



# Scientific Reports

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DAVID P. SMITH

**Illustrative Analysis:  
Marriage Dissolution and Remarriage  
in Sri Lanka and Thailand**

INTERNATIONAL STATISTICAL INSTITUTE  
Permanent Office. Director: E. Lunenberg  
428 Prinses Beatrixlaan, PO Box 950  
Voorburg  
Netherlands

WORLD FERTILITY SURVEY  
Acting Project Director:  
V.C. Chidambaram  
35-37 Grosvenor Gardens  
London SW1W 0BS, UK



The World Fertility Survey is an international research programme whose purpose is to assess the current state of human fertility throughout the world. This is being done principally through promoting and supporting nationally representative, internationally comparable, and scientifically designed and conducted sample surveys of fertility behaviour in as many countries as possible.

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DAVID P. SMITH

WFS Central Staff  
International Statistical Institute  
35–37 Grosvenor Gardens  
London, SW1W 0BS



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# Preface

One of the main concerns of the World Fertility Survey has been the analysis of the data collected by the participating countries. It was decided at the outset that, in order to obtain quickly some basic results on a comparable basis, each country would produce soon after the fieldwork a First Country Report, consisting of a large number of cross-tabulations with a short accompanying text. Precise guidelines for the preparation of the tables were produced and made available to the participating countries.

It was also recognized, however, that at later stages many countries would wish to study in greater depth some of the topics covered in their first reports, or indeed new but related subjects, using more refined analytic techniques. In order to assist the countries at this stage a general 'Strategy for the Analysis of WFS Data' was outlined, a series of Technical Bulletins was started, dealing with specific methodological issues arising in the analysis, and a list of 'Selected Topics for Further Analysis of WFS Data' was prepared, to serve as a basis for selecting research topics and assigning priorities.

It soon became evident that many of the participating countries would require assistance and more detailed guidelines for further analysis of their data. Acting upon a recommendation of its Programme Steering Committee, the WFS then launched the present series of 'Illustrative Analyses' of selected topics. The main purpose of the series is to illustrate the application of certain demographic and statistical techniques in the analysis of WFS data, thereby encouraging other researchers and other countries to undertake similar work.

In view of the potentially large number of research topics which could be undertaken, some selection was necessary. After consultation with the participating countries, 12 subjects which are believed to be of top priority and of considerable interest to the countries themselves were selected. The topics chosen for the series span the areas of fertility estimation, levels, trend and determinants, marital formation and dissolution, breastfeeding, sterilization, contraceptive use, fertility preferences, family structure, and infant and child mortality.

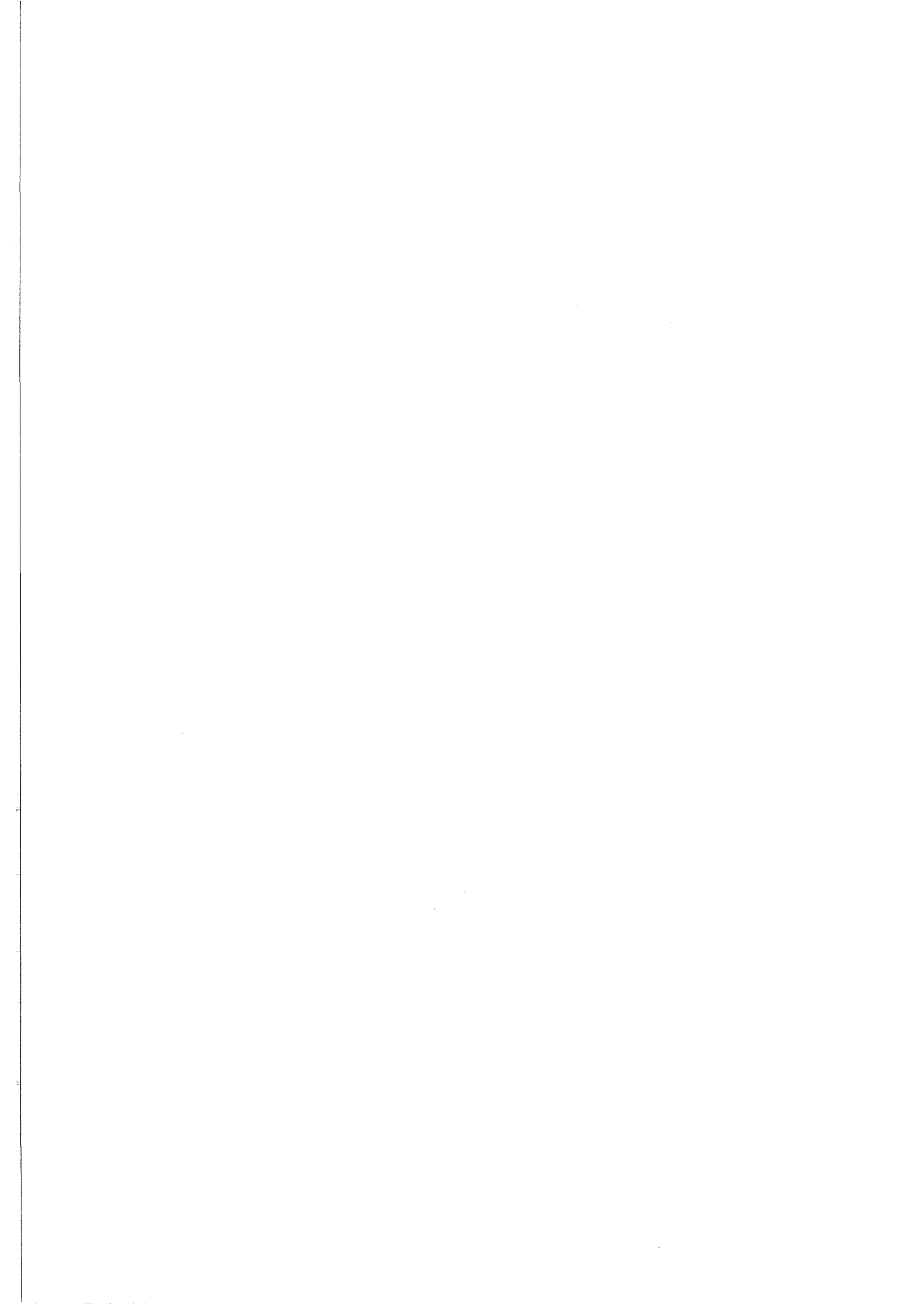
It was envisaged that each study would include a brief literature review summarizing important developments in the subject studied, a clear statement of the substantive and methodological approach adopted in the analysis, and a detailed illustration of the application of such an approach to the data from one of the participating countries, but with emphasis on the general applicability of the analysis. These studies have been conducted in close collaboration with the country concerned, where possible with the active participation of national staff.

It should perhaps be emphasized that the studies in the 'Illustrative Analyses' series are meant to be didactic examples rather than prescriptive models of research, and should therefore not be viewed as cookbook recipes to be followed indiscriminately. In many cases the investigators have had to choose a particular course of action from several possible, sometimes equally sound, approaches. In some instances this choice has been made more difficult by the fact that demographers or statisticians disagree among themselves as to the approach most appropriate for a particular problem. In the present series we have, quite intentionally, resisted the temptation to enter the on-going debates on all such issues. Instead, and in view of the urgency with which countries require guidelines for analysis, an attempt has been made to present what we believe to be a basically sound approach to each problem, spelling out clearly its drawbacks and limitations.

In this difficult task the WFS has been aided by an *ad hoc* advisory committee established in consultation with the International Union for the Scientific Study of Population (IUSSP) and consisting of Ansley Coale (Chairman), Mercedes Concepción, Gwendolyn Johnson-Acsádi and Henri Leridon, to whom we express our gratitude. Thanks are also due to the referees who have generously donated their time to review the manuscripts and to the consultants who have contributed to the series.

Many members of the WFS staff made valuable contributions to this project, which was co-ordinated by Germán Rodríguez and myself.

V.C. CHIDAMBARAM  
Acting Project Director





# 1 Introduction

In this report we present an analysis of marriage dissolution and remarriage in Sri Lanka and Thailand, drawing chiefly on the 1975 Sri Lanka and Thailand Fertility Surveys. The choice of these two countries is largely due to data availability, but has other justification as well. The principal religion of both countries is Hinayana Buddhism, and both have substantial Moslem minorities. Also, literacy is relatively high in the two countries, development has been rapid since the 1960s, and in recent years both countries have experienced rapidly declining fertility rates. Finally, in both Sri Lanka and Thailand births mostly occur within marriages, so that marital stability has direct relevance to fertility levels.

Interest in marriage dissolution and remarriage focuses on both their cultural and demographic aspects. Culturally, the stability of marriages and the ease with which they are entered into or dissolved reflect and also influence relations between husbands and wives and between parents and their children. Where dissolution patterns are changing, the nature of the family is likely to be in transition as well, the newer patterns not necessarily being an improvement on the old. Because of the complexity of such issues and the limited purposes of the WFS, this report will contribute little towards their exploration beyond the purely quantitative. We will present estimates of dissolution and remarriage rates and of time spent in unions in Sri Lanka and Thailand, with some subnational comparisons. Our purpose will be to focus on the general types of analysis that are possible using WFS data.

Demographically, interest in marriage stability also derives from the implications that marriage patterns may have for births, particularly where fertility outside marriage is rare. Our findings on this issue are offered in the final section of the report.

A companion report on ages at first marriage in Sri Lanka and Thailand has been written by James Trussell (1980). His findings, which form a useful starting point for the present report, were as follows.

1 Marriage occurs earlier in Thailand than in Sri Lanka and takes place over a narrower range of ages. Fitting the Coale marriage model to women aged 15–49 in both countries, the mean among those expected ever to marry was 22.2 years and the standard deviation 5.2 years in Thailand, as against 25.2 years and 6.5 years respectively, in Sri Lanka.

2 In both countries age at marriage appears to be rising. The changes have been small in Thailand, the fitted mean rising from 20.2 years among women aged 40–49 to 21.1 years among women aged 20–29 (with standard deviations of 4.4 years and 5.0 years, respectively). In Sri Lanka the mean has risen more, from 19.9 years for women aged 40–49 to 24.0 years for women aged 20–29. The

standard deviations are, respectively, 5.7 years and 7.9 years.

3 By background variables, in Sri Lanka marriages occur earlier among women growing up in rural areas or in the tea estates than among women who grew up in urban areas, earlier among less educated than among better educated women, and earlier among Hindu women than among Buddhists. In Thailand, marriages are earlier in the north and north-east regions than in the central region excluding Bangkok.

The first of these findings is brought out in figure 1, which shows life-table proportions married by age for the two countries.

Since the WFS surveys provide more information for ever-married women than for single women, this report will provide somewhat more detail on the correlates of dissolution and remarriage than was possible in Trussell's analysis of first marriages. However, no models of marriage dissolution or remarriage comparable to Coale's first marriage model are available, and we will not be able to estimate future patterns on the basis of present experience in the way Trussell has done. The methodology of the report will principally be life-table analysis, which provides duration-specific event rates for dissolution and remarriage. A regression analysis that shares the advantages of the life table will also be used. Both methods are discussed in the next chapter.

