer 1997), may start outweighing any disadvantages. Further, as the gainful employment of married women becomes increasingly common, it ceases to signal unconventionality or the existence of marital problems (Bracher et al. 1993). At the same time, as husbands are no longer the sole or predominant providers the social consequences of being less successful in this

role might be weaker (Cherlin 1979). For instance, Oppenheimer (1994, 1997) argues that the gender-role specialization is an inflexible and risky strategy in contemporary Western societies and that a more collaborative model in which both partners are employed buffers against economic uncertainty, financial strain, and decreases in income.

There are problems in establishing causality with regard to the independence effect as well as the effects of socio-economic factors on the risk of marital disruption in general. The theoretical arguments concern the (indirect) effects of economic factors, although the possibility of direct selection (reverse causation) whereby the divorce process affects the socio-economic position of the partners rather than the other way around is obvious. For instance, women may seek employment because they anticipate divorce and therefore prepare to become economically, socially, and psychologically more independent (see e.g., Rogers 1999). Another possibility is that of indirect selection, whereby unmeasured third factors that affect both the socio-economic positions of the partners and the risk of divorce explain the association between them. For instance, some factors related to the spouses' personalities, values or social skills may affect success in occupational life as well as the probability of marital disruption.

Another influential theoretical approach that has guided research on divorce is the life-course perspective (Aldous 1990; Bengtson and Allen 1993). It is well known that the likelihood of divorce declines over the marital life course. Presumably, this occurs partly because of selective attrition, and partly because of changes in the propensity to divorce (on the theoretical reasons behind this, see sub-study III). However, less is known about how the other precursors of marital disruption vary over the life course of individuals and families. There is a strong possibility that the effect of socio-economic factors interact with time in the marriage, for instance: as the significance of the marriage as well as the consequences of divorce for the individuals involved presumably vary over the various stages of their marital lives, the antecedents of divorce could also be expected to vary (South and Spitze 1986).

Earlier literature provides differing hypotheses on how the effect of spouses' socio-economic positions might vary over time in the marriage. On the one hand, there are theoretical reasons to expect that the effects of socio-economic factors strengthen as the spouses age and the marriages survive. Financial insecurity is common among young marriage partners who are just beginning their work careers, and it may be easy for them to accept it as temporary. With increasing age and time in the marriage, variables measuring socio-economic position should become more indicative of the spouses' social and economic success over their lifetimes and therefore, perhaps, also more predictive of marital stability. Thus, the socio-economic positions of spouses as well as each one's evaluation of the resources are expected to crystallize over time in the marriage. (Booth et al. 1986; South and Spitze 1986).

On the other hand, there are several reasons to expect the effect of socio-economic position on divorce risk to weaken as spouses age and marriages last longer. Firstly, over time in the conjugal relationship, spouses presumably build up various kinds of barriers (such as shared children and social networks) that may help in keeping the marriage together through times of economic difficulties. Secondly, high levels of social and economic resources could be taken to indicate that the spouses are well-prepared for assuming responsibility for a family, and proper preparation is assumed to promote high marital stability especially early in the marriage. Thirdly, it has been suggested that, especially at later stages, spouses with greater social and economic resources have more attractive alternatives to remaining married and therefore, may be equally or even more prone to divorce at that stage than spouses with fewer social and economic resources. (South and Spitze 1986)

A better knowledge of the variation in the effect of spousal socio-economic position will add to the understanding of how these factors influence marital stability. With a view to expanding exchange-based theoretical models on divorce, it would be useful to know whether they need specification in order to take into account variation in the antecedents over the life course (see South 2001). The examination of interactions with duration will also establish whether the findings can be generalized to the various marital durations and to all cohorts in recent decades.

1.7 Aims of the study

This study focuses on the impact of the socio-economic positions of marriage partners on the risk of divorce in Finland between 1991 and 1993. The objective is to extend previous knowledge on socio-economic differentials in divorce risk in several ways. More specifically, the aims are:

- to identify differentials in the risk of divorce according to various aspects of the socio-economic positions of the husband, the wife, and the couple;
- to disentangle the influences of the various aspects of the spouses' socio-economic positions;
- to examine the causal pathways through which each socio-economic factor is related to the risk of divorce;
- to investigate the joint effects of the spouses' socio-economic positions on the risk of divorce;
- to explore the possibility that the effects of the spouses' socio-economic positions vary with the duration of the marriage.

Knowledge about socio-economic divorce-risk differentials in Finland is scarce. It would be foolhardy to generalize findings from the US or other European countries (especially other than the Scandinavian countries) to Finland, as Finland differs from these societies in areas such as work life and social welfare.

Furthermore, Finland offers an interesting case for research on interconnections between socio-economic factors and family outcomes. It represents a context that is different in terms of gender relations from the US context for instance, within which prominent theories of marital stability have been developed, and it therefore offers an opportunity to challenge or expand those theories. As discussed above, the specialization and trading model assumes highly segregated gender roles, which is in contrast to contemporary family and work patterns in Finland, where the family with two providers has become the social standard. Thus, it could be assumed that the effects of economic resources on the risk of divorce are not as asymmetric as the model predicts. For instance, given the high labor-force participation rate of women and the extent of the social-security system in Finland, it seems unlikely that a large proportion of Finnish married women would be unable to leave unhappy marriages for economic reasons. In a similar vein, it could be assumed that the influence of the economic resources of spouses on the risk of divorce is not very strong because, for instance, social-security benefits buffer against temporary decreases in income.

The tendency in empirical research concerning economic circumstances and family outcomes has been toward the richer measurement of socio-economic position and the inclusion of the position of both partners. In their 1990s review, White and Rogers (2000) suggest that research on marital stability would benefit from "a broad conception of social class that includes wealth, education, earnings, security, and debt" (White and Rogers 2000, p. 1043). This study uses several symmetrical measures of the socio-economic positions of both partners (see Chapter 2.5).

The unusually large number of observations in the data set is a significant advantage, since it enables the examination of groups that are theoretically important but small in size. It also enables the simultaneous analysis of associations between various socio-economic characteristics of spouses and the risk of divorce without the problem of multicollinearity becoming too severe.

The aim of sub-study I was to contribute to the knowledge on socio-economic divorce-risk differentials by disentangling the influences of a large number of indicators of the socio-economic positions of the wife, the husband, and the couple. The first step was to identify the divorce-risk differentials according to 10 indicators of the spousal socio-economic position by examining them individually. The next step was to distinguish the independent effects of each indicator. Furthermore, in an analysis based on the logic of elaboration, the indicators of the socio-economic positions of spouses were added to the models following an assumed causal order of the variables, and changes in the effects following the introduction of new variables were assumed to reveal how – through which pathways – each one was related to the risk of divorce. Finally, different types of explanation for the associations between the socio-economic positions of the

spouses and the propensity to divorce were identified. Note that sub-study I focused on the main effects of the socio-economic position of each partner; examination of the interactive linkages was left for sub-study II.

Sub-study II focused on the joint effects of the wife's and the husband's socio-economic positions and examined hypotheses concerning the interplay between them. Three socio-economic variables were used in the empirical analyses: education, economic activity, and income, each of which combined symmetrically measured information on the positions of the two spouses. A key feature of the sub-study was the consideration of the married couple as a unit: divorce is a couple-related event, even if one of the partners is more active in ending the marriage (Bracher and Santow 2001). Further, the socio-economic position of the married couple as well as of each partner is presumably determined in terms of the joint position of both. Finally, some hypotheses (including the relative-incomes hypothesis and hypotheses on the divorce-promoting effect of socio-economic heterogamy) predict that there are interactions between the socio-economic positions of the two marriage partners. If this is the case, the effects of the position of one partner become fully visible only when they are examined in the context of that of the other.

Given its focus on the timing and sequencing of events in the lives of individuals and families, the life-course perspective (Aldous 1990; Bengtson and Allen 1993) has drawn attention to the possibility that various factors affecting the propensity to divorce vary with individual (and historical) time. While the variation in divorce risk according to temporal and life-course factors has been examined in several studies (see Chapter 2.6.2), much less is known about whether there are interactions between life-course and other factors that affect the risk. The aim in sub-study III was to further the understanding of socio-economic differentials in divorce risk by exploring the possibility that the effects of the socio-economic positions of the spouses vary with the duration of the marriage (that is, time elapsed in marriage). The empirical analyses were based on the same 10 indicators of socio-economic position as in sub-study I. Because of its differential distributions in the various birth cohorts, the level of spousal education was presumed to be a problematic measure of socio-economic position. It was therefore expected that a fuller picture of the potential interactions between the socio-economic and the temporal factors would emerge when other measures were also used.

This summary report includes an overview (Chapter 3) and a discussion (Chapter 4) of the results of the three sub-studies. The concluding chapter (6) synthesizes the main finding of the whole thesis study.

2 Data and methods

2.1 Data source

All the analyses reported in the sub-studies are based on a register-based data file compiled by Statistics Finland (permission numbers TK-53-1016-98, and TK-53-1331-04). The data file is based on records from the 1990 census, which were linked with divorce records for wives for 1991–93 and enriched by records from various annual registers for this period, as well as from two earlier censuses. Further, the records for husbands were linked with the records of their wives (as of the end of 1990), resulting in a couple-level file, which means that the unit of observation was a couple rather than an individual.

The analyses include Finnish first marriages that were intact at the end of 1990, with certain further restrictions (described later on), and these marriages were followed up for divorce between 1991 and 1993.

The same data set was used in all three sub-studies, with one additional restriction in sub-study III. The differences were nevertheless kept to a minimum so that the comparability would not suffer.

The compilation of the data at Statistics Finland proceeded in two steps. The first of these was to create the couple-level data file by linking records from the various files, and linking the husbands' records with those of their wives. The second step was to calculate the marriage-years at risk and to cross-tabulate the number of divorces and marriage-years according to the explanatory variables needed in the analyses. In order to limit the size of the table it was necessary to clearly define the study population as well as to select and to collapse the explanatory variables before the tabulation. Cells including no marriage years at risk were deleted. The contingency table used in the analyses includes ca. 879,000 cells, or rows. The SAS program that classified the explanatory variables and tabulated divorces and exposure was designed, written, and tested at the Department of Sociology, University of Helsinki. A 10 percent random sample drawn from the couple-level file was used for testing the program.

For the sake of the protection of individual anonymity, the couple-level file is kept at Statistics Finland, and the analyses are based on tabulated data. This data does not include personal identity codes. Further, when the tabulation was performed care was taken (e.g., by collapsing the categories of variables) to make it impossible to identify individuals from the data.

The couple-level file includes the exact dates of divorce and censoring events (except migration), and marriage-years were calculated using the exact dates. Right-censoring was introduced at the dates of a spouse's death, the emigration of the wife, and the end of the follow-up period. Data on divorces were obtained from the wives' individual-level records, meaning that if the wife emigrated during the follow-up the divorce was unobserved. This is why a marriage was censored if the wife emigrated, but the follow-up continued if the husband emigrated. As the data did not include the dates of the wife's emigration, moving out of the country was inferred from the information that she was no longer registered in the population of Finland at the beginning of a follow-up year.

The table used in the analysis covered 766,637 couples at the beginning of the follow-up period. During the three-year follow-up, ca. 2.25 million marriage-years at risk accumulated and 21,309 marriages were dissolved through divorce. The data used in sub-study III was somewhat less extensive: ca. 2.10 million marriage-years at risk accumulated and 21,204 marriages were dissolved through divorce.

2.2 The study population

A couple was included in the data if the spouses were married (and not judicially separated) at the end of 1990, the marriage was the first for both partners, both were Finnish citizens, the wife was 64 years of age or younger, and the spouses were registered as domiciled in the same dwelling at the end of 1990. An additional restriction in sub-study III was that the analysis excluded marriages that had remained intact for 40 years or longer. The reasons for the main restrictions are discussed in the following and the consequences are discussed in Chapter 5.

The data were stratified by marriage duration in the analyses of sub-study III. There were very few divorces among marriages that had remained intact for 40 years or longer, and this category was therefore excluded. In the description of the data further on the percentages refer to the data as analyzed in sub-studies I and II.

The 21,309 divorces included in the data comprise only 55.3 percent of divorces occurring in Finland between 1991 and 1993, but this is consistent with the exclusion of some known high-divorce-risk groups – especially marriage partners living apart at the beginning of the follow-up period.

By the beginning of the follow-up period the majority of new marriages were preceded by non-marital cohabitation. Further, longer-lasting cohabiting unions, which could be considered social substitutes for marriage, were becoming more common. Owing to data limitations, this study is restricted to judicial marriages.

Entering a second or higher-order marriage is rather selective in Finland. Further, antecedents of divorce may be different for second and subsequent marriages than for first marriages. For the sake of homogeneity, this study was restricted to marriages in which neither spouse had been married previously, thereby excluding about 12 percent of marriages.

The study population was restricted to couples where both partners were Finnish citizens. This was done both for the sake of homogeneity and because of the fact that register-based data on foreigners is often deficient. Approximately one percent of marriages were excluded on this basis.

Marriages in which the wife was 65 years of age or older were also excluded. Divorce is infrequent in the oldest age groups, and the measurement of the socio-economic position of older people could be problematic in some respects because they tend to have retired from work.

Married couples living apart at the end of 1990 were excluded from the data. Presumably the majority of these couples were living apart because of marital discord, and thus these marriages had in effect ended by the beginning of the follow-up period. They may have filed for divorce, and the spouses may have been cohabiting with a new partner.

Following the reform of the marriage legislation, effective from 1988, Finnish divorce law no longer recognizes the concept of judicial separation. There were still some couples who were judicially separated (but not divorced) at the end of 1990, and they were excluded from the data.

The study includes only heterosexual marriages. Homosexual unions had no legal status in Finland during the study period: this was given in 2002.

2.3 The study period

The study population was followed up for divorce during a three-year period, 1991–1993. This period was exceptional in Finland in two respects that may be relevant to this study.

Firstly, the 1988 reform of the marriage act was still recent. In the years following it the rate of divorce rose to a higher level than ever before, the strong peak lasting for two years (1989 and 1990). Many of the divorces granted during this period were probably exceptional in that they were to couples who had separated earlier but had postponed the judicial divorce process until after the reform. Presumably the majority of these postponed divorces had been obtained by the beginning of the study period. Further, there should be few of these postponing couples in the data because those living apart at the end of the follow-up were excluded.

Secondly, the economic situation in Finland weakened significantly during the study period. The rapid growth of the late 1980s turned into a deep recession in the early 1990s. For instance, the unemployment rate in 1990 was still only 3.2 percent, but in 1991 it was already 6.6 percent; it rose to 11.7 percent in 1992, and one year later to 16.3 percent (Statistics Finland 2004). Thus, many Finns became unemployed during the study period and experienced reductions in income. Unemployment and level of income were measured at the beginning of the study period, and any changes during it remain unobserved. It is nevertheless plausible that there was a time lag in the effect of the economic situation on divorce risk, and that the measurement problems are not overly serious. This measurement issue is discussed in Chapter 5.4.

2.4 The concept and measurement of marital disruption

In this study, dates of divorce concern granted divorces, information on which is transmitted to the Population Information System by the district courts. Data on divorces were obtained only from the wives' records.

Information on granted divorces is reliable in that there is no reason to suspect that divorces granted in Finland would go unreported. There is a possibility, however, that some divorces granted abroad are not included in the statistics, but this reliability problem is probably insignificant. (Note that only marriages between Finnish citizens were included.)

Demographic analyses concerning antecedents of divorce often rely on the date of separation (moving apart) as the marker of marital disruption. The consequences of using granted judicial divorce as the (only) indicator is discussed in Chapter 5.3.

However, already at this point it is necessary to remind the reader that marital disruption is a process rather than an event. The divorce process may include various steps, starting from the first indications of marital strain and attempts to reconcile, and ending with the final decision to divorce, moving apart, and filing for and obtaining the judicial divorce. Individuals involved have to deal with various emotional, social, economic, and judicial aspects of the process both before and after obtaining the judicial divorce. (The various aspects and steps of the process have been described by clinically oriented researchers concerned with individual-level adjustment to divorce; see e.g., Raschke 1987.) This process nature of divorce has to be taken into account in the measurement of marital disruption in an empirical analysis and in the interpretation of the results. For instance, by the time the judicial divorce is obtained the process is well underway, and this has to be taken into account when deciding at which point in time prior to the judicial divorce the explanatory factors should be measured: a major problem is the possibility of direct selection (see Chapter 4.2.2 and Chapter 5.4).

2.5 The concept and measurement of socio-economic position

2.5.1 The concept

The term socio-economic position is used in this study as a broad concept referring to various aspects of the economic and social position of each spouse and couple in hierarchies of social stratification. Social stratification implies the institutionalized uneven distribution of valued resources between individuals and families. Valued resources include for instance economic assets, authority and power, prestige and knowledge, social networks and social ties, as well as cultural assets such as privileged life-styles. (Grusky 2001)

Smith and Graham (1995), as well as White and Rogers (2000), recommend that family researchers make fuller use of various indicators of socio-economic position. They note that according to recent theoretical treatments of socio-economic stratification it has several dimensions (which are all likely to affect family variables), but many empirical analyses in the area of family research rely on only a few indicators. A measurement that is too narrow may lead to underestimates of the true effect of inequality. Further, when several socio-economic concepts are measured it is possible to compare them in terms of which ones best account for family outcomes. This is certainly useful, as interpretations of an inverse association between the socio-economic position of spouses and the propensity to divorce, for instance, depends on which dimensions of socio-economic position are important.

Several indicators of spouses' socio-economic positions were therefore used in the present study. Socio-economic position could be viewed as a "latent" phenomenon consisting of various dimensions. As far as spouses and couples are concerned, these dimensions are mutually related in that those who are privileged in one respect are more likely to be privileged in other respects. The dimensions are nevertheless distinct empirically (in that covariation is not perfect) as well as conceptually, and therefore the possibility of disentangling the effects of each dimension facilitates understanding of socio-economic differentials. The various indicators used in this study reflect various dimensions of socio-economic position in varying degrees. Education could be considered a measure of a person's social and cultural resources, and occupational class measures prestige related to occupation as well as the nature of the work. Education and occupational class could also be viewed as structural determinants of material resources, and they both affect values, norms and lifestyles. Economic activity captures the type of labor-force attachment and tends to affect material resources, and income is the most straightforward measure of current economic resources. Housing density and housing tenure may reflect such things as the standard of living and spouses' willingness and ability to make union-specific material investments. The analyses assume a causal order of the various

socio-economic factors that runs from the level of education through occupational class, economic activity and income to housing tenure and housing density: this follows Duncan's model whereby educational attainment affects occupational attainment, which in turn is reflected in income, and income, in turn, can be used for consumption and investment (Duncan 1961; Duncan, Featherman, and Duncan 1972).

In this case, data on both the wives' and the husbands' socio-economic positions were used. This has several advantages. Firstly, in a society in which the status of both marriage partners tends to be based on their own labor-force involvement, assessment of the couple's socio-economic position is more complete when the position of both partners is considered. Secondly, the possibility of disentangling the effects of each spouse's socio-economic position may enhance interpretation of the socio-economic differentials in divorce. Thirdly, having data on each spouse is a prerequisite for being able to examine the theoretically important question of how the positions of the two marriage partners interact.

Table 2 summarizes the inclusion of the various socio-economic variables in the three sub-studies. Ten measures of the socio-economic positions of both spouses were used in sub-studies I and III: education, occupational class, economic activity, and income (all measured separately and symmetrically for each spouse), and the couple's housing tenure and housing density. The only difference between sub-studies I and III in the use of socio-economic variables is that in sub-study III the level of both spouses' education was measured in more detail (four categories) than in sub-study I (three categories).

Table 2. Summary table of the inclusion of socio-economic variables in each sub-study

	Sub-study I	**Sub-study II**	**Sub-study III** [1]
Education	Wife's and husband's separately; 3 categories in each	Wife's and husband's combined	Wife's and husband's separately, 4 categories in each
Occupational class	Wife's and husband's separately	–	Wife's and husband's separately
Economic activity	Wife's and husband's separately	Wife's and husband's combined	Wife's and husband's separately
Income	Wife's and husband's separately	Wife's and husband's combined	Wife's and husband's separately
Housing tenure	Yes	–	Yes
Housing density	Yes	–	Yes

[1] Note that marriages that had lasted 40 years or longer were excluded from the analyses of sub-study III.

Combined measures of the two partners' socio-economic positions were used in sub-study II. Three variables were used, namely education, economic activity, and income. Each of them describes the various combinations of the wives' and husbands' positions. Since the sub-study focused on the interplay of the two spouses' socio-economic positions, variables describing housing tenure and housing density were excluded. The joint effects of each spouse's occupational class were examined in the preliminary analyses, but the (complex) analysis on class was left out of the final report. The combination variables are useful in two respects. First, they allow examination of the interactions between the wives' and the husbands' socio-economic positions, and they describe the socio-economic position of the couple as a unit, which (as well as the position of each partner) is determined by both partner's status jointly.

In the following sub-sections, the variables are described as they were used in sub-studies I and III. The socio-economic indicators describe the spouses' circumstances at the beginning of the follow-up (the end of 1990). Some data was retrieved from earlier censuses when the occupational-class measure was created, as described below.

2.5.2 Educational level

Data on both partners' levels of formal education were obtained from a register indicating the highest educational qualification achieved by each individual. The following classification was used in sub-study III:

1. basic (about nine years or less; persons for whom no data on post-basic education is registered);
2. lower secondary (persons with occupational training of less that three years);
3. upper secondary (persons with occupational training of three years, as well as those who had passed the matriculation examination, which entitles the candidate to continue his or her studies at the university level);
4. tertiary (persons with an occupational training of four or five years, or a university-level certificate or degree).

The lower and upper levels of secondary education were combined in sub-studies I and II. This was not done in sub-study III, because the differences in divorce risk between these two categories were much clearer when they were examined in data stratified by marriage duration.

2.5.3 Occupational class

The wife's and the husband's occupational class were used as explanatory variables in sub-studies I and III. The basis of the classification was the "socio-economic status" classification used by Statistics Finland (see Central Statistical Office of Finland 1989). For the economically active, occupational class was based on the person's own

occupation in 1990. Those who were economically inactive (e.g., the unemployed, pensioners, those fully occupied in domestic work) in 1990 were classified as far as possible on the basis of their occupation at the time of the 1985 or 1980 census or, if this could not be determined, by that of the household unit's reference person. Students were the exception in that neither an earlier occupation nor the occupation of the head of the household was looked for: all students were thus placed in the group "other", which also included those for whom no occupational class could be defined by any of the above criteria. Note that, to some extent, the attribution of occupational class according to the household-dwelling unit's reference person in practice means that it was the same for both spouses. In this respect, the occupational-class variables are an amalgam that in most cases describes the individual status of each spouse, but in some cases it is more of a description of the household's status.

The 1990 census did note separate manual-worker occupations according to the degree of skill and specialization required for the job. The classification was therefore refined at the University of Helsinki Department of Sociology, so that manual-worker occupations were divided into skilled and unskilled by combining the Erikson-Goldthorpe social-class scheme and the Nord-SEI and the Swedish SEI classifications. In this classification, unskilled workers were those who were classified as unskilled or unspecialized in all the three schemes (Pensola 2000).

The following classification was used:

1. upper-white-collar employees (managers and higher administrative or clerical employees);
2. lower-white-collar employees (lower administrative or clerical employees);
3. skilled manual workers (workers in skilled or specialized manual jobs excluding farm and forestry workers);
4. unskilled manual workers (workers in unskilled jobs as well as farm and forestry workers);
5. farmers (farmer employers and own-account farmers);
6. other self-employed persons (employers with the exception of farmer employers as well as other self-employed persons excluding own-account farmers);
7. others (those whose current and former occupations as well as the occupation of the reference person were unknown; as well as all students).

2.5.4 Economic activity

The variables concerning the wives' and the husbands' economic activities were based on the Statistics Finland classification of the "main type of activity". This, in turn, is based on data obtained from various registers of individuals' economic activity during the 1990 census week, which was the last week of the year. The following classification was used:

Labor force

1. employed (wage earners and entrepreneurs);
2. unemployed;

Persons outside the labor force

3. students (here including conscripts and conscientious objectors);
4. pensioners;
5. others (or others outside the labor force. Comprises persons who are outside the labor force but are not students, conscripts or conscientious objectors, and pensioners, and includes those fully occupied in domestic cork, for example.)

Persons (mostly women) fully occupied in domestic work, also referred to as homemakers, could not be identified on the basis of the (register-based) 1990 census data. In practice, they were included in the category "other (outside the labor force)". Note, however, that employed persons on family leave usually remain registered as employed persons.

The employed labor force could not be divided into full-time and part-time workers: part-time work is relatively rare in Finland, even among mothers of pre-school children (see Chapter 1.4).

2.5.5 Income

The income variables describe the level of each spouse's income subject to state taxation in 1990. The data files of the National Bureau of Taxation were the sources of the information. Income subject to state taxation does not include scholarships and grants received from public corporations (for studies or research, for example), certain income earned abroad, certain social-security benefits or tax-exempt interest income. Since the analyses used tabulated data, income (as well as the other explanatory variables) had to be treated as a categorical variable. Income was classified as follows:

1. FIM –49,999;
2. FIM 50,000–99,999;
3. FIM 100,000–149,999;
4. FIM 150,000–199,999;
5. FIM 200,000 or more.

The same income classification was used for wives and husbands because this served the analysis focusing on relative incomes. Clearly, a problem here was the different income distributions, since married men tend to have higher incomes than married women. For instance, the fourth and fifth income categories taken together comprised 27.3 percent of the husbands but only 5.6 percent of the wives included in the follow-up. Thus, the substantive significance of belonging to these high-income categories

was different for the women and the men in that the women were much fewer and thus more exceptional. Unfortunately, the effect of the different income classifications could not be tested because the number of variables that could be included in the data set was limited.

2.5.6 Housing tenure and housing density

Sub-studies I and III included two variables describing the material living conditions of the married couple at the end of 1990. Housing tenure was classified as follows:

1. home-owner: an occupant of the dwelling owns the house or shares in the housing corporation;
2. rented: rented, employer-provided or similar arrangement;
3. housing-tenure status unknown.

The housing-density classification was based on the occupancy-rate categorization used in the 1990 census. Dwellings were classified in three categories by comparing the number of persons in the household unit and the number of rooms in the dwelling. The classification used in the analyses was the following (classes 1–3 are described in Table 3):

1. spacious (as in Table 3);
2. normal (as in Table 3);
3. overcrowded (as in Table 3);
4. housing density unknown.

Table 3. The housing-density classification

The number of persons in the household-dwelling-unit	The number of rooms in the dwelling (with kitchen excluded from the number of rooms)									
	1	2	3	4	5	6	7	8	9	10+
1										
2							Spacious			
3			Normal							
4										
5										
6		Overcrowded								
7+										

Source: Statistics Finland 1992c.

2.6 The measurement of potential confounding factors

2.6.1 The inclusion of the control variables in each sub-study

A set of variables referred to as "control variables" was included in all the analyses. All the control variables were based on data obtained from the Statistics Finland registers. They are variables that require adjustment because they are potential confounding factors in the association between the socio-economic position of spouses and the risk of divorce. In other words, they are factors that are likely to affect both in such a way as to at least partly explain the association between them. The control variables are described below.

Sub-studies I and II included four control variables: marriage duration, the wife's age at marriage, family composition, and the degree of urbanization of the municipality of the couple's residence. In sub-study III, in which the data were stratified by marriage duration (in five- or 10-years segments), the wife's age (at the beginning of the follow-up) was included among the control variables in order to ensure that time was adequately controlled for. Marriage duration was updated dynamically during the three-year follow-up. All other control variables were fixed at the beginning of the follow-up. Table 4 summarizes the use of control variables in each sub-study.

Table 4. Summary table of the inclusion of the control variables in each sub-study

	Sub-study I	Sub-study II	Sub-study III [1]
Marriage duration	Yes	Yes	Used for stratifying the data
The wife's age at marriage	Yes	Yes	Yes
The wife's age at the beginning of the follow-up	-	-	Controlled in 5-year categories
Family composition	Yes	Yes	Yes
The degree of urbanization	Yes	Yes	Yes

[1] Note that marriages that had lasted 40 years or longer were excluded from the analyses of sub-study III.

Table 2 in sub-study I shows the distributions of marriage-years (%), numbers of divorces, and relative divorce risks (see Chapter 2.7) for marriage duration, the wife's age at marriage, family composition, and degree of urbanization. The variation in divorce risk by marriage duration, the wife's age at marriage, and family composition is described in more detail in Chapter 3.1, which also presents some figures on how adjusting for the control variables affected the socio-economic divorce-risk differentials.

2.6.2 Age, age at marriage, and marriage duration

Age, age at marriage, and marriage duration all measure individual time (as opposed to historical time; see Thornton and Rodgers 1987), and act as proxies for the maturation of an individual or a union. Age at marriage has consistently been found to have a strong impact on the propensity to separate or divorce, with lower ages related to higher risks of marital disruption, in Finland (Finnäs 1996, 2000) as well as elsewhere (e.g., Balakrishnan et al. 1987; Bumpass and Sweet 1972; Lehrer 1988/1993; Morgan and Rindfuss 1985; Murphy 1985a; Raley and Bumpass 2003; South and Spitze 1986). The ages of spouses and marriage duration are strongly related, and the results are similar: marital disruption is less likely when the spouses are older and when the marriage has lasted a longer time (Morgan and Rindfuss 1985; Thornton and Rodgers 1987). This is what is to be expected on the basis of both selective attrition and actual changes in the propensity to divorce. (Theoretical explanations for these associations are discussed in sub-study III.)

While age at marriage, current age, and marriage duration affect the risk of divorce, they also affect the socio-economic positions of the spouses. For instance, over the course of the marriage and the lives of the spouses, economic activity varies and wealth tends to increase. Cohort factors also come into the picture: owing to the general increase in education in all cohorts, younger partners tend to be more highly educated than older spouses. Variation in spousal socio-economic position by marriage duration is visible in Table 2 of sub-study III, which shows the percentage distribution of marriage years by the socio-economic indicators separately for each duration category.

With perfect measurement, the wife's age at marriage, her current age, and the duration of the marriage are perfectly collinear. For instance, age is perfectly determined by the age at marriage and marriage duration. The problem of perfect multicollinearity is the reason why it is difficult, if not impossible, to distinguish their effects in a meaningful way. This corresponds to the Age-Period-Cohort (APC) identification problem, which is familiar to demographers but still remains largely unresolved. (For a review, see Mason and Wolfinger 2001.) Note also that for age and for age at marriage, there are the ages of both spouses to consider. Two of these were selected as control variables representing individual time: because of the multicollinearity the inclusion of the third would have been both unnecessary and potentially harmful. The aim was to pick two variables that together carried a clear substantive meaning.

Individual time was controlled for in sub-studies I and II by using the duration of the marriage and the wife's age at marriage. The latter figure was obtained by comparing the wife's date of birth and the date of entry into marriage, and then collapsed into the following five-year categories:

1. –19 years;
2. 20–24 years;
3. 25–29 years;
4. 30–34 years;
5. 35–39 years;
6. 40– years.

Duration (time elapsed since the day of marriage) was updated dynamically during the follow-up period according to the following five-year categories:

1. –4 years;
2. 5–9 years;
3. 10–14 years;
4. 15–19 years;
5. 20–25 years;
6. 25–29 years;
7. 30–34 years;
8. 35–39 years;
9. 40–44 years;
10. 45– years.

In sub-study III, separate models describing the associations between the socio-economic variables and the risk of divorce were fitted for each category of marriage duration. The following categories were used in the data stratification:

1. –4 years;
2. 5–9 years;
3. 10–19 years;
4. 20–29 years;
5. 30–39 years.

Thus, the first two were five-year categories and the other three 10-year categories. Five-year categories were used at all durations in the preliminary analyses, but as the added detail did not prove informative some categories were collapsed. As noted earlier, marriages that had lasted for 40 years or longer were excluded from sub-study III, as this duration category included very few divorces.

The wife's age at marriage was controlled for in sub-study III (as in sub-studies I and II), and her age at the beginning of the follow-up was also held constant: most of the marriage-duration categories were as wide as 10 years, and without the control of age in the five-year categories, individual time would have been inadequately controlled for.

The husband's age (current or at marriage), which strongly correlated with his wife's age, was not included in the tabulated data. The wife's rather than the husband's age

was chosen for two reasons. Firstly, this is a more conventional choice in analyses of marital disruption. Secondly, it is more important to control for the wife's age, because her socio-economic position tends to vary more with age than the socio-economic status of the husband: married women more often than married men adjust their economic activities according to their family situation (especially to the birth of a child), which in turn varies with age.

2.6.3 Family composition (children)

There are several reasons to expect the risk of divorce to be lower for couples with several or young children in the family. Children can be a source of satisfaction in marriage, and involuntary childlessness may cause tension between spouses. Dependent children may also provide a reason for dissatisfied partners to remain together (Levinger 1976). Further, if the spouses believe their marriage will not last they may be less willing to have (additional) children (Becker et al. 1977; Lillard and Waite 1993). Finally, there may be third factors related to value orientations, for example, that both increase the likelihood of childbearing and decrease the likelihood of divorce.

Various studies have reported an inverse association between the number of children and the risk of marital disruption (e.g., Andersson 1997; Blossfeld et al. 1995; Cherlin 1977; Fergusson, Horwood, and Lloyd 1990), though some studies have found evidence of a U-shaped effect of parity – for instance, Lutz and associates (1991) reported that when duration of marriage was controlled, divorce probabilities were lowest for couples with two or three children. Most previous studies have also reported that the risk of divorce or separation is lower for couples with younger children (see e.g., Andersson 1997; Becker et al. 1977; Bracher et al. 1993).

While the number and ages of children affect the risk of divorce, they are likely also to affect some aspects of the couple's socio-economic status, especially the wife's economic activity and income, as well as the couple's housing arrangements. It is therefore necessary to control for the number and ages of children: children may, for instance, at least partly explain the lower divorce risk among women fully occupied in domestic work.

In this study, information concerning children refers to children living in the same household as the married couple. While this information was more readily available than information on biological children, it also seemed a more meaningful choice for a control variable because children living in the household more directly affect the spouses' economic activities and housing arrangements, for instance.

The control variable referred to as family composition combined information on the number of children (0, 1, 2, 3+) and the age of the youngest child (0, 0–3, 4–6, 7–17

years). Children included the husband's, the wife's, and their shared biological and adopted children under 18 years of age registered as domiciled in the same dwelling as the married couple at the end of 1990. It is important to note that couples with no children in the family included those whose children had already moved out of the home or were older than 17 years of age. The following categories were used:

1. no children (under 18 years of age living in the household);
2. 1 child, 0–3 years of age;
3. 1 child, 4–6 years of age;
4. 1 child, 7–17 years of age;
5. 2 children, youngest 0–3 years of age;
6. 2 children, youngest 4–6 years of age;
7. 2 children, youngest 7–17 years of age;
8. 3 or more children, youngest 0–3 years of age;
9. 3 or more children, youngest 4–6 years of age;
10. 3 or more children, youngest 7–17 years of age.

Note that the information on children was fixed at the beginning of the follow-up period, and the categories of the age of the youngest child were too wide to produce a good description of divorce-risk differentials by family composition. However, family composition is included here because it is a potential confounding variable in the association between the spouses' socio-economic positions (especially the wife's economic activity and income) and the risk of divorce: the information on children has to refer to the same point of time as the information on the socio-economic positions of the spouses. Further, since data on children living in the household was used, the information has to refer to a point of time at which all the women included in the follow-up still lived in the same household with their husbands.

Note also that when the focus is on the association between socio-economic factors and the risk of divorce, the wife's age at marriage and the family composition could, in some respects, be seen not only as confounding but also as intermediate variables, in other words as factors that transmit the effect of socio-economic position on the risk of divorce. For instance, it could be argued that a woman's high level of formal education postpones marriage and childbearing, and that these in turn affect the risk of divorce.

2.6.4 Degree of urbanization

Previous Finnish research has reported that the risk of divorce is higher for couples living in more urban areas (Finnäs 1997, 2000). Since the socio-economic positions of spouses also vary by the degree of urbanization, this is a potential confounding variable in the association between socio-economic positions and the risk of divorce and should therefore be included among the control variables. The Statistics Finland classification (Statistics Finland 1992) was used to divide the municipalities in which

the couples resided at the beginning of the follow-up period by the degree of urbanization. Under this classification municipalities fall into one of three categories according to the proportion of people living in urban settlements and the population of the largest of these. The capital city (Helsinki) region was treated as a separate category in this study. The classification was as follows:

1. Helsinki region (here including Helsinki, Espoo, Vantaa, and Kauniainen);
2. other urban-type municipalities;
3. other densely populated municipalities;
4. rural-type municipalities.

2.7 Statistical methods

Even in the simplest descriptive analyses in the sub-studies it was necessary to control for the effects of several variables simultaneously, and therefore statistical modeling was used in all cases. Because the dependent variable was intensity of divorce, for which the normality assumption of the ordinary linear regression model does not hold, and because the analyses were based on contingency data, Poisson regression was used as the method of analysis (Armitage and Berry 1994; Francis, Green, and Payne 1993).

The fact that the analyses were contingency-based meant that the couple-level data had been cross-tabulated according to the explanatory variables needed. Each cell included information on the number of divorces and marriage-years (exposure time) lived in 1991–93 in that cell. It was assumed in the Poisson regression model that the number of divorces in each cell d_i is Poisson distributed, and that the expected divorce rate (being the ratio of divorce events to exposure time) could be expressed by the equation

$$E(d_i)/(V_i) = \exp(a + b_1x_{1i} + b_2x_{2i} + \ldots + b_px_{pi}),$$

where $E(d_i)$ is the expected number of divorces in the i^{th} cell, V_i is the number of marriage-years lived in the i^{th} cell, $x_{1i} \ldots x_{pi}$ are the explanatory variables, and a, $b_1 \ldots b_p$ are the parameters to be estimated.

The models were fitted using GLIM (Francis et al. 1993), where the model is estimated by taking the number of divorces as the dependent variable, choosing the logarithmic link function and Poisson error distribution, and introducing the logarithm of marriage-years as an a-priori known component to be included in the linear predictor (an offset variable).

The results from the models are presented in the form of rate ratios, which were obtained by exponentiating the corresponding parameter estimates and are referred to as "relative divorce risks" (RR). The first category of each explanatory variable was taken

as the reference category with a relative divorce risk of 1, and for the other categories the relative risks were relative to the reference category: for instance, a relative risk of 1.30 means that the risk of divorce for the category is 30 percent higher than for the reference category of the same variable.

The statistical significance of an added term was measured in terms of the difference in scaled deviance between nested models. Some analyses shows ordinary 95-percent confidence intervals (± 1.96×standard error) for the relative risks. However, tests of statistical significance played only a minor role in the analyses because the large numbers of observations in the data set tended to produce differentials that were statistically but not substantively significant. The choice of explanatory variables and interactions in each model as well as the order in which the terms were added, were decided upon on the basis of the research question at hand rather than tests of statistical significance. For instance, an assumed "causal chain" of socio-economic factors was an important principle guiding the order in which the models were fitted. Tests of statistical significance were performed, but most of the results are not presented.

The way in which the indicators of the socio-economic positions of the spouses (as well as other indicators) are dealt with in this investigation is affected by the underlying assumption that they constitute "a causal chain", running from the level of education through occupational class, economic activity and income to housing tenure and housing density (and to divorce). This assumed causal chain is the order in which the various aspects of socio-economic position can be assumed to appear in an individual's life course, and it is also assumed that the earlier factors affect the latter ones rather than the other way around: educational level presumably affects occupational attainment and economic activity, which in turn influence the level of income, while income can be used for consumption and investment in housing, for example. No causal order could be assumed between the wife's and husband's positions.

In all three sub-studies, and especially sub-study I, the idea of the assumed "causal chain" was used jointly with the logic of "elaboration". To put it simply, elaboration refers to the further exploration of an established relationship by the introduction of additional variables, the causal position of which has been determined (or rather assumed) in advance, and by then observing how the original relationship changes. Three main types of results are thus distinguished: 1) explanation, where the analysis seeks to "disqualify" the original relationship (between x and y) as spurious by introducing "third" variables that precede both x and y; 2) interpretation, where the analysis seeks to provide "links" between the original variables with the help of intervening variables; and 3) specification, which seeks to specify conditions under which the original relationship holds true (Hyman 1955). Important special cases of third variables include suppressor variables, which hide an existing association, and distorter variables, which

turn an existing association in the opposite direction (Rosenberg 1968). Elaboration was a common approach in survey research before the introduction of multivariate methods. It is nevertheless equally if not more suitable for multivariate methods and longitudinal event-history data, and many newer studies more or less explicitly lean on the logic of elaboration (see e.g., Bracher et al. 1993; Mäkelä 1999; Pensola 2003; Valkonen and Martelin 1988).

In the present study the socio-economic variables were added to the models following their assumed causal order. It was assumed that the comparison of various models would reveal whether the confounding variables explained the associations between each socio-economic variable and the risk of divorce, and how (through which pathways) each variable was related.

Sub-studies II and III also include specification, in that in sub-study II focuses on interactions between the wife's and the husband's socio-economic positions, and sub-study III explores the possibility that the effect of spousal socio-economic position varies with the duration of the marriage.

3 Overview of the results

3.1 Control variables

This chapter summarizes the main findings from the three sub-studies concerning socio-economic differentials in the risk of divorce. Before that this section focuses on divorce-risk differentials according to the variables referred to as the control variables and assesses how their inclusion in the models affected the socio-economic divorce-risk differentials.

3.1.1 The control variables and divorce risk

The following four control variables were used in all the analyses (see Chapter 2.6): marriage duration, the wife's age at marriage, family composition, and the degree of urbanization in the municipality in which the couple resided. (Family composition combines information on the number of children and the age of the youngest child, including the husband's, the wife's, and their shared biological and adopted children under 18 years of age living in the same dwelling as the married couple at the end of 1990.) Moreover, sub-study III, in which the data were stratified by marriage duration (in five- or 10-year segments), incorporated the wife's age at the beginning of the follow-up (in five-year categories) in order to ensure that time was adequately controlled for. The distributions and findings by the wife's age at the beginning of the follow-up provided no surprises: they were as expected given the findings on the other two measures of individual time – marriage duration and the wife's age at marriage.

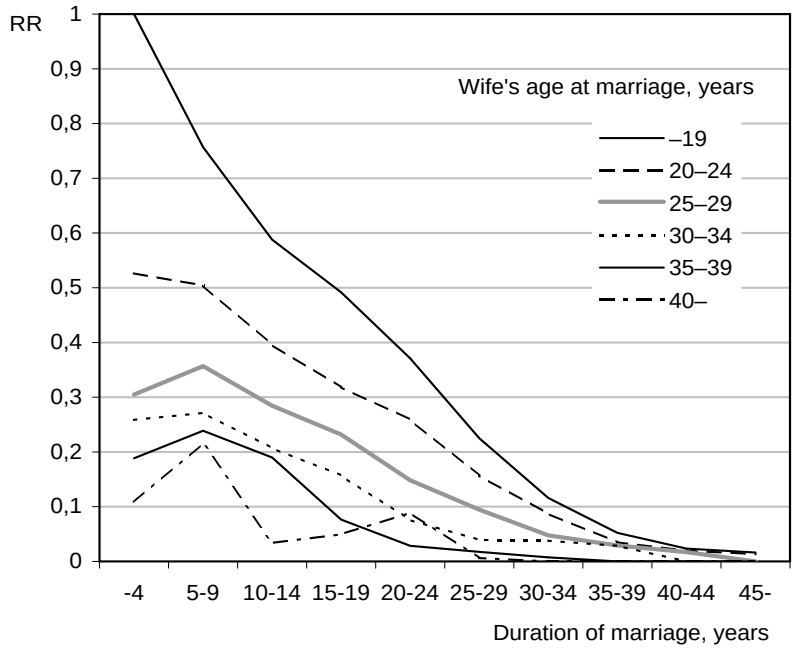
The relative divorce risks by the four control variables used in all the analyses are shown in Table 2 in sub-study I. The model on which they were based included only these four variables. Most importantly, the relative risks turned out to be in accordance with expectations based on previous research (briefly reviewed in Chapter 2.6). The risk of divorce was highest for marriages that had lasted from five to nine years, and decreased the longer the marriage survived to reach a very low level. Divorce risk was also strongly and inversely associated with the wife's age at marriage. Among couples who had at least one child living in the household, it increased with the increasing age of the youngest child, and decreased with the increasing number of children living in the household. Finally, the risk was higher for couples living in more urban municipalities.

Certain results that were not presented in any of the sub-studies are considered in the following, although some of them were reported in Jalovaara (2000). The study population referred to is restricted as in sub-studies I and II.

The interaction between two temporal factors gives a better picture of the divorce-risk differentials by these variables. Figure 6 shows the relative risks for the various

combinations of marriage duration and the wife's age at marriage. The reference category (with a RR of 1) comprises marriages that had lasted for four years or less, and the wife's age at marriage was under 20. The differences in divorce risk by the wife's age at marriage were especially large in relatively new marriages. There were also clear differences at relatively long marriage durations (e.g., at the third decade). In the present data, the relatively young marriages also belonged to more recent cohorts and therefore the very high risks of divorce for young brides early in marriage may partly reflect an increase in the divorce-promoting effect of marrying at a young age.

Figure 6. Relative divorce risks (RR) by marriage duration and the wife's age at marriage (marriages that had lasted for four years or less, and where the wife was below the age of 20 at marriage as the reference group with a RR of 1)



Let us now take a look at divorce-risk differentials by family composition. Family composition is strongly associated with marriage duration, and controlling for this clearly affects these differentials. Figure 7 shows the relative divorce risks by family composition with no controls and Figure 8 shows the relative risks when marriage duration and the wife's age at marriage are controlled for. The reference category (with a RR of 1) comprises couples with no children less than 18 years of age residing in the household.

Figure 7. Relative divorce risks (RR) by family composition (couples with no children under 18 years of age living in the household as the reference group with a RR of 1)

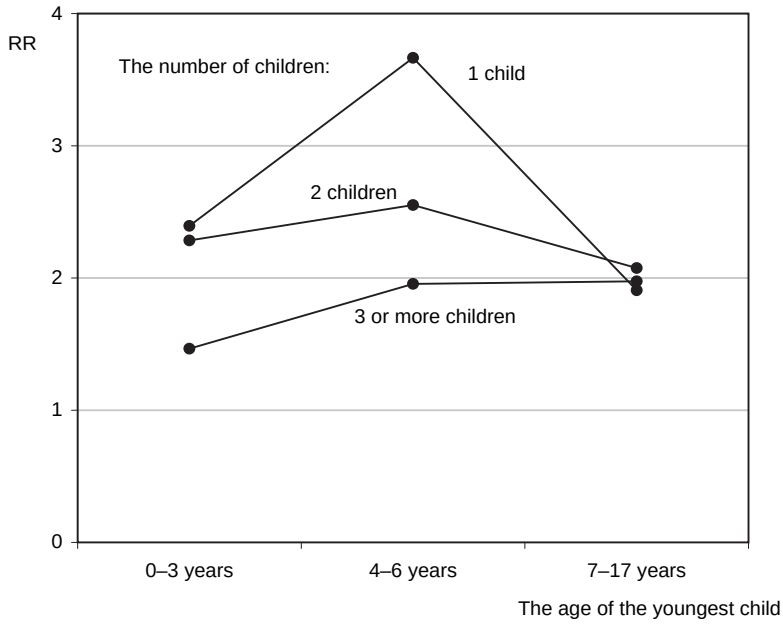
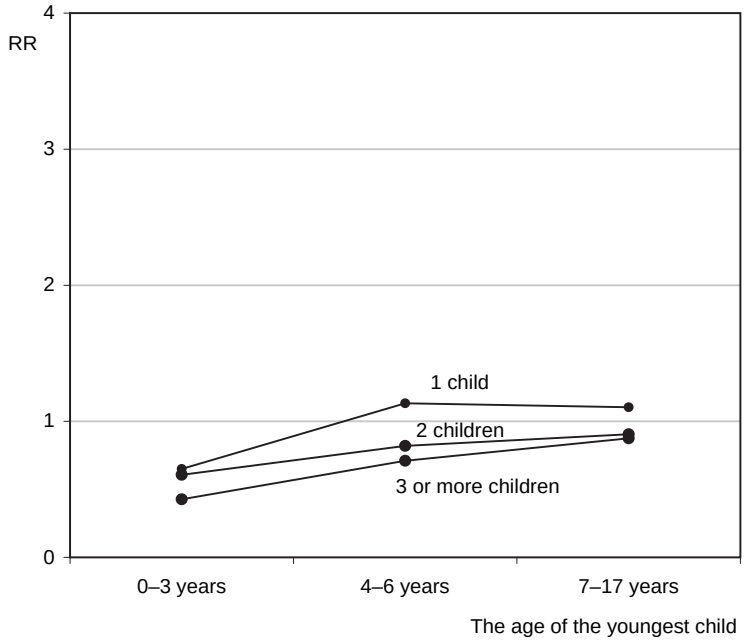


Figure 8. Relative divorce risks (RR) by family composition (couples with no children under 18 years of age living in the household as the reference group with a RR of one) adjusted for marriage duration and the wife's age at marriage



When the temporal variables are out of the picture (Figure 7) the divorce risk for families with children is notably higher than for those with no children under 18 years of age living in the household, and is highest for couples with one 4–6-year-old child. Inclusion of the temporal variables (Figure 8) significantly reduces the risk: couples with young children tend to be at stage of marital duration in which the risk of divorce is high. The divorce risk for couples with no children is exceeded only by that for couples with one 4–6 or 7–17-year-old living in the household. Overall, the risk decreases with the increasing number of children, and divorce risk increases with increasing age of the youngest child. It should be borne in mind that couples with no children form a heterogeneous category: in the majority of cases the children had moved away from the parental home or were older than 17, but it also included couples who had just married and did not yet have children (including those expecting their first child), as well as permanently childless couples.

3.1.2 The effect of the control variables on socio-economic differences in divorce risk

Several control variables were included in the sub-studies, even in the simplest models describing the associations between socio-economic factors and the risk of divorce. It would therefore be useful to briefly examine how the inclusion of such variables affected the socio-economic divorce-risk differentials.

The first column in Table 5 shows the relative divorce risks according to a number of indicators of socio-economic position from models that include only one such indicator and marriage duration (Model 1). The wife's age at marriage, family composition, and the degree of urbanization were added one at a time in the subsequent models (Models 2−4). The last of these shows the RRs from the same models as presented in Table 3 of sub-study I (also shown in Table 7 of this summary in the column "Model 1"). Note that even these last models are still descriptive in that none of the other indicators of socio-economic position is controlled for.

Comparison of the relative divorce risks from Model 1 to Model 2 in Table 5 reveals how the introduction of the wife's age at marriage affects the differences when marriage duration is already controlled for. Note that the wife's age at marriage is likely to capture the effects of both spouses' ages then as well as during the follow-up. The changes in the socio-economic divorce-risk differentials are particularly interesting when age at marriage is considered an intermediate rather than a confounding variable. For instance, the differentials by the level of spousal education and occupational class diminish when the wife's age at marriage is held constant. This could be taken to signify that the relatively low divorce risk for spouses with a high level of formal education and for those in white-collar occupations is partly mediated by their generally higher age at marriage.

Table 5. Relative divorce risks according to the indicators of socio-economic position when the control variables are added. Each model includes only the indicator of socio-economic position in question and the control variable(s)

Socio-economic (SES) indicator	Model 1: Duration of marriage + the SES indicator	Model 2: Model 1 + Wife's age at marriage	Model 3: Model 2 + Family composition	Model 4: Model 3 + Degree of urbanisation
Wife's education				
Basic or unknown	1.00	1.00	1.00	1.00
Secondary	0.83	0.86	0.87	0.88
Tertiary	0.61	0.72	0.74	0.69
Husband's education				
Basic or unknown	1.00	1.00	1.00	1.00
Secondary	0.94	0.93	0.94	0.92
Tertiary	0.64	0.71	0.74	0.66
Wife's occupational class				
Upper-white-collar employee	1.00	1.00	1.00	1.00
Lower-white-collar employee	1.26	1.14	1.10	1.14
Skilled manual worker	1.36	1.17	1.16	1.24
Unskilled manual worker	1.52	1.28	1.24	1.34
Farmer	0.42	0.38	0.39	0.49
Other self-employed	1.48	1.29	1.29	1.39
Other	1.71	1.43	1.37	1.43
Husband's occupational class				
Upper-white-collar employee	1.00	1.00	1.00	1.00
Lower-white-collar employee	1.24	1.16	1.14	1.20
Skilled manual worker	1.38	1.21	1.18	1.29
Unskilled manual worker	1.59	1.39	1.36	1.51
Farmer	0.52	0.48	0.50	0.65
Other self-employed	1.57	1.41	1.40	1.56
Other	1.71	1.57	1.50	1.58
Wife's economic activity				
Employed	1.00	1.00	1.00	1.00
Unemployed	1.51	1.41	1.41	1.50
Student	1.41	1.24	1.23	1.20
Pensioner	0.91	1.15	1.14	1.19
Other (e.g., homemaker)	0.76	0.73	0.89	0.88

(Table 5 continued)

Socio-economic (SES) indicator	Model 1: Duration of marriage + the SES indicator	Model 2: Model 1 + Wife's age at marriage	Model 3: Model 2 + Family composition	Model 4: Model 3 + Degree of urbanisation
Husband's economic activity				
Employed	1.00	1.00	1.00	1.00
Unemployed	1.88	1.79	1.78	1.88
Student	1.52	1.39	1.32	1.25
Pensioner	1.00	1.18	1.17	1.23
Other	2.49	2.48	2.46	2.46
Wife's income				
1 (lowest)	1.00	1.00	1.00	1.00
2	1.08	1.10	1.03	1.01
3	1.05	1.18	1.08	1.01
4	1.01	1.22	1.13	1.01
5 (highest)	1.05	1.28	1.19	1.03
Husband's income				
1 (lowest)	1.00	1.00	1.00	1.00
2	0.78	0.75	0.76	0.75
3	0.70	0.69	0.69	0.64
4	0.65	0.68	0.68	0.60
5 (highest)	0.59	0.65	0.66	0.55
Housing tenure				
Home owner	1.00	1.00	1.00	1.00
Rented	1.91	1.76	1.72	1.63
Unknown	1.26	1.20	1.20	1.23
Housing density				
Spacious	1.00	1.00	1.00	1.00
Normal	1.05	0.98	1.12	1.09
Overcrowded	1.13	1.01	1.33	1.30
Unknown	1.08	0.99	1.12	1.19

Source: Data of the present study, restricted as in sub-studies I and II.

Comparison of the relative divorce risks from Model 2 to Model 3 (in Table 5) shows how the introduction of family composition affects the differences by each socio-economic variable when marriage duration and the wife's age at marriage are already controlled for. Overall, the differentials change little when family composition is added to the models. There are exceptions, however. Note, for instance, that a positive association between the risk of divorce and housing density appears when family composition is held constant – in other words accounting for the fact that couples living in crowded conditions tend to have several children living in the household.

Comparison of the relative divorce risks from Model 3 to Model 4 (in Table 5) reveals how the introduction of the degree of urbanization affects the socio-economic divorce-risk differentials when the other three control variables are already held constant. When the degree of urbanization is added, the differentials by the spouses' level of education and occupational class tend to grow. This could be interpreted to mean, for instance, that the relatively high risks for spouses with a low level of formal education and for those in manual occupations were partly hidden in the counteractive effects of their generally rural residence.

Following this brief look at how the inclusion of the four control variables in the models affected the divorce-risk differentials by the indicators of the spouses' socio-economic positions, let us take another standpoint. Does the inclusion of socio-economic variables affect the divorce-risk differentials by the four control variables? For instance, is the high risk among younger couples attributable to the fact that they tend to have fewer economic resources than older couples?

Table 6 shows the relative divorce risks by the control variables from two models. Model 1 includes only the four control variables, whereas Model 2 also includes 10 indicators of socio-economic position – the ones shown in Table 5. The RRs of Model 1 are identical to those presented in sub-study I, Table 2. (The RRs of Model 2 in Table 5 are not presented in any of the sub-studies.) There are slight differences between the RRs in the two models. It is possible that the higher divorce risks when the wife was married at a relatively young age and among couples who have been married for a relatively short time are partly attributable to their generally meager socio-economic resources. Further, the lower divorce risk among couples with several children living in the household seems to be partly attributable to their socio-economic characteristics. Overall, the differences between the two models are modest, however. Note that the socio-economic divorce-risk differentials are modest in comparison with the differentials by the temporal factors, for example, and therefore, it is not even reasonable to expect socio-economic factors to mediate much of the effect of the control variables.

Table 6. Relative divorce risks by the control variables, before (Model 1) and after (Model 2) the socio-economic variables are controlled for

	Model 1[1]	Model 2[2]
Wife's age at marriage (years)		
−19	1.00	1.00
20−24	0.63	0.71
25−29	0.39	0.48
30−34	0.27	0.33
35−39	0.19	0.23
40−	0.13	0.14
Duration of marriage (years)		
−4	1.00	1.00
5−9	1.11	1.21
10−14	0.79	0.91
15−19	0.56	0.66
20−24	0.38	0.46
25−29	0.23	0.28
30−34	0.13	0.15
35−39	0.06	0.06
40−44	0.03	0.03
45−	0.02	0.02
Family composition		
No children	1.00	1.00
1 child, 0−3 years	0.66	0.73
1 child, 4−6 years	1.16	1.18
1 child, 7−17 years	1.13	1.15
2 children, youngest 0−3 years	0.63	0.72
2 children, youngest 4−6 years	0.86	0.93
2 children, youngest 7−17 years	0.95	1.00
3 or more children, youngest 0−3 years	0.46	0.54
3 or more children, youngest 4−6 years	0.78	0.85
3 or more children, youngest 7−17 years	0.94	1.02
Degree of urbanization		
Helsinki region	1.00	1.00
Other urban	0.84	0.86
Other densely populated	0.68	0.71
Rural	0.57	0.61

[1] Model 1 includes the four control variables shown in the table.

[2] Model 2 includes the four control variables and the 10 socio-economic variables shown in Table 5.

Source: Data of the present study, restricted as in sub-studies I and II.

3.2 Socio-economic factors and divorce risk: differentials, independent effects, and pathways (sub-study I)

The aim of sub-study I was to identify differentials in divorce risk by various indicators of the husband's, the wife's, and the couple's socio-economic positions, to distinguish the independent effect of each factor, and to reveal the causal pathways through which each factor is related to the risk of divorce. The socio-economic indicators included in the analyses were each spouse's level of education, occupational class, economic activity and income, as well as housing tenure and housing density. The control variables included the wife's age at marriage, the duration of the marriage, family composition and the degree of urbanization.

In order to identify the differentials, Poisson models were fitted individually for each of the 10 indicators of socio-economic position, controlling only for the four control variables. The relative risks from these models are shown in the first column (Model 1) in Table 7. (The models in Table 7 are the same as in the first and last columns of Table 3 in sub-study I.) The results showed that, when examined individually, divorce risk was inversely associated with the socio-economic positions of the spouses for all the various indicators except the wife's income when marriage duration, the wife's age at marriage, family composition, and the degree of urbanization were held constant. The results were notably gender-neutral in that the divorce-risk differentials were very similar for the wife's and the husband's socio-economic position. The only clear exceptions were that the risk for husbands was very high in the economic activity category "other" and relatively low for wives in this category, and that the risk decreased consistently with increasing income for husbands, whereas there were no significant differences related to the wife's income.

The various indicators of socio-economic position turned out to be highly related, and therefore the next step in the analysis was to distinguish the independent effect of each of them. In order to do this, a model was fitted that included all 10 indicators as well as the four control variables. The relative risks from this model are shown in the latter column (Model 2) in Table 7: The differentials were similar to those in Model 1 but smaller, as was to be expected. The only exception was that a positive gradient emerged for the wife's income when the other indicators were introduced. Since the differentials generally diminished but did not disappear (and were statistically significant at the one-percent risk level), it could be said that all factors had an independent effect on the risk of divorce. Note, however, that the size of the effect varied: the differentials between the white-collar and manual-worker classes, as well as by housing density, were modest when the other socio-economic factors were considered.

Table 7. Relative divorce risks (RR) from two models showing the effects of various indicators of socio-economic position. Model 1 includes four control variables[1] and the indicator of socio-economic position in question. Model 2 includes the four control variables as well as all indicators of socio-economic position included in the table.

	Model 1		Model 2	
	RR	95% confidence interval	RR	95% confidence interval
Wife's education				
Basic or unknown	1.00		1.00	
Secondary	0.88	(0.85–0.90)	0.93	(0.90–0.96)
Tertiary	0.69	(0.66–0.73)	0.76	(0.71–0.80)
Husband's education				
Basic or unknown	1.00		1.00	
Secondary	0.92	(0.89–0.95)	0.98	(0.95–1.01)
Tertiary	0.66	(0.63–0.69)	0.76	(0.72–0.81)
Wife's occupational class				
Upper-white-collar employee	1.00		1.00	
Lower-white-collar employee	1.14	(1.09–1.20)	0.94	(0.89–0.99)
Skilled manual worker	1.24	(1.18–1.32)	1.00	(0.93–1.07)
Unskilled manual worker	1.34	(1.27–1.42)	1.00	(0.93–1.06)
Farmer	0.49	(0.45–0.54)	0.50	(0.44–0.57)
Other self-employed person	1.39	(1.30–1.48)	1.10	(1.02–1.19)
Other	1.43	(1.33–1.53)	1.09	(0.96–1.24)
Husband's occupational class				
Upper-white-collar employee	1.00		1.00	
Lower-white-collar employee	1.20	(1.14–1.26)	0.98	(0.93–1.04)
Skilled manual worker	1.29	(1.23–1.34)	0.99	(0.94–1.05)
Unskilled manual worker	1.51	(1.44–1.58)	1.11	(1.04–1.18)
Farmer	0.65	(0.60–0.71)	0.77	(0.69–0.86)
Other self-employed person	1.56	(1.48–1.65)	1.20	(1.13–1.28)
Other	1.58	(1.45–1.72)	1.02	(0.90–1.16)
Wife’s economic activity				
Employed	1.00		1.00	
Unemployed	1.50	(1.40–1.61)	1.27	(1.18–1.37)
Student	1.20	(1.12–1.28)	1.04	(0.91–1.19)
Pensioner	1.19	(1.08–1.30)	1.05	(0.95–1.16)
Other (e.g., homemaker)	0.88	(0.84–0.93)	0.80	(0.75–0.85)

(Table 7 continued)

	Model 1		Model 2	
	RR	95% confidence interval	RR	95% confidence interval
Husband's economic activity				
Employed	1.00		1.00	
Unemployed	1.88	(1.77–2.01)	1.57	(1.47–1.68)
Student	1.25	(1.13–1.39)	0.98	(0.84–1.14)
Pensioner	1.23	(1.14–1.33)	1.04	(0.96–1.13)
Other	2.46	(2.24–2.71)	1.80	(1.62–2.00)
Wife's income				
1 (lowest)	1.00		1.00	
2	1.01	(0.98–1.05)	1.06	(1.01–1.10)
3	1.01	(0.96–1.05)	1.19	(1.13–1.25)
4	1.01	(0.94–1.09)	1.34	(1.23–1.46)
5 (highest)	1.03	(0.92–1.14)	1.40	(1.25–1.58)
Husband's income				
1 (lowest)	1.00		1.00	
2	0.75	(0.72–0.79)	0.82	(0.78–0.87)
3	0.64	(0.61–0.67)	0.75	(0.71–0.79)
4	0.60	(0.57–0.64)	0.76	(0.72–0.81)
5 (highest)	0.55	(0.51–0.58)	0.76	(0.71–0.82)
Housing tenure				
Home owner	1.00		1.00	
Rented	1.63	(1.58–1.69)	1.47	(1.42–1.53)
Unknown	1.23	(1.06–1.43)	1.13	(0.97–1.32)
Housing density				
Spacious	1.00		1.00	
Normal	1.09	(1.05–1.13)	0.98	(0.94–1.02)
Overcrowded	1.30	(1.23–1.37)	1.05	(1.00–1.12)
Unknown	1.19	(1.07–1.32)	1.03	(0.93–1.15)

[1] Control variables: duration of marriage, wife's age at marriage, family composition, and degree of urbanization.

Source: Sub-study I. Table 3.

In order to identify the causal pathways through which each aspect of socio-economic position was related to the risk of divorce, a series of nested models was fitted following the assumed causal order of these variables. In other words, the analysis proceeded towards Model 2 in Table 7, with the introduction of one socio-economic indicator at a time. The logic of elaboration was used in the interpretation of the results. In other words, the models were compared, and it was assumed that this would reveal whether the divorce-risk differentials by a given socio-economic variable could be explained by the socio-economic variables preceding it in the causal chain, and whether the effect appears to be mediated by the socio-economic variables that followed it (interpretation). For instance, the high risk among unemployed wives and husbands was, to some extent, explained by the variables preceding economic activity in the assumed causal order – the level of education and occupational class; further, it seemed that the effect of the husband's being unemployed could be partly mediated by his income. The findings are described in more detail in the original research article.