In the First Country Reports brief overviews of marriage dissolution and remarriage in Sri Lanka and Thailand were presented, together with tables of the proportions of marriages dissolved by duration of union in the two countries (see table 1). The figures, which are for five-year marriage groups, correspond approximately to mid-point life-table values, eg the proportion of dissolutions among Sri Lankan women married in the five years preceding the interview (4.5 per cent) derives from a mean duration since entry into marriage of two and a half years. These values are highly imprecise, but the overall impression they give is largely correct: higher rates of dissolution are found in Thailand than in Sri Lanka, and in both countries rates are highest in the first five or ten years of marriage. The First Country Reports also show substantial proportions remarried after dissolution. The tables do not indicate whether duration-specific rates of dissolution and remarriage have been similar among age cohorts or marriage cohorts. This question will be considered in the present report. We also present more precise results on dissolution and remarriage, and include some breakdowns by background variables where differences were indicated in the First Country Reports but details were not given.

Our analysis will be by birth cohorts (ie ages at interview) in preference to marriage cohorts. Both approaches are

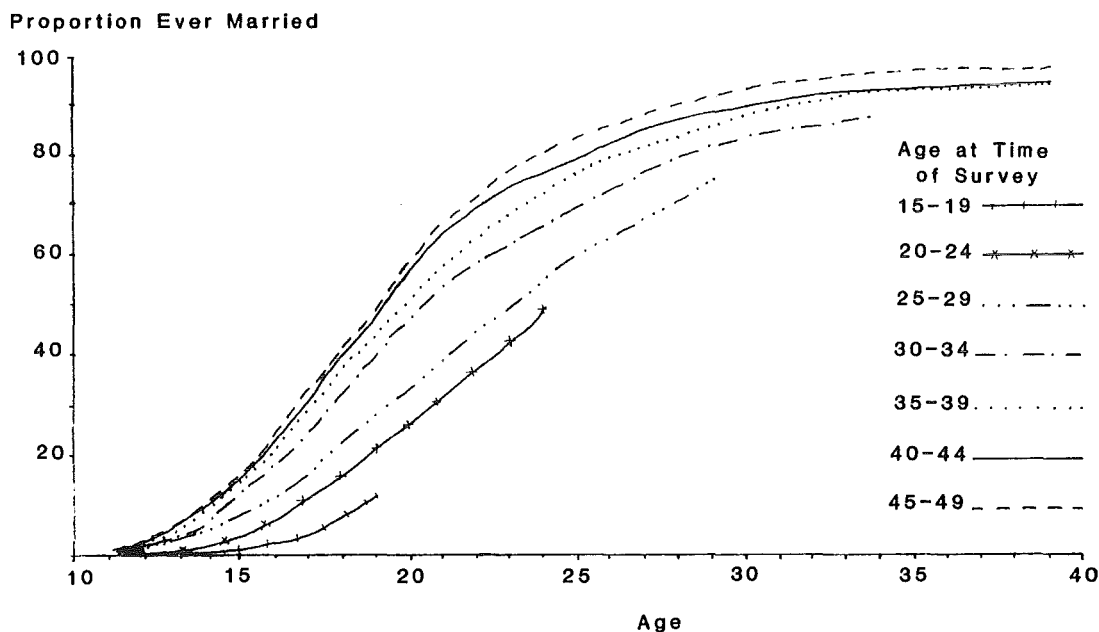


Figure 1a Cumulative Proportion of Women Ever Married, by Age, and Age at Time of Survey (Sri Lankan Women Aged 15-49)

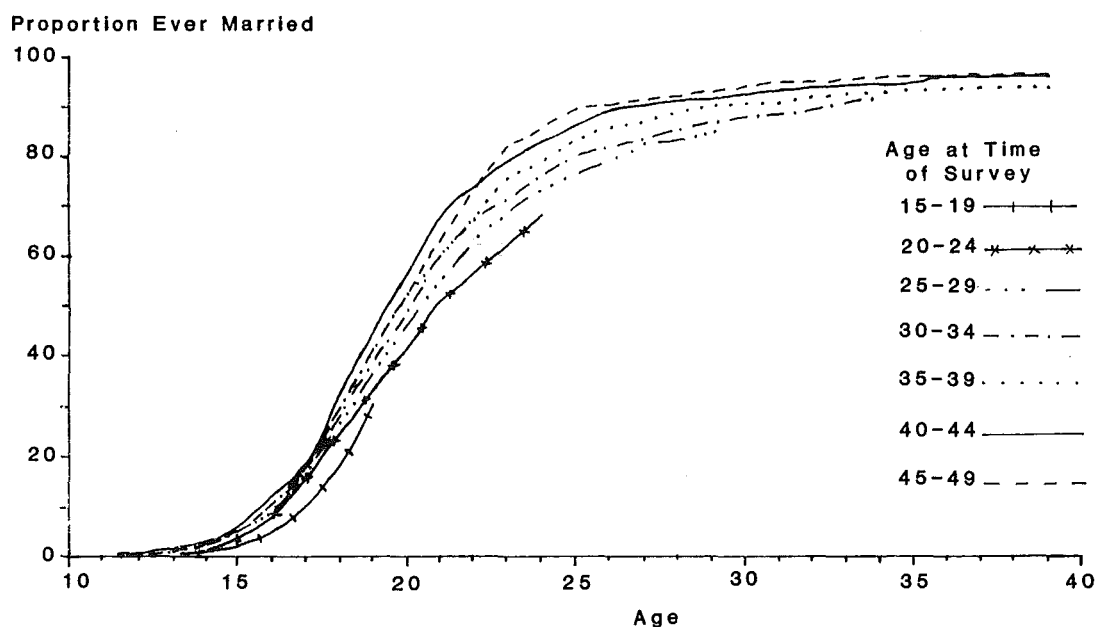


Figure 1b Cumulative Proportion of Women Ever Married, by Age, and Age at Time of Survey (Thai Women Aged 15-49)

commonly used. As the present report complements Trussell's (1980) first marriage analysis, which groups women by age at interview, his classification has seemed a logical choice. We initially calculated rates of both types, however, since it is possible that dissolution rates might display either birth cohort or marriage cohort patterns (ie dissolution rates might be high among women in particular age groups regardless of when they married, or high among all women marrying in a particular period). It is important that the choice of rates corresponds to the pattern of dissolutions that is observed.

In Sri Lanka, we have found a rise in the proportion of marriages dissolved among younger women (women aged

15-24 at interview, and to some extent women aged 25-29) that persists when controlled for age at marriage and marriage cohort. Among women aged 30-34 rates of dissolution are lower and show differences by age at marriage but not independently by marriage cohort. These patterns make it unlikely that a marriage cohort approach would contribute much to our understanding of marital stability in Sri Lanka, a point explored further in section 4.1. Thai rates do not display changes but need to follow the Sri Lanka presentation if the two countries are to be compared. The choice might be different if other countries were being analysed.

Other work on marriage dissolution in Asia is limited,

**Table 1** Proportion of Ever-Married Women whose First Marriage Was Dissolved, by Duration of Union and Type of Dissolution (Sri Lankan and Thai Women 15–49)

Type of dissolution	Widowed	Separated or divorced	Total
<b>A Sri Lanka</b>			
<i>Duration (years)</i>			
0–4	.008	.036	.045
5–9	.023	.049	.073
10–14	.038	.061	.100
15–19	.057	.087	.144
20–24	.109	.053	.162
25–29	.143	.082	.225
30+	.187	.080	.267
<b>B Thailand</b>			
<i>Duration (years)</i>			
0–4	.010	.068	.078
5–9	.011	.114	.125
10–14	.041	.116	.157
15–19	.074	.146	.220
20–24	.111	.166	.277
25+	.132	.164	.296

Sources: A Sri Lanka, Dept. of Census and Statistics (1978b), table 4.6, p 66

B Institute of Population Studies (1977), p 45

but much has been done on Latin America (Downing and Yaukey 1979) and the Caribbean (Roberts 1975). Careful investigations of dissolution and remarriage have also been made in many of the developed countries, among which Blayo and Festy's (1976) study of French experience and McCarthy's (1978) American study also use a life-table approach and may be of interest to the reader.

## 2 Methodology

Most of the analysis in the present study is drawn from life tables, which allow incremental and cumulative dissolution rates to be found for various durations since the start of marriage, and incremental and cumulative remarriage rates to be found for various durations since first marriage dissolution. We may compare, for example, the proportion of marriages that end within one year or within five years for women born in different years or belonging to different marriage cohorts.

To construct a life table for marriage dissolution, the duration from marriage to interview and from marriage to dissolution (if the marriage was dissolved) would be recorded for all ever-married women. The dissolution rate for the first year of marriage,  ${}_1q_0$ , is found as the proportion of marriages that were dissolved within the first year among all marriages that began one or more years before the interview. More recent marriages are omitted, since their one-year dissolution rates would not be known at the time of the survey.

To find the proportion dissolved during the second year,  ${}_1q_1$ , women whose marriages ended in the first year are dropped from the denominator, together with women whose marriages began in the two years before the interview. The remainder comprises women at risk of dissolution during the second year, among whom the proportion whose marriages are dissolved is the desired rate.

After two years the cumulative proportion dissolved will be  ${}_1q_0 + (1 - {}_1q_0) \cdot {}_1q_1$ , which is the sum of the chance of marriages being dissolved in the first year plus the chance of marriages being dissolved in the second year after continuing through the first. Rates for later years, and rates for remarriages following dissolutions, are found by the same process. Kaplan and Meier (1958) have shown that such rates are consistent maximum likelihood estimates for the proportions of marriages that are dissolved with time.

The rates are subject to error if durations are systematically misreported (which may have occurred in Sri Lanka, see chapter 3); or if the experience of women married relatively recently is unlike that of women married longer ago, since recently married women contribute only to the earlier part of the  ${}_1q_i$  series. When experience is not alike, rates are calculated separately for the different duration of marriage groups, or separately by age if that is the relevant distinction. This problem will be considered in chapter 4.

More detail on life-table methodology, with applications to WFS data, will be found in Smith (1980), a WFS Technical Bulletin.

The relatively small numbers of dissolved marriages in the Sri Lankan and Thai samples do not permit highly detailed breakdowns of dissolution rates by the life-table method. Using linear models it is possible to carry the analysis somewhat further. Most simply, for the proportion of marriages continuing to a single duration, such as  $y = 5$

years or 10 years, a discriminant analysis can be performed using the dependent variable  $f(y)$ , defined by:

$$f(y) = \begin{cases} 1 & \text{if first marriage continued at least to} \\ & \text{duration } y \\ 0 & \text{if first marriage ended before } y \end{cases}$$

Women whose *observation times* (the duration from marriage to interview) are less than  $y$  are omitted from the analysis, irrespective of their status, since our information about them is incomplete.

Since dissolution rates are higher at some marriage durations than at others and the factors associated with dissolution may also change, sampling survival probabilities over a series of intervals will usually provide more information than sampling only once. Hence, in place of a single regression using  $f(y)$ , we might separately regress the series of functions  $f(y_i) \mid i = 1, 2, 3, \dots$ , in which

$$f(y_i) = \begin{cases} 1 & \text{if first marriage continued at least to} \\ & \text{duration } y_i \\ 0 & \text{if first marriage ended between } y_{i-1} \\ & \text{and } y_i \end{cases}$$

As before, women whose observation times are less than  $y_i$  are omitted. We also omit women whose marriages terminated before  $y_{i-1}$ , as their terminations will have been recorded in an earlier interval. To illustrate, if we were using intervals of two and a half years, a woman who married ten years before the interview and was divorced after six years of marriage would enter three regressions and would be coded  $f(y_1) = f(2.5) = 1$ ,  $f(y_2) = f(5.0) = 1$ ,  $f(y_3) = f(7.5) = 0$ .

All regressions will be of the form

$$f(y_i) = \sum_j b_j x_{ji} + e_i$$

where  $e_i$  is a stochastic error term with expected mean and variance  $(0, \sigma_e^2)$ , and  $b$  is the vector of regression coefficients to be estimated at each timepoint  $i$ . Regressor variables  $x_{ji}$  would include any for which life tables had previously been constructed and differences found (here, age at marriage or age at interview, education, residence, religion), plus others on which the sample might be too unevenly distributed to permit life tables to be constructed, such as migration status, whether wife worked before marriage, or whether any births occurred to the couple between marriage and time  $y_i$ .

We will suggest one additional regressor for  $f(y_i)$  that adds great flexibility to the analysis, the term  $\hat{\lambda}_{y_i} / \hat{\lambda}_{y_{i-1}}$ , which represents the mean proportion of marriages continuing from time  $y_{i-1}$  to time  $y_i$  in the sample. When the mean proportion of marriages continuing through the interval is added, other coefficients and the constant term



become estimators of *differences* between the individual and the mean. Moving the term  $\hat{\lambda}_{y_i}/\hat{\lambda}_{y_{i-1}}$  from the right hand side of the regression equation to the left makes this relationship exact. With the change the model becomes:

$$f(y_i) - \hat{\lambda}_{y_i}/\hat{\lambda}_{y_{i-1}} = \sum_j b_j x_{ji} + e_i. \quad (1)$$

The left hand side of the model is now the difference between the individual's own survival status between  $y_{i-1}$  and  $y_i$  and that of sample respondents overall. The term takes values between 1.0 (for an individual who remains married at a time when almost all other marriages have terminated) and -1.0 (for an individual who has terminated at a time when almost all other marriages are still continuing).

Notice that in the revised model the impact of marriage duration is controlled, with the result that a single regression combining observations in all intervals can be used in place of the several regressions suggested earlier *if the factors that correlate with dissolution are relatively stable from one interval to the next*. (We ignore the problem of heteroscedasticity, that is, differences in the variance of the error terms at each duration.)

We may also replace  $\hat{\lambda}_{y_i}/\hat{\lambda}_{y_{i-1}}$  in expression (1) by  $\hat{\lambda}_{y_i}^*/\hat{\lambda}_{y_{i-1}}^*$ , where the star (\*) denotes the survival rate for a particular subgroup of the sample to which the individual belongs (eg the survival rate for women of the respondent's

own age group and educational level). This allows a few variables to be used as controls in the regressions.

For our analysis the regressor variables that were suggested above have been used, with eight time intervals of two and a half years' duration. Our initial regressions used the difference between individual survival and the whole-sample rate for each duration as the dependent variable. In these, age, education and residence were most often found to be significant for both countries. To control for these factors, additional sets of regressions were run with survival rates specific for age, age-education, and age-education-residence replacing overall survival rates, and with only the regressor variables age at marriage, work before marriage, migration, religion, and birth of children to the marriage. As a further check, a number of runs were made using single durations or subsamples of women to test the generality of whole-sample findings.

We caution the reader that the explained variances in our regressions were never above one per cent, as most of the women in every attribute group remained married through the several durations that were investigated. Even so, F-values for some of the regressor variables were repeatedly significant ( $p < 0.05$ ) and their coefficients consistent both as to direction and as to magnitude over the various runs. We will note these variables in chapter 4, and also comment on those whose effects were ambiguous or usually not significant.

### 3 Quality of Data

In neither Trussell's companion report nor in our own has data quality been found to be a major problem. A degree of age heaping appears in the age distributions of both countries, but none of our findings are based on small enough differences for this to be a factor. Likewise, the possibility exists that dissolved marriages are under-reported, but if this has occurred it has not generated suspect age-specific marriage rates in either country. The pattern in both Sri Lanka and Thailand is of stable or decreasing ages at marriage and equal or higher proportions ultimately marrying among older cohorts, as we might expect. For Thailand slightly higher rates of widowhood are found in cause-deleted tables — that is, when we control for the differing proportions separated or divorced (see table 4 and figures 2 and 3) — which also seems reasonable. Thailand has had higher mortality in the past than Sri Lanka (see, for example, Keyfitz and Flieger 1968, pp 200, 238 for rates c1960), and the younger age at marriage in the former should no more than marginally offset this. It is also reasonable that the proportions widowed accelerate with duration

of marriage in the cause-deleted figures for both countries. The data display some errors, such as rates of widowhood at 15 or 20 years' duration of marriage declining with respondents' ages (in this instance the problem may be sampling error, since the number of relevant events is small), but the number of such anomalies is not great and their significance never more than marginal.

In Thailand but not in Sri Lanka there is close agreement between WFS figures for proportions of women ever married as of interview and as of five years earlier, and census figures for the earlier date (table 2). The large differences at ages 15–19 in Sri Lanka indicate either WFS or census data problems, and both sources may be in error. In the WFS, it is possible that current ages are being understated so that changes in age at marriage appear to be more recent than was actually the case, or that dates of marriage are being systematically shifted away from the date of interview, perhaps to accommodate incidental misreporting of the dates of children's births. In the censuses, biases due to age shifting among young married or single women are

**Table 2** Proportion of Women Ever Married from Selected Sources

**A Sri Lanka**

Period and source	1950 WFS	1953 Census	1955 WFS	1960 WFS	1963 Census	1965 WFS	1970 WFS	1971 Census	1975 WFS
<i>Age</i>									
15–19	.360	.243	.323	.281	.150	.205	.153	.105	.068
20–24	.740	.675	.705	.663	.597	.596	.476	.469	.394
25–29	—	.872	.888	.861	.829	.833	.774	.754	.681
30–34	—	—	—	.948	.917	.919	.915	.890	.862
35–39	—	—	—	—	.952	.970	.945	.941	.942
40–44	—	—	—	—	—	—	.979	.953	.953
45–49	—	—	—	—	—	—	—	—	.979

**B Thailand**

Period and source	1970 Census	1970 WFS	1975 WFS
<i>Age</i>			
15–19	.190	.212	.153
20–24	.621	.633	.586
25–29	.844	.847	.809
30–34	.919	.924	.899
35–39	.948	.951	.936
40–44	.961	.967	.961
45–49	—	—	.967

Sources: A Sri Lanka, Dept. of Census and Statistics (1978a), table 7.2, p 101; 1975 Sri Lanka Fertility Survey  
 B CICRED (1974) table 4.1a, p 91; 1975 Survey of Fertility in Thailand

also potential sources of error.

The issue is not one that can be wholly resolved. We will suggest, however, that the implications of the error being within the WFS may not be serious. There are two reasons. First, being common to all age groups, the errors should not distort *relative* dissolution rates, however they may affect the absolute levels. Secondly, it is reasonable to suppose

that dates of dissolutions would share some of the bias present in reported dates of marriage. If so, the bias reduces from a first order to a second order problem: owing to the small numbers of marriages that are dissolved, the life-table rates will be more sensitive to errors in the estimated intervals from marriage to dissolution than to errors in the intervals from marriage to interview.

## 4 Marriage Dissolution

### 4.1 TOTAL AND CAUSE-DELETED RATES

Life-table marriage dissolution rates by duration of marriage and age are shown in tables 3 and 4 and figures 2 and 3. Ignoring small differences, rates of widowhood are similar in the two countries, while both actual and cause-deleted separation and divorce rates are about twice as high in Thailand as in Sri Lanka during the first 20 years of marriage.<sup>1</sup> Relative differentials are especially large in early years, separation and divorce rates at 5 years of marriage for Thai women equalling those for Sri Lankan women at 15 years. The degree to which early years dominate is seen in the single-year dissolution probabilities of figure 4. In Sri Lanka separation and divorce probabilities change rather little with duration of marriage, while in Thailand constant rates follow only after a period of much higher risks. In both countries the risk of separation or divorce ultimately becomes quite low; at about ten years of marriage the cause-deleted risk of widowhood equals or is greater than the risk of separation or divorce. As compared with other WFS survey countries, Thai dissolution rates are about average and the Sri Lankan rates are low.

The age group 15–24 is exceptional in that dissolution rates for these ages reflect the experience of only part of each cohort, since the majority of women are still single in both countries. The proportions ever married at these ages are 22 per cent in Sri Lanka (8 per cent at ages 15–19 and 43 per cent at ages 20–24), and 33 per cent in Thailand (16 per cent at 15–19 and 59 per cent at 20–24). For Thai women these fractions are highly relevant: dissolution rates are considerably greater in all age groups for marriages occurring at ages under 17.5 than at 17.5–19.9, and these in turn are greater than dissolution rates for marriages taking place at 20–24 (table 6 and figures 5–7).<sup>2</sup> Controlling for this influence, the rates for women aged 15–24 are not exceptional.

The higher dissolution rates at ages 15–24 in Sri Lanka require a different explanation. Sri Lankan dissolution rates are not closely related to age at marriage,<sup>3</sup> and with this control the differential evident in the 15–24 age rates persists. The differential also persists and remains confined to the younger age groups when marriage quartiles are substituted for fixed ages at marriage, indicating that it is not associated with the overall rise in marriage age.<sup>4</sup> Table 6 suggests that the differential occurs to women with none or primary schooling, but apparently not to those with middle schooling or more. Later tables show that it is not restricted to particular religious or residential groups.

The differential is not essentially a period effect. It appears especially in dissolution rates after 1970 (table 5)<sup>5</sup> but remains confined to age groups under 30 in simple period rates (not shown).

We suspect that the higher rates at young ages may in part reflect non-permanent early separations. If so, we

should expect reported dates of dissolution to be biased towards the date of interview, which can be checked. Our reasoning is as follows: over the first few years of marriage the proportion of first unions that are dissolved rises approximately linearly among women aged 15–24 (figure 6), which would place expected dissolutions about halfway between marriage and interview. On the other hand, to the extent that absences are temporary the proportion of husbands who have returned will be higher for early than for recent separations, which favours the preferential reporting of the more recent absences. What we find is that for women aged 15–24 whose first unions were dissolved, the mean duration from marriage to dissolution is 32.0 months and the mean from dissolution to interview is 29.0 months. The difference implies that some reporting of temporary absences has occurred.

Whether it is temporary separations or changes in dissolution patterns that underlie the higher rates for the age group, owing to their special character, and that of the Thai rates for the same ages, we will use the summary age categories 25–44 and 25–49 rather than 15–44 or 15–49 in the remainder of this report.

<sup>1</sup> Causes of dissolution are deleted by resetting the interview date to be the same as the date of dissolution for the relevant persons. This has the result that these persons are treated as no longer observed as of the date of dissolution instead of as having terminated, since events in the interview month are disregarded in rate calculations. The rationale for the procedure is that from the date of marriage to the date of dissolution such women have been observed not to have terminated their marriages through the causes that remain of interest. Note that cause-deleted rates count equal numbers of dissolutions for causes of interest but use smaller sample sizes than ordinary rates since some observation times have been shortened. Hence, they show higher proportions of marriages dissolved, as we should expect when the number of competing factors is reduced.

<sup>2</sup> With age, education and residence controlled, Thai differences were significant at the .05 level in our regressions. However, the greater stability of marriages at ages over 20 was principally confined to women under 35 at interview.

<sup>3</sup> In the Sri Lankan regressions the higher dissolution rates for early marriages were significant at the .05 level for women under 35, but not for those 35 and over. Effects of late marriage were not significant for either age group.

<sup>4</sup> Marriage quartiles are demarcated by the 25th, 50th and 75th percentiles ever married, which the reader can locate in figure 1. If marriage stability were a function of women's ages at marriage relative to those of others in their own age cohort, dissolution rates by age at marriage would worsen with the rise in marriage ages, while rates by quartiles remained constant. The implication would be that no fundamental change in dissolution patterns had occurred. In Sri Lanka, however, the worsening is seen in both sets of rates.