In sum, sub-study I showed a clear and consistent pattern of socio-economic differentials in Finnish first marriages in the early 1990s. It was found that overall, divorce risk was higher in the disadvantaged than in the advantaged groups with respect to all the indicators included in the analysis, including more structural variables such as education, and more situational factors such as economic activity. An exception was the wife's income, which was not associated with divorce risk when marriage duration, the wife's age at marriage, family composition, and degree of urbanization were controlled for. Further, all of the socio-economic factors had an independent effect, meaning that all of the dimensions of socio-economic position were more or less useful in terms of understanding socio-economic divorce-risk differentials. The independent effect was generally negative (divorce risk was inversely associated with socio-economic status); an exception was the wife's income, which had a positive effect when the other dimensions were considered. The size of the independent effect varied, however. For instance, it was weak for occupational ranking and housing density.

3.3 The joint effects of the two spouses' positions (sub-study II)

Sub-study II focused on the gender-specific effects of each spouse's socio-economic position and the joint effects of both marriage partners' positions on the risk of divorce. The joint effects were examined by means of three variables (education, economic activity, and income), each of which combines information on the positions of the two marriage partners.

The main results are presented in Table 8 and Table 9, which show the relative divorce risks for these three socio-economic variables from four models. Each model (1a, 1b, and 1c) in Table 8 includes one of the three indicators of the couples' socio-economic position

and four control variables (marriage duration, wife's age at marriage, family composition, and degree of urbanization). Model 2, presented in Table 9, includes the four control variables as well as all three indicators of the couples' socio-economic position.

Table 8. Relative divorce risks according to wife's and husband's education, economic activity, and income from models (Model 1a, 1b, and 1c) that include only the indicator of socio-economic position in question and the four control variables[1].

Model 1a:

Husband's education	Wife's education		
	Basic	Secondary	Tertiary
Basic	1.00	1.02	0.93
Secondary	1.07 *	0.89 *	0.77 *
Tertiary	0.79 *	0.67 *	0.62 *

Model 1b:

Husband's economic activity	Wife's economic activity				
	Employed	Unemployed	Student	Pensioner	Other (e.g., homemaker)
Employed	1.00	1.50 *	1.22 *	1.33 *	0.83 *
Unemployed	1.83 *	2.08 *	—	1.96 *	2.02 *
Student	1.30 *	—	0.98	—	—
Pensioner	1.29 *	1.54 *	—	1.13	1.00
Other	2.66 *	—	—	—	2.20 *

Model 1c.

Husband's income	Wife's income				
	1 (lowest)	2	3	4	5 (highest)
1 (lowest)	1.00	1.29 *	1.43 *	1.34 *	—
2	0.89 *	0.87 *	0.96	1.13	—
3	0.77 *	0.75 *	0.77 *	0.84 *	0.91
4	0.70 *	0.73 *	0.71 *	0.68 *	0.82
5 (highest)	0.57 *	0.69 *	0.63 *	0.69 *	0.70 *

[1] The control variables include the wife's age at marriage, the duration of the marriage, family composition, and degree of urbanization.
— The number of marriage-years was fewer than 3,000.
* The 95% confidence interval does not include 1.

Source: Sub-study II. Table 3.

A comparison between the models in which only the control variables were controlled for (Table 7), and those controlling for the other two indicators of spousal socio-economic position (Table 8) gave no surprises in the light of the results of sub-study I. With controls for education and income, the divorce-risk differentials as a function of economic activity generally diminished, and with controls for education and economic activity, the differentials according to the husband's income diminished and according to the wife's income became more consistently positive.

Table 9. Relative divorce risks according to the wife's and the husband's education, economic activity, and income from Model 2, which includes all three indicators of socio-economic position and the four control variables.

Husband's education	Wife's education		
	Basic	Secondary	Tertiary
Basic	1.00	1.02	0.85 *
Secondary	1.09 *	0.90 *	0.73 *
Tertiary	0.86 *	0.70 *	0.61 *

Husband's economic activity	Wife's economic activity				
	Employed	Unemployed	Student	Pensioner	Other (e.g., homemaker)
Employed	1.00	1.49 *	1.31 *	1.32 *	0.86 *
Unemployed	1.66 *	1.90 *	—	1.77 *	1.90 *
Student	1.13	—	0.92	—	—
Pensioner	1.11 *	1.36 *	—	1.02	0.94
Other	1.96 *	—	—	—	1.91 *

Husband's income	Wife's income				
	1 (lowest)	2	3	4	5 (highest)
1 (lowest)	1.00	1.27 *	1.49 *	1.47 *	—
2	0.92	0.94	1.10	1.41 *	—
3	0.84 *	0.84 *	0.93	1.12	1.25
4	0.82 *	0.86 *	0.92	1.00	1.25
5 (highest)	0.76 *	0.89 *	0.89 *	1.07	1.11

[1] The control variables include the wife's age at marriage, the duration of the marriage, family composition, and degree of urbanization.
— The number of marriage-years was fewer than 3,000.
* 95% confidence interval does not include 1.

Source: Sub-study II. Table 4.

Let us now focus on the results from Model 2, presented in Table 9. As far as spouses' education is concerned, the risk of divorce generally diminished as the education level increased, irrespective of which spouse contributed the education. Thus, the pattern was very gender-neutral. However, the divorce risk when neither spouse was educated beyond the basic level was lower than expected on the basis of the overall inverse association with each spouse's education: it might have been expected that couples with both partners at the lowest educational level would have the highest risk of divorce.

In terms of economic activity, Model 2 (Table 9) shows that the risk of divorce was higher when either or both partners were unemployed than when both partners were employed. The husband's unemployment had a stronger effect than the wife's unemployment. For instance, the divorce risk for couples with an unemployed husband and an employed wife was slightly higher than when the wife was unemployed and the husband was employed. The risk of divorce was especially high when both partners were unemployed. When the husband was in the category "other" the risk was also comparatively high, whereas when the wife was in this category (including homemakers) it was even lower than among couples with two employed partners – provided that the husband was employed. If one spouse was a student or a pensioner the risk was generally elevated, but notably not when both partners were students or both were pensioners. Thus, the pattern for economic activity was rather gender-neutral in that not only the husband's but also the wife's unemployment increased the risk of divorce. The most notable exception concerned the category "other/homemaker", which was significant in opposite directions for the wives and the husbands.

There was a general increase in divorce risk as the wife's income increased regardless of the level of the husband's income, and a general decrease as the husband's income increased regardless of the wife's income. However, the interplay between the income levels of the marriage partners was also significant, in that the divorce-promoting effect of the wife's high income was especially strong when the husband's income was low.

In sum, the results of sub-study II indicated that the interplay between the two spouses' resources affected the risk of divorce on all three dimensions of socio-economic position: education, economic activity, and income. First, when neither spouse had more than the basic level of education the risk was lower than expected given the previously reported inverse association with each spouse's education. Secondly, employed and "homemaker" women with employed husbands had comparatively stable marriages, whereas when either or both partners were unemployed the divorce risk was comparatively high. Finally, the wife's high income and the husband's low income increased the risk regardless of the other spouse's income level, but especially when the wife's income was higher than her husband's.

3.4 Variation in differentials by marriage duration (sub-study III)

Sub-study III explored the possibility that the effects of the spouses' socio-economic positions would vary according to how long the marriage had lasted. The study population in this case was restricted to marriages of less than 40 years' duration but even so, there was a relatively high range. The same 10 socio-economic variables were used as in sub-study I, with a more detailed classification for the spouses' levels of formal education.

The relative divorce risks as a function of the socio-economic factors, by marriage duration, are shown in Table 10 and Table 11. Table 10 shows gradients that are referred to as "gross" effects. They were obtained from models that included only the socio-economic indicator in question and four control variables, which in this case were the wife's age at marriage, the wife's age at the beginning of the follow-up, family composition, and the degree of urbanization. Table 11 shows gradients referred to as "net" effects, obtained from models that included the same four control variables as well as all 10 indicators of the socio-economic positions of the spouses.

The gross effects of the wife's and the husband's levels of formal education were very different for marriages of short and long durations (Table 10). The divorce risk among couples in their first decade of marriage decreased strongly and consistently the higher the wife's and the husband's levels of formal education. In contrast, for those in their third or fourth decade the risk was highest among women and men with secondary level education. The net effects were similar (Table 11).

As for occupational class, the gross effects show large and consistent divorce-risk differentials, but only for couples in their first decade of marriage (Table 10). In the net-effect model (Table 11), however, the differentials by occupational class have almost disappeared, the most notable exception being that the risk for farmers was low irrespective of the duration of the marriage.

The spouses' economic activity, income, and housing tenure and housing density generally showed similar patterns regardless of the marriage duration (Tables 10 and 11). For instance, the wife's and the husband's unemployment increased the risk of divorce in marriages of both short and long durations. However, if a spouse was a student the risk increased only at long durations, and having a pensioner in the marriage increased the risk only at short durations: in other words, these statuses promoted divorce only at durations at which they are rare. In the net-effect model, the wife's high income increased the risk of divorce most clearly in the shortest marriages (first and second decades), while the husband's low income promoted divorce most consistently in marriages of medium duration (and this was not attributable to the lower proportion of employed husbands in the very shortest and the very longest marriages). The gross and net effects of home-

ownership were very similar regardless of duration. Housing density had a gross effect in the shortest marriages, but no independent net effect in any of the duration categories.

Table 10. Relative divorce risks according to the indicators of socio-economic position for each category of marriage duration when only the four control variables[1] were controlled for (the gross-effect models)

Marriage duration (years)	–4	5–9	10–19	20–29	30–39
Wife's education					
Basic or unknown	1.00	1.00	1.00	1.00	1.00
Lower secondary	0.59*	0.78*	0.93*	1.11*	1.18*
Upper secondary	0.39*	0.65*	0.88*	1.16*	1.21
Tertiary	0.29*	0.45*	0.82*	1.10	1.08
Husband's education					
Basic or unknown	1.00	1.00	1.00	1.00	1.00
Lower secondary	0.67*	0.90*	0.95	1.06	1.12
Upper secondary	0.51*	0.74*	0.89*	1.07	1.30*
Tertiary	0.30*	0.48*	0.71*	1.04	0.95
Wife's occupational class					
Upper-white-collar employee	1.00	1.00	1.00	1.00	1.00
Lower-white-collar employee	1.37*	1.35*	1.06	0.94	0.91
Skilled manual worker	1.77*	1.52*	1.09	0.90	0.92
Unskilled manual worker	2.05*	1.73*	1.15*	0.98	0.93
Farmer	0.52*	0.46*	0.43*	0.40*	0.54*
Other self-employed	2.30*	1.78*	1.18*	1.05	1.36*
Other	1.39*	1.63*	1.46*	1.19	1.40
Husband's occupational class					
Upper-white-collar employee	1.00	1.00	1.00	1.00	1.00
Lower-white-collar employee	1.44*	1.30*	1.21*	0.98	1.08
Skilled manual worker	1.70*	1.53*	1.21*	0.96	1.00
Unskilled manual worker	2.16*	1.74*	1.46*	0.98	1.21
Farmer	0.63*	0.61*	0.65*	0.51*	0.78
Other self-employed	2.05*	1.92*	1.48*	1.19*	1.46*
Other	1.79*	1.77*	1.91*	1.24	1.03
Wife’s economic activity					
Employed	1.00	1.00	1.00	1.00	1.00
Unemployed	1.65*	1.51*	1.34*	1.58*	1.13
Student	0.92	1.18*	1.35*	1.28*	2.41*
Pensioner	2.55*	1.53*	1.51*	1.22*	1.12
Other	1.20*	0.88*	0.69*	0.77*	0.79
Husband’s economic activity					
Employed	1.00	1.00	1.00	1.00	1.00
Unemployed	1.71*	1.81*	1.94*	1.85*	1.64*
Student	1.06	1.10	1.65*	1.98*	–
Pensioner	2.31*	1.90*	1.68*	1.23*	1.07
Other	3.19*	2.20*	2.31*	2.24*	1.84*

(Table 10 continued)

Marriage duration (years)	–4	5–9	10–19	20–29	30–39
Wife's income					
1 (lowest)	1.00	1.00	1.00	1.00	1.00
2	0.94	0.96	1.10*	1.06	1.07
3	0.85*	0.93	1.16*	1.09	1.18
4	0.87	0.85	1.14*	1.23*	1.08
5 (highest)	0.94	0.86	1.27*	1.10	1.11
Husband's income					
1 (lowest)	1.00	1.00	1.00	1.00	1.00
2	0.89*	0.77*	0.71*	0.66*	0.84
3	0.73*	0.67*	0.60*	0.59*	0.81*
4	0.62*	0.57*	0.56*	0.65*	0.89
5 (highest)	0.53*	0.54*	0.51*	0.59*	0.73*
Housing tenure					
Home owner	1.00	1.00	1.00	1.00	1.00
Rented	1.54*	1.54*	1.69*	1.46*	1.19
Unknown	1.11	1.21	1.36*	1.13	0.70
Housing density					
Spacious	1.00	1.00	1.00	1.00	1.00
Normal	1.23*	1.14*	1.13*	0.97	1.01
Overcrowded	1.35*	1.36*	1.40*	1.01	0.85
Unknown	1.07	1.57*	1.13	1.03	0.98

[1] The control variables include the wife's age at marriage, the wife's age at the beginning of the follow-up, family composition, and degree of urbanization.
* The 95% confidence interval does not include 1.
 No divorces; result not shown.

Source: Sub-study III. Table 3.

Table 11. Relative divorce risks according to the indicators of socio-economic position for each category of marriage durations when the four control variables[1] as well as all other indicators of socio-economic position were controlled for (the net-effect model)

Marriage duration (years)	–4	5–9	10–19	20–29	30–39
Wife's education					
Basic or unknown	1.00	1.00	1.00	1.00	1.00
Lower secondary	0.66*	0.84*	0.96	1.11*	1.15
Upper secondary	0.50*	0.74*	0.93	1.14*	1.17
Tertiary	0.40*	0.54*	0.83*	1.01	0.99
Husband's education					
Basic or unknown	1.00	1.00	1.00	1.00	1.00
Lower secondary	0.78*	0.97	1.00	1.06	1.13
Upper secondary	0.64*	0.85*	0.94	1.01	1.34*
Tertiary	0.41*	0.59*	0.79*	0.98	1.01
Wife's occupational class					
Upper-white-collar employee	1.00	1.00	1.00	1.00	1.00
Lower-white-collar employee	0.96	0.96	0.91*	0.92	0.78
Skilled manual worker	1.09	1.04	0.94	0.90	0.84
Unskilled manual worker	1.09	1.05	0.90	0.95	0.83
Farmer	0.59*	0.45*	0.44*	0.51*	0.50*
Other self-employed	1.40*	1.18	1.02	0.99	1.15
Other	0.95	1.04	1.06	1.04	1.18
Husband's occupational class					
Upper-white-collar employee	1.00	1.00	1.00	1.00	1.00
Lower-white-collar employee	0.94	0.92	1.04	0.94	1.02
Skilled manual worker	0.87	0.92	0.96	0.91	1.02
Unskilled manual worker	0.99	1.00	1.12	0.92	1.25
Farmer	0.50*	0.64*	0.82*	0.71*	1.13
Other self-employed	1.08	1.18*	1.18*	1.09	1.40*
Other	1.05	1.22	0.87	0.74	0.99
Wife’s economic activity					
Employed	1.00	1.00	1.00	1.00	1.00
Unemployed	1.32*	1.22*	1.16*	1.43*	1.11
Student	1.09	1.15	1.23	1.12	1.72
Pensioner	1.36	0.95	1.28*	1.19	1.12
Other	0.97	0.75*	0.66*	0.75*	0.79
Husband’s economic activity					
Employed	1.00	1.00	1.00	1.00	1.00
Unemployed	1.37*	1.47*	1.63*	1.65*	1.62*
Student	1.02	0.75	1.57*	2.12*	–
Pensioner	1.38	1.26	1.34*	1.16*	1.07
Other	2.37*	1.58*	1.56*	1.57*	1.64

(Table 11 continued)

Marriage duration (years)	–4	5–9	10–19	20–29	30–39
Wife's income					
1 (lowest)	1.00	1.00	1.00	1.00	1.00
2	1.02	0.99	1.07	1.06	1.13
3	1.19*	1.18*	1.25*	1.11	1.23
4	1.51*	1.32*	1.31*	1.23*	1.07
5 (highest)	1.71*	1.38*	1.53*	1.10	1.08
Husband's income					
1 (lowest)	1.00	1.00	1.00	1.00	1.00
2	1.04	0.82*	0.75*	0.71*	0.89
3	0.95	0.79*	0.68*	0.65*	0.88
4	0.99	0.78*	0.68*	0.70*	0.95
5 (highest)	0.94	0.83*	0.68*	0.63*	0.78
Housing tenure					
Home owner	1.00	1.00	1.00	1.00	1.00
Rented	1.35*	1.37*	1.52*	1.41*	1.18
Unknown	1.04	1.02	1.32	1.05	0.66
Housing density					
Spacious	1.00	1.00	1.00	1.00	1.00
Normal	1.05	0.99	1.00	0.95	1.02
Overcrowded	1.09	1.07	1.12*	0.93	0.85
Unknown	0.90	1.33*	0.94	0.96	1.00

[1] The control variables include the wife's age at marriage, the wife's age at the beginning of the follow-up, family composition, and degree of urbanization.
* The 95% confidence interval does not include 1.
□ No divorces; result not shown.

Source: Sub-study III. Table 3.

In a nutshell, many socio-economic factors, including spousal unemployment, the wife's income and employment, home-ownership, and the fact that the spouses were farmers, were found to have similar effects on the risk of divorce in marriages of various durations. In contrast, the consistent differences in risk between the educational categories on the one hand and the white-collar and manual categories on the other were found to be specific to marriages of short duration.

4 Discussion

4.1 Summary and discussion of the findings

The purpose of the present investigation was to increase our knowledge of the effects of the socio-economic positions of spouses on the risk of divorce, as manifested by divorces in Finnish first marriages between 1991 and 1993. The three sub-studies approach the socio-economic differentials from different angles. The aim in sub-study I was to identify the differentials by various indicators of the socio-economic positions of the husband, the wife, and the couple; to distinguish the effects of each indicator independently of each other; and to reveal the causal pathways through which each factor was related to the risk of divorce. Sub-study II focused on the joint effects of the spouses' socio-economic positions, and sub-study III explored the possibility that the effects of the spouses' socio-economic positions varied at different marriage durations. Chapter 3 summarized the main findings from each sub-study. Several indicators of spousal socio-economic position were applied in the analyses. This chapter discusses the findings of the sub-studies, focusing on one aspect of socio-economic position at a time.

4.1.1 Education

Sub-study I reported a lower divorce risk among spouses with a higher level of formal education. Most previous studies from the US (Martin 2006; Raley and Bumpass 2003; Tzeng 1992; Tzeng and Mare 1995) and the Nordic countries (Hoem 1997; Kravdal and Noack 1989; Liu and Vikat 2004; Lyngstad 2004), including Finland (Finnäs 1996, 1997, 2000), have found an inverse association between spousal level of formal education and the level of marital disruption, although some European studies have reported that women with higher education are equally (Babka von Gostomski et al. 1998; Diekmann and Klein 1991) or more likely (De Rose 1992; Poortman 2002) to divorce than those with a lower level.

Consistent with previous findings from Finland (Finnäs 2000) we found (in sub-study I) that the association was very similar for the wife's ad the husband's education. Furthermore, the more proximate socio-economic factors partly mediated the effect of education on the risk of divorce.

Sub-study II examined the joint effects of both spouses' levels of formal education. The risk of divorce when neither spouse had more than the basic level was lower than expected given the overall inverse association between each spouse's educational level and the divorce risk. (In more methodological terms, the divorce risk was lower than expected on the basis of the main effects of each spouse's educational level.) This suggests that educational homogamy may stabilize (or that educational heterogamy may destabilize) marriages at the lowest level. The finding that the stabilizing

effect of homogamy was specific to the lowest educational level could be interpreted to mean that the discrepancy in worldviews and tastes that might complicate mutual understanding is especially prevalent when one partner has some and the other has no education beyond the basic level. Previous studies from Finland (Finnäs 1997, 2000) and Norway (Kravdal and Noack 1989; Lyngstad 2004) found no clear support for the stabilizing effect of educational homogamy. Some studies from the US, on the other hand, have reported an increased risk of marital disruption among educationally heterogamous couples (Weiss and Willis 1997), especially if the wife is the partner with more education (Bumpass et al. 1991; Tzeng 1992).

Sub-study III reported very different effects of formal education in marriages of short and long durations. Among the former the divorce risk decreased strongly and consistently as the wives' and husbands' levels of formal education increased, while among the latter the risk was highest among those with an upper-secondary level of education. This finding is generally in line with those from the US indicating that (the wife's) education is a more reliable predictor of marital disruption at early marital durations (Morgan and Rindfuss 1985, South and Spitze 1986). South (2001) reported for the US the wife's high level of education had a strong and negative effect on the risk of disruption early in marriage, but no or even a positive effect at longer durations. Some recent studies from the US also suggest a divergence over (historical) time in marital-disruption rates according to women's educational attainment (for a review, see Martin 2006).

It could be argued (see Hoem 1997) that the different effects of selection processes in the various birth cohorts at least partly account for the different effects of education among spouses at early and long durations of marriage. Longer durations of course can only be observed in older cohorts. Owing to the general increase in the educational level (as well as the tendency of the more highly educated to marry at a later age), spouses in marriages of short duration tend to be more highly educated than those in long-lasting marriages. Of the spouses in marriages of the longest duration observed in the present study, the majority had no education beyond the basic level. In contrast, among spouses in marriages of shortest durations, they were much fewer and presumably more strongly selected in terms of factors predictive of low marital stability. However, sub-study III showed that the differences in divorce risk between white-collar employees and manual workers also declined with duration, even though there were relatively modest differences in distributions into these occupational classes between the duration categories. Other possibilities are that the different effects of education among spouses at early and long durations reflect genuine change across the phases of marital lives, or changes in the effects of socio-economic differentials in divorce risk across the cohorts. Finally, it is also likely that the interaction at least partly follows from selective attrition, whereby differentials in divorce risk by a (relatively) permanent

divorce-promoting characteristic (such as a low level of education or manual-worker status) decline or even reverse with the duration of marriage because marriages susceptible to that characteristic are selected out of the total pool of marriages at a higher rate than others (see South and Spitze 1986; Vaupel and Yashin 1985/1993).

4.1.2 Occupational class

Sub-study I reported a clear pattern of divorce-risk differentials by the wife's and the husband's occupational class. The differentials were notable when only the four control variables were held constant. Among the manual-worker and white-collar-employee classes, the divorce risk was higher for the two manual-worker than for the two white-collar-employee categories. Further, the risk for unskilled manual workers was higher than for skilled manual workers, and for lower white-collar employees it was higher than for upper white-collar employees. It was notably low for farmers (even net of the effect of rural residence), but high for other self-employed persons as well as in the residual category of "other". The pattern was very similar for the wife's and the husband's occupational class.

When the wife's education was held constant, the differences in divorce risk by her occupational class diminished considerably (with the exception of the low risk among farmers). Similarly, the husband's education appeared to explain a substantial part of the differences by his occupational class. All other things being equal, the risk of divorce was low for farmers, and higher for other self-employed spouses and unskilled manual worker husbands than for spouses in the other occupational groups.

The finding that the divorce-risk differentials between the manual-worker and white-collar-employee groups could largely be "explained away" by controlling for the level of education is, of course, based on the fact that education and occupational class are highly related. It could be argued (Valkonen and Martelin 1988) that these two variables represent two stages of the same developmental sequence through which the social position of an individual is determined, and the two variables are also related in that occupations are assigned to occupational groups partly on the basis of the formal education required for the work. Because of the close association between these two could be considered misleading to even try to distinguish their independent effects.

Overall, the findings concerning occupational class are in line with those in some older British studies reporting that marital disruption was more common among men in unskilled manual occupations than among men in professional occupations (Haskey 1984; Murphy 1985a, 1985b). They are also consistent with the results of a previous Finnish study (Finnäs 2000) reporting that the risk of divorce was higher for manual workers than for white-collar employees and entrepreneurs. It has long been known that divorce is rare among Finnish farmers (e.g., Allardt 1953).

Sub-study III showed that there were consistent and substantial differences in divorce risk between the white-collar-employee and manual-worker groups only in marriages of the shortest duration. The differentials among couples in their first decade of marriage were large but there were no consistent differences among couples in their third or fourth decade. See Chapter 4.1.1 for the potential explanations for the finding that the comparatively high divorce risk for spouses in manual-worker occupations (and for those with little formal education) was specific to marriages of relatively short duration.

4.1.3 Economic activity

As for economic activity, sub-study I reported that the risk of divorce was much higher for unemployed than for employed spouses. Moreover, when the joint effects of the wife's and the husband's economic activities were examined (sub-study III), it was found that the risk of divorce was higher when either or both partners were unemployed than when both were employed. The husband's unemployment had a stronger effect than the wife's unemployment. Further, the risk of divorce was especially high when both partners were unemployed. It was also notably high for husbands in the small category "other". Presumably, a large proportion of men (and some women) in this category may, in fact, be unemployed, thus being in this group may signal "unregistered unemployment".

The divorce risk for wives in the group "other" (including homemakers) was relative low (sub-study I). The examination of both partner's economic activity jointly (in sub-study II) resulted in a richer picture: couples with the wife in the category "other" were at lower risk than when both partners were employed – but only when the husband was employed. The husband being unemployed or in the category "other" increased the risk also when the wife was in the category "other".

The finding that the husband's unemployment increased the risk of divorce was to be expected, as previous research from the US (Bumpass et al. 1991; Cherlin 1979; Ono 1998; Ross and Sawhill 1975; South and Spitze 1986) as well as from European countries (Babka von Gostomski et al. 1998; Nygaard Christoffersen 2002; Poortman 2002) has consistently reported a higher risk of marital disruption among unemployed and unstably employed husbands than for (stably) employed husbands.

The present study reported a relatively low the risk of divorce among women in the economic activity category "other", which comprises those engaged in domestic work full-time. This finding is in line with the findings of previous studies from the US (Brines and Joyner 1999; Cherlin 1979; Greenstein 1990, 1995; Hiedemann at al. 1998; South and Spitze 1986; Tzeng and Mare 1995) and Europe (Babka von Gostomski et al. 1998; Beck and Hartmann 1999; De Rose 1992; Poortman 2002), including Sweden (Hoem and Hoem 1992; Trussell et al. 1992): the risk of marital disruption is reported to be higher for women who are employed or who work more hours than for non-

working women or women who work fewer hours. As the effect of the wife's being employed on marital stability is usually measured by comparing "working" women to "non-working" women, or by studying the effect of the number of hours worked, few studies explicitly measure the effect of the wife's unemployment (available for work and seeking job). A British study (Berrington and Diamond 1999) found an elevated risk of marital disruption for women who reported themselves as unemployed, and a Danish study (Nygaard Christoffersen 2002) reported that both the mother's and the father's unemployment increased the risk of family dissolution. Finally, a study from the US (Bumpass et al. 1991) found that the wife's unemployment had no effect as long as her husband was employed, but unemployment among both partners early in marriage promoted divorce more than if only the husband was without work.

Sub-study III reported that the effects of spousal employment and unemployment were similar in marriages of various durations (the main exception being that the divorce risks were high for pensioners and students when these statuses were unusual). Having used a more suitable study design, South (2001) reports for the US that as marriages age, the divorce-promoting effect of wives' employment becomes stronger.

4.1.4 Income

Sub-study I showed that the risk of divorce decreased consistently with the husband's increasing personal income (subject to state taxation). The inverse association became weaker when the other socio-economic factors were considered, which is consistent with the results of another Finnish study (Finnäs 2000). Studies from the US also frequently report that the husband's higher earnings or income lower the risk of divorce (Hoffman and Duncan 1995; Ono 1998; South and Lloyd 1995), although some have found no effect (Greenstein 1990, 1995).

As far as the wife's income was concerned, sub-study I produced some interesting results. No association was observed in the descriptive model (controlling only for the control variables) but when the wife's education, occupational class, and economic activity were also considered, there was a positive relation to the risk of divorce. This could be taken to mean that the wife's high income had a divorce-promoting effect, which was hidden at first in the counteracting effects of the three other socio-economic factors. For Finland, Finnäs (2000) reported that divorce risk increased with the wife's increasing income – in a model controlling for a number of other socio-economic variables. This finding and the findings of the present study are consistent.

Sub-study II examined the joint effects of the wife's and the husband's income, and reported that overall, the divorce risk was lowest when the wife's income was low and the husband's income was high, and highest when the wife's income was relatively high and the husband's was low. Further, the wife's high income increased the risk of divorce at all levels of the husband's income, including cases in which it was still clearly

lower, but the divorce-promoting effect of the wife's high income was particularly strong when the husband's income was low. (As a consequence, the risk of divorce was particularly high when wife's income exceeded the husband's income.) These findings could be taken to indicate that both the absolute and the relative income levels (in other words the wife's income compared to the husband's) may have an effect.

These findings are generally consistent with those of a recent study from Sweden (Liu and Vikat 2004), reporting that the wife's higher percentage contribution to the couple's total income increased the risk of divorce when the couple's total income was controlled for. Research from the US reports inconsistent findings: some studies show that the wife's having a high income, or a higher income than her husband, increases the risk of divorce (D'Amico 1983; Heckert et al. 1998), while others suggest no such divorce-promoting effect (Greenstein 1995; Hoffman and Duncan 1995; South and Lloyd 1995). (For a review, see Sayer and Bianchi 2000.) Apparently, the effect of the wife's income on the risk of marital disruption is complex, and given the counteracting effects involved, the different societal contexts, as well as the different operationalizations of relative incomes used in these studies, the inconsistency is not surprising.

The results of sub-study III suggested that the wife's income was rather consistently and positively related to the risk of divorce early as well as later on in the marriage. The inverse effect of the husband's income was less clear in marriages of the shortest duration. Research from the US has reported that the effects of factors such as the spouses' employment, income, and material assets remain similar throughout the marriage (Booth et al. 1986; South and Spitze 1986; White and Booth 1991).

4.1.5 Housing tenure and housing density

Previous research has consistently reported that home-ownership lowers the risk of marital disruption (Finnäs 2000; Murphy 1985a; Ono 1998; Weiss and Willis 1997; for a review of early research see Levinger 1965). This was reflected in the results of sub-study I showing a lower risk of divorce among home-owners than among couples living in a rented dwelling – although factors such as marriage duration, family composition, and the degree of urbanization were also considered. The lower risk among home-owners was partly attributable to their generally higher socio-economic position. However, home-ownership also had a clear independent effect on the risk of divorce.

The effect of housing tenure was similar in marriages of short and long durations (sub-study III). The lack of interaction with marriage duration was an unexpected finding in that, given the higher prevalence of home-ownership in longer-lasting marriages, renters could be expected to be more strongly selected in terms of factors predictive of divorce, such as lowered expectations concerning the continuity of the marriage. It

is nevertheless consistent with previous research from the US reporting that couples' home-ownership and monetary assets (Booth et al. 1986; White and Booth 1991) have similar effects at various marriage durations.

The descriptive model (controlling for the control variables) in sub-study I showed that divorce risk increased with increasing housing density. However, when the other socio-economic factors were also considered, no association was observed. Thus, the higher divorce risk among couples living in more crowded dwellings was attributable to their generally lower socio-economic position. Sub-study III showed that this held for all categories of marriage duration.

4.2 Explanations for the association between socio-economic position and divorce

The findings of the present study were generally in line with those of previous studies from other European countries and the US commonly reporting a negative association between the socio-economic positions of spouses and the likelihood of marital disruption, the main exception being that some aspects of the wife's economic success increase the likelihood of marital disruption.

The finding that the various dimensions of spousal socio-economic position had an independent effect on the risk of divorce suggests that the differential aspect is a highly multifaceted phenomenon requiring several types of explanation. This section offers various explanations for this association, divided into the following three categories, based on the causal order of the socio-economic variables and divorce: effect, direct selection, and indirect selection.

4.2.1 Effect: socio-economic positions affect marital stability

From the perspective of the present study, the most important type of explanation for the association between spousal socio-economic positions and the likelihood of divorce is the possible causal effect of socio-economic position on marital stability. Previous literature suggests several intermediary processes through which socio-economic factors might impose their effect. The present study, as well as several previous studies, report that, overall, divorce risk is higher in disadvantaged than in advantaged groups of the population. It has been argued that the social and economic resources of a married couple increase marital stability through both attraction and barrier forces.