<sup>5</sup> The table displays dissolution rates by marriage cohorts, standardized on the whole-sample age at marriage distribution of each country. For Sri Lanka the most stable marriages were those of the early to mid-1960s. Members of these marriage cohorts were largely in their 30s at the time of interview. The least stable have been those since 1970, whose members were largely in their 20s at interview. In the Thai rates a more gradual decline in stability is seen, evidence that rates have not worsened sharply for younger women as in Sri Lanka.



**Table 3** Proportion of Marriages Dissolved, by Duration of Union, Cause of Dissolution and Age

Duration	2½ years		5 years		10 years		15 years		20 years	
	W	S/D	W	S/D	W	S/D	W	S/D	W	S/D
<b>A Sri Lanka</b>										
<i>Age group</i>										
15-24	.005	.011	.020	.056	—	—	—	—	—	—
25-29	.000	.011	.008	.041	.025	.069	—	—	—	—
30-34	.001	.007	.011	.029	.027	.044	.043	.062	—	—
35-39	.002	.010	.015	.034	.030	.052	.052	.071	.081	.089
40-44	.001	.005	.012	.031	.033	.050	.057	.055	.106	.065
45-49	.003	.006	.021	.033	.045	.048	.061	.062	.087	.070
25-49	.001	.008	.014	.034	.032	.052	.052	.068	.086	.080
<b>B Thailand</b>										
<i>Age group</i>										
15-24	.003	.037	.012	.147	—	—	—	—	—	—
25-29	.001	.032	.006	.071	.024	.102	—	—	—	—
30-34	.000	.033	.011	.083	.037	.107	.087	.119	—	—
35-39	.006	.031	.018	.083	.034	.117	.062	.140	.072	.147
40-44	.004	.041	.013	.096	.035	.129	.054	.152	.094	.158
45-49	.003	.030	.021	.069	.040	.102	.052	.119	.090	.135
25-49	.002	.033	.013	.081	.034	.112	.057	.132	.090	.143

<sup>a</sup> W = Widowed; S/D = Separated or Divorced

**Table 4** Total Proportion of First Marriages Dissolved and Hypothetical Proportions for Widowhood (Cause-Deleted Rates Omitting Separation and Divorce) and Separation and Divorce (Cause-Deleted Rates Omitting Widowhood), by Duration of Union and Age

Duration	Total rates			Cause-deleted for widowhood			Cause-deleted for separation and divorce		
	5 years	10 years	15 years	5 years	10 years	15 years	5 years	10 years	15 years
<b>A Sri Lanka</b>									
<i>Age group</i>									
15-24	.076	—	—	.020	—	—	.057	—	—
25-34	.045	.081	.125	.010	.027	.044	.035	.056	.085
35-44	.047	.083	.118	.014	.033	.057	.033	.052	.065
45-49	.055	.093	.123	.022	.046	.064	.034	.049	.064
25-49	.047	.084	.120	.014	.033	.055	.034	.053	.069
<b>B Thailand</b>									
<i>Age group</i>									
15-24	.159	—	—	.013	—	—	.148	—	—
25-34	.086	.135	.193	.009	.035	.084	.077	.104	.119
35-44	.105	.157	.204	.017	.038	.065	.090	.124	.149
45-49	.090	.141	.171	.023	.043	.056	.070	.103	.122
25-49	.094	.145	.190	.014	.037	.064	.081	.113	.135

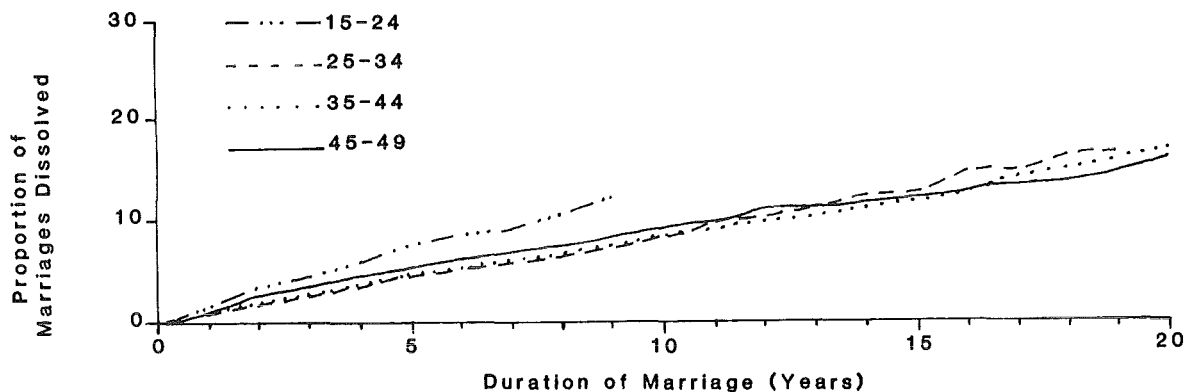


Figure 2a Cumulative Proportion of First Marriages Dissolved, by Duration of Union and Age at Time of Survey (Sri Lankan Women Aged 15-49)

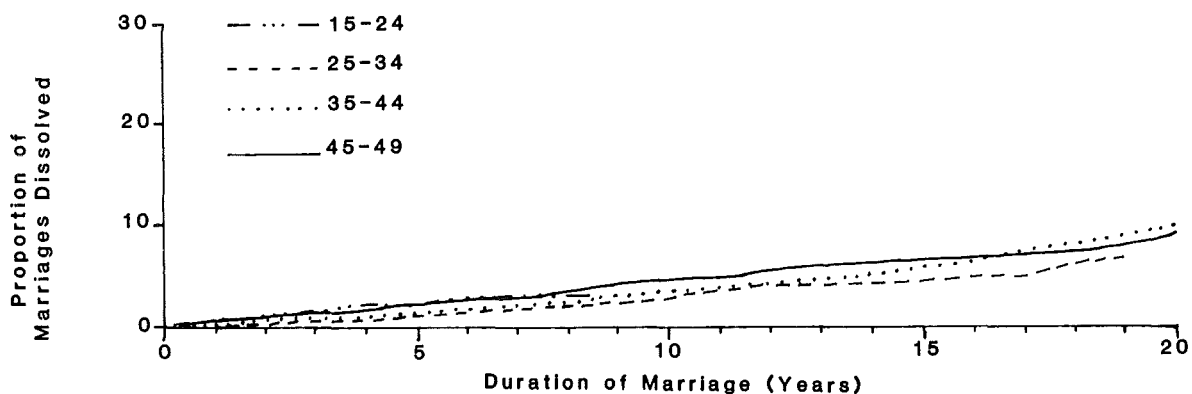


Figure 2b Hypothetical Cumulative Proportion of First Marriages Ending in Widowhood, by Duration of Union and Age at Time of Survey (Cause-Deleted Rates Omitting Separation and Divorce) (Sri Lankan Women Aged 15-49)

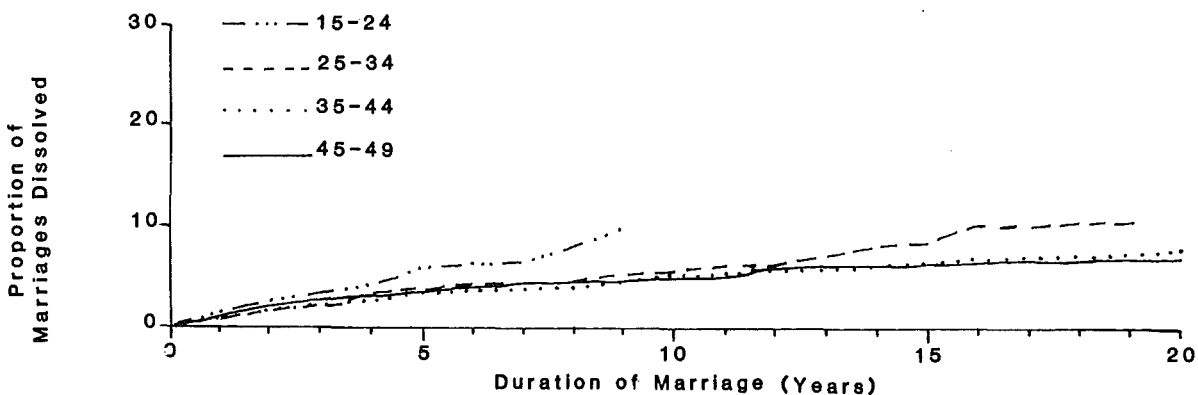


Figure 2c Hypothetical Cumulative Proportion of First Marriages Ending in Separation or Divorce, by Duration of Union and Age at Time of Survey (Cause-Deleted Rates Omitting Widowhood) (Sri Lankan Women Aged 15-49)

#### 4.2 RATES BY EDUCATIONAL LEVEL

Besides age at marriage, in both Sri Lanka and Thailand sharp differentials appear in marriage dissolution rates by education and by religion; and in Thailand by residence and region as well. Educational differences are shown in tables 6 and 7. Dissolution rates are seen to fall markedly with increasing education in both countries, being only half as great at ten years for women with middle schooling or more (Thailand) and for those with high schooling or more (Sri Lanka) than for women with no schooling. In Sri Lanka differentials continue to be sharp at longer

durations. Because of small numbers, the Thai sample cannot be followed as far, but differentials between women with primary schooling and with none continue to be maintained to 20 years and it is reasonable to imagine that the same will be true for women with more schooling than this. In all of the rates, absolute differences appear to have stabilized by the tenth year of marriage and remain roughly constant thereafter.<sup>6</sup>

<sup>6</sup> In the regressions all of these differences were found to be significant at the .05 level. Disaggregated, they were significant at some durations and not significant at others.

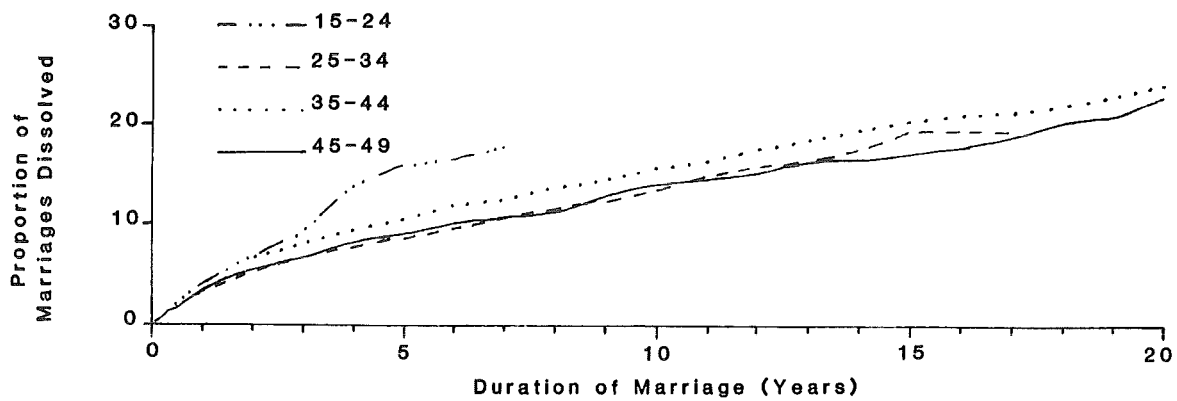


Figure 3a Cumulative Proportion of First Marriages Dissolved, by Duration of Union and Age at Time of Survey (Thai Women Aged 15-49)

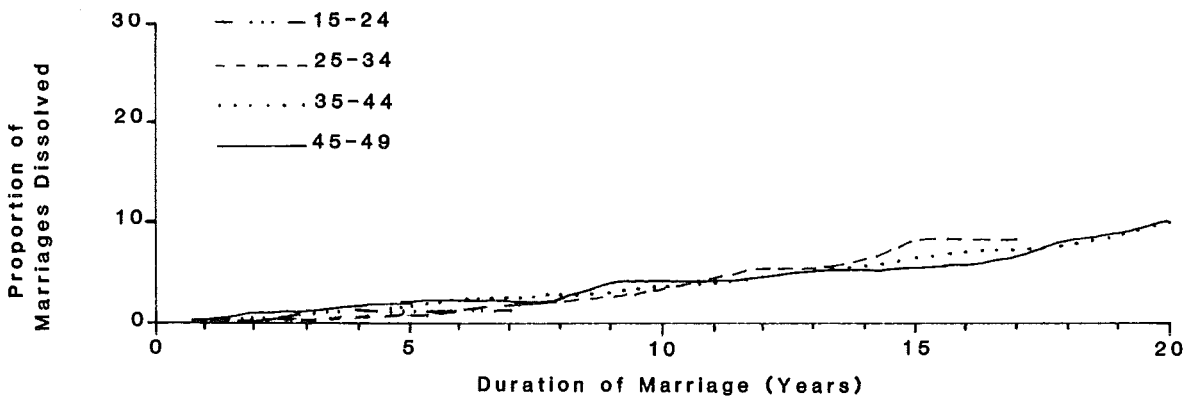


Figure 3b Hypothetical Cumulative Proportion of First Marriages Ending in Widowhood, by Duration of Union and Age at Time of Survey (Cause-Deleted Rates Omitting Separation and Divorce) (Thai Women Aged 15-49)

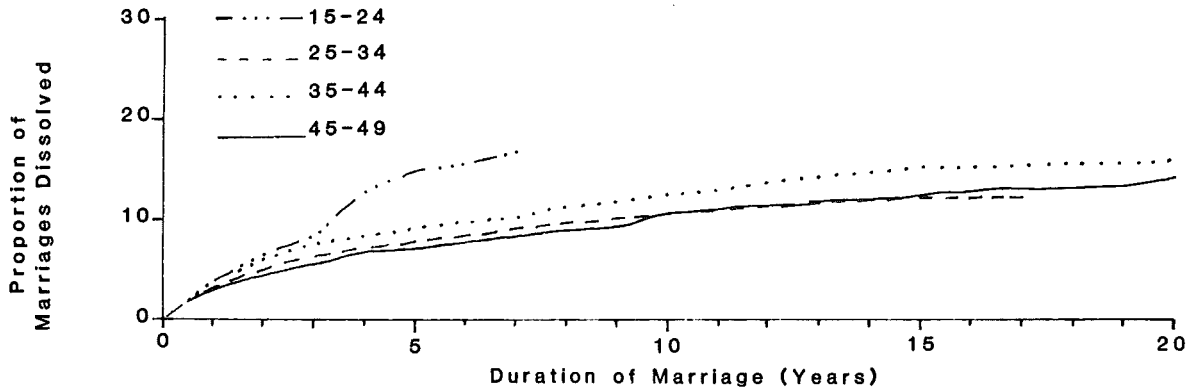


Figure 3c Hypothetical Cumulative Proportion of First Marriages Ending in Separation or Divorce, by Duration of Union and Age at Time of Survey (Cause-Deleted Rates Omitting Widowhood) (Thai Women Aged 15-49)

As with overall rates, rates by educational level are consistently higher in Thailand than in Sri Lanka, but with more similarity at the middle school level than at the primary school level or no education. In both countries dissolution is more common among the least educated.

The larger sample base of the Sri Lanka survey allows rates to be decomposed by age and education simultaneously, but no systematic interaction effect is evident in these rates. Controlling for age at marriage, however, a clear interaction is seen. The increase in marital stability with later ages at

marriage appears to be confined to women with middle schooling or more. It is not evident in the rates for women with no education or primary schooling only (table 6).

The proportions of women aged 25-49 with none, primary, and middle or more schooling are 25 per cent, 40 per cent and 35 per cent in Sri Lanka and 20 per cent, 74 per cent and 6 per cent in Thailand, respectively. Middle school begins at the fifth year in Thailand and the sixth year in Sri Lanka.

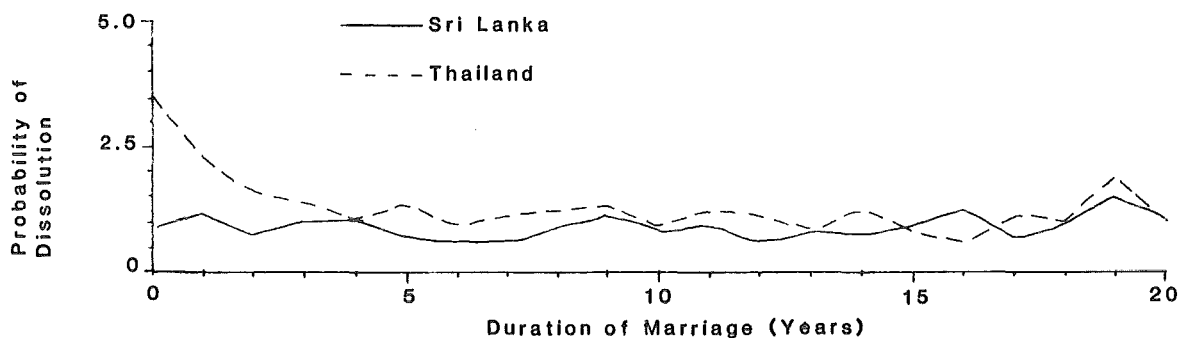


Figure 4a Single-Year Probability of First Marriage Dissolution ( ${}_1q_x$ ), by Duration of Union (Sri Lankan and Thai Women Aged 25-49)

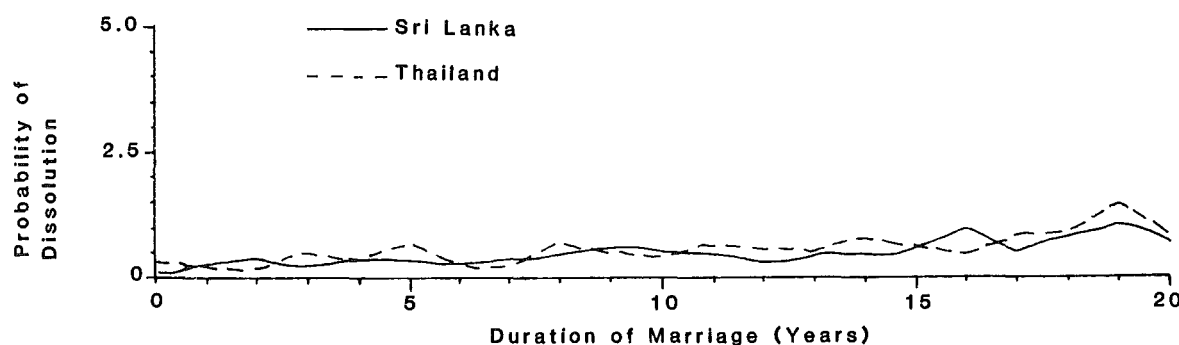


Figure 4b Hypothetical Single-Year Probability of First Marriage Ending in Widowhood, by Duration of Union (Cause-Deleted Rates Omitting Separation and Divorce) (Sri Lankan and Thai Women Aged 25-49)

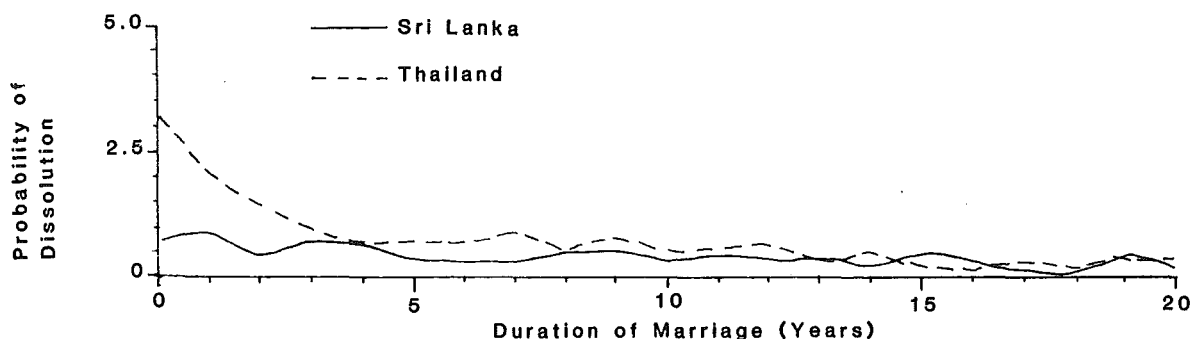


Figure 4c Hypothetical Single-Year Probability of First Marriage Ending in Separation or Divorce, by Duration of Union (Cause-Deleted Rates Omitting Widowhood) (Sri Lankan and Thai Women Aged 25-49)

#### 4.3 RATES BY RELIGION

Differences in rates of dissolution are also found by religion, and persist when educational levels are controlled (table 7). In both Sri Lanka and Thailand dissolutions are higher for Moslems than for Buddhists, but in Sri Lanka this appears to be a historical effect. Rates for the two religious groups are similar at ages 25-44 and diverge only with the inclusion of the 45-49 age group. Evidently a change in the frequency of dissolutions took place in the decade following the Second World War, ie at the time of

independence. The size of the Moslem sample in Thailand is too small to allow an investigation into age-specific patterns. We might note that the differences between the two religious groups in Thailand are largely confined to the first few years of marriage although the early wide disparity is never overcome. At two and a half years 6 per cent of Buddhist marriages and 21 per cent of Moslem marriages have been dissolved, at ten years 14 per cent and 32 per cent have been dissolved.

Besides its Buddhist and Moslem populations, Sri Lanka also has significant proportions of Hindus and Christians.