Above all, the availability of greater social and economic resources to the family, irrespective of the source, is assumed to make continuing with the marriage more attractive for both partners. These family resources may act as attractions in that they provide material rewards in terms of satisfying needs for physical subsistence, safety and psychological security, as well as symbolic rewards such as a high social status in

the community (Levinger 1976). Psychosocial models suggest that, in particular, the husband's failure to satisfy the normative expectation that men are the (main) heads of households undermines mutual esteem and affection among marriage partners, adds to psychological distress, and contributes to interpersonal tensions, even if the wife is employed (Cherlin 1979; Nock 2001; Ross and Sawhill 1975; Voydanoff 1991). More generally, psychological research has linked economic stress to poor marital quality (see Conger et al. 1990; Kinnunen and Pulkkinen 1998).

Social and economic resources may also decrease the likelihood of divorce by creating barriers against leaving a marriage that has turned out to be unsatisfactory. Spouses may be reluctant to break up the financial assets of the family, especially if the assets are indivisible and relatively illiquid, such as the family home (Levinger 1976; Ross and Sawhill 1975) or a family business, such as a family farm. In other words, joint property is marriage-specific capital that discourages marital disruption (Becker et al. 1977).

The main exception to the inverse association between the socio-economic position of marriage partners and the risk of divorce was that the wife's economic independence may also have had divorce-promoting effects. Economic and psychosocial explanations suggest that if the partner who is economically more dependent – usually the wife – has independent economic resources it tends to destabilize the marriage. According to economic theories, when the wife's resources compare more favorably with those of her husband, mutual interdependencies based on gender differentiation of conjugal roles (whereby the husband specializes in breadwinning and the wife in domestic production and reproduction) decrease, the gains from marriage decrease, and hence the risk of marital disruption increases. Psychosocial models (see e.g., Nock 1995, 2001; Voydanoff 1991) suggest that a wife's economic success adds to her confidence in being capable of maintaining an independent household should the marriage turn out to be unsatisfactory. Employment and economic independence from the husband may also provide a woman with alternative attractions, such as more opportunities for self-realization outside marriage, and better chances of meeting a new, attractive partner. Finally, wives with independent social and economic resources may have higher expectations in terms of the qualities of their husbands (Liu and Vikat 2004).

The results of this study showed, however, that the effect of spousal resources was remarkably gender-neutral in many respects (education, occupational class, and unemployment), suggesting that, overall, higher economic resources, irrespective of whether the wife or the husband has contributed them, are associated with higher marital stability. Thus, the effects of economic resources on the risk of divorce were not as asymmetric as the prominent theories of marital stability seem to predict. This is what was expected (see Chapter 1.6). The gendered and gender-neutral hypotheses are discussed further on in the concluding chapter (6).

4.2.2 Direct selection: marital instability affects socio-economic position

It seems likely that a part of the association between the socio-economic position of spouses and the risk of marital disruption found in studies focusing on antecedents of divorce (including the present one) arises from the fact that the process of marital disruption affects the social and economic circumstances of each partner. Its effect on the circumstances of divorced adults and their children is an important theme in its own right (see e.g., Poortman 2002). However, in research focusing on precursors of divorce, any differentials in divorce risk following from the fact that marital breakup affects the socio-economic position of each partner rather than the other way around are problems that complicate the interpretation of the findings, and which researchers try to avoid by building appropriate study designs (e.g., by measuring the social and economic circumstances before the marital breakup). Even so, direct selection is likely to affect the findings. This is because, in reality, divorce is a process rather than an event, and spouses probably take steps toward dissolving the marriage before they actually separate or divorce. In other words, they anticipate or plan the divorce, and they may, at least in some respects, adjust their economic activities and investments accordingly.

The possibility of such direct selection is perhaps most obvious in the case of marriage-specific investments (see Becker et al. 1977), best exemplified in the present study by home-ownership. Spouses who have little trust in the continuity of their marriage may hesitate to invest in indivisible and relatively illiquid assets, and this may partly explain the higher divorce risk among couples living in rented dwellings.

Another aspect of spousal socio-economic position in which direct selection might be important is (the wife's) employment and the level of personal income. A potential explanation for the comparatively low divorce risk among wives who are not employed and for wives with a low level of income is that women respond to an expectation of marital disruption by increasing their supply of labor as they prepare to become economically, socially, and psychologically more independent (Rogers 1999; Spitze 1988). Some studies from Germany (Beck and Hartmann 1999) and the US (Rogers 1999; Sen 2000), using different approaches, have found support for the hypothesis that marital discord and anticipated divorce affect women's labor-supply decisions, although Sen (2000) reported that the effect of anticipated divorce (as indicated by actual divorce in the near future) on such decisions had declined across cohorts.

However, in 1990s' Finland the great majority of married women tended to work full-time in any case, and it is not likely that they would very often seek employment in preparation for ending the marriage. It is nevertheless possible that the minority of Finnish women who have chosen to restrict their involvement in paid work in order to engage in domestic work full-time are selected for having a deep trust in the continuity of their marriage.

4.2.3 Indirect selection: factors that affect socio-economic position and marital stability

The third type of explanation for the associations between spousal socio-economic position and the risk of divorce is indirect selection. This means that there are unmeasured "third" factors that affect both, and explain at least some of the association. Of course, researchers do their best to control for such confounding variables in their analyses. Still, it is easy to think of many factors that may have consequences for both a person's socio-economic position and the prospects of a marriage, but remain unobserved in empirical analyses. In this case, such third factors could include spousal values and wishes, social skills, or personality traits and other psychological characteristics. As far as values are concerned, holding on to "traditional" family values may, for instance, increase the likelihood that the wife will choose to engage in domestic work full time, as well as increase the chances that the marriage will last. With personality traits, it may be that being a persistent person increases the length of the educational career as well as the length of the marriage. Similar personality factors may increase the likelihood of owning a home rather than renting. Given the relatively low rates of unemployment in Finland in 1990, unemployment is also likely to have been selective. There may be some personal traits that increase the likelihood of both unemployment and divorce, and explain at least part of the effect of the former on the risk of the latter (Bracher et al. 1993, p. 420). Presumably, the effect of this kind of selection was only partly controlled in the analyses by holding education and occupational class constant.

Childhood socialization experiences and family background have consequences as far as the material as well as the non-material circumstances of an individual are concerned, and they might therefore affect both the socio-economic position and the likelihood of marital disruption. Parental divorce is one such family-background factor. Research from the US and Great Britain has shown that individuals whose parents have divorced have an elevated risk of union disruption (Amato 1996; Bumpass et al. 1991; Kiernan and Cherlin 1999). To the extent that the dissolution of marriage has negative consequences for the socio-economic position of children, parental divorce might explain some of the association between spousal socio-economic position and divorce risk. Such factors are nevertheless reported to explain little of the association between parental divorce and union disruption (Amato 1996; Kiernan and Cherlin 1999).

5 Methodological considerations

The present study was based on an extensive register-based data set, which includes information on several aspects of the socio-economic positions of both marriage partners measured symmetrically for the husband and the wife. The data set has several advantages over ordinary survey data, but the study design also has some limitations. These are discussed in this chapter, which together with the concluding chapter addresses the more general question of how further research could add to existing knowledge of socio-economic differentials in union disruption.

5.1 Focus on formal first marriages

Owing to data limitations, the study was restricted to formal marriages: no data on the disruption of cohabiting unions or on periods of premarital cohabitation were available. This restriction could be considered as a weakness of this study, which thus gives only a partial picture of union disruption in Finland in the early 1990s.

In principle, the absence of data on periods of cohabitation may affect the results because of selection processes. Individuals in population groups in which marriage is less likely and is entered into after longer periods of cohabitation are presumably more strongly selected in terms of factors predictive of high marital stability than those in groups in which marriage is more likely and is entered into sooner. As mentioned earlier, it appears that when cohabitation was becoming common in Finland, women from lower socio-economic groups were somewhat more likely to enter into cohabiting unions, less likely to marry their cohabiting partner, and less likely to marry before the birth of the first child than women from higher socio-economic groups (Finnäs 1995). Presumably, this kind of selection process would lead to a slight underestimation of the effect of socio-economic factors on union disruption. It is unlikely that this would affect the conclusions of the study, however: it would rather highlight their substantive significance.

Given that disruption risks for cohabiting unions are much higher than for marriages (Finnäs 1996), there is no doubt that the absence of data on such disruption leads to an underestimation of the likelihood of union disruption. As far as the present study is concerned, this is not relevant: the important question is whether the socio-economic differentials in union disruption are different for cohabiting unions than they are for marriages. Little is known about this. It should be noted, however, that cohabiting unions are heterogeneous: while some could be considered an alternative to being single rather than an alternative to marriage, some are stepping-stones to marriage, and others could be considered social substitutes for marriage. In principle, there is no reason to expect that socio-economic differentials in the risk of union disruption would be much different for “marriage-like” cohabiting unions than they are for marriages.

Comparison of the determinants of union disruption between marriages and different types of cohabiting unions remains for future research.

Given the fact that antecedents of divorce may be somewhat different for second and subsequent marriages than for first marriages, for the sake of homogeneity, the study population was restricted to marriages which were the first ones for both the husband and the wife (about 88 percent of all marriages). Since first union dissolution is becoming increasingly common, future research should explore the formation and dissolution of not only the first but also of subsequent marriages. Furthermore, because cohabitation is a common choice among divorced men and women, and entering into a second or subsequent marriage is even more selective than entering into a first one, cohabiting unions should also be included.

5.2 The exclusion of spouses living apart in 1990

Married couples residing apart (i.e. not registered as domiciled in the same dwelling) at the beginning of the follow-up were excluded from the data. This restriction did not apply to many marriages: of a 10 percent sample of the data only 3.1 percent of married women did not have their husbands registered in the same dwelling. However, their divorce rate was high and therefore their percentage share of all divorces was large: 26.9 percent of these women divorced within the following three years, whereas among women residing with their husbands the proportion was only 2.5 percent. This means that 26.1 percent of divorces during those years were granted to women who were not residing with their husbands at the end of 1990. In other words, because of this exclusion there were far fewer divorces in the data.

The exclusion of couples living apart was necessary and meaningful. Presumably, the majority of spouses living apart were doing so because their marriage had, in effect, ended. They may have filed for divorce, and they may have been cohabiting with a new partner. There are two potential disadvantages, however. Firstly, spouses living (permanently) apart for reasons other than marital discord (such as work) were excluded, and secondly, cases in which there was a long period of separation before the judicial divorce are under-represented in the data. Fortunately, there is no reason to expect that the socio-economic factors affecting the risk of divorce in these groups were much different from those that were analyzed in this study.

5.3 Granted judicial divorce as the marker of marital disruption

The analyses reported in the present study took granted judicial divorce as the (only) indicator of marriage disruption. Another common marker of marriage disruption in analyses of the antecedents of union dissolution is the date of separation (moving apart) (e.g., Berrington and Diamond 1999; Bracher and Santow 2001; Martin 2006; Poortman and Kalmijn 2002), which is a more immediate marker of the end of marital life. Separation is also a better indicator in studies of societies in which it is difficult to obtain judicial divorce, or when the process is very long: in these cases analyses based on judicial divorce misrepresent subgroup differentials in that there may be differences in the pace or the probability of divorce after separation. (See Bracher et al. 1993; McCarthy 1978).

Judicial divorce was used as the only marker of the end of marriage in this study, and the data did not even include details of the date of separation. While this approach may give some cause for concern, it was justified and has some advantages. The distinction between separation and divorce is less relevant when there are no significant legal, moral, or financial obstacles to divorce. Ever since the reform of the Finnish divorce legislation that came into force in 1988, judicial divorce as such has been quick, easy and inexpensive. As for as the possibility of misrepresenting subgroup differences is concerned, so-called desertion without judicial divorce has been more common in the low socio-economic strata (Levinger 1965), but it is unlikely that this was the case in the 1990s' Finland. Rather, common sense suggests that wealthy wives and husbands are able to move apart sooner in the case of marital discord, and the results would be biased if they were based on moving apart.

Divorce is an essential, irreversible step toward the end of the relationship. At least two advantages (of the use of judicial divorce as the marker of the end of the marriage) follow from this. Firstly, even if the register data includes information on moving apart, there is no information on the reasons. The date of moving apart is therefore a misleading indicator of union disruption to the extent that couples move and live apart for other reasons, such as work. Secondly, the use of separation (or filing for divorce) as the marker may upwardly bias the estimates of marital disruption in view of subsequent reconciliations. Bumpass and associates (1991) found that spells of separation followed by reconciliation were extremely common in the US, and in the NSFH data, of those who first separated 1970–84, 40 percent reconciled at least once. Litmala (2001) reported for Finland that during recent years, about a quarter of divorce applications had been dropped. Thus, reconciliation is rather common even after filing for a judicial divorce. Furthermore, whatever biases the focus on judicial divorce creates, they probably affect estimates of the levels of marital disruption rather than socio-economic differentials in the risk of disruption.

5.4 Other methodological considerations

As already mentioned in Chapter 2.3, the divorce follow-up years of this study (1991–93) happened to exactly overlap the years when Finland's rapid economic growth of the late 1980s turned into a deep recession. The fact that the unemployment rate rose dramatically means that many individuals in the present study population experienced unemployment and thereby decreases in income. However, information on the economic activities and the income levels of spouses were obtained from the year 1990, and subsequent changes remain unobserved. In terms of measurement, this is not necessarily harmful. The reason for this is that marital disruption is a process (see Chapter 2.4), and it is reasonable to assume that time tends to elapse after a change in economic status before the new status (e.g., being unemployed) manifests itself in divorce. (Note that the judicial divorce process entails at least a six-month time lag.) The usual length of the process from a change in economic status to divorce remains an open question, however, since the details of the process of marriage disruption cannot be determined from the present data material and a special investigation would go beyond the scope of this study. Fortunately, the unemployment rate had not yet reached a very high level in 1991 and 1992. Moreover, unemployment was presumably less selective than usual at that time, and therefore it is less likely that the exceptionality of the study period in this respect distorts the findings. In terms of interpretation, it is important to note that the findings of the study on the associations between unemployment and divorce, for example, concern the situation before rather than during an economic recession, when being unemployed is presumably less indicative of a person's own success in work life. This probably makes it more likely that the established associations hold in post-recession Finland and in other countries.

The possibility of direct selection, meaning that the socio-economic status of the spouses measured for the study might be a consequence rather than a cause of the end of the marriage was discussed in Chapter 4.2.2 in the context of the interpretation of the findings. For the analyses of the present study, most of the explanatory variables were measured at the beginning of the three-year divorce follow-up, meaning that they describe spousal circumstances 0–3 years before each observed divorce. Further, the study only includes couples registered as domiciled in the same dwelling at the beginning of the follow-up. Therefore, changes in the socio-economic positions of spouses following actual separation (e.g., moving out of a shared home) are not likely to have affected the socio-economic positions measured for this study. Even so (as discussed in Chapter 4.2.2), spouses may anticipate or plan divorce, and adjust their economic activities and investments accordingly.

As for problems related to the measurement of socio-economic position, it should be noted that this is often subject to change among the youngest – at least those under 30 years of age, as young people are just beginning their work lives and they may still be

completing their education. Still, it is clear that analyses of the antecedents of divorce have to include relatively young spouses since they are also prone to divorce, and restricting the analysis to older couples would bias the results owing to selection.

A clear disadvantage in register-based data is the lack of subjective reports. Data on the process of marital disruption (or the intervening factors) are potentially useful in the interpretation of findings. The possibility of including indicators of matters that require subjective reports, such as marital happiness and problems (including the problem behavior of spouses), is a strength in survey studies, which has been taken advantage of in some recent analyses of the antecedents of divorce (e.g., Amato and Rogers 1997; Sayer and Bianchi 2000).

Studies concerning the antecedents of marriage dissolution are best conducted by observing successive marriage cohorts from the time the unions are initiated. The analyses conducted for the present study, however, were based on a left-truncated study population, meaning that the marriages were of varying durations at the beginning of the follow-up. This is a weakness especially when the focus is on the effects of historical and individual time on union dissolution. Namely, in such data the effects of marriage duration are confounded with the effects of membership in various birth and marriage cohorts, and it is not possible to unconfound them. The left-truncation was a weakness especially in sub-study III, as the interpretation of the findings was complicated by the fact that in principle, any interaction between a socio-economic variable and marriage duration could just as well have been related to the cohort as to the duration.

5.6 Concluding comments on the data

A (register-based) couple-level data set was used in this thesis study to examine socio-economic differentials in divorce risk. This has several advantages in comparison with ordinary survey data. The data included information on the socio-economic positions of both partners measured symmetrically for the husband and the wife. With a linkage success close to 100 percent (meaning that there was virtually no loss of follow-up) and the inclusion of the whole population at risk, the problems inherent in sample selection were avoided, and the large number of observations in the data allowed the examination of groups that are theoretically important but small in size, as well as the simultaneous analysis of associations between various socio-economic characteristics of spouses and the risk of divorce.

With regard to the potential of linked register data, the overall conclusion is that it is also promising in family research. Significantly, the main limitations of the data set used in this research project do not directly follow from the fact that the data were register-based – they could be avoided if a better register-based data set were used. In fact, Statistics Finland has already compiled a new data register for the purposes

of family research. It includes complete union and childbearing histories of cohorts of individuals, thereby enabling the investigation of the diversity of family-formation pathways among Finnish women and men, including the formation and dissolution of marriages as well as of cohabiting unions.

6 Conclusions

Prominent economic and psychosocial theories suggest that the husband's social and economic resources tend to stabilize the marriage, whereas the wife's economic success tends to destabilize it (see Bracher and Santow 2001; Ono 1998). The main justifications for this so-called gendered hypothesis concern the gains derived from gender specialization in conjugal roles (Becker 1981; Becker et al. 1977); that the husband's failure to satisfy the normative expectation that men are (main) breadwinners contributes to interpersonal strains (Cherlin 1979; Nock 2001; Ross and Sawhill 1975; Voydanoff 1991); and that the wife's having economic resources independent of the husband provides her with more opportunities outside the marriage as well as the confidence that she could manage as the sole breadwinner (Nock 1995).

The idea of gender-specific effects of socio-economic resources on marital stability has been challenged by several theorists and in several empirical studies (for a review, see Sayer and Bianchi 2000). The key argument is that gender ideology modifies the effects of the wife's resources on marital stability. The alternative gender-neutral hypothesis posits that as the family with two providers becomes increasingly usual, the effects of the wife's and the husband's resources become more symmetrical than the gendered hypothesis predicts. People marry increasingly for reasons such as companionship and personal satisfaction and less for economic reasons such as the rigid gender differentiation of conjugal roles (Ross and Sawhill 1975). The advantages of wives' working, such as the economic resources they bring to their families (Oppenheimer 1997) and spousal solidarity based on role congruity (Simpson and England 1981) may start outweighing any disadvantages. Further, as paid work of both partners becomes a normal arrangement in marriages, the wife's employment no longer signals that she is exceptionally unconventional, or that the marriage is troubled (Bracher et al. 1993).

The family with two providers has long been the predominant ideology and practice in Finland. More generally, the Finland of the 1990s differed in terms of social welfare and work as well as in family and gender relations to the contexts within which the long-prominent theoretical ideas were developed, thereby offering possibilities to challenge or develop those ideas.

The findings of the present study largely supported the gender-neutral hypothesis. Namely, they were gender-neutral in that both the husband's and the wife's socio-economic positions influenced the risk of divorce, and in many respects had similar (inverse) effects on such risk. For instance, the effects of the level of formal education and occupational class were very similar for wives and husbands. Moreover, the wife's unemployment increased the risk of divorce (as compared to employed wives), although the divorce-promoting effect of the husband's unemployment was stronger than that of the wife.

The main exceptions to the inverse association between the socio-economic positions of marriage partners and the risk of divorce, as well as to the gender-neutrality in the effects, were the divorce-promoting effects of the wife's employment – as compared to wives in the "homemaker" category – and the wife's having a high income. Both absolute and relative incomes seemed to have an effect, as the wife's high income increased the risk of divorce at all levels of the husband's income, but especially when the wife's income was higher. In this respect, the findings of this study were consistent with the gendered hypothesis suggesting that the wife's economic independence promotes divorce. The fact that evidence of such an effect was found in the Finnish context was somewhat surprising. However Liu and Vikat (2004) also found support for the independence effect (as measured by the relationship between the share of the wife's income in the couple's total income and the risk of divorce) in their recent study in Sweden, where social circumstances, including gender relations and social welfare, closely resemble those of Finland.

It is the rule rather than the exception in Finland for the wife to have full-time employment and a reasonable level of personal income. It certainly does not represent unconventionality, and presumably rarely signals that the husband has failed in his role as the (main) breadwinner, or that the wife has lost her trust in the continuity of the marriage. Still, even here, where own earned income combined with income transfers tend to result in a reasonable level of income for single mothers (Hakovirta 2001), the wife's low level of personal income may form a barrier for her to leave a troubled marriage – and perhaps for the husband too, to the extent that he assumes responsibility in this respect. Furthermore, the relatively advanced gender equality in Finland does not mean that full equality or economic independence has been achieved. With their lower wages, atypical work contracts, and problems attached to reconciling work and family life, many women, especially those in low-income families, may feel they are not, in fact, economically independent of their spouses. As the husband's income is usually higher, the wife may feel she is reliant on her husband's income, if not for the satisfaction of basic material needs at least to ensure her (and the children's) customary standard of living (Becker et al. 1977; Cherlin 1979).

The finding that the wife's income exceeding the husband's income promoted divorce could also be interpreted to signify that her higher income threatened the "traditional" gender-differentiation of conjugal roles and the accompanying power balance, and that this lowered relationship quality to the extent that at least one of the spouses preferred a more conventional situation (Liu and Vikat 2004). The specialization and trading model posits that a more "traditional" division of work would yield gains for both partners (Becker 1981; Becker et al. 1977). However, this does not seem to be a very viable solution in a situation in which the great majority of married women tend to work full-time in any case, still perform most of the daily domestic work, and often perceive this unequal division of unpaid work as unfair (Melkas 2004).

It should also be noted that the higher divorce risk among wives with more abundant monetary resources does not necessarily mean that these resources causally affect marital stability. In addition to direct selection, whereby the wife increases her market work effort because she expects a divorce (Oppenheimer 1997), there is a strong possibility that there are unmeasured factors, such as "traditional" views about marriage, that affect the wife's choices concerning how she allocates time between market work and unpaid domestic work on the one hand, and the likelihood of divorce on the other, and at least partly explain the differentials in divorce risk according to the wife's economic activity and income.

In principle, the independence hypothesis applies to the effects of husbands' as well as wives' socio-economic resources. It has also been hypothesized that as wives provide for the family and the non-economic aspects of marriage gain in relative importance, the effects of the husband's being unsuccessful in his role of provider might no longer place strains on the marriage (Cherlin 1979). However, the findings of the present study suggest that the socio-economic resources of the husband consistently add to marital stability. Despite the fact that Finnish men and women have become increasingly similar in their economic and domestic roles, there are persistent differences between the genders in the perceived primary responsibilities attached to breadwinning on one hand and procreation on the other, meaning that even nowadays, men are often expected to be primary providers. Presumably, too, other, non-economic resources (such as social skills) tend to go hand in hand with economic resources.

Although the present study provided some evidence that the wife's greater economic resources may also have stabilizing effects on the marriage, the generally inverse and gender-neutral association between the social and economic resources of spouses and the risk of divorce seems more significant in terms of understanding marital stability in Finland. The divorce-promoting effect of the wife's economic resources was restricted to the low divorce risk for women in the "homemaker" category and to the high risk for wives with exceptionally high incomes. In this respect, the specialization and trading model found only little support in this study.

The study included several indicators of the socio-economic positions of both husbands and wives. The fact that all of these had effects independent of each other suggests that the socio-economic differentials in the risk of divorce are multidimensional in nature and various types of explanation are needed to account for them. It is likely that socio-economic factors influence marital stability by affecting the current and expected rewards of the ongoing relationship and barriers to breaking the bond, and that different selection processes are also important. One possibility is that of indirect selection, whereby third factors that affect both the socio-economic positions of the spouses and the risk of divorce explain at least some of their association. Finally, it is

likely that, especially in the case of factors that exemplify marriage-specific capital (e.g., home ownership), direct selection is also important.

The fact that all indicators of spousal socio-economic positions had independent effects also means that they are not interchangeable, and that several of them are needed in order to provide a good description of socio-economic divorce-risk differentials. In particular, measures describing the positions of spouses in the educational or occupational structure are not enough to capture the full pattern, as more situational factors, especially those measuring employment and levels of income, are also important. Significantly, too, the richer measurement of socio-economic differentials facilitates the interpretation of the findings. Finally, the inclusion of symmetrical measures of both the husbands' and the wives' socio-economic positions enables the description of the interactive patterns of their resources and thus the testing of hypotheses concerning their relative positions.

The finding that the effects of factors such as spousal employment and unemployment, the wife's income, and home-ownership affected divorce risk in a very similar way at the various marital durations suggests that previous results concerning the effects of these factors could be largely generalized to couples in marriages of varying duration as well as to all cohorts from the most recent decades. It also suggests that the effects of these perhaps less structural factors are pervasive in that they manifest themselves among young people for whom economic difficulties and a lack of material assets are commonplace and often temporary, and among those who have been together for decades and who are presumably tied together by many kinds of tangible and intangible bonds that make divorce costly. The pervasive nature of the effects of these factors highlights their importance as antecedents of divorce.

However, measured in terms of the wife's and the husband's level of formal education and occupational class, an inverse association between the socio-economic positions of the spouses and the risk of divorce was found only in marriages of relatively short duration. It is likely that several factors jointly produced these interactions. The finding for occupational class suggests that the presence of differential educational distributions in the various birth cohorts is an unlikely explanation for the differential effects of education in shorter and longer marriages. In the present analysis, change with time in the marriage was represented only synthetically, and a longer cohort follow-up study would be needed to disentangle the cohort and duration effects. Finally, selective attrition may be an important factor and should be considered in future research. The findings for education and occupational class suggest that empirical research and the exchange-based theories concerning antecedents of divorce may need specification in order to take the variation of divorce determinants over the life course into account.

There is clearly plenty of scientific interest in the socio-economic differentials involved in the risk of divorce. Questions concerning the formation and dissolution of unions lie at the heart of family demography. More generally, social ties and social cohesion, the causes and consequences of social inequality, as well as the gendered nature of family and work are central themes in the social sciences. However, the socio-economic differentials in the risk of divorce are important not only from the scientific point of view, but also because they are relevant to the well-being of divorced individuals and their children. Any negative consequences of marital disruption to the well-being of divorcees and their offspring (Amato 2000; Furstenberg 2001; Smock, Manning, and Gupta 1999) are exacerbated by the fact that women and men with fewer social and economic resources are more likely to face divorce in the first place. Moreover, several studies from the US report that resources such as education and employment positively affect post-divorce adjustment (see Amato 2000). A large body of research consistently reports that divorced individuals, as compared to married ones, experience lower levels of psychological well-being, higher morbidity and mortality, as well as greater economic hardship, for instance (for reviews, see Amato 2000; Joutsenniemi et al. 2006; Koskinen and Martelin 2007; Martelin, Koskinen, and Aromaa 2004; Martikainen et al. 2005). These differentials follow partly from the effects of divorce on well-being, and partly from selection, whereby some individual characteristics both increase the likelihood of divorce and lead to poorer well-being after it (see e.g., Amato 2000; Koskinen and Martelin 2007). Given that Finland has one of the highest divorce rates in Europe, and that the disruption rates of cohabiting unions are even higher than for marriages, there is an enduring need for research that furthers understanding of the factors that contribute to union stability as well as of the consequences of union disruption.

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Socio-economic status and divorce in first marriages in Finland 1991–93

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Abstract. Various studies report an inverse association between socio-economic status and the risk of marital disruption. Using register-based follow-up data on first marriages in Finland intact at the end of 1990 and divorces in 1991–93 (n=21 309), this study aimed at gaining a better understanding of socio-economic differentials in divorce risk by disentangling the influences of various aspects of the socio-economic status of the spouses. Indicators of socio-economic status include each spouse's education, occupational class, economic activity, and income as well as housing tenure and housing density. When examined individually, divorce risk was inversely associated with socio-economic status for all its various indicators except wife's income. All of these factors had an independent effect on divorce risk. The effect was, however, weak for the spouses' occupational rankings and housing density, and it was positive for the wife's income. Given the multifaceted nature of these socio-economic differentials, it appears unlikely that one single explanation could account for them all.

INTRODUCTION

Earlier research has usually found a negative association between the socio-economic status of the spouses and the risk of marital disruption. For instance, there is evidence that marital disruption is more common among men in unskilled manual occupations than among those in professional occupations (Fergusson et al. 1984; Haskey 1984; Murphy 1985a, 1985b). Most studies have reported that the risk of marital disruption is inversely associated with the wife's educational level (Mott and Moore 1979; Morgan and Rindfuss 1985; Bumpass et al. 1991; Hoem 1997), or with both spouses' level of education (Kravdal and Noack 1989; Tzeng 1992), though in Canada (Balakrishnan et al. 1987) and Australia (Bracher et al. 1993) the level of education was found to have no effect on the risk of separation. The inverse relationship between spouses' level of education and marital disruption has been reported to hold for Finland (Finnäs 1996, 1997). Further, earlier research has related a low risk of marital disruption to home-ownership (Murphy 1985a; South and Spitze 1986; Greenstein 1990; Bracher et al. 1993), as well as to the husband having a high income (Cutright 1971; Becker et al. 1977; Cherlin 1979) and stable employment (Ross and Sawhill 1975, pp. 52–61; Cherlin 1979; Haskey 1984; Bumpass et al. 1991; Bracher et al. 1993). In the United States, the wife being employed has been linked to an increased divorce risk, while the results for the effects of her earnings have been inconsistent (for a review, see Spitze 1988, p. 597).

Designs in these previous studies have been diverse. Many studies make extensive use of various socio-economic variables, while some operate with one or two. Many older studies concentrated exclusively on the husband's status, but some recent studies focus only on the wife's characteristics, while some use data on both husband and wife. The inclusion of other variables such as demographic and life-course variables in the models varies, depending on the focus of the study.

Owing to this diversity in study designs, and the fact that the various components of socio-economic status are usually strongly related to each other, little is known about those dimensions of socio-economic status that are the most important in affecting the risk of marital disruption. Knowing this would, however, improve understanding of the socio-economic differentials in the risk of marital disruption. For instance, in several longitudinal studies in the United States in the 1970s, it was found that, in predicting marital disruption, the stability of the husband's employment may be more important than the level of his earnings (Ross and Sawhill 1975, pp. 52–61; Cherlin 1979). (Previously, conflicting results had been reported. For instance, in Cutright's (1971) study based on cross-sectional data, when family income was controlled, marital stability showed a strong relationship to neither the occupation nor the education of the husband.) Research also suggested that it was lack of material assets, rather than low income itself, that was an important determinant of marital disruption (Ross and Sawhill 1975, pp. 52–61; Galligan and Bahr 1978). Thus, the finding that the marriages of

husbands with higher earnings are less likely than others to dissolve through divorce does not necessarily mean that it is the husband's money that holds marriages together; more fundamental factors may explain this association, and there may be factors that mediated the effect of the husband's income on divorce risk.

The aim of this study is to extend knowledge about the socio-economic differentials in the risk of divorce by disentangling the influences of a large number of indicators of the socio-economic status of the spouses. After describing socio-economic differences in divorce risk by each indicator of socio-economic status, the independent effects of each variable are distinguished. The analysis is then directed at revealing pathways through which each factor is related to the risk of divorce. The analysis focuses on the main effects of the dimensions of socio-economic status rather than, for instance, on the interactive linkages between the status of each spouse. Finally, different types of explanation for the associations between socio-economic factors and the propensity to divorce are identified.

The study uses register-based follow-up data on Finnish marriages. The data include a great deal of information on each spouse's socio-economic status as well as the couple's housing conditions. The socio-economic characteristics have been measured before separation and divorce, which is essential since the process of marital disruption may affect, as well as be affected by, a person's economic situation (Galligan and Bahr 1978, p. 284). A significant advantage of these data is that the whole population at risk is included. The problems introduced by sample selection are avoided and, perhaps more importantly, the very extensive size of the data set allows simultaneous analysis of associations between various socio-economic characteristics and divorce risk. Finally, in contrast to ordinary longitudinal census data sets, in which the information on changes in marital status is based on comparison between status data from consecutive censuses, in this data set the exact dates of vital events have been linked to the census data. The computerised linking of census and other records is made possible by the personal identity code system used in the Nordic countries.

In this paper, the term 'socio-economic status' is used as a broad concept referring to various aspects of the social and economic position of each individual spouse as well as each couple. Four dimensions of socio-economic status are distinguished for each spouse: level of education, occupational class, economic activity, and level of income. In addition, measures of the couple's housing tenure as well as housing density are included.