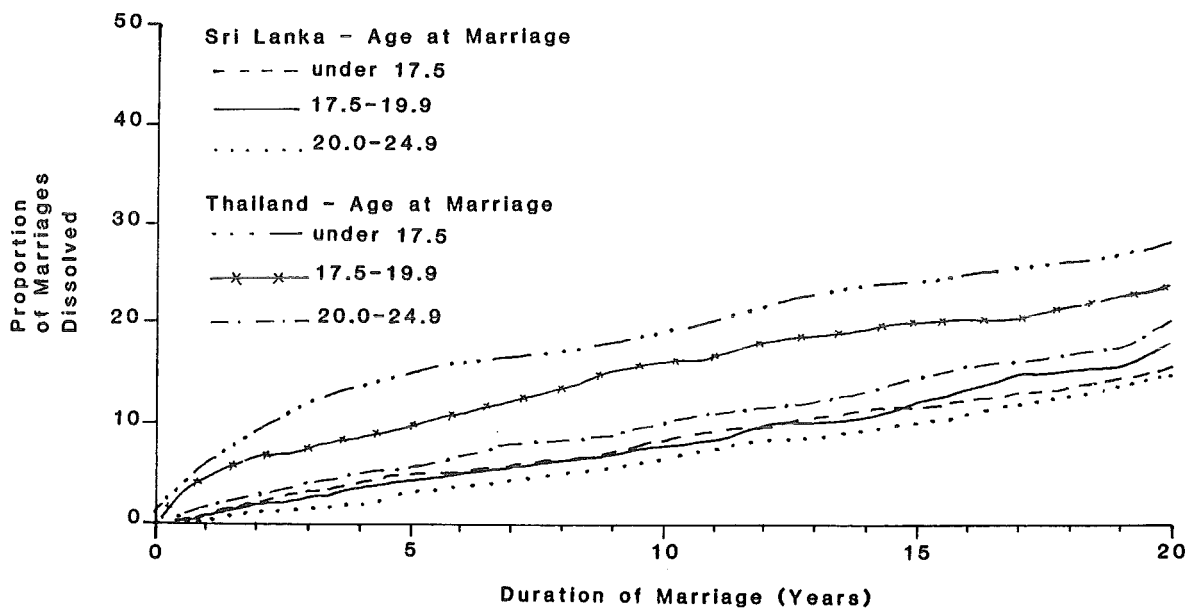


Figure 5 Cumulative Proportion of First Marriages Dissolved, by Duration of Union and Age at Union (Sri Lankan and Thai Women Aged 25-49)

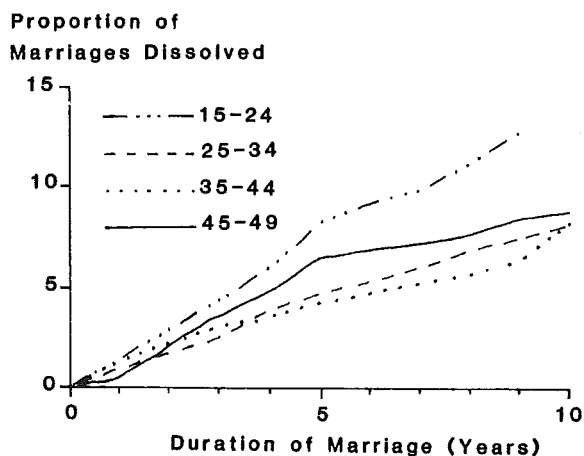


Figure 6a Cumulative Proportion of First Marriages Dissolved, by Duration of Union and Age at Time of Survey (Sri Lankan Women Married at Ages under 17.5)

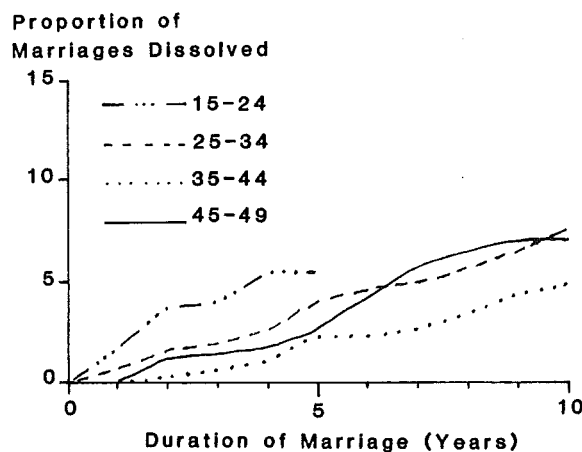


Figure 6b Cumulative Proportion of First Marriages Dissolved, by Duration of Union and Age at Time of Survey (Sri Lankan Women Married at Ages 17.5-19.9)

The two groups are fairly similar in their dissolution rates, which are lower than those for Buddhists and Moslems.

In neither country are differences apparent by age for any of the religious groups except as noted above. All display high rates for ages 15-24. By educational levels, the Hindu and Christian populations in Sri Lanka both display sharp differentials in the first decade of marriage, followed by partial (Hindu) or complete (Christian) convergence. Among Sri Lankan Buddhists, differentials continue to widen with time. Among Thai Buddhists, they are sharp for at least the first decade of marriage. Moslem samples are too small in both countries for educational differences to be examined.

Using regression analysis, the influence of religion on

dissolution rates becomes less pronounced than the life-table findings indicate, though it remains significant. Among Thai women, those who are Moslem also tend to be less educated, to have married young, and not to have worked before marriage, all of which independently contribute towards the high rates of dissolution that are observed. For ages under 35 these factors are dominant, and it is only for older women that religion remains significant when education, age at marriage and work experience are entered into the regressions. Evidently, the impact of religion is becoming less direct now than formerly. For Sri Lanka, differences among religious groups were only occasionally significant at the .05 level and may be due to intervening factors or to chance.

Proportion of Marriages Dissolved

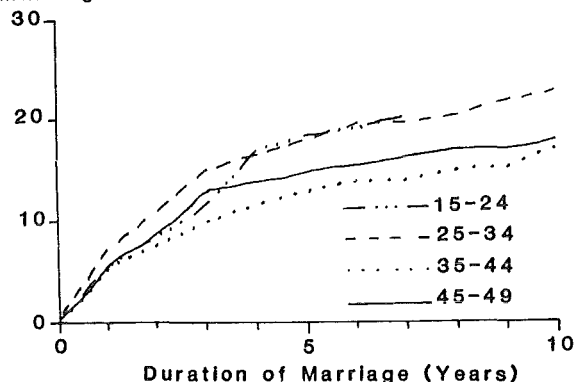


Figure 7a Cumulative Proportion of First Marriages Dissolved, by Duration of Union and Age at Time of Survey (Thai Women Married at Ages under 17.5)

Proportion of Marriages Dissolved

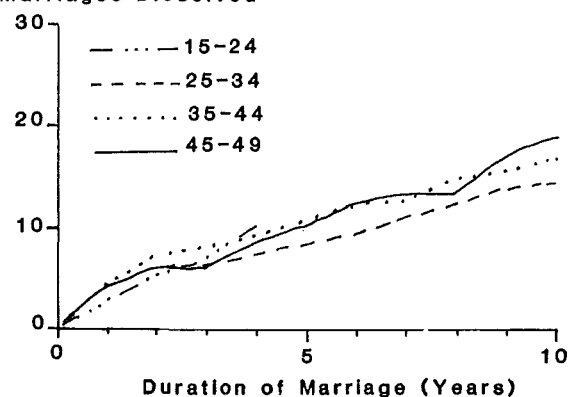


Figure 7b Cumulative Proportion of First Marriages Dissolved, by Duration of Union and Age at Time of Survey (Thai Women Married at Ages 17.5-19.9)

The proportions of ever-married women aged 25-49 in the listed religious categories are, for Sri Lanka, 67 per cent Buddhist, 19 per cent Hindu, 8 per cent Christian and 6 per cent Moslem; and for Thailand 96 per cent Buddhist and 4 per cent Moslem.

#### 4.4 RATES BY CHILDHOOD AND CURRENT RESIDENCE

For marriage dissolution rates by residence (table 7) three residence categories have been used: women who grew up and currently live in urban areas, women who grew up in rural areas are now urban, and women who grew up and remain in rural areas. Tea estates in Sri Lanka are considered to be rural. Few women in either country who grew up in urban areas are now rural, and this category is not used. The categorizations are not ideal, since neither marriages nor marriage dissolutions to urban migrants can be assigned to the locales in which they occurred, and for lifetime rural and urban residents the possibility of future migration exists. The proportions rural, urban migrant and lifetime urban among women aged 25-49 were, in Sri Lanka, 82 per cent, 8 per cent and 10 per cent, respec-

Table 5 Age-Standardized Proportion of First Marriages Dissolved, by Marriage Cohort and Duration of Union

Duration	5 years		10 years		15 years	
	W	S/D	W	S/D	W	S/D
Type of dissolution <sup>a</sup>						
A Sri Lanka						
<i>Marriage cohort</i>						
1955.0-1957.5	.008	.035	.033	.053	.049	.068
1957.5-1960.0	.022	.038	.034	.060	.061	.083
1960.0-1962.5	.007	.034	.017	.057	(.042)	(.080)
1962.5-1965.0	.012	.027	.028	.046	-	-
1965.0-1967.5	.010	.044	(.027)	(.072)	-	-
1967.5-1970.0	.015	.036	-	-	-	-
1970.0-1972.5	(.013)	(.065)	-	-	-	-
B Thailand						
<i>Marriage cohort</i>						
1955.0-1957.5	.018	.106	.039	.151	.061	.173
1957.5-1960.0	.007	.069	.042	.092	.084	.119
1960.0-1962.5	.014	.079	.034	.105	(.073)	(.117)
1962.5-1965.0	.008	.066	.017	.102	-	-
1965.0-1967.5	.005	.096	(.015)	(.121)	-	-
1967.5-1970.0	.009	.095	-	-	-	-
1970.0-1972.5	(.014)	(.107)	-	-	-	-

NOTE: Parenthesis ( ) denote incomplete experience.  
<sup>a</sup> W = Widowed; S/D = Separated or Divorced.

tively, and in Thailand 86 per cent, 8 per cent and 6 per cent.

In Sri Lanka, dissolution rates are fairly similar for the two non-migrant groups and lower among women who have migrated from rural to urban areas. The differential is restricted to women with middle schooling or more, among whom migrants display lower dissolution rates than non-migrants, and was not found to be significant at the .05 level in any of our regressions. In Thailand differences by residence are sharp in the first decade of marriage and subsequently narrow. Overall, lifetime rural residents maintain the highest dissolution rates, followed by rural to urban migrants and lifetime urban residents, respectively. Our regression analysis showed the Thai differences to be significant ( $p < .05$ ) with other factors controlled.

#### 4.5 RATES BY REGION (THAI BUDDHIST POPULATION ONLY)

For Thailand's Buddhist population, differences are also found by region (table 7). (In Sri Lanka regions overlap ethnic and religious groupings and need not be looked at separately.) The lowest dissolution rates are found in the capital, Bangkok-Thon Bury, and in surrounding rural areas. Rates are also low in the south, and contrast with the high rates among Moslems, who share the region. The rural north and north-east have dissolution rates somewhat above those in other parts of the country.

Our regression analysis was restricted to rural women

**Table 6** Proportion of Marriages Dissolved within Five Years by Education and Age at Union

Educational level	Proportion dissolved								
	Total			None or primary school			Middle +		
	-17.5	17.5-19.9	20.0+	-17.5	17.5-19.9	20.0+	17.5-19.9	20.0+	
Age at first marriage									
<b>A Sri Lanka</b>									
<i>Age group</i>									
15-24	.082	.055 <sup>a</sup>	—	.093	—	—	.058 <sup>a</sup>	—	—
25-34	.047	.039	.043	.040	.039	.068	.074	.040	.023
35-44	.043	.023	.045	.044	.024	.060	.037	.022 <sup>a</sup>	.029 <sup>a</sup>
45-49	.065	.026	.050	.058	.031	.067	—	.012	.009
25-49	.049	.031	.045	.046	.032	.065	.067	.030	.024
<b>B Thailand</b>									
<i>Age group</i>									
15-24	.183	—	—	.185	—	—			
25-34	.127	.085	.061	.129	.083	.071			
35-44	.179	.110	.057	.178	.107	.060			
45-49	.147	.105	.044	.147	.103	.048			
25-49	.149	.098	.056	.150	.096	.063			

<sup>a</sup> Sample size between 50 and 100.

since urban numbers are small outside Bangkok. It was found that the higher dissolution rates in the north and north-east were significant with other factors controlled ( $p < .05$ ), but differences between the central and south regions were not. Regional differences were sharpest among women 35 and over and were concentrated in the first five years of marriage.

#### 4.6 INFLUENCE OF WORK BEFORE MARRIAGE AND OF CHILDBIRTH

In table 7 and in the regressions, work prior to marriage was associated with more stable unions than was non-work ( $p < .05$ ) among Thai women aged 25-34. The effect was not felt among older women or at marriage durations beyond ten years, but was consistently positive at shorter durations. It persists with education and residence controlled, and appears to be correlated with being Buddhist and with avoidance of early marriage. Among Sri Lankan women, work was not found to correlate with marriage stability. It was also much less prevalent, about 90 per cent of Thai wives having worked before marriage as against 35 per cent of Sri Lankan wives.

The occurrence of a birth to the couple was found to correlate highly with marriage stability in both countries during the first two and a half years of the union and between two and a half and five years. Beyond the fifth year, by which time only five per cent of women who were still married had not had a live birth in the two countries, the variable was no longer significant in either. It is

impossible to separate cause and effect in the relationship of births to stability on the basis of the information available in the surveys, but it is almost certainly two-way.

#### 4.7 MARRIAGE DISSOLUTION SUMMARY

Overall, the picture in both countries is of marked differences in rates of dissolution by age at marriage and education, and sometimes by religion and work experience. Differences likewise exist for residence groups (in Sri Lanka for better educated urban migrants only), and in Thailand for regions. All persist when controls for age, and, where possible, for education are used. In both countries women aged 15-24 require separate analysis. Of the two countries, dissolution rates are consistently higher in Thailand.

From the regression results these factors can be tentatively ranked in their order of importance during the first five years of marriage (using ordinary least squares and omitting interaction terms). For Sri Lanka, the strongest contribution to marriage stability comes from education, followed by marriage at central ages (late marriages being especially unstable). Religion and residence only sometimes contribute to rate differences. In Thailand, religion displays the highest regression coefficients, about double those for other factors. Education and age at marriage are next, both factors being positively correlated with stability. Residence is less often significant, and work experience, which is only relevant for younger age groups, contributes least. All of these findings accord with the simple life-table differences.

**Table 7** Proportion of First Marriages Dissolved within Ten Years, by Selected Background Variables

A Sri Lanka

Proportion dissolved

	Education		Religion				Residence			Work	
	P	M	B	M	H	C	U-U	R-U	R-R	No	Yes
<i>Age group</i>											
15-24	—	—	—	—	—	—	—	—	—	—	—
25-34	.087	.073	.086	.085	.070	.078*	.085	.058*	.081	.076	.090
35-44	.096	.057	.087	.067	.085	.052	.098	.084	.082	.076	.095
45-49	.092	.094	.089	.188	.089	.065*	.072	.028*	.099	.091	.096
25-49	.092	.069	.087 <sup>a</sup>	.098	.080 <sup>b</sup>	.062 <sup>b</sup>	.085	.063	.086	.079	.094
25-44				.077 <sup>a</sup>							

Summary for ages 25-49 and Moslem 25-44

	Education		Education		Education		Education	
	P	M	P	M	P	M	P	M
<i>Education</i>								
None	.106							
Primary	.084							
Middle	.080							
High+	.042							
<i>Religion</i>								
Buddhist			.092 <sup>c</sup>	.078				
Moslem			.111	—				
Moslem 25-44			.087 <sup>c</sup>	—				
Hindu			.089	.049				
Christian			.081 <sup>d</sup>	.049 <sup>d</sup>				
<i>Residence</i>								
U-U					.112	.062 <sup>e</sup>		
R-U					.097	.025		
R-R					.090	.074 <sup>e</sup>		
<i>Work</i>								
No							.089 <sup>f</sup>	.061
Yes							.098 <sup>f</sup>	.088

B Thailand

Proportion dissolved

	Education		Religion		Residence			Work		Region				
	P	M	B	M	U-U	R-U	R-R	No	Yes	N	NE	S	C	BT
<i>Age group</i>														
15-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25-34	.143	—	.131	—	—	—	.145	—	.127	.144	.137	.173*	.133	—
35-44	.157	—	.146	—	.087*	.101*	.171	.190*	.154	.174	.178	.234*	.097	.110*
45-49	.146	—	.129	—	—	—	.139	—	.143	.143*	.146	—	.107	—
25-49	.150	.078*	.137	.324*	.088	.110	.155	.194	.141	.153	.155	.130 <sup>g</sup>	.113 <sup>g</sup>	.089 <sup>g</sup>

Summary for ages 25-49

	Education		Education		Education		Education	
	P	M	P	M	P	M	P	M
<i>Education</i>								
None	.209							
Primary	.132							
Middle	.102*							
High+	—							
<i>Religion</i>								
Buddhist			.142	.068				
Moslem			.324*	—				
<i>Residence</i>								
U-U					.090	—		
R-U					.113	—		
R-R					.157	—		
<i>Work</i>								
No							.197	—
Yes							.145	.059*

NOTES:

Education codes: P = None or primary school; M = Middle school or more

Religion codes: B = Buddhist; M = Moslem; H = Hindu; C = Christian

Residence codes: U-U = Grew up in urban areas and currently urban; R-U = Grew up in rural areas and currently urban; R-R = Grew up in rural areas and currently rural

Region codes: N = North; NE = North-east; S = South; C = Central excluding Bangkok-Thon Bury; BT = Bangkok-Thon Bury

a-g: Matching alphabetic superscripts denote rates which converge before 20 years' duration of marriage. (Differences relative to non-superscripted rates persist.)

\*Sample size between 50 and 100.

## 5 Remarriage

In the investigation of remarriage we are severely hampered by small numbers and offer only three observations (table 8). First, like the rate of dissolution, the rate of remarriage is substantially higher for Thai women than for Sri Lankan women. Secondly, in both countries the proportions remarried are higher for unions dissolved when the wife was under 25 than for those dissolved at later ages. Within two and a half years of dissolution, nearly half of those under age 25 at the time of dissolution in Sri Lanka and 60 per cent in Thailand have remarried. This is double the proportion found among women aged 25–34 at dissolution in Sri Lanka, and far above the 3 per cent remarrying at this duration among women 35 and over at dissolution. In Thailand the proportions remarrying fall off less sharply with age at dissolution. At two and a half years the proportion is three times as high for ages under 25 than for ages 35 and above, but even for the later group the proportion remarrying within two and a half years is nearly one-fifth. We are not able to separate widowhood from divorce and separation in these figures.

Finally, in both countries we find higher rates of re-

marriage among women with no education than among those with primary schooling or more, and in Sri Lanka higher rates among other groups than among Hindus (not shown).

All of these differences were significant at the .05 level in regressions of remarriage rates on the background variables used in chapter 4. (Higher rates of remarriage were also found among Moslems than among non-Moslems in both countries, but did not persist when controlled for education and age at dissolution.)

What is of most interest is that the groups of women whose dissolution rates are highest (Thai women, those with less education, those who are Moslem or Buddhist) also re-enter marriages most quickly. This tendency is especially marked among women who are young when their first marriages are dissolved. As a consequence, the time spent out of unions by ever-married women is less – and the differentials between groups far less – than would be expected on the basis of the dissolution rates we have been examining.

**Table 8** Proportion of Women Entering Second Marriages, by Duration since First Marriage Dissolution and Selected Background Variables

Duration since dissolution Age at dissolution	1 year				2½ years				5 years			
	Total	-25	25-34	35+	Total	-25	25-34	35+	Total	-25	25-34	35+
<b>A Sri Lanka</b>												
<i>Current age group</i>												
15-24	—	—	—	—	—	—	—	—	—	—	—	—
25-34	.189	.209	.155 <sup>a</sup>	—	.375 <sup>a</sup>	.442 <sup>a</sup>	—	—	—	—	—	—
35-44	.118	.255 <sup>a</sup>	.096	.014 <sup>a</sup>	.226	.456 <sup>a</sup>	.123	.055 <sup>a</sup>	.316	—	.232	—
45-49	.113	.268 <sup>a</sup>	.158 <sup>a</sup>	.001 <sup>a</sup>	.208	—	.246 <sup>a</sup>	.015 <sup>a</sup>	.295	—	.327 <sup>a</sup>	.015 <sup>a</sup>
25-49	.134	.233	.124	.006	.253	.454	.200	.034	.358	.629 <sup>a</sup>	.271	.034 <sup>a</sup>
<b>Summary for ages 25-49</b>												
<i>Education</i>												
None or primary	.137	.254	.115	.006	.263	.482	.186	.039 <sup>a</sup>	.376	.675 <sup>a</sup>	.254	.039 <sup>a</sup>
Middle or more	.126	.174 <sup>a</sup>	.150 <sup>a</sup>	—	.222	—	—	—	.299 <sup>a</sup>	—	—	—
<i>Residence</i>												
Rural-Rural	.131	.219	.120	.005	.264	.460	.195	.028 <sup>a</sup>	.368	.631 <sup>a</sup>	.269	.028 <sup>a</sup>
<i>Work before marriage</i>												
No	.146	.246	.143	.010	.262	.464	.213	.036 <sup>a</sup>	.370	.653 <sup>a</sup>	.284	.036 <sup>a</sup>
Yes	.112	.212	.085	.001 <sup>a</sup>	.236	.436 <sup>a</sup>	.166 <sup>a</sup>	—	.335	.587 <sup>a</sup>	—	—
<b>B Thailand</b>												
<i>Current age group</i>												
15-24	.381 <sup>a</sup>	.381 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—
25-34	.263	.307	—	—	.511 <sup>a</sup>	.568 <sup>a</sup>	—	—	—	—	—	—
35-44	.254	.315	.226	—	.473	.599 <sup>a</sup>	.385 <sup>a</sup>	—	.673 <sup>a</sup>	—	—	—
45-49	.207	—	—	—	.335 <sup>a</sup>	—	—	—	.473 <sup>a</sup>	—	—	—
25-49	.247	.327	.191	.085 <sup>a</sup>	.453	.589	.344	.186 <sup>a</sup>	.647	.796 <sup>a</sup>	.511 <sup>a</sup>	—
<b>Summary for ages 25-49</b>												
<i>Education</i>												
None or primary	.250	.327	.198	.090 <sup>a</sup>	.462	.594	.351	.196 <sup>a</sup>	.659	.805 <sup>a</sup>	.521	—
<i>Religion</i>												
Buddhist	.222	.297	.181	.066 <sup>a</sup>	.429	.562	.334	.176 <sup>a</sup>	.630	.783 <sup>a</sup>	.503 <sup>a</sup>	—
<i>Residence</i>												
Rural-Rural	.267	.330	.203	.108 <sup>a</sup>	.479	.588	.353 <sup>a</sup>	—	.681	.801	.540 <sup>a</sup>	—
<i>Work before marriage</i>												
Yes	.245	.327	.200	.089 <sup>a</sup>	.455	.583	.351	.207 <sup>a</sup>	.654	.796 <sup>a</sup>	.522 <sup>a</sup>	—

<sup>a</sup> Sample size between 50 and 100.

## 6 Time Spent in Unions

To see how completely remarriage offsets dissolution, we may look at the proportion of time (in woman-years) spent in marriage at each age among the different age groups.<sup>7</sup> These data are shown in table 9. They show that Thai women, despite having fewer very early marriages than Sri Lankan women and despite having sharply higher dissolution rates, nevertheless are more likely to be in unions during their peak fertile ages (ages 20–34). This finding holds most strongly for younger cohorts, as Thailand has not experienced changing marriage patterns to the same degree that Sri Lanka has. At ages 45–49 the advantage is slight or vanishes. We may note that it is remarriage which accounts for this effect. At ages under 20 and again after age 30 Sri Lankan women are more likely to be in a first union than are Thai women (figure 8).

Limiting our analysis to ever-married women, it is possible to make some comparisons by background variables. These are presented in table 10 and show a rather remarkable homogeneity. By age 30, when most women who might be expected to marry have done so, in Sri Lanka little difference can be seen in the proportion of time spent in marriage either among educational or religious groups. Nor is there much difference between Sri Lanka and Thailand. The impact of differential rates of dissolution seems everywhere to be wholly offset by differentials in remarriage.