Although these dimensions overlap to a great extent, they are distinct both empirically and conceptually. There are, for instance, people with high education but low income, and unemployment is experienced in every educational and occupational category. Further, the variables describe somewhat different aspects of a person's and a couple's social and economic position. The level of education can be thought of as a measure of cultural resources, and occupational class as a measure of occupational prestige and nature of work, while they can both also be considered structural determinants of material resources. The various categories of economic activity describe different types of labour force attachment, while income is the most straightforward measure of a person's current economic situation. The indicators of housing conditions, that is, housing tenure and housing density, may reflect such things as the couple's wealth, standard of living, and the material investments of the spouses in the current marriage.

The 'elaboration' strategy adopted for the analyses is an attempt to explain, interpret, and specify an observed association by taking additional variables into account (Hyman 1955). It has proved useful also in analysing longitudinal event data by means of statistical modelling (see, for example, Valkonen and Martelin 1988). In an analysis employing the logic of elaboration, socio-economic variables are introduced into the models following an assumed causal order, and changes in the effects following the addition of new variables are assumed to reveal *how* – through which pathways – each variable is related to the risk of divorce. The causal ordering of the socio-economic variables is assumed to run from the level of education through occupational class, economic activity, and income to housing tenure and housing density. The ordering is in line with Duncan's model, according to which educational level influences occupational attainment, which in turn leads to remuneration in the form of income (Duncan 1961, p. 783), that can be used for consumption and investment (Duncan et al. 1972, p. 3). The proper place for economic activity in the causal order is assumed to be after education and occupational class, which affect economic activity, but before income, which is influenced by economic activity. In this study, the effects of the individual socio-economic characteristics of husband and wife are examined using this same framework. Thanks to the high rate of labour force participation among Finnish married women, it is possible to determine

an individual socio-economic status for most of them, on the basis of each one's own economic activity.

Divorce is placed at the end of the causal chain. It is assumed that each socio-economic factor may influence divorce risk 'directly' or through more proximate socio-economic factors. The possibility that the marital disruption process also influences the socio-economic status of the spouses is discussed below.

DATA

The data consist of records from the 1990 census (the data for which had been extracted from registers) which were linked with divorce records for 1991–93, and enriched by records from various annual registers for this period, as well as from two earlier censuses. The records of husbands were linked with those of their wives. The linking of registers was carried out by Statistics Finland.

Unmarried cohabitation has become common in Finland, particularly as a way to begin a union. At least until the late 1980s, a large proportion of consensual couples had eventually married (Finnäs 1995). Owing to data limitations and in order to increase homogeneity, this study is restricted to formal marriages. Disruption risks for consensual unions were much higher than for marriages at least until the late 1980s (Finnäs 1996).

Further, this study is confined to judicial divorces. Permanent separations that occurred during the follow-up period (1991–93) as a result of marital discord but that did not lead to divorce before the end of 1993 cannot be identified from the present data. Fortunately, there is no reason to assume that permanent separations without judicial divorce were common in the study population. After the switch to exclusive 'no fault' divorce legislation in 1988, the Finnish divorce rate rose markedly and has remained high. After the law reform, spouses had an unconditional right to obtain a divorce after a six-month waiting period, or immediately if they had resided apart for the two preceding years without interruption. In 1991, 1992, and 1993, the total divorce 'rate' (the sum of duration-specific divorce rates per 100 marriages) was 43 (Statistics Finland 1999, p. 133).

The study includes marriages that were intact on 31 December 1990. Because determinants of divorce may be somewhat different for subsequent marriages than for first marriages, the study population has been restricted, for the sake of homogeneity, to marriages in which neither spouse had been married previously (about 88 per cent). Further, if one or both of the spouses was not Finnish (about one per cent of the marriages), or the wife was 65 years of age or more at the beginning of the follow-up, the marriage was excluded. Finally, the marriage was excluded if the spouses were not registered as domiciled in the same dwelling at the beginning of the follow-up (about three per cent of the marriages). Presumably a large proportion of these marriages had in effect ended. The data include only 55.3 per cent of divorces occurring in Finland between 1991 and 1993, but this is consistent with the exclusion of some known high-divorce-risk groups. Owing to the exclusion of couples living apart at the beginning of the follow-up, the proportion of divorces included in the study is at its smallest during the first follow-up year. The exclusion of these couples may bias the results owing to under-representation of divorces where there was a long period of separation before the divorce.

Divorces among wives were monitored over the three years 1991–93 using data on divorce decrees transmitted to the Population Register Centre by district courts. There were 766,637 marriages in the study population at the beginning of this follow-up. During the follow-up period, the number of divorces in the study population totalled 21,309, and the number of marriage-years at risk – years that the couples spent married during the follow-up period – amounted to 2.25 million. Marriage-years were calculated on a daily basis. Right-censoring was introduced at the dates of the spouse's death, the emigration of the wife, and the end of the follow-up period.

Indicators of socio-economic status

The indicators of socio-economic status included in the analysis describe the circumstances of the spouses at the beginning of the follow-up period. The classifications of the indicators of socio-economic status, as well as the distribution of marriage-years and the numbers of divorces according to these variables, are presented in Table 1.

Data on each spouse's *education* were obtained from a register indicating the level of the highest educational qualification achieved by each individual. The *occupational classification* used by Statistics Finland was modified so that manual workers were further divided into skilled and unskilled (Pensola 2000). Economically active people were classified according to their own occupation. Economically inactive people were classified by their occupation in the 1985 or 1980 census, or, if this could not be determined, by that

Table 1. *Marriage-years (per cent) and divorces (N) according to indicators of socio-economic status, Finland 1991–93*

	Marriage-years (per cent)	Divorces N		Marriage-years (per cent)	Divorces N
All	100	21309			
Marriage-years (thousands)	2246				
Wife's education			Husband's education		
Basic (9 years or less) or unknown	40.1	6755	Basic (9 years or less) or unknown	41.4	7184
Secondary (ca. 10 – 12 years)	47.1	12135	Secondary (ca. 10 – 12 years)	43.1	11463
Tertiary (at least 13 years)	12.8	2419	Tertiary (at least 13 years)	15.5	2662
Wife's occupational class			Husband's occupational class		
Upper white collar employee	12.6	2505	Upper white collar employee	18.1	3375
Lower white collar employee	42.3	9934	Lower white collar employee	18.7	4143
Skilled manual worker	10.6	2461	Skilled manual worker	27.0	6460
Unskilled manual worker	15.6	3271	Unskilled manual worker	13.0	3484
Farmer	9.2	541	Farmer	9.8	695
Other self-employed	5.5	1332	Other self-employed	9.7	2504
Other	4.2	1265	Other	3.6	648
Wife's economic activity			Husband's economic activity		
Employed	76.1	17326	Employed	80.3	18504
Unemployed	2.6	815	Unemployed	2.5	1076
Student	2.1	935	Student or conscript	0.8	373
Pensioner	11.0	573	Pensioner	15.7	931
Others outside labour force	8.3	1660	Others outside labour force	0.8	425
Wife's income			Husband's income		
1 (FIM – 49 999)	25.8	4417	1 (FIM – 49 999)	10.3	2244
2 (FIM 50 000 – 99 999)	48.6	11283	2 (FIM 50 000 – 99 999)	27.3	5657
3 (FIM 100 000 – 149 999)	19.9	4426	3 (FIM 100 000 – 149 999)	35.0	8018
4 (FIM 150 000 – 199 999)	3.9	823	4 (FIM 150 000 – 199 999)	15.1	3166
5 (FIM 200 000 –)	1.7	360	5 (FIM 200 000 –)	12.4	2224
Housing tenure					
Home owner	86.8	15797			
Rented	12.6	5344			
Unknown	0.6	168			
Housing density					
Spacious	31.3	4172			
Normal	57.3	13949			
Overcrowded	9.6	2788			
Unknown	1.9	400			

Source: As Figure 1.

of the household unit's reference person. The group 'other' consists of those for whom none of these characteristics could be determined (most of whom were pensioners), and students. The *economic activity* classification is based on data, obtained from various registers, on each person's economic activity during the last week of 1990. The group 'others outside labour force' consists mainly of persons performing domestic work. The data files of the National Bureau of Taxation were the sources of the variables describing each spouse's *income* subject to state taxation during 1990. Two indicators of housing conditions are used: *housing tenure* and *housing density*. The latter divides couples into four categories (spacious, normal, overcrowded, and unknown) on the basis of the number of rooms (kitchen excluded) in their dwelling and the number of persons in their household's dwelling. The dwelling was classified as spacious if there were at least five rooms for two persons, at least six rooms for three persons, at least seven rooms for four persons, or at least eight

rooms for five persons. The dwelling was classified as overcrowded if there was more than one person per room. (Statistics Finland 1992, pp. 15–16.)

Control variables

Because of their potential effect on both socio-economic factors and the risk of divorce, the following control variables were included in the analysis. The *wife's age at marriage* was calculated from her date of birth and date of marriage, and then classified into five-year categories. The *duration of marriage* refers to the time elapsed since the day of entry into marriage, and was updated during the three-year study period if the couple reached the next five-year duration block. The variable representing *family composition* combines information about the number of children and the age of the youngest child. Children include the husband's, the wife's, and their shared biological and adopted children under 18 years of age living in the same dwelling as the married couple at the beginning of the follow-up period. The last control variable is contextual by nature. Statistics Finland's classification was used to divide the municipalities of the couple's residence at the beginning of the follow-up period by *the degree of urbanization*. The Helsinki region (including Helsinki, Espoo, Vantaa, and Kauniainen) is treated as a separate category. Table 2 shows the classifications of the control variables as well as the distribution of marriage-years and divorces by these variables.

METHODS

The data were cross-tabulated according to the variables included in the analysis. Each cell of the cross-tabulation includes information on the numbers of divorces and the marriage-years lived between 1991 and 1993. The table was analysed by means of Poisson regression. In the model it is assumed that the expected divorce rate (the ratio of divorce events to exposure time) in a certain combination i of the explanatory variables can be described by the equation:

$$E(d_i)/(V_i) = \exp(a + b_1x_{1i} + b_2x_{2i} + \ldots + b_px_{pi}),$$

where $E(d_i)$ stands for the expected number of divorces in the i^{th} cell, V_i is the number of marriage-years lived in the i^{th} cell, $x_{1i} \ldots x_{pi}$ are the explanatory variables, and a, b_1 … b_p denote the parameters to be estimated. The results are presented as rate ratios, or 'relative divorce risks'. The first category of each explanatory variable is taken as the reference group with a relative risk of one. The relative risks for the remaining categories are obtained by exponentiating the corresponding parameter estimates. The statistical significance of an added term was measured by scaled deviance, which is asymptotically χ^2-distributed. Ordinary five per cent confidence intervals (± 1.96*standard errors) were calculated for the relative risks. The models were fitted using GLIM (Francis et al. 1993).

RESULTS

The associations between the control variables and divorce risk are presented in Table 2. The relative risks are from models including all four variables. Divorce risk was highest for marriages that had lasted from five to nine years, and it decreased with longer marital durations. Divorce risk was also strongly and inversely associated with the wife's age at marriage. Further, among couples with children living in the household, divorce risk decreased with increasing numbers of these children, and divorce risk increased with the age of the youngest child. Finally, divorce risk was higher for couples living in more urban municipalities.

The analysis continued with the identification of divorce risk differentials by each individual indicator of socio-economic status. The first column in Table 3 shows the relative divorce risks from models that include one of the indicators of socio-economic status and the four control variables. These relative divorce risks are also shown in Figure 1, in which the widths of the bars are proportional to exposure time in the categories. Divorce risk was lower for spouses with a higher education. Among white collar employee and manual worker classes, divorce risk increased towards the more disadvantaged occupational classes. Further, divorce risk was very low for farmers, even though rural residence has been taken into account, while divorce risk was high for other self-employed persons and in the group 'other'. As for economic activity, divorce risk was much higher for unemployed than for employed people. For husbands, divorce risk was very high in the group 'others outside labour force', while for wives, divorce risk was relatively low in this group. Furthermore, for husbands, divorce risk decreased consistently with increasing income, while there were no significant differences in divorce risk by wife's income. Finally, divorce risk was substantially higher for couples living in rented dwellings than for couples owning their home, and increased with increasing housing density. In summary, divorce risk was inversely associated with

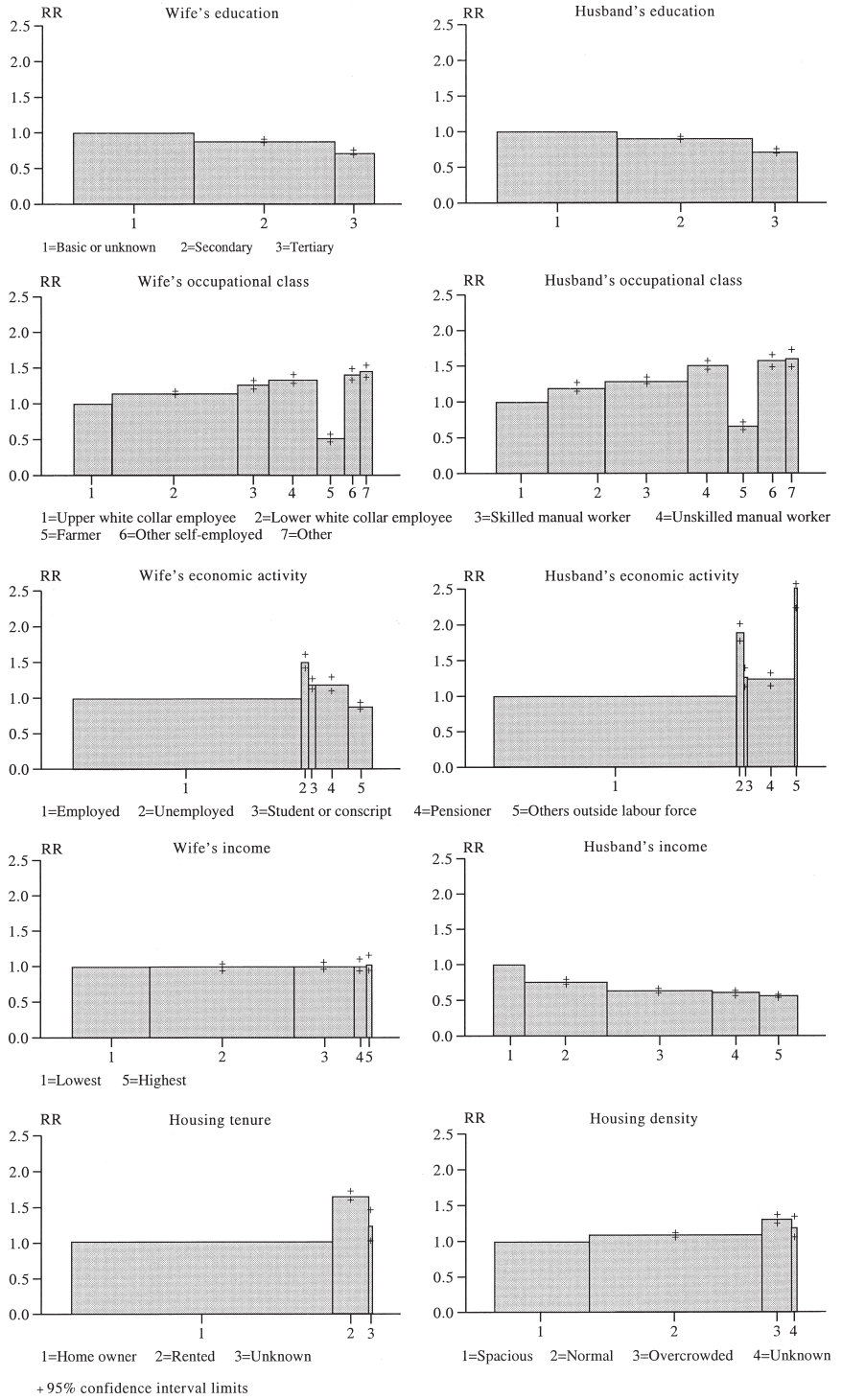

Figure 1. For legend see opposite.

Table 2. *Marriage-years (per cent) and divorces (N) by the control variables and the corresponding relative divorce risks (RR) from a model including all four variables, Finland 1991–93*

	Marriage-years (per cent)	Divorces N	RR	95 per cent confidence interval
Duration of marriage (years)				
– 4	7.9	2883	1.00	
5 – 9	12.0	4573	1.11	(1.05–1.17)
10 – 14	12.6	3972	0.79	(0.75–0.84)
15 – 19	13.8	3733	0.56	(0.53–0.60)
20 – 24	15.0	3283	0.38	(0.36–0.41)
25 – 29	12.7	1711	0.23	(0.21–0.24)
30 – 34	10.7	764	0.13	(0.12–0.14)
35 – 39	9.0	285	0.06	(0.05–0.06)
40 – 44	5.3	93	0.03	(0.02–0.03)
45 –	1.0	12	0.02	(0.01–0.03)
Wife's age at marriage (years)				
– 19	18.8	4856	1.00	
20 – 24	54.5	11808	0.63	(0.61–0.65)
25 – 29	20.8	3831	0.39	(0.37–0.41)
30 – 34	4.5	662	0.27	(0.25–0.30)
35 – 39	1.1	123	0.19	(0.16–0.23)
40 –	0.3	29	0.13	(0.09–0.18)
Family composition				
No children	43.7	5710	1.00	
1 child, 0 – 3 years	5.6	1754	0.66	(0.62–0.70)
1 child, 4 – 6 years	1.8	841	1.16	(1.07–1.25)
1 child, 7 – 17 years	14.1	3514	1.13	(1.08–1.19)
2 children, youngest 0 – 3 years	7.7	2287	0.63	(0.59–0.66)
2 children, youngest 4 – 6 years	4.9	1638	0.86	(0.80–0.91)
2 children, youngest 7 – 17 years	11.8	3190	0.95	(0.90–1.00)
3 or more children, youngest 0 – 3 years	5.3	1013	0.46	(0.43–0.50)
3 or more children, youngest 4 – 6 years	2.7	684	0.78	(0.71–0.84)
3 or more children, youngest 7 – 17 years	2.6	678	0.94	(0.87–1.03)
Degree of urbanization				
Helsinki region	14.1	3924	1.00	
Other urban	40.2	9650	0.84	(0.81–0.87)
Other densely populated	17.4	3355	0.68	(0.64–0.71)
Rural	28.3	4380	0.57	(0.54–0.59)

Source: As Figure 1.

the socio-economic status of the spouses for its various indicators except wife's income when the duration of marriage, the wife's age at marriage, family composition, and the degree of urbanization were controlled.

As noted above, the various indicators of each individual spouse's socio-economic status are related to each other. For instance, in the study population the proportion of upper white collar employees was 65 per cent among wives and 79 per cent among husbands with tertiary education, while the proportion of white collar employees was three per cent among wives and husbands with basic education. Further, nine per cent of wives and 43 per cent of husbands who were classified as upper white collar employees fell into the highest income category, while the same was true for 0.1 per cent of wives and 1.2 per cent of husbands classified as unskilled manual workers. Furthermore, 94 per cent of wives and 93 per cent of husbands in the highest income category lived in owner-occupied dwellings, while the proportion was 84 per cent for wives and

Figure 1. Relative divorce risks (RR) by indicators of socio-economic status, adjusted for control variables (duration of marriage, wife's age at marriage, family composition, and degree of urbanization), Finland, 1991–93. The width of the bars corresponds to the proportion of marriage-years in the category. *Source:* Register data from Statistics Finland.

Table 3. *Nested models showing interrelationships among the effects of various indicators of socio-economic status on divorce risk, Finland 1991–93*

	Control variables +X (1)	95 per cent confidence interval	*Model 1* Control variables +wife's education and occupational class	*Model 2* Model 1+ wife's economic activity	*Model 3* Model 2+ wife's income	*Model 4* Control variables +husband's education and occupational class	*Model 5* Model 4+ husband's economic activity	*Model 6* Model 5+ husband's income	*Model 7* Model 6+ wife's education, occupational class, economic activity and income	*Model 8* Model 7+ housing tenure	*Model 9* Model 8+ housing density	95 per cent confidence interval
Wife's education												
Basic or unknown	1.00		1.00	1.00	1.00				1.00	1.00	1.00	
Secondary	0.88 *	(0.85–0.90)	0.88 *	0.88 *	0.87 *				0.91 *	0.93 *	0.93 *	(0.90–0.96)
Tertiary	0.69 *	(0.66–0.73)	0.70 *	0.69 *	0.65 *				0.74 *	0.75 *	0.76 *	(0.71–0.80)
Wife's occupational class												
Upper white collar	1.00		1.00	1.00	1.00				1.00	1.00	1.00	
Lower white collar	1.14 *	(1.09–1.20)	0.99	0.95	0.99				0.94 *	0.94 *	0.94 *	(0.89–0.99)
Skilled manual	1.24 *	(1.18–1.32)	1.05	1.05	1.09 *				1.02	1.00	1.00	(0.93–1.07)
Unskilled manual	1.34 *	(1.27–1.42)	1.12 *	1.08 *	1.14 *				1.02	1.00	1.00	(0.93–1.06)
Farmer	0.49 *	(0.45–0.54)	0.42 *	0.41 *	0.43 *				0.49 *	0.50 *	0.50 *	(0.44–0.57)
Other self-employed	1.39 *	(1.30–1.48)	1.20 *	1.20 *	1.24 *				1.09 *	1.10 *	1.10 *	(1.02–1.19)
Other	1.43 *	(1.33–1.53)	1.25 *	1.31 *	1.37 *				1.13	1.10	1.09	(0.96–1.24)
Wife's economic activity												
Employed	1.00			1.00	1.00				1.00	1.00	1.00	
Unemployed	1.50 *	(1.40–1.61)		1.36 *	1.39 *				1.30 *	1.27 *	1.27 *	(1.18–1.37)
Student	1.20 *	(1.12–1.28)		0.89	0.91				1.04	1.04	1.04	(0.91–1.19)
Pensioner	1.19 *	(1.08–1.30)		1.04	1.07				1.05	1.05	1.05	(0.95–1.16)
Others outside labour force	0.88 *	(0.84–0.93)		0.78 *	0.81 *				0.81 *	0.80 *	0.80 *	(0.75–0.85)
Wife's income												
1 (lowest)	1.00				1.00				1.00	1.00	1.00	
2	1.01	(0.98–1.05)			1.01				1.03	1.05 *	1.06 *	(1.01–1.10)
3	1.01	(0.96–1.05)			1.11 *				1.15 *	1.19 *	1.19 *	(1.13–1.25)
4	1.01	(0.94–1.09)			1.24 *				1.30 *	1.34 *	1.34 *	(1.23–1.46)
5 (highest)	1.03	(0.92–1.14)			1.26 *				1.35 *	1.40 *	1.40 *	(1.25–1.58)
Husband's education												
Basic or unknown	1.00					1.00	1.00	1.00	1.00	1.00	1.00	
Secondary	0.92 *	(0.89–0.95)				0.94 *	0.96 *	0.96 *	0.98	0.98	0.98	(0.95–1.01)
Tertiary	0.66 *	(0.63–0.69)				0.70 *	0.71 *	0.73 *	0.77 *	0.76 *	0.76 *	(0.72–0.81)

Husband's occupational class									
Upper white collar	1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Lower white collar	1.20 *	(1.14–1.26)	1.00	1.00	0.99	0.99	0.98	0.98	(0.93–1.04)
Skilled manual	1.29 *	(1.23–1.34)	1.04	1.03	1.02	1.00	0.99	0.99	(0.94–1.05)
Unskilled manual	1.51 *	(1.44–1.58)	1.21 *	1.19 *	1.15 *	1.13 *	1.11 *	1.11 *	(1.04–1.18)
Farmer	0.65 *	(0.60–0.71)	0.53 *	0.55 *	0.50 *	0.75 *	0.77 *	0.77 *	(0.69–0.86)
Other self-employed	1.56 *	(1.48–1.65)	1.30 *	1.33 *	1.22 *	1.18 *	1.20 *	1.20 *	(1.13–1.28)
Other	1.58 *	(1.45–1.72)	1.33 *	1.17 *	1.08	1.05	1.02	1.02	(0.90–1.16)
Husband's economic activity									
Employed	1.00			1.00	1.00	1.00	1.00	1.00	
Unemployed	1.88 *	(1.77–2.01)		1.79 *	1.66 *	1.62 *	1.58 *	1.57 *	(1.47–1.68)
Student or conscript	1.25 *	(1.13–1.39)		1.14	1.02	1.02	0.98	0.98	(0.84–1.14)
Pensioner	1.23 *	(1.14–1.33)		1.16 *	1.04	1.03	1.04	1.04	(0.96–1.13)
Others outside labour force	2.46 *	(2.24–2.71)		2.34 *	1.85 *	1.83 *	1.81 *	1.80 *	(1.62–2.00)
Husband's income									
1 (lowest)	1.00				1.00	1.00	1.00	1.00	
2	0.75 *	(0.72–0.79)			0.80 *	0.80 *	0.82 *	0.82 *	(0.78–0.87)
3	0.64 *	(0.61–0.67)			0.71 *	0.71 *	0.74 *	0.75 *	(0.71–0.79)
4	0.60 *	(0.57–0.64)			0.71 *	0.71 *	0.76 *	0.76 *	(0.72–0.81)
5 (highest)	0.55 *	(0.51–0.58)			0.70 *	0.70 *	0.76 *	0.76 *	(0.71–0.82)
Housing tenure									
Home owner	1.00						1.00	1.00	
Rented	1.63 *	(1.58–1.69)					1.48 *	1.47 *	(1.42–1.53)
Unknown	1.23 *	(1.06–1.43)					1.15	1.13	(0.97–1.32)
Housing density									
Spacious	1.00							1.00	
Normal	1.09 *	(1.05–1.13)						0.98	(0.94–1.02)
Overcrowded	1.30 *	(1.23–1.37)						1.05	(1.00–1.12)
Unknown	1.19 *	(1.07–1.32)						1.03	(0.93–1.15)

(1) Model including only the control variables and the socioeconomic indicator in question.
Control variables: duration of marriage, wife's age at marriage, family composition, and degree of urbanization.
* 95 per cent confidence interval does not include 1.00.
Source: As Figure 1.

82 per cent for husbands in the lowest income category. Finally, 34 per cent of home-owner couples were classified as living in spacious dwellings, while the corresponding proportion was twelve per cent among couples living in rented dwellings.

The married spouses' socio-economic statuses were also related to each other. For instance, 58 per cent of wives with tertiary education and four per cent of wives with basic education were married to husbands with tertiary education, and 62 per cent of upper white collar employee wives and three per cent of unskilled manual worker wives were married to upper white collar employee husbands. The strongest association was found among farmers: 77 per cent of farmer wives had a husband classified as a farmer. Note that the correlation between married spouses' occupational classes is partly a result of the fact that, in some cases, a person's occupational class is determined by the spouses' occupation. Finally, 57 per cent of wives in the highest income category had a husband in the highest income category, while nine per cent of wives in the lowest income category had a husband in the highest income category.

The next step in the analysis entailed fitting a series of nested models in order to unravel the influences of the various indicators of socio-economic status (Table 3). First, models were fitted that included the measures of the wife's and husband's education, occupational class, economic activity, and income (Models 1–3 and Models 4–6 respectively) following the assumed causal ordering of these variables. Thereafter, the indicators of wife's and husband's characteristics were entered into the same model (Model 7). Finally, variables describing the couple's housing conditions were added to this model (Models 8 and 9).

Owing to the correlations between the socio-economic variables, differences by each indicator diminished when other indicators were introduced into the model. An exception was that a positive gradient emerged for the wife's income as other variables were controlled. However, although the differences by almost all indicators diminished, they did not disappear. In the last model, all variables were statistically significant at the one per cent level. Thus, all socio-economic variables can be said to have had an independent effect on divorce risk.

A comparison of the models that include only the control variables and one socio-economic indicator (presented in the first column) with those that also include the socio-economic variables preceding this socio-economic variable in the causal chain reveal that the preceding (or, confounding) factors explain a part of the association between almost all socio-economic factors and divorce risk. A comparison of the models also shows that the effect of such factors as the spouses' education on divorce risk may be mediated by other socio-economic factors.

Differences in divorce risk by the wife's education diminished when the indicators of the husband's status were controlled, suggesting that the lower divorce risk for wives at higher educational levels may partly depend on the fact that they tend to have husbands with high socio-economic status. The differences in divorce risk by husband's education diminished when his occupational class and the indicators of the wife's status were adjusted for, implying that the effect of the husband's education on divorce risk may be partly mediated by his occupational status and the wife's status. In the last model, divorce risk was lower for spouses with tertiary education than for spouses in the lower educational categories.

As for the wife's occupational class, when her education was held constant, differences in divorce risk between occupational groups diminished considerably (with the exception of the difference between farmers and the other groups). Similarly, the husband's education appeared to explain a substantial part of the differences in divorce risk by his occupational class. The differences by wife's occupational class were further reduced when the indicators of husband's status were controlled. When all the other socio-economic variables were controlled, farmers differed from the other groups with their low divorce risk, while the divorce risk for other self-employed spouses as well as unskilled manual worker husbands was higher than that for the other occupational groups. The low divorce risk for farmer husbands was partly 'explained' by the wife's socio-economic status, but since farms are very often family enterprises, it does not seem meaningful to differentiate between the effect of a husband's farmer status and that of a wife's when interpreting the results.

The high divorce risk for unemployed wives and husbands was to some extent explained by the variables preceding economic activity in the causal order, that is, education and occupational class. It also seemed that the effect of a husband being unemployed may be partly mediated by his income. However, unemployed spouses had a higher divorce risk than employed spouses even after controlling for all the other indicators of socio-economic status. The independent effect of the husband being unemployed was greater than that of the wife being so.

The relatively high divorce risk for husbands classified as 'others outside labour force' was partly

reduced when the other socio-economic factors were considered. In all models, divorce risk was relatively low for wife's economic activity group 'others outside labour force', which includes women performing domestic work. The results for students and pensioners were not consistent, and the difference in divorce risk between these and employed spouses was generally small.

It was noted above that no association was observed between the income of the wife and divorce risk. Interestingly, once the wife's education, occupational class, and economic activity were held constant, her income was related positively to divorce risk. The positive association became even stronger when the indicators of the husband's status and housing tenure were controlled. This may be interpreted to mean that the wife's income had a positive effect on divorce risk, but that this effect was hidden in the counteracting effects of her education and occupational class, and buffered by the effect of the husband's socio-economic status as well as the couple's housing tenure.

The negative association between the income of the husband and divorce risk became weaker when the preceding and intervening socio-economic variables were introduced into the model. In the last model, divorce risk was equally low in the three highest categories of the husband's income.

The difference in divorce risk for home-owners and couples living in rented dwellings was reduced when the variables preceding housing tenure in the causal chain were controlled. Thus, it appears that the lower divorce risk for home-owners is partly attributable to their generally higher socio-economic position. However, housing tenure also had a strong independent effect: in the last model, the divorce risk for couples living in rented dwellings was 47 per cent higher than for couples owning their home.

A usual reason for a married couple to have a crowded dwelling is that there are several children living in the household, and this makes the association between housing density and divorce risk quite complex. For instance, when family composition was omitted from the model for housing density shown in the first column of Table 3, there were no significant differences in divorce risk by housing density. This could be interpreted to mean that dense housing was associated with an increased divorce risk, but the association was suppressed by the countervailing effect of children living in the household, who reduce the risk of divorce. The independent effect of housing density on divorce risk was, however, effectively non-existent. Thus, the effect of housing density on divorce risk was explained by the variables preceding it in the causal order.

The interactions between the socio-economic variables were tested and examined in the model including all main effects (Model 9 in Table 3). Of the 45 first-order interactions between the various socio-economic variables, 36 were statistically significant at the five per cent risk level. It seemed that many of the interactions that were statistically significant were so because of the large number of observations in the data, since they did not show consistent patterns and thus did not seem to be substantively important. The clearest pattern was that the divorce-promoting effect of low socio-economic status was stronger among couples living in rented dwellings than for home-owner couples according to most of the indicators of socio-economic status. For instance, the effect of the occupational class of the husband on the risk of divorce was more substantial if the married couple lived in a rented dwelling than if they lived in an owner-occupied dwelling. In particular, the differences between upper white collar employee and manual worker groups were substantial for couples living in rented dwellings even when all the other socio-economic factors were considered (Table 4).

The interactive effects of the wife's and the husband's status on the propensity to divorce are an important issue, but a systematic examination of this type of interaction is beyond the scope of this paper.

DISCUSSION

This study shows a consistent pattern of socio-economic differentials in divorce risk in Finnish first marriages in the early 1990s. Divorce risk was higher in the disadvantaged than in the advantaged groups with respect to all indicators of socio-economic status included in the analysis except the wife's income, controlling for wife's age at marriage, duration of marriage, family composition, and degree of urbanization. The differentials in divorce risk by most indicators of socio-economic status were rather similar whether they were measured using the characteristics of the wife or husband, which is understandable in the light of the quite high degree of socio-economic homogamy in the marriages. The differences in divorce risk by socio-economic factors were more modest than differences by the demographic factors, such as the duration of marriage and the wife's age at marriage.

None of the individual dimensions of the socio-

Table 4. *Relative divorce risks (RR) by husband's occupational class, home owners and couples living in rented dwellings, Finland 1991–93*

	Housing tenure			
	Home owner		Rented	
Husband's occupational class	RR *	95 per cent confidence interval	RR *	95 per cent confidence interval
Upper white collar employee	1.00		1.00	
Lower white collar employee	0.96	(0.90–1.02)	1.11	(0.99–1.24)
Skilled manual worker	0.94	(0.88–1.00)	1.22	(1.10–1.35)
Unskilled manual worker	1.03	(0.96–1.11)	1.38	(1.24–1.54)
Farmer	0.74	(0.66–0.83)	0.93	(0.65–1.31)
Other self-employed	1.15	(1.08–1.24)	1.44	(1.25–1.64)
Other	1.10	(0.95–1.27)	1.02	(0.85–1.22)

Source: As Figure 1.
* RRs are from a model including all main effects and an interaction effect between husband's occupational class and housing tenure; RR is set at 1.0 for upper white collar employees in each group.

economic status of the spouses could fully account for the associations between the socio-economic factors and divorce risk. All socio-economic factors had a statistically significant independent effect on divorce risk. However, the size, and even the direction, of the independent effect varied. For instance, the married couple's housing tenure and spouses being unemployed were important determinants of divorce risk even when the other socio-economic factors were taken into account, while occupational rankings and housing density had little independent effect, and the wife's income had a positive independent effect on divorce risk.

Alternative types of explanation

Among the various explanations offered in the literature for the generally inverse association found between socio-economic status and the propensity to divorce, three types of explanation can be distinguished on the basis of the assumed direction of causality between these two – and additional third – factors.

The first possibility is that of reverse causation. In this analysis, the socio-economic factors were considered as the independent variables, while divorce was the outcome event. In the data, the socio-economic characteristics were measured before separation and divorce. Therefore, the events of moving apart and dissolving the marriage judicially cannot have affected spouses' socio-economic characteristics measured for this study. It is nevertheless possible that the direction of causation is partly the reverse of that assumed because the socio-economic factors seen as 'determinants' of divorce may themselves signal the weakness of the marital bond. For instance, spouses may be discouraged to invest in shared assets as a response to a lowered expectation for the continuity of their marriage (Becker et al. 1977, p. 1152). This may help to explain why there are differences in divorce risk by so-called marital-specific investments. Long-term plans to end a marriage could also affect each spouse's individual position in the labour market. In particular, a wife performing domestic work might enter the labour force as a response to marital dissatisfaction (Spitze 1988, p. 599). However, given that married Finnish women tend anyway to have a strong foothold in the paid labour market, the enhancement of socio-economic status is not likely to be common among them as a preparation for marital disruption.

Secondly, it is possible that socio-economic factors influence divorce risk directly or indirectly. The variety of socio-psychological processes through which socio-economic status could exert its influence on the risk of marital disruption has been outlined in social exchange frameworks (for example, Levinger 1965, 1976). To start with, it is assumed that the greater resources in the higher strata can decrease the propensity to divorce by making a marriage more rewarding, while, for instance, unemployment and economic insecurity can increase tensions between spouses and contribute to the erosion of the marital bond. It is also assumed, however, that the status quo in a marriage is often maintained for lack of attractive alternatives or because there are barriers to breaking up rather than as a response to the attractiveness of the marriage. It is not difficult to think of barriers that might hold marriages together, particularly in the higher social strata. Firstly, it is possible that the family's assets might make a divorce costly (Ross and Sawhill 1975,

p. 60). Secondly, in Finland, highly educated women have been conservative with respect to family formation. For instance, among cohabiting women, the odds of marrying before the birth of the first child have heightened with increasing education (Finnäs 1995). The highly educated women may be conservative also with respect to family dissolution (Finnäs 1997, p. 276). One might also speculate that career-oriented wives as well as husbands feel more dependent on their spouses for sharing domestic responsibilities. Given the demanding everyday life of a single parent, the combination of single parenting and a career may seem an unattractive alternative.

The third type of explanation for the association between socio-economic status and the risk of divorce is that there are unmeasured, and perhaps even unmeasurable, third factors that affect both socio-economic status and divorce risk. (This possibility was emphasized by Bracher et al. 1993). These third factors could be such things as the spouses' expectations, wishes, and values as well as their personalities and other psychological characteristics and social skills. Also, the family background, which has consequences for material as well as non-material circumstances, may affect both one's social position and the prospects of a marriage.

Unfortunately, little can be said about the validity of the alternative types of explanation on the basis of this study. Given the multifaceted nature of the association between the socio-economic status of the spouses and the risk of divorce, it appears unlikely that one type of explanation could account for all the socio-economic differentials. It is more probable that all of them contribute to varying degrees and that all may be useful in interpreting observed associations.

Interpretations of the present findings

The findings of this study suggested that part of the inverse effect of a spouse's education on the risk of divorce was mediated by more situational socio-economic factors. The divorce risk for spouses in the highest educational category was, however, lower than that of those in the other educational categories even when a number of economic correlates of education were considered. It has been suggested that highly educated spouses communicate more effectively, which facilitates problem-solving in the marriage (Amato 1996, p. 630). This is not necessarily to say that better communication skills are gained in the course of longer education. Rather, it may be that some third factor, such as family background, influences both educational attainment and the social skills which affect the prospects of a marriage. In Finland, as elsewhere, the social standing of parents affects the length of a child's educational career (Valkonen et al. 1998).

Divorce risk was much lower for farmers than for the other occupational groups, even when the effect of living in more rural areas was removed. The economic theory would suggest that the gender division of labour on the farm increases the gains from marriage (Sander 1985, p. 520). It could also be argued that farmers are simply more conservative. However, since for many farmers dissolving a marriage would presumably require great efforts in finding new work and housing, their low divorce risk may also be attributable to the high cost of marital disruption. (Bracher et al. 1993, p. 418.)

As for other occupational groups, differences in divorce risk between white collar employee and manual worker groups diminished or disappeared when educational attainment was considered. Thus, other things being equal, it appears that occupational positions had little or no effect on divorce risk.

Although a husband being unemployed had a more substantial effect on divorce risk, the wife being so also increased the risk of divorce. The husband's income appeared to mediate only a small part of the effect of his unemployment. Again, the simplest interpretation of the effect is that unemployment creates or intensifies tensions between spouses either directly or by making other problems surface. Additionally, with the relatively low rates of unemployment in Finland in 1990, unemployment is likely to have been selective. Thus, presumably, only a part of its effect was controlled in the analysis by holding education and occupational class constant. There may be some personal traits that increase the likelihood of both unemployment and divorce, and explain at least a part of the effect of unemployment on the risk of divorce. (See Bracher et al. 1993, p. 420.)

Divorce risk was found to be relatively low for women in the group 'others outside labour force', which includes those performing domestic work. As for women performing domestic work, it is not clear whether their lowered divorce risk is a result of higher levels of marital satisfaction, or of stronger barriers to marital disruption, or a bit of both. It is also unclear whether 'housewife' status or high marital satisfaction comes first in causal order – some might not stay at home with children because the marriage is unhappy – or whether there is some third factor that explains the dedication to household work and the low divorce risk (Spitze 1988, p. 599).

This analysis showed the wife's income exerting a positive effect on the risk of divorce, but only when the other socio-economic factors were controlled. Ross and Sawhill (1975, pp. 35–66) suggested that the wife's income affected marital stability in two opposing ways. On the one hand, the wife's income adds to the economic resources available to the family, and sufficient resources are presumed to stabilize the marriage (the 'income effect'). On the other, the wife having a high income reduces the economic benefits from marriage and improves her chances of leaving an unsatisfactory relationship (the 'independence effect'). It appears that the 'independence effect', first concealed in the 'income effect', was identified in the present data. Given the extensive social security system and the high labour force participation rate of married women in Finland, it does not seem likely that wives with low incomes would be economically dependent on their husbands and, for economic reasons, unable to leave unhappy marriages. Nevertheless, it is possible that wife having a high income signals or leads to greater confidence in her ability to live independently of her husband. Of course, it is also possible that wives with exceptionally high income levels are dedicated to their work lives to the extent that real conflicts between work and family life appear, or that their work offers them a genuine alternative source of satisfaction.

The negative association between the husband's income and divorce risk became weaker when the other socio-economic factors were controlled. It seems that the original inverse association partly reflected the effect of the factors preceding the husband's income in the causal order, and that the remaining differences were partly mediated by the couple's housing tenure. However, other things – including the couple's housing conditions – being equal, the husband having a low income destabilized the marriage to some extent.

The independent effect of housing tenure was strong, although other socio-economic factors that may influence a couple's housing arrangements, as well as the duration of marriage, family composition, and the level of urbanization, had been controlled. The independent effect of housing density was weak, and the lower divorce risk for home-owners was not explained by the fact that they tend to live in more spacious dwellings. All three types of explanation identified above may help to explain the effects of housing tenure on the risk of divorce. Firstly, reverse causation can play a role in that spouses who lack confidence in the continuity of their marriage may be discouraged from investing substantially in marital-specific capital (Becker et al. 1977, p. 1152), such as a shared home. Secondly, secure living conditions may simply make living together without serious conflicts easier. Material assets, and secure housing in particular, may also be a buffer against temporary declines in income (Ross and Sawhill 1975, p. 60). Thirdly, a shared home is a relatively illiquid and indivisible asset, which can increase the costs of marital disruption (Ross and Sawhill 1975, p. 60), whether the costs be economic or emotional. Finally, there may be personal factors, ranging from the family backgrounds of the spouses to value orientations that affect the ability or willingness of people to make investments specific to the marriage, as well as the durability of the marriage.

CONCLUSION

Register-based follow-up data proved useful in examining the effects of socio-economic factors on divorce risk. A noteworthy advantage of these data, compared to ordinary longitudinal survey data, was the extensive size of the data set, allowing the inclusion of several indicators of socio-economic status in the same model. In this analysis, the confidence intervals remained small even in the largest model, and the estimates remained stable in successive models. Thus, it appears that multicollinearity was not too severe a problem.

Each spouse's socio-economic characteristics had an effect even when the other spouse's status was considered, and these independent effects were different for wives and husbands to some extent. Thus, it appears that much more can be learned about the effect of socio-economic factors on the risk of divorce by using comparable data on both spouses than by using data on one spouse only.

In conclusion, the various indicators of socio-economic status are not interchangeable, and none of them could fully account for the socio-economic differentials in divorce risk. This means that the full impact of socio-economic status cannot be captured by using one or two indicators. In particular, the measures describing the position of the spouses in the educational or occupational structure are not enough to do so; the more situational factors, especially those associated with spouses' employment and income are also important.

NOTES

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THE JOINT EFFECTS OF MARRIAGE PARTNERS' SOCIOECONOMIC POSITIONS ON THE RISK OF DIVORCE*

MARIKA JALOVAARA

This study investigated the joint effects of spouses' socioeconomic positions on the risk of divorce in Finland. For couples in which both partners were at the lowest educational level, the risk of divorce was lower than could be expected on the basis of the previously documented overall inverse association between each spouse's education and the risk of divorce. Women who were employed or were homemakers, and who had employed husbands, had comparatively stable marriages; couples in which the husband, the wife, or both partners were unemployed had an elevated risk of divorce. A husband's high income decreased the risk of divorce, and a wife's high income increased the risk at all levels of the other spouse's income, but especially when the wife's income exceeded the husband's.

A major deterrent against wives leaving their husbands in past generations was their lack of independent social and economic resources (Phillips 1991; Scanzoni 1979). Consequently, the increased participation of women in the labor force has been viewed as one of the root causes of the increase in marital disruption in the twentieth century (for reviews, see Greenstein 1990; Oppenheimer 1997). The role that wives' economic independence may play in marital stability has been at the center of intensive research, especially in the United States. However, it is still unclear whether a wife's independent resources or her higher social status relative to her husband's increases the risk of marital breakup in contemporary postindustrial societies in which men and women have increasingly similar economic roles.

Although economic and psychosocial theories posit somewhat different mechanisms through which economic resources affect marital stability, both view a husband's lack of resources and a wife's economic success as factors that tend to destabilize a marriage (Bracher and Santow 2001; Ono 1998). Proponents of the economic theory, such as Becker, Landes, and Michael (1977), have argued that the major gain to being married lies in the mutual dependence of spouses, which arises out of their differentiated roles: the husband specializes in breadwinning and the wife in domestic production (and reproduction). They have suggested that when a wife's resources compare more favorably with those of her husband, specialization decreases and hence the risk of marital disruption increases. Proponents of psychosocial frameworks have assumed that a husband's poor performance of his role as a provider places various kinds of strains on a marriage, even if the wife is employed (Cherlin 1979). Furthermore, a wife's independent economic resources give her confidence that she could get by on her own should the marriage be troubled (Nock 1995).

Ross and Sawhill (1975) suggested that a wife's economic resources affect marital stability in two opposing ways. Greater economic resources available to the family,

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irrespective of the source, make marital disruption a less attractive alternative for both partners (the income effect); but the wife's independent economic resources reduce the gains from the gender differentiation of conjugal roles and lower a barrier for her to leave an unhappy marriage (the independence effect). Empirical measurement of the effect of wives' economic resources on marital stability is complicated by the difficulty of disentangling the income effect from the independence effect.

It is also unclear whether the critical factor in the independence effect is the wife's economic resources relative to those of her husband, the absolute amount of the wife's resources, or both. The relative-incomes hypothesis suggests that the within-couple relationship between spouses' resources is important. When the wife's economic resources compare more favorably with the husband's resources, the marriage is more susceptible to disruption because the gains based on specialization decrease, and the wife has less to lose by separating from her husband (Becker et al. 1977; Cherlin 1979). The absolute amount of resources may also be decisive: perhaps the simple fact that the wife can afford to live separately from her husband lowers a barrier for her to leave an unsatisfying marriage. As Oppenheimer (1997) noted, the effect of relative resources should be analyzed in the context of absolute resources because the meaning of a gap between the two spouses' resources differs at different levels of absolute resources. For example, the wife-husband income ratio may be high because she is a high earner and thus has a real potential for economic autonomy. Alternatively, both spouses may hold weak labor-market positions with little financial autonomy for either.

Marital heterogamy, that is, marrying across social and cultural boundaries, is assumed to lead to a lower marital quality and an increased risk of marital disruption (Lewis and Spanier 1979) owing to, for instance, the lack of spousal consensus on basic life goals, priorities, and expectations (Bumpass and Sweet 1972). Becker (1973) argued that, for marital stability, the similarity of spouses is generally optimal, an exception being that with wage-earning potential, dissimilarity is optimal because of the gains from specialization within marriage. Some authors, however, have contended that social similarity between spouses in economic activities also may add to marital solidarity and happiness (Simpson and England 1981).

Several scholars have argued that as gainful employment of married women becomes usual, the divorce-promoting effect of wives' high levels of economic resources will weaken. Ross and Sawhill (1975) predicted that with the general acceptance of wives' employment, couples' decisions to marry and remain married would be influenced more by personal satisfaction and less by factors such as transfers of income and a well-defined, gender-specific division of labor. The remaining economic dependencies, such as economies of scale, would be symmetrical with respect to gender. The increasing relative importance of companionate aspects of marriage may mean that better mutual understanding, evolving from a similarity of economic activities, will be more important for marital solidarity (Simpson and England 1981). Furthermore, as gainful employment of married women becomes normative, it is less indicative of unconventionality and the existence of marital problems (Bracher et al. 1993). Finally, as wives contribute to family finances, the consequences of husbands failing to provide may be less severe (Cherlin 1979). In sum, as men and women become similar in their economic and domestic roles and the noneconomic aspects of marriage gain in relative importance, the effects of wives' and husbands' economic resources on marital stability can be expected to be more symmetrical than prominent theories of marriage suggest.

Previous research has tended to find a positive association between wives' employment and marital disruption (see Spitze 1988). Even in Sweden, where the rate of female labor-force participation is high, wives who work full-time have higher rates of first-marriage disruptions (Hoem and Hoem 1992; Trussell, Rodríguez, and Vaughan 1992). An Australian study also reported higher rates of marital disruption for employed wives,

although the effect weakened across birth cohorts and, thus, with increasing proportions of women who were employed (Bracher et al. 1993). Less consistent is the evidence concerning the effect of wives' income and the income ratio on the risk of marital disruption (for reviews, see Ono 1988; Oppenheimer 1997; Sayer and Bianchi 2000; White and Rogers 2000).

Evidence that husbands' high socioeconomic status lowers the likelihood of marital disruption has been consistent across studies. For example, studies from the United States have reported that husbands' higher earnings reduce the risk of marital disruption (Hoffman and Duncan 1995; South and Lloyd 1995). Husbands' stable employment also appears to be an important predictor of high marital stability (Bumpass, Castro Martin, and Sweet 1991; Cherlin 1979; Ross and Sawhill 1975).

Studies from the United States (J. M. Tzeng and Mare 1995; Tzeng 1992) and from the Scandinavian countries (Finnäs 1996, 1997, 2000; Kravdal and Noack 1989) have reported an inverse association between spouses' levels of education and the risk of marital disruption. Studies from the United States have also reported an increased risk of marital disruption for educationally heterogamous couples (Weiss and Willis 1997), especially if the wife is more educated than the husband (Bumpass et al. 1991; Tzeng 1992). In contrast, studies in the Scandinavian countries have not found clear support for the hypothesis that educational homogamy stabilizes marriages (Finnäs 1997, 2000; Kravdal and Noack 1989).

A recent Finnish study (Jalovaara 2001), based on the same data I use in this article, found that the risk of divorce was inversely associated with various indicators of socioeconomic status with one exception: wives' high income increased the risk of divorce when other aspects of spouses' socioeconomic status were controlled. This previous study did not consider the joint effects of spouses' socioeconomic positions, however, as I do in this article.

Using register-based data on first marriages in Finland that were intact at the end of 1990 and divorces between 1991 and 1993, I examine the joint effects of spouses' socioeconomic positions on the risk of divorce. The Finnish case provides an opportunity to study the effects of couples' economic resources on the risk of divorce in a labor-market setting that differs from those in which the theories of marriage originated. Well into the twentieth century, Finland was a predominantly an agrarian country, but it industrialized at a comparatively fast pace. During the process of modernization, women's labor was needed in both agriculture and industry (Julkunen 1990), and in the late 1960s and the early 1970s, the rate of female labor-force participation was higher in Finland than in any other member country of the Organization of Economic Cooperation and Development (OECD 1988). Following World War II, the public sector also expanded rapidly, providing women with not only additional job opportunities but also services and other forms of support (e.g., paid family leave and day care for children) that enabled them to combine wage work and family life (see Julkunen 1999). The patterns of labor-force participation of Finnish women now closely resemble those of men in that their labor-force participation is continuous and lasts until retirement age (Rissanen 2001). In 1990, the labor-force participation rate was 86% among married women aged 25–54 and 95% among married men of this age group (my calculations based on Statistics Finland 1993). Furthermore, in contrast to other Scandinavian women, Finnish women generally work full-time. In 1990, 11% of employed women in Finland worked fewer than 30 hours per week, compared with 25% of the employed women in Sweden, 30% in Denmark, and 40% in Norway (OECD 2000).

After Finland adopted "no fault" divorce legislation in 1988, the Finnish divorce rate rose markedly and has remained high. Between 1991 and 1993, the total divorce rate (the sum of duration-specific divorce percentages) was 43 (Statistics Finland 2000), whereas in 1980–1987 it had varied between 28 and 31 (Statistics Finland 1992). Under the new legislation, spouses have an unconditional right to obtain a divorce on mutual or unilateral

demand after a six-month waiting period or immediately if they have resided apart for the two preceding years.

Central to this study is the view of the married couple as a unit. Divorce is a couple-related event, even when one partner is more active in ending the marriage (Bracher and Santow 2001), and hence the couple is the proper level of analysis. Furthermore, the socioeconomic status of the couple (as well as of the married individual) is likely to be determined in terms of both partners' joint status. Finally, if the partners' resources interact—as, for example, the relative-incomes hypothesis predicts—the effects of a person's resources on the risk of divorce become fully visible only in the context of the other spouse's resources.

DATA AND METHOD

I used tabulated data that were based on a census-linked divorce data file compiled by Statistics Finland. The 1990 census records of marital partners were linked to each other and with wives' divorce records (as well as other annual records) for the years 1991–1993. The dates of divorce relate to granted divorces for which information is transmitted to the Population Register Centre by the district courts. The computerized linking of census and other records is made possible by the personal-identification code system used in the Scandinavian countries. The 1990 census was an exclusively register-based census (all census data were extracted from registers instead of gathered by means of a questionnaire survey).

A couple is followed up if their marriage was intact at the end of 1990. This study focused on marriages in which each spouse was in his or her first marriage and in which, at the beginning of the follow-up period, both spouses were Finnish citizens, the wife was younger than 65, and the spouses resided together.

By the beginning of the study period, consensual unions had become common in Finland. In 1990, cohabiting couples accounted for 16% of the couples living together (Statistics Finland 1996). Essentially, the typical way to begin a union was through unmarried cohabitation, representing a lengthy transitional stage preceding formal marriage, which tended to occur either just before or after the birth of the first child. The risks of disruption for cohabiting unions were also much higher than for marriages, even if the couples had children (Finnäs 1995, 1996). More durable cohabiting unions, which could be considered social substitutes to marriage, were becoming more common, especially in the lower socioeconomic strata: women from lower socioeconomic groups were more likely to enter consensual unions, less likely to marry when cohabiting, and less likely to marry before the birth of the first child than were women from higher socioeconomic groups (Finnäs 1995).

In this study, I focused on formal marriages. The breakups of unmarried cohabiting unions were excluded because of data limitations. The restriction is meaningful, however, because the large majority of unmarried cohabiting unions and marriages in Finland in 1990 could not be ranked as equal arrangements (Finnäs 1996). It is therefore preferable to focus on one type of union at a time. The exclusion of the breakup of consensual unions limited the study in that it gives only a partial picture of the disruption of unions in Finland in the early 1990s. The bias that the exclusion of cohabitation may cause is discussed at the end of the article.

Marriage-years at risk of divorce are years that the couple spent married in the three-year follow-up period (1991–1993). The data include exact dates of divorce, as well as censoring events, and marriage-years were calculated on a daily basis. Right censoring was introduced at the dates of the death of spouses, the emigration of the wife,[1] and the

1. Data on divorces were obtained from the wives' individual-level records. Thus a marriage was censored if the wife emigrated, but the follow-up continued if the husband emigrated.

end of the follow-up period. There were 766,637 couples at the beginning of the follow-up period. During the three-year follow-up, about 2.25 million marriage-years at risk accumulated and 21,309 marriages were dissolved through divorce.

The socioeconomic position of couples at the beginning of the follow-up period was measured using three variables: education, economic activity, and income. Each variable combines symmetrically measured information on the two spouses' positions.

Data on the spouses' education originated from Statistics Finland's register on degrees and examinations. The variable referred to as *spouses' education* combines information on the highest educational qualification each spouse had achieved by the beginning of the study period. Three educational levels are distinguished for each spouse: basic education (about 9 or fewer years), meaning that no data on post-basic education had been registered for the person; secondary education, referring to an occupational training with a duration of 3 or fewer years or completed matriculation examination; and tertiary education (13 or more years), indicating occupational training with a duration of 4–5 years or a university-level degree.

Spouses' economic activity combines data from several registers on the two spouses' main economic activities during the last week of 1990. Five types of economic activity are distinguished for each spouse: employed (wage earner or entrepreneur), unemployed (registered job applicant), student (here including conscripts and conscientious objectors[2]), pensioner (in this age group, frequently because of a work disability), and the residual group of others. The residual group includes persons performing domestic work, and although this category simplifies the reality to some extent, it is referred to as "homemaker" for wives and "other" for husbands. Persons who had jobs but were on family leaves were registered as employed at least during the first year they were on leave.

National taxation registers were the sources of information on spouses' income. The variable referred to as *spouses' income* combines information on each spouse's annual income subject to state taxation in 1990. The following five levels are distinguished for each spouse: 1: FIM ≤ 49,999; 2: FIM 50,000–99,999; 3: FIM 100,000–149,999; 4: FIM 150,000–199,999; 5: FIM ≥ 200,000. (December 31, 1990 FIM ≈ 0.27 US$.)

Table 1 shows the number of marriage-years (in 1,000s) by spouses' education, economic activity, and income. Table 2 shows the number of divorces per 1,000 marriage-years by the same variables. The two spouses' socioeconomic positions are generally positively related to each other. In addition, certain types of economic activity (e.g., student and pensioner) are related to certain ages, whereas marital partners tend to be of about the same age. For these reasons, even when I used such an extensive data set, there were some small variable categories that were not informative. The results for categories in which the number of marriage-years was fewer than 3,000 are not presented. These categories are indicated by parentheses in Tables 1 and 2.

Spouses tend to have similar levels of completed schooling: in 59% of the couples in the follow-up, the two partners had attained an equally high level of education. In about 66% of the couples, both partners were employed. Other large groups consisted of couples in which both spouses were pensioners (about 8% of the couples), couples in which the wife was employed and the husband was a pensioner (about 7% of the couples), and couples in which the husband was employed and the wife was a homemaker (about 7% of the couples). Finally, spouses' incomes were positively related. In 30% of the couples, the two spouses had equal income levels. There were many more couples in which the husbands were in a higher income category than their wives (60%) than couples in which the wives were in a higher income category than their husbands (10%).

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2. There are very few conscripts and conscientious objectors in these data because, in general, men complete military service (6–12 months) at age 19 or 20, when they are still unmarried. At this age, most men have just finished their studies or are still studying.

Table 1. Marriage-Years (in 1,000s) by Spouses' Education, Economic Activity, and Income

	Wife's Education			
Husband's Education	Basic	Secondary	Tertiary	All[a]
Basic	577.8	326.0	25.9	929.7
Secondary	286.6	586.7	95.0	968.3
Tertiary	36.7	144.8	166.9	348.3
All[a]	901.1	1,057.5	287.7	2,246.3

	Wife's Economic Activity					
Husband's Economic Activity	Employed	Unemployed	Student	Pensioner	Homemaker	All[a]
Employed	1,495.7	40.4	40.9	70.5	155.1	1,802.7
Unemployed	39.3	5.0	(1.7)	3.7	6.2	55.9
Student or Conscript	11.7	(0.5)	3.0	(0.1)	(1.9)	17.2
Pensioner	149.6	12.1	(0.7)	170.7	19.9	353.0
Other	12.1	(0.7)	(0.5)	(1.3)	3.1	17.6
All[a]	1,708.4	58.6	46.8	246.4	186.1	2,246.3

	Wife's Income					
Husband's Income	1–lowest	2	3	4	5–highest	All[a]
1–lowest	128.1	77.0	20.7	3.4	(1.4)	230.7
2	191.9	335.5	75.9	8.2	(2.5)	613.9
3	148.5	442.0	169.6	20.0	5.3	785.5
4	59.1	151.1	98.3	22.8	7.1	338.3
5–highest	52.8	86.9	83.2	33.6	21.5	278.0
All[a]	580.5	1,092.5	447.7	88.0	37.7	2,246.3

Note: Cells with figures in parentheses are those in which the number of marriage-years was fewer than 3,000.

[a]Some columns and rows do not sum exactly to the total listed because of rounding.

In all the models, the wife's age at marriage (in five-year groups), duration of marriage (as time-varying and in five-year groups), family composition (combining data on the number of children and the age of the youngest child, including children under age 18 residing with the couple at the end of 1990), and degree of urbanization of the place of residence (four groups) were controlled because of their potential effect on both the couple's socioeconomic position and risk of divorce. They are referred to as control variables. (For the classifications, distributions, and relative divorce risks for these variables, see Jalovaara 2001.) Especially in the association between wife's education and the risk of divorce, family composition could be considered not only a confounding variable but also an intermediate variable. In this case, however, this distinction is not important: after I controlled for the other control variables, controlling for family composition had virtually no effect on the results for education.

Marriage-years and divorces were tabulated according to the variables used in the analysis at Statistics Finland. The tables were analyzed by means of Poisson regression analysis with categorical variables. In a Poisson model, it is assumed that the expected

Table 2. Divorces / 1,000 Marriage-Years, by Spouses' Education, Economic Activity, and Income

	Wife's Education			
Husband's Education	Basic	Secondary	Tertiary	All
Basic	5.9	10.9	9.2	7.7
Secondary	10.9	12.5	10.1	11.8
Tertiary	6.2	8.4	7.3	7.6
All	7.5	11.5	8.4	9.5

Husband's	Wife's Economic Activity					
Economic Activity	Employed	Unemployed	Student	Pensioner	Homemaker	All
Employed	10.3	15.5	19.1	4.6	8.7	10.3
Unemployed	18.6	22.2	(38.4)	7.3	22.7	19.3
Student or Conscript	21.4	(23.0)	20.7	(0.0)	(26.5)	21.7
Pensioner	4.1	4.1	(14.4)	1.3	2.2	2.6
Other	26.0	(25.9)	(36.6)	(2.3)	23.8	24.1
All	10.1	13.9	20.0	2.3	8.9	9.5

	Wife's Income					
Husband's Income	1–lowest	2	3	4	5–highest	All
1–lowest	6.4	13.5	15.4	14.2	(13.9)	9.7
2	7.2	10.0	10.7	11.9	(10.5)	9.2
3	9.4	10.4	10.2	10.5	11.2	10.2
4	8.4	10.0	9.2	8.2	10.5	9.4
5–highest	6.3	8.9	7.9	8.3	8.5	8.0
All	7.6	10.3	9.9	9.3	9.6	9.5

Note: Cells with figures in parentheses are those in which the number of marriage-years was fewer than 3,000.

divorce rate (the ratio of divorce events to exposure time) in a certain combination i of the explanatory variables can be described by the following equation:

$$E(d_i)/V_i = \exp(a + b_1x_{1i} + b_2x_{2i} + \ldots + b_px_{pi}),$$

where $E(d_i)$ is the expected number of divorces in ith cell; V_i is the number of marriage-years lived in ith cell; $x_1,\ldots,x_p$ are the explanatory variables; and a, $b_1,\ldots,b_p$ are the parameters to be estimated. The models were fitted with GLIM (Francis, Green, and Payne 1993). The results are presented as rate ratios, or "relative divorce risks," which I obtained by exponentiating the parameter estimates. I calculated 95% confidence intervals for the relative risks.

The interactions among the two spouses' education, economic activity, and income were statistically significant, meaning that the combination variables ("interactive model") produced a better fit than the main effects of each spouse's socioeconomic characteristics. For instance, all three interactions were statistically significant at the 1% risk level in a

Table 3. Relative Divorce Risks According to Spouses' Education, Economic Activity, and Income: Models 1a, 1b, and 1c (Include One of the Indicators of Socioeconomic Position and the Four Control Variables)[a]

Model 1a:	Wife's Education		
Husband's Education	Basic	Secondary	Tertiary
Basic	1.00	1.02	0.93
Secondary	1.07*	0.89*	0.77*
Tertiary	0.79*	0.67*	0.62*

Model 1b: Husband's Economic Activity	Wife's Economic Activity				
	Employed	Unemployed	Student	Pensioner	Homemaker
Employed	1.00	1.50*	1.22*	1.33*	0.83*
Unemployed	1.83*	2.08*	—[b]	1.96*	2.02*
Student or Conscript	1.30*	—[b]	0.98	—[b]	—[b]
Pensioner	1.29*	1.54*	—[b]	1.13	1.00
Other	2.66*	—[b]	—[b]	—[b]	2.20*

Model 1c:	Wife's Income				
Husband's Income	1–lowest	2	3	4	5–highest
1–lowest	1.00	1.29*	1.43*	1.34*	—[b]
2	0.89*	0.87*	0.96	1.13	—[b]
3	0.77*	0.75*	0.77*	0.84*	0.91
4	0.70*	0.73*	0.71*	0.68*	0.82
5–highest	0.57*	0.69*	0.63*	0.69*	0.70*

[a]The control variables are wife's age at marriage, duration of marriage, family composition, and degree of urbanization.

[b]The number of marriage-years was fewer than 3,000.

*The 95% confidence interval does not include 1.

model including the four control variables; separate main effects of wife's and husband's education, economic activity, and income; as well as interactions between wife's and husband's education, wife's and husband's economic activity, and wife's and husband's income. (The statistical significance of an added term was measured by scaled deviance.)