By constructing cause-deleted tables for time spent in first union in the absence of separation and divorce, it is possible to compare the actual proportion of women's lives spent in first and later marriages with the proportion they would theoretically spend in first marriages if no separations or divorces occurred and if those becoming widowed remarried at prevailing rates.<sup>8</sup> The difference turns out to be small in both countries. During the 15 years between age 20 and 35, Thai women would gain only four and a half additional months of marriage per capita and Sri Lankan women only two and a half additional months.<sup>9</sup> These amounts are about three per cent and

<sup>7</sup> For the  $x$ th year of age the figure is found by attributing to each woman of age  $x + 1$  or older the fraction of the year spent in marriage when she was age  $x$ , and dividing this result by the sample size. For never-married women and those married at age  $x + 1$  or later, the fraction is 0. For other women it is between 0 and 1.0.

<sup>8</sup> To construct cause-deleted rates, women whose marriages end in separation or divorce are treated as if their marriages were continuing, with the time of interview backdated to the time of separation (the interval from marriage to separation being the amount of time they were exposed to the risk of becoming widowed). The rates are calculated for single-year ages at marriage, and weighted according to the number of women under observation at each later age. For widow remarriage, among women widowed at each age the time spent in second unions at later ages, weighted by the cause-deleted number widowed at the given age, is used.

<sup>9</sup> In the cause-deleted rates, about two and a half months per capita are lost through widowhood both in Sri Lanka and in Thailand. The time lost is restricted to the period between widowhood and remarriage.

**Table 9** Proportion of Women in First Marriages and All Marriages, Proportion Ever Married, and Hypothetical Proportion in All Marriages (Cause-Deleted Rates Including Widowhood and Widow Remarriage but Omitting Separation and Divorce), by Age

		Age <sup>a</sup>	19–20	29–30	39–40
<b>A Sri Lanka</b>					
<i>Age group</i>					
25–34	First marriage	.386	.788	—	—
	All marriages	.391	.814	—	—
	C-D all marr.	.396	.825	—	—
	Prop. ever-marr.	.398	.846	—	—
35–44	First marriage	.527	.821	.785	—
	All marriages	.536	.854	.825	—
	C-D all marr.	.539	.874	.863	—
	Prop. ever-marr.	.543	.892	.951	—
45–49	First marriage	.568	.853	.833	—
	All marriages	.574	.905	.900	—
	C-D all marr.	.586	.919	.925	—
	Prop. ever-marr.	.592	.938	.978	—
25–49	First marriage	.463	.820	.811	—
	All marriages	.470	.855	.866	—
	C-D all marr.	.475	.873	.900	—
	Prop. ever-marr.	.479	.890	.966	—
<b>B Thailand</b>					
<i>Age group</i>					
25–34	First marriage	.448	.746	—	—
	All marriages	.466	.844	—	—
	C-D all marr.	.483	.864	—	—
	Prop. ever-marr.	.483	.880	—	—
35–44	First marriage	.485	.768	.728	—
	All marriages	.513	.873	.872	—
	C-D all marr.	.537	.894	.898	—
	Prop. ever-marr.	.541	.915	.959	—
45–49	First marriage	.477	.811	.748	—
	All marriages	.504	.901	.858	—
	C-D all marr.	.518	.928	.897	—
	Prop. ever-marr.	.524	.941	.965	—
25–49	First marriage	.466	.771	.738	—
	All marriages	.489	.871	.865	—
	C-D all marr.	.509	.900	.903	—
	Prop. ever-marr.	.511	.911	.961	—

<sup>a</sup> Each figure is an average over two ages (eg values shown for age 19–20 are means of the proportions of women in unions when ages 19.0–19.9 and 20.0–20.9).



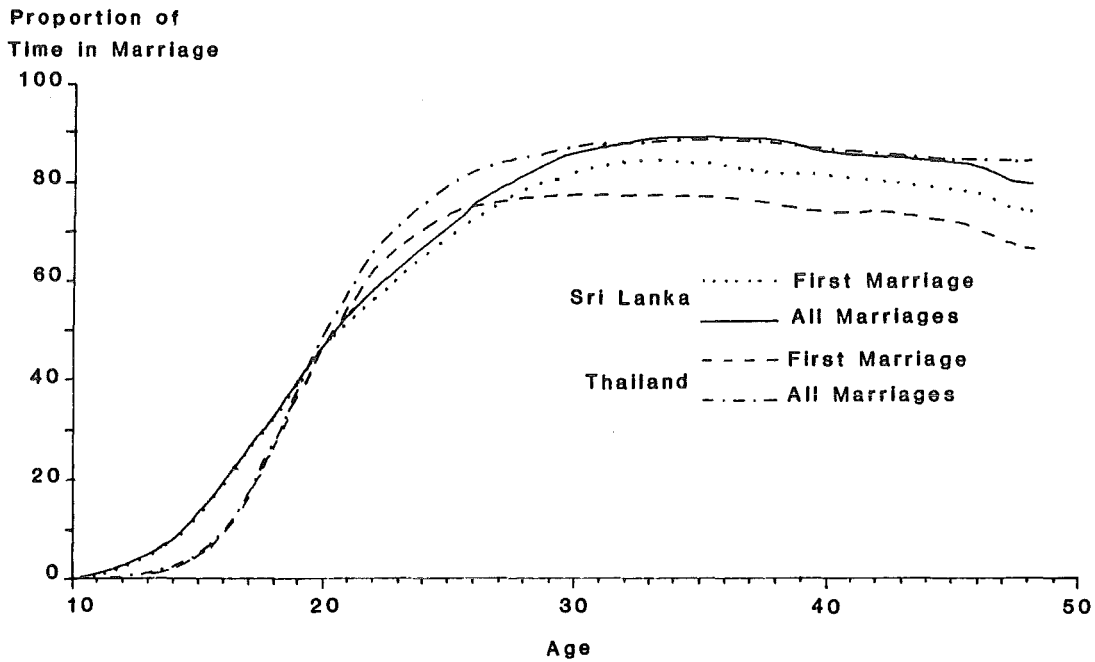


Figure 8 Proportion of Time Spent in First Marriage and All Marriages by Age (Sri Lankan and Thai Women Aged 25-49)

Table 10 Proportion of Time Spent in Marriage at Selected Ages, Restricted to Women Already Married and Omitting Women not Married by 30

A Sri Lanka				B Thailand			
Age <sup>a</sup>	19-20	29-30	39-40	Age <sup>a</sup>	19-20	29-30	39-40
<i>Age group</i>				<i>Age group</i>			
30-34	.985	.962	—	30-34	.956	.959	—
35-44	.985	.957	.863	35-44	.943	.953	.906
45-49	.968	.965	.919	45-49	.957	.957	.888
30-49	.981	.960	.894	30-49	.950	.956	.898
<b>Summary rates for ages 30-49</b>				<b>Summary rates for ages 30-49</b>			
<i>Education</i>				<i>Education</i>			
None or primary	.981	.960	.891	None or primary	.950	.956	.900
Middle or more	.980	.960	.906	<i>Religion</i>			
<i>Religion</i>				Buddhist			
Buddhist	.983	.960	.892	Buddhist	.953	.956	.897
Moslem	.962	.949	.898				
Christian	.970	.955	.890				
Hindu	.986	.967	.904				

<sup>a</sup> Each figure is an average over two ages (eg values shown for age 19-20 are means of the proportions of women in unions when ages 19.0-19.9 and 20.0-20.9).

two per cent, respectively, of the time presently spent in marriage, and are unlikely to have more than a marginal influence on fertility.

The relationship of marital stability to fertility may be more complex than this analysis assumes, particularly as being childless, whether intentionally or by chance, may increase the likelihood of dissolution, and as sexual relations may cease well before dissolution occurs. Following dissolution and remarriage, a woman's family size preferences may also change. We have not looked into these effects in detail, as the numbers of dissolutions in the Sri Lankan and Thai surveys are small.

An overview of fertility differences by marriage history is presented in table 11, which shows the mean number of children ever born to currently married women in first and later unions and to women who were separated, divorced or widowed at the times of the surveys. The means are standardized on the overall age distributions of ever-married women aged 15–49 in the two countries. As we would expect, currently married women display higher fertility than women no longer in unions, the differences being about one child at ages 40–49. Among currently married women, however, until about age 40 differences in mean family sizes favour those who have been divorced and remarried. This pattern is almost certainly a consequence of the higher dissolution and remarriage rates that occur to women who initially married young. When controlled by duration since start of first marriage rather than age, family sizes are consistently higher among women in their first union than among those in later unions; and when controlled by time spent in unions, fertility differences between the three marriage groups largely vanish (tables not shown). These results imply that age should not be important in itself.

The difference in mean family sizes of women in first unions and all ever-married women at ages 40–49 (about 0.3 children in each country) may be taken as a crude measure to the overall fertility cost of marriage dissolutions. The figure is less than five per cent of the mean family sizes for this age group in the two countries, and is not inconsistent with the roughly three per cent loss in reproductive time attributable to separation and divorce and the slightly smaller loss due to widowhood at the peak fertility ages (20–34) that was found earlier. On this evidence, the fertility effects of marriage dissolution may not differ greatly from their simple time loss components.

**Table 11** Age-Standardized Mean Number of Children Ever Born by Mother's Marital Status at Interview, Age, Education and Residence

	Number of children ever born, for women currently			
	In first union	In later union	S,D,W <sup>a</sup>	Total
<b>A Sri Lanka</b>				
<i>Ages</i>				
20–29	2.1	3.2 <sup>b</sup>	1.9	2.1
30–39	4.4	4.5 <sup>b</sup>	3.4	4.3
40–49	5.8	5.5 <sup>b</sup>	4.5	5.5
No educ.	4.7	4.3 <sup>b</sup>	3.4	4.5
Primary	4.3	4.5 <sup>b</sup>	3.2	4.2
Secondary+	3.2	3.8 <sup>b</sup>	2.8	3.2
Rural	4.0	4.3	3.1	3.9
Urban	3.6	—	3.4	3.6
Total	4.0	4.3	3.2	3.9
n	5917	241	648	6806
<b>B Thailand</b>				
<i>Ages</i>				
20–29	2.1	2.5 <sup>b</sup>	1.7 <sup>b</sup>	2.1
30–39	4.5	4.6	2.9 <sup>b</sup>	4.4
40–49	6.3	5.6	4.9	6.0
No educ.	4.5	4.0	3.2 <sup>b</sup>	4.3
Primary+	3.8	3.9	2.8	3.8
Rural	4.1	3.9	2.9	3.9
Urban	3.2	—	2.8 <sup>b</sup>	3.1
Total	3.9	3.9	2.9	3.8
n	3136	381	301	3817

<sup>a</sup> S,D,W = Separated, Divorced or Widowed.

<sup>b</sup> Sample size between 50 and 100.

## 7 General Summary

We saw from Trussell's analysis that Thai women enter marriage over a narrower range of ages than do women in Sri Lanka, and among younger cohorts more Thai women may ultimately marry. First unions in Thailand are much more likely to end in early separations or divorce, but when this occurs the women affected quickly move into second unions. In both countries women with low education, and in Thailand Moslem women, are more likely to have terminated their first unions and remarried than better edu-

cated or Buddhist women; in Sri Lanka dissolutions and remarriages are more common among Buddhist women than among Hindus. Finally, Thai women, and especially those in younger cohorts, are more likely than Sri Lankan women to be currently married at peak fertile ages, owing to the narrower age interval over which most marriages occur and to the smaller recent changes in marriage patterns in Thailand. The effect of dissolutions on birth rates is evidently small in both countries.

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