RESULTS

Relative divorce risks from two models are presented in Tables 3 and 4. Table 3 shows the relative risks of divorce from three models (1a, 1b, and 1c), including the four control variables and one of the indicators of a couple's socioeconomic position. Table 4 shows the relative risks of divorce from a model including the four control variables and all three indicators of a couple's socioeconomic position (Model 2). It is assumed that the socioeconomic factors may influence the risk of divorce either directly or through more proximate socioeconomic factors. For instance, spouses' economic activity may affect marital stability directly, or the spouses' income levels may mediate the effect. Model 2 is assumed to show the direct effect, controlled for the intermediate as well as confounding factors.

Table 4. Relative Divorce Risks According to Spouses' Education, Economic Activity, and Income: Model 2 (Includes All Three Indicators of Socioeconomic Position and the Four Control Variables)[a]

	Wife's Education		
Husband's Education	Basic	Secondary	Tertiary
Basic	1.00	1.02	0.85*
Secondary	1.09*	0.90*	0.73*
Tertiary	0.86*	0.70*	0.61*

	Wife's Economic Activity				
Husband's Economic Activity	Employed	Unemployed	Student	Pensioner	Homemaker
Employed	1.00	1.49*	1.31*	1.32*	0.86*
Unemployed	1.66*	1.90*	—[b]	1.77*	1.90*
Student or Conscript	1.13	—[b]	0.92	—[b]	—[b]
Pensioner	1.11*	1.36*	—[b]	1.02	0.94
Other	1.96*	—[b]	—[b]	—[b]	1.91*

	Wife's Income				
Husband's Income	1–lowest	2	3	4	5–highest
1–lowest	1.00	1.27*	1.49*	1.47*	—[b]
2	0.92	0.94	1.10	1.41*	—[b]
3	0.84*	0.84*	0.93	1.12	1.25
4	0.82*	0.86*	0.92	1.00	1.25
5–highest	0.76*	0.89*	0.89*	1.07	1.11

[a]The control variables are wife's age at marriage, duration of marriage, family composition, and degree of urbanization.

[b]The number of marriage-years was fewer than 3,000.

*The 95% confidence interval does not include 1.

Spouses' Education

The reference category for spouses' education, with a relative divorce risk of 1, is couples with neither spouse having an education beyond the basic level. Model 1a for education (Table 3) shows that among couples with one or both spouses having completed at least a secondary-level education, the risk of divorce was consistently lower for couples with more education, irrespective of which spouse may have been more educated than the other. Consequently, the risk of divorce was the lowest for couples in which both spouses had completed a tertiary education. The risk of divorce for couples in which one spouse was at the lowest educational level while the other spouse had attained a secondary-level education, however, was even higher than for couples with both spouses at the lowest educational level, especially if it was the husband who was more educated.

The divorce-risk patterns for education in Model 1a and Model 2 (shown in Table 4) are essentially similar. Overall, the shape of the pattern for education was stable across the inclusion of other socioeconomic variables in the model. The divorce-risk pattern for education was symmetrical with respect to gender, in that an increase in educational

attainment affected the risk of divorce in much the same way irrespective of which partner contributed to the increase.

Spouses' Economic Activity

Model 1b for spouses' economic activity (Table 3) shows that the risk of divorce for the reference category, couples in which both partners were employed, was comparatively low. The risk of divorce for the group with the most stable marriages—namely, couples with a homemaker wife and an employed husband—was only 17% lower than for couples with both spouses employed.

Model 1b also shows that compared with couples in which the husbands were employed, couples with the husbands unemployed or in the "other" group (which may, in a sense, indicate a type of unregistered unemployment) had high divorce risks in all categories of wives' economic activity. The relative difference in the risk of divorce for couples with employed husbands versus couples with unemployed husbands was the greatest when the wives were homemakers. Also, couples with unemployed wives had an elevated risk of divorce compared with couples with employed wives, irrespective of the husbands' economic activity. The husbands' being unemployed seemed to matter more than the wives' being so. For instance, the risk of divorce for couples with unemployed husbands and employed wives was somewhat higher than for couples with unemployed wives and employed husbands. Furthermore, couples with both partners unemployed were even more likely to divorce than couples with one employed and one unemployed partner.

Differences in the risk of divorce between couples in which at least one spouse was unemployed (or the husband in the "other" group) and couples in which both partners were employed diminished slightly when spouses' education and income were introduced into the model (Model 2 in Table 4). Presumably, spouses' education explains a small part of the association between spouses' unemployment and the risk of divorce, and spouses' income mediates a part of the effect of unemployment on the risk of divorce.

The results for spouses' economic activity from Model 2 (Table 4) indicate that the risk of divorce for couples in which both spouses were pensioners was at an equal level with that of couples in which both partners were employed. If one spouse was employed while the other was a pensioner, the risk of divorce was higher than that for couples with two pensioners.

Model 2 for spouses' economic activity also shows that compared with couples with two employed partners, couples had a reduced risk of divorce when both partners were studying. If one spouse was studying while the other was employed, however, the risk of divorce was higher than in dual-earner marriages.

Spouses' Income

The reference category for spouses' income is couples in which both spouses were at the lowest income level. Model 1c shows that the risk of divorce was the lowest when the wife's income was low and the husband's income was high, whereas it was the highest when the wife's income was relatively high and the husband's income was low.

Model 1c also shows that the risk of divorce was higher for couples in which the husbands' income was lower at all levels of the wives' income. The differences in the risk of divorce as a function of the wife's income were rather inconsistent, as long as the husband's income was high; when the husband's income was low, the risk of divorce increased more consistently with the wife's increasing income. Put another way, an increased risk of divorce was found among couples in which the wives were in a higher income category than their husbands.

In addition, the results from Model 2 (Table 4) indicate that the risk of divorce increased with the husbands' lower income at all levels of the wives' income. When the spouses' education and economic activity were introduced into the model, the differences

in the risk of divorce by wife's income became more consistent. This finding may be interpreted to mean that the divorce-promoting "independence effect" emerged more strongly when the counteracting effects of spouses' education and economic activity were considered. In Model 2, the risk of divorce increased with the wives' higher income at all levels of the husbands' income, including couples in which the wives still earned substantially less than their husbands (and thus hardly threatened their husbands' position as the primary provider). This finding could be taken to indicate that, as far as the independence effect of the wife's income is concerned, the absolute amount of the wife's income may have an effect on marital stability.

Nevertheless, Model 2 also shows that the within-couple relationship between spouses' income levels may have an effect: the divorce-promoting effect of the husband having a low income was not very strong when the wife's income was also low, and the wife's high income increased the risk of divorce especially when the husband's income was low. In other words, the risk of divorce increases if the wife is in a higher income category than her husband.

Regarding the low risks of divorce for women in the "homemaker" category and for women with low incomes, it is possible that the age of the youngest child was inadequately controlled (the categories were 0–3, 4–6, and 7–17 years). When Model 2 was fitted for couples that had no children under age 4, however, the effect of the wife being a homemaker and the effect of the wife's income were not any weaker. Also remember that women who have a job but are on maternity or parental leave are registered as employed.

DISCUSSION

In this study, I used register-based data on Finnish first marriages and divorces in 1991–1993 to study the joint effects of spouses' socioeconomic positions on the risk of divorce. The risk of divorce for couples in which neither spouse had a formal education beyond the basic level was lower than could be expected on the basis of the previously reported inverse main effects of each spouse's education on the risk of divorce (Jalovaara 2001). Preliminary analyses suggest that among marriages of relatively short duration, the risk of divorce is the highest when neither spouse has an education beyond the basic level. Therefore, the fact that previous Finnish research (Finnäs 1997, 2000) excluded marriages of the longest duration may explain why the interaction between spouses' levels of education was not reported earlier.

The lower risk of divorce for couples with equal levels of education is consistent with the hypothesis that educational homogamy stabilizes marriage. The finding that this stabilizing effect was specific to the lowest educational level may be taken to signify that the critical dissimilarity that may affect such things as the divergence in attitudes and values between spouses is that between a spouse having no education and a spouse having some education beyond the basic level.

Couples' education had similar direct effects on the risk of divorce, irrespective of which spouse contributed the educational capital. This gender neutrality is in contrast with studies from the United States, which found that the chances of marital disruption are higher for couples with unequal educational levels, particularly if the wife's educational level exceeds that of her husband (Bumpass et al. 1991; Tzeng 1992).

As for economic activity, the risk of divorce was the lowest for couples in which the husbands were employed and the wives were homemakers, although family composition was considered. It is possible that gender-role specialization within the couple can add to the longevity of marriage, owing to higher barriers to divorce, higher marital satisfaction, or both. Because it is common for married women in Finland to be in the labor force, wives' employment should not often indicate marital problems or that the husbands have failed to provide for their families. Nevertheless, the minority of women who choose to commit themselves to full-time homemaking (beyond family leaves) may be a select group

characterized by, for instance, traditional values and by a strong trust in the continuity of their marriages.

Although employed spouses, in some respects, may have low barriers to breaking up the marital bond, the risk of divorce for couples with both spouses employed was not much higher than that for homemaker wives with employed husbands. This finding may be due to, for instance, companionship and understanding based on shared everyday experiences, as well as high joint resources, which help cement the marriages. Also, in Finland, homemakers do not differ much from employed women because homemakers tend to be women who leave the labor force for a short period when their children are young.

An elevated risk of divorce was found for couples in which the wives, the husbands, or both partners were unemployed, even when spouses' education and income were considered. The usual explanation for the divorce-promoting effect of husband's unemployment is that, owing to his unemployment, the husband loses his status as a dependable primary or sole breadwinner, causing the wife to reconsider the marriage bargain (Cherlin 1979). In the present context, the wife's unemployment also promoted divorce. It is possible that in Finland, where the dual-earner family has become the social standard and it may be difficult for husbands alone to provide for their families, a woman's employment can make her indispensable or desirable to her husband. Nevertheless, it is likely that there are more complex effects as well as selection mechanisms involved. With the low rates of unemployment in 1990 (2.6% for women and 2.5% for men in these data), at least long-term unemployment is likely to have been highly selective (in terms of, for instance, personal characteristics and problems, such as poor health or excessive use of alcohol). Therefore, it is likely that there are various kinds of unmeasured factors that increase the likelihood of both unemployment and divorce and explain some of the association between them.

When spouses' education and economic activity were controlled, the wife's high income increased, and the husband's high income decreased, the risk of divorce at all levels of the other spouse's income; thus, spouses' absolute levels of income may be relevant for marital stability. Nevertheless, in accord with the relative-incomes hypothesis, the risk of divorce for couples in which the wives' income exceeded the husbands' income was higher than could be expected on the basis of the previously reported asymmetric main effects of each spouse's income (Jalovaara 2001). Thus, it appears that both absolute income and the earnings ratio, which are clearly not mutually exclusive factors, were predictive of divorce.

In sum, the results of this study indicated that, in Finland, both husbands' and wives' socioeconomic characteristics had important consequences for marital stability. The effect of spousal resources was remarkably gender-neutral in some respects (education and unemployment), suggesting that, overall, higher economic resources, irrespective of which spouse has contributed them, are associated with higher marital stability.

However, the significance of income and, to some extent, of economic activity for marital stability was asymmetric with respect to gender: the wife's lower economic resources may also have stabilizing effects on marriage. Despite comparatively high gender equality in Finland, there are still differences between women and men in perceived primary responsibilities attached to procreation, on the one hand, and to providing for the family, on the other hand. Perhaps owing to the gendered nature of family and work, the characteristics of men and women have partly different influences on marital stability. The divorce-promoting independence effect, however, was largely restricted to the high risk of divorce for wives with high income and the low risk of divorce of homemaker women, who are few in number. Therefore, the generally positive and gender-neutral effect of spousal resources on marital stability seems more important in understanding the determinants of divorce in Finland. Further, a lower risk of divorce for homemakers and for women with low income does not necessarily mean that the wife's economic resources causally

affect marital stability. One possibility is that of reverse causation: the wife may increase her market-work effort because she anticipates a divorce (Oppenheimer 1997). In addition, there may be unmeasured factors that affect both the wife's economic activity (and hence income) and the risk of divorce and explain at least a part of the differences in the risk of divorce by the wife's activity and income. For instance, women who perform domestic work full-time and have low incomes may be a select group characterized by traditional views about marriage; it may be the traditional views (rather than the domestic work or the low income) that decrease the probability of divorce.

Remember that at the beginning of the study period, almost all unions in Finland began as cohabiting unions and long cohabiting unions were becoming common, but this study did not include data on cohabitation. It is highly possible that marriage is selective of partners with particular combinations of economic resources and that this selection affected the findings of this study. For instance, once they are cohabiting, less-educated women are less likely to marry, and they marry after longer spells of cohabitation than do highly educated women (Finnäs 1995). Thus, the less-educated women who do marry—instead of separating before marriage or continuing cohabitation—may be more strongly self-selected than may highly educated women in terms of factors that are predictive of high marital stability (e.g., commitment to the union or to the institution of marriage); an analysis that is restricted to the married population only produces underestimates of the true propensity of those with low education to dissolve their unions. Unfortunately, little is known about selection into marriage among the couples who were included in this study and, therefore, it is not possible to estimate the size or even the direction of each bias.

Obviously, when studying socioeconomic determinants of divorce in a society in which dual-earner marriage is the norm, one should consider both partners' socioeconomic positions. The question remains whether important insights can be gained into determinants of marital stability by focusing on the joint characteristics of spouses. Overall, the new results gained by focusing on couples did not indicate that the previous conclusions drawn from the main effects of each spouse's socioeconomic position would, for the bulk of the study population, be flawed. Nevertheless, over and above the main effects of each spouse's socioeconomic position, the interplay of the two spouses' positions affected the couple's risk of divorce on all three socioeconomic dimensions included in this analysis. Consideration of the interplay of the spouses' positions has provided a more multidimensional picture of socioeconomic factors that affect the risk of divorce, as well as answers to central theoretical questions concerning the effect of asymmetry between marital partners' economic resources.

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III

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Research Article

Socioeconomic Differentials in Divorce Risk by Duration of Marriage

Marika Jalovaara

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Research Article

Socioeconomic Differentials in Divorce Risk by Duration of Marriage

Marika Jalovaara[1]

Abstract

Using register-based data on Finnish first marriages that were intact at the end of 1990 (about 2.1 million marriage-years) and followed up for divorce in 1991–1993 (n = 21,204), this research explored the possibility that the effect of spouses' socioeconomic position on divorce risk varies according to duration of marriage. The comparatively high divorce risks for spouses with little formal education and for spouses in manual worker occupations were found to be specific to marriages of relatively short duration. In contrast, such factors as unemployment, wife's high income, and living in a rented dwelling were found to increase divorce risk at all marital durations.

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1. Introduction

As divorce has become common in almost all Western countries, many social scientists are attempting to understand the factors that hold marriages together or contribute to divorce. Micro-level research has related divorce to various demographic, socioeconomic, and social-psychological factors (for a review, see White 1990).

Research findings on micro-level determinants of divorce are frequently interpreted using versions of the social exchange theory. Levinger's (1976) framework distinguishes three categories of factors that individuals presumably assess when considering divorce: the attraction to the ongoing marriage, barriers to breaking up the marriage, and alternatives to the current marriage. The economic theory of marital instability (Becker, Landes, and Michael 1977) provides a similar but more formal rational choice framework.

The other influential theoretical approach guiding research on antecedents of divorce is the life course perspective (Aldous 1990, Bengtson and Allen 1993). With its attention to the timing and sequencing of events in the lives of individuals and families, the life course perspective has increased the awareness of the potential time-dependency of divorce determinants, that is, the possibility that the antecedents of divorce vary with individual (and historical) time (White 1990, p. 909). The possibility that divorce determinants interact with individual time is highly plausible: The significance of marriage as well as the consequences of divorce for the individuals involved presumably vary over the various stages of marital lives, and antecedents of divorce can be expected to vary accordingly (South and Spitze 1986). In order to gain a better understanding of divorce, it is essential to know whether the empirical research and the exchange-based theoretical models concerning the determinants of divorce need specification in order to take the variation of divorce determinants over life course into account.

This paper deals with the possibility that the effects of spouses' socioeconomic position on the risk of divorce vary with the duration of marriage. Recent research from the United States (for a review, see White and Rogers 2000) as well as from Finland (Finnäs 1997, 2000, Jalovaara 2001, in press) and other Nordic countries (Hoem 1997, Kravdal 1994) has usually reported an inverse association between the socioeconomic position of spouses and the risk of divorce (and separation). An exception to this pattern is that wife's "economic independence" measured by the wife's employment (as opposed to the wife performing domestic work full-time) and high income may have divorce-promoting effects (Finnäs 2000, Jalovaara 2001, in press, White and Rogers 2000). Knowledge of the interactions between the duration of marriage and the socioeconomic position of spouses might help understand the processes by which the socioeconomic factors exert their effects on the risk of divorce (Morgan and Rindfuss 1985). Further, knowledge of these interactions would inform us about the

socioeconomic determinants of divorce in midlife and later life. (If these interactions are ignored, the understanding of the effects of socioeconomic factors on the risk of divorce remains overwhelmingly restricted to relatively short durations of marriage, where the incidence of divorce is highest.) In analyses of socioeconomic determinants of divorce and separation, the duration of marriage and the ages of spouses are standard control variables, but their interactions with socioeconomic factors have been examined in relatively few recent studies (Booth, Johnson, White, and Edwards 1986, Morgan and Rindfuss 1985, South 2001, South and Spitze 1986, White and Booth 1991. All of these use survey material from the United States). This research extends previous knowledge by using data from Finland, a Northern European country; by using a data set that is very extensive in size; by including a comparatively wide range of marital durations (up to 39 years); and by using several indicators of the socioeconomic position of both partners.

2. Individual time and divorce

The major challenge in analyses concerning temporal determinants of divorce is that the various dimensions of historical time and individual time are highly related and therefore, it is difficult to disentangle the independent effect of each of them in a meaningful way (see Thornton and Rodgers 1987). The main trends and differences are, however, clear. From the end of the 19th century, the Western world has experienced a rise in divorce, accelerating since the 1960s. Successive cohorts and new periods have presented higher rates of divorce than their predecessors (Haskey 1993, Lutz, Wils, and Nieminen 1991, Phillips 1991, pp. 185–223, Pitkänen 1986, Thornton and Rodgers 1987). In some countries, including the United States, divorce rates during the recent decades have leveled off at their historical highs or have even declined (Goldstein 1999). On the other hand, individual time has been reported to be inversely related to the likelihood of divorce and separation. Divorce and separation are less likely when the spouses are older, when the spouses have married at a higher age, and when the marriages have lasted a longer time (Morgan and Rindfuss 1985, South and Spitze 1986, Thornton and Rodgers 1987).

The lower incidence of divorce in longer marriages and among older spouses is likely to be a result of several factors. One potentially important reason is selective attrition, meaning that marriages with the highest probability of divorce are ended first, and therefore, the proportion of divorce-prone marriages is smaller among marriages of longer duration (Thornton and Rodgers 1987, p. 2, Vaupel and Yashin 1985/1993). Further, when the marriages of long duration represent earlier cohorts, their high

stability may be partly specific to the generation rather than the duration of marriage or the ages of spouses (White and Booth 1991, p. 6).

Moreover, there are theoretical reasons to expect that the actual propensity to divorce declines as spouses age and marriages last longer. Social-psychological explanations suggest that older people are socially and emotionally more mature and personally stable and therefore more able to avoid or solve serious marital conflicts than younger people; that older spouses are less likely undergo rapid individual changes and this limits the chances that the expectations and views of the two spouses will diverge (Morgan and Rindfuss 1985, Thornton and Rodgers 1987); and that older people put a higher value on stability than young people (Booth et al. 1986). The social exchange theory posits that older spouses have fewer alternatives to their current relationship, and because they have less time to enjoy any benefits that might follow from divorce, the expected future benefits compare less favorably with the costs of divorce (Ross and Sawhill 1975, p. 40). Also, the costs of divorce should be higher for couples that have been together for a longer time, because over time they tend to have made many tangible as well as intangible marital-specific investments (Becker et al. 1977) that act as barriers to divorce. A higher attraction to the current marriage is usually not considered a cause for the lower divorce risk at high marital durations. Indeed, recent research from the United States suggests that self-reported marital happiness tends to decline over the marital life course. (Whether there is a slight upturn in later years is under debate; see VanLaningham, Johnson, and Amato 2001).

3. Interactions between spouses' socioeconomic position and the duration of marriage

As noted above, recent research has usually reported an inverse association between the socio-economic status of spouses and the propensity to divorce. Earlier literature provides differing predictions as how to the socioeconomic differentials in the risk of divorce might vary over the marital life course. On the one hand, the socioeconomic differentials in divorce risk could be expected to *increase* with time in the marriage. This is because the socioeconomic status of spouses as well as the spouses' perceptions and evaluations of the family's socioeconomic status should crystallize as the duration of marriage increases and as the spouses age (Booth et al. 1986, South and Spitze 1986). Economic insecurity and a low socioeconomic status are frequent among young spouses, who are just establishing their families, beginning their work lives, and who may still be completing their education. The socioeconomic status of older couples is usually higher and it is to a greater extent the result of the life's work of the marriage partners. Therefore, with increasing time in the marriage, variables measuring the

socioeconomic status of spouses (such as occupational class, income, and home-ownership) should become more indicative of the spouses' lifetime economic success (Booth et al. 1986, South and Spitze 1986). Also, at higher ages and marital durations, it may be more difficult for the spouses to accept economic insecurity and any accompanying difficulties as just a temporary state of affairs.

On the other hand, there are reasons to expect that socioeconomic differentials in the risk of divorce *diminish* with time in the marriage. Firstly, it could be expected that having few economic resources is less predictive of divorce at longer durations of marriage, because the couples tend to have built up various kinds of barriers to leaving the relationship. For instance, they have a long shared history, and they often have shared children and social networks, and such barriers may help maintain the marital bond through times of economic difficulties. Secondly, the fact that the spouses have, for instance, stable employment, high occupational status, and some material assets early in marriage may be taken to indicate that they are well-prepared for assuming responsibility for a family. The proper preparation is presumed to strengthen the conjugal relationship especially at its early stages, since in later years, current developments within the marriage should play an increasingly important role (see South and Spitze 1986). Thirdly, especially at later stages of individual and marital life courses, greater social and economic resources might also widen the array of attractive alternatives to remaining married, should the marriage turn out unsatisfying. For instance, it has been suggested that especially later in marriage, highly educated women are more likely to find alternative partners and to be economically independent, and therefore, they might later in marriage be equally (or even more) divorce-prone than less educated women (South and Spitze 1986).

Empirical evidence on whether the socioeconomic differentials in divorce risk strengthen or weaken with the duration of marriage is partly contradictory. Various studies from the United States have reported that wife's high education reduces the probability of marriage disruption only during the early years of marriage, having a much weaker negative or a positive effect at higher durations (Morgan and Rindfuss 1985, South 2001, South and Spitze 1986). Further, Booth et al. (1986) reported that low family income was more predictive of marital disruption in shorter than it was in longer marriages. On the other hand, several studies have reported that many other dimensions of the spouses' socioeconomic position, namely wife's income (White and Booth 1991), wife's labor force participation (South and Spitze 1986, White and Booth 1991), and husband's employment (Booth et al. 1986, South and Spitze 1986), as well as couple's home-ownership and monetary assets (Booth et al. 1986, White and Booth 1991) have similar effects irrespective of the duration of marriage. Finally, a recent study reported that the divorce-promoting effect of wife's employment becomes stronger with increasing marital duration (South 2001).

4. Purpose of the study

The present study aims at contributing to the understanding of socioeconomic differentials in divorce risk by exploring the possibility that the effect of the socioeconomic position of the spouses varies with the duration of marriage (that is, time elapsed in marriage). The study uses register-based data concerning Finnish first marriages that were intact at the end of 1990 and were followed up for divorce between 1991 and 1993. The analysis uses several indicators of the socioeconomic position of both the wife and the husband. Because of its differential distributions in the various birth cohorts, the level of spouses' formal education may be a problematic measure of socioeconomic position. Consequently, a fuller picture of the interactions between socioeconomic and temporal factors can be gained when other measures of the socioeconomic position of the spouses are also used. The very extensive size of the data is an advantage when examining divorce determinants at longer marital durations where the incidence of divorce is low. In the present analysis, the highest observed marital duration is limited to (the comparably high figure of) 39 years.

Studies on marital dissolution are best conducted by observing successive marriage cohorts from the time they are initiated. The cohort approach is particularly advantageous when the analysis focuses on the effects of historical and individual time on marital stability. However, the present analysis is based on a left-truncated study population, meaning that the marriages were of varying durations at the beginning of the 3-year follow-up. In such data, the effects of the duration of marriage are confounded with the effects of membership in various birth and marriage cohorts, and it is not possible to unconfound the effects. In principle, any interaction between a socioeconomic factor and the duration of marriage could just as well be related to cohort as to the duration of marriage. The changes in socioeconomic differentials in divorce risk over the marital life course (which in the present analysis are represented synthetically) may be the interactions of greater theoretical importance. However, when interpreting the results of the present analysis, the possibility that the patterns are related to cohort also needs to be considered.

Period-related shifts in divorce rates during the 3-year follow-up are relatively insignificant. In the reform of the Finnish marriage legislation effective from the beginning of 1988, 'no fault' divorce legislation was adopted. Under the new legislation, spouses have an unconditional right to obtain a divorce on mutual or unilateral demand after a 6-month waiting period, or immediately if they have resided apart for the two preceding years. After the reform, divorce rates climbed steeply and remained high throughout the 1990s: between 1980 and 1987, the total divorce rate (TDR, the sum of duration-specific divorce rates per 100 marriages) varied between 28 and 31, rose then sharply following the law reform, and increased further in the 1990s

from 41 in 1990 to 51 in 1999; the TDR was 43 in 1991, 1992, and 1993, which are the follow-up years of this study (Statistics Finland 1992a, Statistics Finland 2001, p. 146).

5. Data and methods

5.1 Data set

The study uses tabulated data that are based on a census-linked divorce data file compiled at Statistics Finland (permission number TK-53-1016-98). The records of wives and husbands from the register-based 1990 census were linked to each other and with divorce records (as well as other annual records) for the years 1991–1993. Dates of divorce refer to the dates on which divorce is granted, information concerning which are transmitted to the Population Register Centre by district courts.

Neither the dissolution of consensual unions nor the time spent in premarital consensual unions are considered owing to data limitations. Finnäs (1995, 1996) has shown that by the beginning of the study period, living in a consensual union had become the typical way to begin a union in Finland. However, consensual unions tended to end in either judicial marriage or separation, meaning that cohabitation as a long-term alternative to formal marriage had not yet become common (Finnäs 1995, 1996). Still, it is obvious that the exclusion of consensual unions and their dissolution lead to a partial picture of union dissolution in Finland in the early 1990s.

The study includes judicial marriages that were intact on 31 December 1990, that were the first for both spouses, where both spouses were Finnish citizens, where the wife's age was below 65, and where the spouses were registered as domiciled in the same dwelling at the beginning of the follow-up. This analysis is further restricted to marriages that had lasted for less than 40 years. Among couples that have been married for 40 years or longer, the incidence of divorce is very low and therefore, the results would be neither reliable nor very interesting. Also, the measurement of the socioeconomic position of the oldest spouses would be somewhat problematic because the oldest spouses tend to have retired from work.

The same data have been used in two previous studies concerning the effects of the socioeconomic position of spouses on the risk of divorce (Jalovaara 2001, in press). The only difference between the study populations followed up in these studies is that in the two previous studies, marriages that had lasted for 40 years or longer were also included.

Marriage-years are years that the couples spent married during the follow-up period, that is, between 1991 and 1993. The data include exact dates of divorce as well as censoring events, and marriage-years were calculated using the exact dates. Couples

were dropped and ceased to contribute marriage-years on the dates of divorce, wife's or husband's death, wife's emigration, the 40th anniversary of the wedding, or at the end of the follow-up period, whichever came first. After all restrictions, the data included about 2.10 million marriage-years at risk, and during the follow-up period 21,204 marriages were dissolved through divorce.

5.2 Duration of marriage

Marital duration, that is, time elapsed since the day of marriage, was used as the life course measure. The value of the variable changed at the anniversary of the wedding if the marriage reached the subsequent category of marital duration. In order to examine whether – and how – the effects of socioeconomic factors varied with the duration of marriage, the couples were divided into five categories of marital duration. These categories are less than 5 years, 5 to 9 years, 10 to 19 years, 20 to 29 years, and 30 to 39 years. Note that the first two categories are five-year categories, whereas the rest are 10-year categories. In preliminary analyses, 5-year categories were used also at higher marital durations, but this more detailed classification did not prove informative.

5.3 Measurement of socioeconomic position

The socioeconomic position of the spouses was depicted with respect to each spouse's level of education, occupational class, economic activity, and income, as well as the couple's housing tenure and housing density. Each variable describes the circumstances of the spouses at the beginning of the study period, that is, at the end of 1990.

Wives' and husbands' *education* refers to the highest educational qualification the person had achieved by the end of 1990. The data were obtained from the Statistics Finland's register of completed degrees. Here, four educational levels were distinguished: (a) Basic (about 9 years or less; persons for whom no data on post-basic education is registered); (b) Lower secondary (persons with an occupational training of less than 3 years); (c) Upper secondary (persons with an occupational training of 3 years, as well as persons who have a completed matriculation examination), and (d) Tertiary (persons with an occupational training of 4–5 years, or a university-level certificate or degree).

The *occupational classification* used by Statistics Finland was modified so that manual workers were further divided into skilled and unskilled manual workers (Pensola 2000). For economically active husbands and wives, occupational class was based on the person's own occupation in 1990. The economically inactive (unemployed persons,

pensioners, persons performing domestic work etc.) were classified as far as possible on the basis of their occupation in 1985 or 1980. Husbands and wives for whom neither current nor previous occupation was found, were classified whenever possible under the same occupational class as the head of the household. The exception consists of students, for whom neither earlier occupation nor occupation of head of household were searched; all students are in the group "other".

The variables concerning wives' and husbands' *economic activity* were based on Statistics Finland's classification of the "main type of activity". This, in turn, was based on data obtained from various registers on a person's economic activity during the 1990 census week from December 25th to 31st. The categories are as follows: employed (comprising wage earners and entrepreneurs), unemployed (persons registered as actively seeking work), students (here including conscripts and conscientious objectors), pensioners, and the residual category of others outside the labor force. This last category ("others") comprises persons performing domestic work full-time (who usually are women).

The data on wife's and husband's *income* originate from the tax files of the national taxation registers, and the income variables describe the level of the person's income subject to state taxation in 1990. Five income categories are distinguished (see Table 2).

Housing tenure was measured in three classes: home-owner, rented, and unknown. Statistics Finland's *housing density* classification divides household-dwelling units into spacious, normal, and overcrowded (as well as unknown) by comparing the number of persons in the unit and the number of rooms in the dwelling (kitchen excluded). If there was more than one person per room, the dwelling was classified as overcrowded. The dwelling was classified as spacious if there were at least five rooms for two persons, at least six rooms for three persons, at least seven rooms for four persons, or at least eight rooms for five persons (Statistics Finland 1992b, pp. 15–16.).

5.4 Control variables

Four control variables were included in all models because they were likely to affect both the socioeconomic position of spouses (at the end of 1990) and the risk of divorce (in 1991–93). The *wife's age at marriage* was calculated exactly on the basis of the date of birth and the date of entry into marriage, and then grouped into 5-year categories. *Wife's age* was measured at the beginning of the follow-up (at the end of 1990), and was also grouped into 5-year categories. The *family composition* variable combined information on the number of children and the age of the youngest child living in the household, including spouses' biological and adopted children under 18 years of age

residing in the same household as the married couple at the end of 1990. The last control variable was the *degree of urbanization* of the municipality of the couple's residence at the end of 1990. This last variable was based on Statistics Finland's classification. Here, the capital city region (here including Helsinki, Espoo, Vantaa, and Kauniainen) was treated as a separate category.

5.5 Methods

The data were cross-tabulated according to the variables included in the analysis. Each cell of the cross-tabulation includes information on the number of divorces granted and the marriage-years lived in 1991–1993. The table was analyzed by means of Poisson regression. All explanatory variables were treated as categorical. In the model it is assumed that the expected divorce rate (the ratio of divorce events to exposure time) in a certain combination *i* of the explanatory variables can be described by the equation:

$$E(d_i)/(V_i) = \exp(a + b_1x_{1i} + b_2x_{2i} + \ldots + b_px_{pi}),$$

where $E(d_i)$ is the expected number of divorces in the i^{th} cell, V_i is the number of marriage-years lived in the i^{th} cell, $x_{1i} \ldots x_{pi}$ are the explanatory variables, and a, $b_1 \ldots b_p$ are the parameters to be estimated. The models were fitted with GLIM (Francis, Green, and Payne 1993). The results are presented as 'relative divorce risks' (rate ratios). The statistical significance of an added term was measured by means of scaled deviance, which is asymptotically χ^2-distributed. After testing the statistical significance of interactions between the duration of marriage and each socioeconomic variable, separate models describing the associations between the socioeconomic variables and the risk of divorce were fitted for each category of marital duration. 95% confidence intervals were calculated for the relative risks.

Note that owing to the use of this model, the analysis was based on the comparison of relative rather than absolute differences in the risk of divorce. For instance, if a relative difference in divorce risk between two socioeconomic groups is equal in size across all categories of marital duration, the absolute difference is smallest in the marital duration category with the lowest incidence of divorce. However, the conclusions are based on the presence or absence of the effects of socioeconomic variables and signs of parameter estimates rather than on a comparison of effect sizes. For this reason, the conclusions would be essentially the same also if absolute differences had been compared.

Table 1: Marriage-years (%) and divorces (in 100s) in 1991–93 according to the control variables in each category of marital duration

	Marriage-years (%) **Marital duration (years)**					**Divorces (in 100s)** **Marital duration (years)**				
	–4	5–9	10–19	20–29	30–39	–4	5–9	10–19	20–29	30–39
All	100	100	100	100	100	29	46	77	50	10
Wife's age at marriage (years)										
–19	6	8	15	24	22	4	6	18	17	3
20–24	43	48	55	56	57	15	25	43	28	6
25–29	38	32	23	15	18	8	12	13	4	1
30–34	10	8	5	3	2	2	2	2	0	0
35–39	2	2	1	1	0	0	0	0	0	0
40–	1	1	1	0	–	0	0	0	0	–
Wife's age in 1990 (years)										
–19	1	0	–	–	–	1	0	–	–	–
20–24	27	5	0	–	–	13	5	0	–	–
25–29	48	40	4	–	–	11	22	6	–	–
30–34	18	39	28	0	–	3	14	28	0	–
35–39	4	12	43	8	–	1	3	31	8	–
40–44	1	3	20	40	0	0	1	10	25	0
45–49	0	1	4	35	9	0	0	1	14	2
50–54	0	0	1	13	35	0	0	0	3	5
55–59	0	0	0	3	38	0	0	0	0	2
60–64	0	0	0	1	17	0	0	0	0	1
Family composition [a]										
No children	41	13	6	45	94	13	10	5	18	9
1, 0–3 years	40	17	1	0	0	10	7	1	0	0
1, 4–6 years	1	8	2	1	0	1	6	2	1	0
1, 7–17 years	1	3	14	32	6	0	2	14	18	1
2, 0–3 years	14	37	7	1	0	4	14	5	0	0
2, 4–6 years	0	9	12	2	0	0	4	11	1	0
2, 7–17 years	0	1	29	14	1	0	1	23	8	0
3+, 0–3 years	2	12	13	1	0	0	3	6	0	0
3+, 4–6 years	0	1	8	2	0	0	1	5	1	0
3+, 7–17 years	0	0	7	3	0	0	0	5	2	0
Degree of urbanization										
Helsinki region	20	16	14	14	13	7	9	13	8	1
Other urban	43	40	39	41	40	14	21	34	23	5
Other densely populated	15	17	18	18	17	4	7	12	9	2
Rural	22	27	29	27	31	4	9	17	10	3
Total number of marriage-years (in 1000s)	177	269	592	624	442					
Divorces/1000 marriage-years						16.2	17.0	13.0	8.0	2.4

[a] Family composition describes the number of children and the age of the youngest child; including spouses' (biological and adopted) children under 18 years of age *residing in the same household* as the married couple at the end of 1990.

– No exposure in the category.

6. Results

6.1 Distributions of marriage-years

Table 1 shows the distributions of marriage-years (%) and divorces (in 100s) according to the control variables, separately for each of the five marital duration categories. It shows that the proportions of marriage-years contributed by couples wed at a young age were higher among marriages at longer durations. The wife's age at the beginning of the follow-up is, of course, strongly and positively associated with the duration of marriage. The distributions of marriage-years by family composition indicate that couples in their first decade of marriage were typically at the childbearing stage, whereas couples in the third and fourth decade in marriage tended to have reached the post-parental stage. Finally, marriage-years contributed by couples living in rural areas increased with increasing duration of marriage.

Table 2: Marriage-years (%) and divorces in 1991–93 (in 100s) according to the indicators of socioeconomic position in each category of marital duration

	Marriage-years (%) Marital duration (years)					Divorces (in 100s) Marital duration (years)				
	–4	5–9	10–19	20–29	30–39	–4	5–9	10–19	20–29	30–39
All	100	100	100	100	100	29	46	77	50	10
Wife's education										
Basic or unknown	13	15	24	45	67	8	10	21	21	7
Lower secondary	25	31	34	30	20	8	15	27	16	2
Upper secondary	44	36	25	14	6	10	16	19	8	1
Tertiary	17	18	17	12	7	2	5	11	6	1
Husband's education										
Basic or unknown	18	20	28	45	64	9	11	24	21	6
Lower secondary	37	39	35	26	16	11	20	29	14	2
Upper secondary	27	22	18	13	9	7	10	13	7	1
Tertiary	17	19	19	16	11	2	5	11	8	1
Wife's occupational class										
Upper white collar employee	15	17	15	12	9	3	5	10	6	1
Lower white collar employee	46	45	47	44	34	12	21	38	24	4
Skilled manual worker	12	12	10	10	11	4	6	8	5	1
Unskilled manual worker	10	10	11	16	23	5	6	10	9	2
Farmer	4	6	7	10	14	0	1	2	2	1
Other self-employed	3	4	6	6	6	1	2	5	4	1
Other	10	5	3	2	4	4	4	4	1	0

Table 2 (continued)

	Marriage-years (%) Marital duration (years)					Divorces (in 100s) Marital duration (years)				
Marital duration	–4	5–9	10–19	20–29	30–39	–4	5–9	10–19	20–29	30–39
Husband's occupational class										
Upper white collar employee	19	21	21	19	14	3	7	13	10	1
Lower white collar employee	22	21	19	19	17	6	9	15	10	2
Skilled manual worker	28	28	28	27	26	9	15	24	14	3
Unskilled manual worker	15	13	12	13	14	6	8	12	6	2
Farmer	5	7	8	10	14	0	1	2	2	1
Other self-employed	6	8	10	11	10	2	5	10	7	1
Other	6	2	1	1	6	2	2	1	1	0
Wife's economic activity										
Employed	75	76	85	88	65	20	35	66	44	8
Unemployed	3	3	2	2	3	1	2	3	2	0
Student	8	4	3	1	0	3	3	3	1	0
Pensioner	0	1	1	4	26	0	0	1	2	2
Other	14	17	9	4	6	4	6	4	2	0
Husband's economic activity										
Employed	90	94	94	89	58	24	41	69	44	7
Unemployed	4	3	3	2	2	2	3	4	2	0
Student	4	2	1	0	0	2	1	1	0	0
Pensioner	1	1	2	7	39	0	1	2	3	3
Other	1	1	1	1	1	1	1	1	1	0
Wife's income (in 1990)										
1 (FIM –49,999)	24	25	20	17	34	9	12	13	7	3
2 (FIM 50,000–99,999)	58	54	50	49	46	16	25	41	25	5
3 (FIM 100,000–149,999)	15	17	23	26	16	3	7	18	13	2
4 (FIM 150,000–199 999)	2	3	4	5	3	0	1	3	3	0
5 (FIM 200,000–)	1	1	2	2	1	0	0	2	1	0
Husband's income (in 1990)										
1 (FIM –49,999)	11	7	6	7	15	4	5	7	4	1
2 (FIM 50,000–99,999)	33	27	21	21	36	11	14	18	10	3
3 (FIM 100,000–149,999)	39	41	40	37	27	10	19	30	18	3
4 (FIM 150,000–199 999)	12	16	18	18	11	2	6	13	10	1
5 (FIM 200,000–)	6	9	15	17	10	1	3	9	8	1
Housing tenure										
Home owner	63	79	88	91	92	14	30	61	43	9
Rented	35	20	11	8	8	15	15	15	7	1
Unknown	2	1	1	0	0	0	1	1	0	0
Housing density										
Spacious	20	15	12	32	62	4	7	9	14	6
Normal	65	67	73	60	32	20	30	55	31	4
Overcrowded	13	17	13	7	4	5	8	11	4	0
Unknown	2	2	2	1	2	1	1	1	1	0

Table 2 shows the distribution of marriage-years (%) and divorces (in 100s) by each socioeconomic variable, separately for each category of marital duration. Reflecting the increase in education over birth cohorts, women and men at shorter marital durations tended to have reached higher levels of education than women and men at higher marital durations. As for occupational class, the most significant difference in distributions between the categories of marital duration is that the proportion of marriage-years contributed by farmers increased towards spouses at higher marital duration, who tended to be members of earlier birth and marriage cohorts.

Table 2 also shows that the proportion of marriage-years contributed by couples with employed wives is highest among couples in their second and third decade of marriage. A number of young spouses were still in education. Moreover, during the early years in marriage, some women leave the labor force because they have young children. Note, however, that in later stages of family careers, married women tended to belong to the labor force in equal proportions with their husbands. The proportion of marriage-years contributed by pensioners was highest at high marital durations. Further, women and men tended to have highest incomes at medium durations of marriage. Finally, home-ownership became more prevalent towards higher marital durations and couples that had been married for a long time were likeliest to live in spacious dwellings.

6.2 Duration of marriage and divorce risk

The usual empirical pattern of divorce by the duration of marriage in Finland is that the divorce rate increases sharply during the first years in marriage and then, after having peaked, declines towards long marital durations (Lindgren and Ritamies 1994, Pitkänen 1986). The pattern was found also in these data (see bottom of Table 1). The risk of divorce was highest for marriages that had lasted 5–9 years and decreased thereafter, reaching a very low level at long marital durations. Note that in this study design, the marriages of shorter durations represented more recent marriage cohorts. Therefore, the higher divorce risk for marriages at shorter durations of marriage during the period studied partly reflects the increase in divorce risk over marriage cohorts.

6.3 Socioeconomic differentials in divorce risk by duration of marriage

The next step in the analysis was to find out whether the effects of socioeconomic factors on the risk of divorce varied across the five categories of marital duration. The statistical significance of interactions between marital duration and each indicator of

socioeconomic position was tested in a model including the main effects of marital duration, the four control variables, and all indicators of the socioeconomic position of spouses, as well as the interactions between each socioeconomic indicator and marital duration. In this model, all but one first order interactions between the socioeconomic indicators and marital duration were statistically significant at one per cent risk level. The one interaction that was not statistically significant was the interaction between husband's occupational class and marital duration (p = .132). Note, however, that some of the interactions may be statistically significant because of the large number of observations in the data, and therefore, it is possible that the statistical significance of interactions is not a very useful tool in this case when singling out the interactions that are sizable enough to be important.

Table 3: Gross[a] and net[b] effects of socioeconomic factors in each category of marital duration; relative divorce risks (rate ratios)

	Marital duration									
	–4 years		**5–9 years**		**10–19 years**		**20–29 years**		**30–39 years**	
	Gross	**Net**	**Gross**	**Net**	**Gross**	**Net**	**Gross**	**Net**	**Gross**	**Net**
Wife's education										
Basic or unknown	1	1	1	1	1	1	1	1	1	1
Lower secondary	0.59 *	0.66 *	0.78 *	0.84 *	0.93 *	0.96	1.11 *	1.11 *	1.18 *	1.15
Upper secondary	0.39 *	0.50 *	0.65 *	0.74 *	0.88 *	0.93	1.16 *	1.14 *	1.21	1.17
Tertiary	0.29 *	0.40 *	0.45 *	0.54 *	0.82 *	0.83 *	1.10	1.01	1.08	0.99
Husband's education										
Basic or unknown	1	1	1	1	1	1	1	1	1	1
Lower secondary	0.67 *	0.78 *	0.90 *	0.97	0.95	1.00	1.06	1.06	1.12	1.13
Upper secondary	0.51 *	0.64 *	0.74 *	0.85 *	0.89 *	0.94	1.07	1.01	1.30 *	1.34 *
Tertiary	0.30 *	0.41 *	0.48 *	0.59 *	0.71 *	0.79 *	1.04	0.98	0.95	1.01
Wife's occupational class										
Upper white collar emp.	1	1	1	1	1	1	1	1	1	1
Lower white collar emp.	1.37 *	0.96	1.35 *	0.96	1.06	0.91 *	0.94	0.92	0.91	0.78
Skilled manual worker	1.77 *	1.09	1.52 *	1.04	1.09	0.94	0.90	0.90	0.92	0.84
Unskilled manual worker	2.05 *	1.09	1.73 *	1.05	1.15 *	0.90	0.98	0.95	0.93	0.83
Farmer	0.52 *	0.59 *	0.46 *	0.45 *	0.43 *	0.44 *	0.40 *	0.51 *	0.54 *	0.50 *
Other self-employed	2.30 *	1.40 *	1.78 *	1.18	1.18 *	1.02	1.05	0.99	1.36 *	1.15
Other	1.39 *	0.95	1.63 *	1.04	1.46 *	1.06	1.19	1.04	1.40	1.18
Husband's occupational class										
Upper white collar emp.	1	1	1	1	1	1	1	1	1	1
Lower white collar emp.	1.44 *	0.94	1.30 *	0.92	1.21 *	1.04	0.98	0.94	1.08	1.02
Skilled manual worker	1.70 *	0.87	1.53 *	0.92	1.21 *	0.96	0.96	0.91	1.00	1.02
Unskilled manual worker	2.16 *	0.99	1.74 *	1.00	1.46 *	1.12	0.98	0.92	1.21	1.25
Farmer	0.63 *	0.50 *	0.61 *	0.64 *	0.65 *	0.82 *	0.51 *	0.71 *	0.78	1.13
Other self-employed	2.05 *	1.08	1.92 *	1.18 *	1.48 *	1.18 *	1.19 *	1.09	1.46 *	1.40 *
Other	1.79 *	1.05	1.77 *	1.22	1.91 *	0.87	1.24	0.74	1.03	0.99

Table 3 (continued)

	Marital duration									
	–4 years		5–9 years		10–19 years		20–29 years		30–39 years	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Wife's economic activity										
Employed	1	1	1	1	1	1	1	1	1	1
Unemployed	1.65 *	1.32 *	1.51 *	1.22 *	1.34 *	1.16 *	1.58 *	1.43 *	1.13	1.11
Student	0.92	1.09	1.18 *	1.15	1.35 *	1.23	1.28 *	1.12	2.41 *	1.72
Pensioner	2.55 *	1.36	1.53 *	0.95	1.51 *	1.28 *	1.22 *	1.19	1.12	1.12
Other	1.20 *	0.97	0.88 *	0.75 *	0.69 *	0.66 *	0.77 *	0.75 *	0.79	0.79
Husband's economic activity										
Employed	1	1	1	1	1	1	1	1	1	1
Unemployed	1.71 *	1.37 *	1.81 *	1.47 *	1.94 *	1.63 *	1.85 *	1.65 *	1.64 *	1.62 *
Student	1.06	1.02	1.10	0.75	1.65 *	1.57 *	1.98 *	2.12 *	–	–
Pensioner	2.31 *	1.38	1.90 *	1.26	1.68 *	1.34 *	1.23 *	1.16 *	1.07	1.07
Other	3.19 *	2.37 *	2.20 *	1.58 *	2.31 *	1.56 *	2.24 *	1.57 *	1.84 *	1.64
Wife's income										
1 (lowest)	1	1	1	1	1	1	1	1	1	1
2	0.94	1.02	0.96	0.99	1.10 *	1.07	1.06	1.06	1.07	1.13
3	0.85 *	1.19 *	0.93	1.18 *	1.16 *	1.25 *	1.09	1.11	1.18	1.23
4	0.87	1.51 *	0.85	1.32 *	1.14 *	1.31 *	1.23 *	1.23 *	1.08	1.07
5 (highest)	0.94	1.71 *	0.86	1.38 *	1.27 *	1.53 *	1.10	1.10	1.11	1.08
Husband's income										
1 (lowest)	1	1	1	1	1	1	1	1	1	1
2	0.89 *	1.04	0.77 *	0.82 *	0.71 *	0.75 *	0.66 *	0.71 *	0.84	0.89
3	0.73 *	0.95	0.67 *	0.79 *	0.60 *	0.68 *	0.59 *	0.65 *	0.81 *	0.88
4	0.62 *	0.99	0.57 *	0.78 *	0.56 *	0.68 *	0.65 *	0.70 *	0.89	0.95
5 (highest)	0.53 *	0.94	0.54 *	0.83 *	0.51 *	0.68 *	0.59 *	0.63 *	0.73 *	0.78
Housing tenure										
Home owner	1	1	1	1	1	1	1	1	1	1
Rented	1.54 *	1.35 *	1.54 *	1.37 *	1.69 *	1.52 *	1.46 *	1.41 *	1.19	1.18
Unknown	1.11	1.04	1.21	1.02	1.36 *	1.32	1.13	1.05	0.70	0.66
Housing density										
Spacious	1	1	1	1	1	1	1	1	1	1
Normal	1.23 *	1.05	1.14 *	0.99	1.13 *	1.00	0.97	0.95	1.01	1.02
Overcrowded	1.35 *	1.09	1.36 *	1.07	1.40 *	1.12 *	1.01	0.93	0.85	0.85
Unknown	1.07	0.90	1.57 *	1.33 *	1.13	0.94	1.03	0.96	0.98	1.00

[a] Gross effect = Only the control variables (wife's age at marriage, wife's age, family composition, and degree of urbanization) are controlled for.

[b] Net effect = The control variables as well as all other indicators of socioeconomic position are controlled for.

– No divorces; result not shown.

* 95% confidence interval does not include 1.

In order to see how the effects of socioeconomic factors on the risk of divorce varied with the duration of marriage in these data, separate models describing the associations between the socioeconomic variables and the risk of divorce were fitted for each category of marital duration. Table 3 shows the gross and net effects of each socioeconomic factor by the duration of marriage. The gross effects are from models including the four control variables as well as one of the indicators of the socioeconomic position of spouses. The net effects are from models including the four control variables as well as all 10 indicators of the socioeconomic position of spouses. Separately for each category of marital duration, the first category of each explanatory factor was taken as the reference category with a relative divorce risk of one.

In the interpretation of the findings, an underlying assumption is that the socioeconomic factors constitute a "causal chain" running from the level of education through occupational class, economic activity, and income to housing tenure and housing density, and that each socioeconomic factor may influence divorce risk "directly" or through more proximate socioeconomic factors. The net effect models are assumed to show the direct effect of each socioeconomic factor.

The spouses' levels of formal education showed a very different pattern in the first years of marriage than after several decades of marriage. In marriages of short duration, wife's and husband's levels of education had very strong and negative net effects on the risk of divorce. In contrast, among wives and husbands in their third or fourth decade in marriage, divorce risk was highest for the wives and husbands who had completed secondary education. The gross and net effects of spouses' education differed from each other only slightly, implying that the other socioeconomic factors mediated only a small part of the effect of spouses' education on the risk of divorce.

The gross effect models for wife's and husband's occupational class showed that there were consistent and substantial differences in divorce risk between white-collar employee and manual worker groups, but only in marriages of shortest durations. Especially among couples in their first decade of marriage, the divorce risks for the two manual worker groups were higher than for the two white-collar employee groups. Further, the divorce risk for unskilled manual workers was higher than for skilled manual workers, and the divorce risk for lower white-collar employees was higher than for upper white-collar employees. In contrast, among couples in their third or fourth decade of marriage, there were no consistent differences in divorce risk between white-collar employee and manual worker groups.

An earlier Finnish study (Jalovaara 2001) showed that the differences in divorce risk between white-collar employee and manual worker groups are largely explained by spouses' education. In accord with this, in the net effects model, there were no consistent differences in divorce risk between white-collar employee and manual worker groups even in the marriages of shortest durations.

Nevertheless, in almost all duration segments, farmers differed from other occupational groups with their notably low divorce risk – also when the other socioeconomic factors were considered. (The relative divorce risk for farmer husbands was higher than for farmer wives. However, farmer husbands tend to have farmer wives, and therefore, the result for farmer husbands, controlling for the wife's farmer status, is probably not interesting.) Further, the gross effect models showed that the divorce risk for self-employed spouses (other than farmers) was comparatively high in almost all categories of marital duration.

The gross and net effects of spouses' economic activity differed from each other to some extent. This could be taken to signify that the preceding socioeconomic factors (that is, socioeconomic factors that came first in the causal chain, namely education and occupational class) partly explain the differences in divorce risk by spouses' economic activities, and the more proximate socioeconomic variables (especially income) mediate some of the effect of spouses' economic activities on the risk of divorce. Still, wife's and husband's economic activities also had substantial net effects on the risk of divorce.

Overall, the net effects of spouses' economic activity were similar at all marital durations. For instance, a spouse, and especially the husband being unemployed (or the husband being on the group "other") increased divorce risk as compared to employed spouses at all marital durations. Further, as compared to employed women, the wife being in the category "other" (including women performing domestic work full-time) lowered the risk of divorce in all but the very first duration segment.

However, the gross effect models for wife's and husband's economic activity showed that the divorce risks for students at high marital durations as well as for pensioners at relatively early marital durations were comparatively high, whereas the divorce risks for students at early durations and for pensioners at late marital durations were not particularly high.

The gross effect models for wife's income show rather small and inconsistent differences in the risk of divorce. The association between wife's income and divorce risk became more consistently positive when the other components of spouses' socioeconomic position were considered. The net effect models show that wife's income was rather consistently and positively related to the risk of divorce at early as well as longer marital durations. (The only exception to the consistent pattern concerned wives who were at high marital durations and had very high incomes. These groups were, however, very small.)

The gross effect models for husband's income show that at all marital durations, the divorce risk for husbands in the lowest income category was comparatively high, and divorce risk was negatively and consistently associated with the husband's income, especially in marriages of relatively short duration. In the net effect models, the differences in divorce risk by husband's income are smaller that in the gross effect

models. This may be taken to signify that the preceding socioeconomic factors partly explain the differences in divorce risk by husband's income, and the more proximate socioeconomic variables (that is, those related to housing) partly mediate its effect. Nevertheless, the net effect models also show that the husband having a low income increased the risk of divorce, most clearly, however, in marriages at medium durations.

In the very shortest and the very longest marriages, the net effect of husband's income was somewhat less clear. To see whether this was attributable to the comparatively low proportions of employed husbands in the shortest and the longest marriages, the same models were fitted to data including only the couples with employed husbands. As for marriages that had lasted for less than 5 years, the restriction to couples with employed husbands changed the result very little, and, as for the longest marriages, the restriction made the effect somewhat more consistently negative (see Table 4). Note, however, that the 95% confidence intervals are wide.

Table 4: Net effects[a] of husband's income for the very shortest and the very longest marriages; couples with employed husbands; relative divorce risks (rate ratios)

	Marital duration			
	–4 years		30–39 years	
	Relative divorce risk	95% confidence interval	Relative divorce risk	95% confidence interval
Husband's income				
1 (lowest)	1		1	
2	0.98	(0.83–1.16)	0.80	(0.56–1.12)
3	0.93	(0.78–1.10)	0.84	(0.60–1.19)
4	0.99	(0.80–1.21)	0.82	(0.57–1.18)
5 (highest)	0.93	(0.71–1.22)	0.63	(0.43–0.95)

[a] Net effect = the control variables as well as all other indicators of socioeconomic position are controlled for.

The sub-sample of couples with employed husbands includes ca. 160 thousand marriage-years of duration 0–4 years and ca. 255 thousand marriage-years of duration 30–39 years.

The gross effect models for housing tenure show that the divorce risk for renters was higher than that for home-owners at all marital durations. The difference in divorce risk between renters and home-owners slightly diminished when the other socioeconomic factors were controlled for, implying that the difference is to some extent attributable to the generally higher socioeconomic position of home-owners. Still, the net effect models also indicate that home-ownership decreased the risk of divorce at all marital durations.

The gross effect models for housing density indicate that divorce risk increased with increasing housing density, but only among couples in their first or second decade in marriage. However, the differentials in divorce risk by housing density are explained by preceding socioeconomic factors, and the net effects of housing density show no direct effect of housing density on the risk of divorce in any of the duration segments.

7. Discussion

Using register-based data on Finnish women and men in their first marriages intact at the end of 1990 followed up for divorce between 1991 and 1993, this study explored the possibility that the effect of the socioeconomic position of spouses on the risk of divorce varies in marriages of various marital durations (up to the 40th anniversary of the wedding). Many socioeconomic factors, including spouses' unemployment, wife's income and employment, home-ownership, and the fact that the spouses were farmers were found to have similar effects on the risk of divorce in marriages of various durations. In contrast, the previously reported consistent differences in divorce risk between educational groups on one hand and between white-collar employee and manual worker groups on the other (Finnäs 2000, Jalovaara 2001) were found to be specific to marriages of relatively short duration. The findings are generally in line with those from the United States indicating that (wife's) education is a more important predictor of marital disruption at early marital durations (Morgan and Rindfuss 1985, South 2001, South and Spitze 1986), whereas the effects of such factors as spouses' employment, income, and material assets remain similar over marital careers (Booth et al. 1986, South and Spitze 1986, White and Booth 1991).

Prior research has reported that in Finland, the wife being a homemaker decreases the risk of divorce as compared to the wife being employed, but at the same time, both wife's and husband's unemployment increases the risk of divorce as compared to the spouses being employed (Jalovaara 2001, in press). The present study shows that the effects of spouses' employment and unemployment are similar in marriages of various durations.

The high divorce risks for pensioners and students were found to be specific to the marital durations where these statuses are unusual. That is, divorce risk was high for pensioners only at short and for students only at long marital durations. Note that the reasons for being a pensioner vary with age and consequently, with marital duration: The youngest pensioners tend to have retired from work because of poor health. Note, however, that these two interactions contribute to the understanding of very few divorces. For instance, among couples in their third decade in marriage, there were only 80 divorces for wives and 21 divorces for husbands who were students, and among

marriages that had lasted for less than 5 years, there were only 20 divorces to wives and 29 divorces to husbands who were pensioners.

The results indicate that overall, wife's high income increases the risk of divorce irrespective of the duration of marriage. Husband's high income was found to decrease the risk of divorce especially in marriages of medium durations. Particularly in the very shortest marriages, the net effect of husband's income was weak and inconsistent, and this was not attributable to the comparatively low proportions of employed husbands at this marital duration. It is possible that income is a comparably poor indicator of a young husband's personal characteristics and efforts, even if the husband is employed.

As compared to home-owners, the fact that the couple lived in a rented dwelling increased the risk of divorce irrespective of the duration of marriage. The lack of interaction with the duration of marriage is an unexpected finding, in that at longer marital durations, where home-ownership is highly prevalent, renters could be expected to be more strongly selected than in shorter marital durations in terms of factors predictive of divorce (such as a lowered expectation for the continuity of the marriage).

At the same time as the other socioeconomic factors exerted similar effects on the risk of divorce in almost all marital duration segments, wife's and husband's education and occupational class showed different patterns in shorter and longer marriages. Among marriages of short duration, the risk of divorce was strongly and negatively associated with the wife's and husband's level of formal education, whereas among marriages of comparatively long duration, divorce risk was highest for spouses having attained a secondary level education, even when such factors as spouses' economic activity and income were considered. Further, the high divorce risk for manual workers as compared to white-collar employees was specific to marriages of shortest durations.

There are several potential explanations for these interactions. Firstly, the low divorce risk for spouses with high education and occupational position may be partly specific to the recent (birth and marriage) cohorts. During the increase in divorce in the early 20th century, divorce became an option not just for the wealthiest people, but for members of all social strata (Phillips 1991). However, even in 1946–47 in Finland, the divorce rate was much higher among men in professional occupations than among urban workers and lower white-collar employees (Allardt 1952, pp. 165–166). To the extent that the turn of the socio-structural divorce risk gradient from positive to negative is recent and it occurs at least partly over cohorts, it is one potential explanation for the failure to find negative educational and occupational divorce risk gradients for the longest marriages intact at the end of 1990.

Secondly, the differential educational distributions in the various birth cohorts might account for the diverse effects of education in marriages of shorter and longer duration. Owing to the general increase in education over cohorts, spouses at early marital durations tend to be more highly educated than spouses at long durations of

marriage. Further, within a given birth cohort, spouses in marriages of short duration tend to be more highly educated, because the highly educated tend to marry at a later age. Therefore, it could be argued that the significance of having reached a certain educational level varies between spouses at various marital durations (see Hoem 1997[1]). Among spouses in the longest marriages, those having no education beyond the basic level are the majority, whereas among spouses in the shortest marriages, they are much fewer and perhaps more strongly selected in terms of factors predictive of high marital instability.

However, the differences in divorce risk between white-collar employees and manual workers also declined with duration, although the differences between marital duration segments in distributions into these occupational classes were relatively modest. This suggests that explanations based on differential distributions may not be important.

Thirdly, the interactions between marital duration and education on one hand and between marital duration and occupational class on the other may also reflect genuine change across the phases of marital lives. Perhaps supporting this possibility, research from the United States that has followed successive cohorts of marriages as they are initiated reports that the negative impact of wife's education on the risk of marital disruption disappears or turns positive with increasing marital duration (South 2001). Note that in longer marriages, the risk of divorce was highest for both husbands and wives with a secondary level education, and controlling for economic activity and income had little effect on the pattern. This finding lends little support to the hypothesis that in long marriages, highly educated women were likely to divorce because they have better chances of finding employment and having a high income.

The fourth and final potential explanation for the interactions is selective attrition, whereby differentials in divorce risk by a given permanent divorce-promoting characteristic decline or even reverse with the duration of marriage because marriages susceptible to that characteristics are selected out of the total pool of marriages at a higher rate than other marriages (see South and Spitze 1986, FN 6, Vaupel and Yashin 1985/1993). Given high rates of divorce during the first decades of marriage and the very strong effects of education and occupational class in marriages of short durations, selective attrition may be an important explanation for the differential divorce risk gradients for education and occupational class in shorter and longer marriages.

In sum, the effects of spouses' employment and unemployment, wife's income, and home-ownership on the risk of divorce were similar at very different marital durations. This suggests that prior findings concerning the effects of these factors on the risk of divorce can be largely generalized to couples at different marital durations as well as to recent cohorts. The effects of spouses' employment, wife's income, and home-ownership are very pervasive in that they manifest themselves among young men and

women among whom economic difficulties and the lack of material assets are commonplace and often temporary, as well as among men and women who have been together for decades and who are thought to be tied together by many kinds of tangible and intangible bonds that make a divorce costly. The pervasive nature of the effects of these factors highlights their importance as antecedents of divorce.

However, when measured in terms of wife's and husband's level of formal education and occupational class, an inverse association between the socioeconomic position of spouses and the risk of divorce was found only in the marriages of relatively short duration. These findings suggest that empirical research and the exchange-based theories concerning antecedents of divorce may need specification according to marital duration. The finding for occupational class suggests that the presence of differential educational distributions in the various birth cohorts is not a very likely explanation for the differential effects of education in shorter and longer marriages. It is likely that the interactions are partly related to developmental changes in marriages over the individual and marital life courses, and partly to differences between cohorts. A marked disadvantage of the present analysis was that it was based on a left-truncated study population and therefore, the effects of marital duration were confounded with the effects of cohort membership. A data set covering cohorts of marriages from the time they are initiated would allow patterns related to duration and cohort to be disentangled, and this in turn would greatly facilitate the interpretation of the interactions between temporal and socioeconomic determinants of divorce. Finally, the results of this study suggested that selective attrition may be an important factor in explaining the interactions between the duration of marriage and the socioeconomic factors. The cohort approach would also allow the importance of selective attrition to be estimated.

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Notes

1. Hoem (1997) reported that the increase in divorce between 1980 and 1990 in Sweden had been concentrated in women with lower educational attainments. This was interpreted to mean, among other things, that with the general increase in education in Sweden, the lower educational categories have become increasingly over-represented by more divorce-prone women.

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The effects of marriage partners' socio-economic positions on the risk of divorce in Finland

The high and increasing incidence of divorce, with the various consequences for adults and children, has aroused much interest in understanding the contributory factors. This study focuses on the effects of marriage partners' socio-economic positions on the risk of divorce. The analyses are based on register-based follow-up data from Statistics Finland on first marriages in Finland that were intact at the end of 1990 and divorces in 1991-93.

The study provides important new knowledge about socio-economic divorce risk differentials in the Western world where men and women are becoming increasingly similar in their economic and domestic roles.

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