Cultural and Socioeconomic Influences on Divorce During Modernization: Southeast Asia, 1940s to 1960s

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It is commonplace to observe that modernization leads to a rise in divorce. Although such is the trend in the United States and in some other Western societies, it is not a universal pattern. In several Asian countries, including Japan, Taiwan, Malaysia, and Indonesia, moderately high patterns of divorce existed prior to modernization and industrialization (Goode 1993; Jones 1994). In contrast to the Western trend of rising divorce, these societies have experienced declines in divorce with modernization (Heaton et al. 2001; Jones 1997).

In some regions of Malaysia and Indonesia, roughly 40 percent of men and women who were interviewed in the 1970s reported that a previous marriage had ended in divorce (Jones 1994: Tables 5.5 and 5.9). With exposure to modern education, urbanization, changed laws and social mores, and new expectations about the role of marriage, divorce rates in these societies have plummeted and are now below those in most Western countries (Jones 1997: 96). In this article, we explore trends in the incidence of divorce from the 1940s to the 1960s and the social, economic, and cultural correlates of divorce in three Southeast Asian societies, based on marital history data from World Fertility Surveys conducted in the mid-1970s. The results show the flexibility of family institutions in accommodating high levels of marital disruption in traditional societies where women can rely on the economic and social support of their natal kin.

Southeast Asia is home to peoples of diverse ethnic communities (within as well as between countries) who, while sharing many common historical experiences and cultural orientations, follow different religions, speak varied languages, and live in societies with different political and economic struc-

tures. A common cultural feature of Southeast Asian peoples is a bilateral kinship system, which emphasizes close ties to maternal as well as paternal relatives. Living arrangements and other aspects of family life are characterized by flexibility rather than strict cultural prescriptions (Chamratrithirong 1984; Keyes 1995; Tsubouchi 1976). Some regional and cultural groups in Southeast Asia hold preferences for matrilocal living arrangements, but these are not followed as rigidly as the patrilocal customs of East Asian societies.

Southeast Asian cultural patterns of marriage and family life are found across the diverse societies in the region, from Muslim religious traditions among the majority of the Indonesian and Malaysian peoples to the predominately Christian populations in the Philippines and Theravada Buddhist societies on the mainland (Geertz 1961; Hugo et al. 1987; Keyes 1995). Substantial migration from China and India has, over the last century, added peoples with patrilineal and patrilocal family customs to the Southeast Asian region. Although we do not attempt to develop and test a comprehensive theoretical explanation of the moderate and high divorce patterns in the region, we offer a tentative interpretation of divorce-tolerant cultures in traditional Southeast Asia, relative to the East and South Asian cultures represented by immigrant populations in Southeast Asia.

During the decades covered by this study, significant changes occurred in the social and economic characteristics of women as modernization began to spread across the region. As we show below, growing proportions of women received primary education, participated in the modern labor force before their marriage, and married at older ages. Our analysis shows that higher educational attainment and the sharp rise in age at first marriage are important causes of the decrease in the likelihood of marital disruption, whereas participation in the modern labor force preceding marriage did not show a consistent relationship with divorce in the three countries for the time period covered here. Ethnicity, as a proxy for culture, is a pervasive and persistent influence on levels of marital disruption in Southeast Asia. We argue that these ethnic variations are related to the social and economic support available from the wife's family after divorce. Our research builds and extends upon prior work (Guest 1992; Heaton et al. 2001; Jones 1994, 1997; Smith 1981) by using comparable data across countries and presenting life tables and proportional hazards models to estimate trends and correlates of the likelihood of marital disruption over the period of incipient modernization in the decades following World War II.

Modernization and divorce in comparative perspective

Many people assume that high divorce rates are a phenomenon spreading from the decadent West to the rest of the world. Goode (1993) argues, how-

ever, that there is neither a universal trend nor a theoretical consensus on the relationship between social change and divorce. A rapid rise in divorce has taken place in the United States and some other Western countries, particularly since the 1960s (Cherlin 1992: 22). Popular explanations for the recent rise in divorce are the breakdown of traditional family and communal values, a lessened stigma associated with marital dissolution, and the liberalization of laws that have made it easier to dissolve marriages. On the basis of their finding of a continuous rise in divorce for cohorts of American marriages since the Civil War, Preston and McDonald (1979) suggest that the processes of industrialization, urbanization, and increasing individual freedom associated with the modern era have contributed to the secular decline in marital stability. Similar suggestions can be found in most classical and contemporary statements about the impact of modernization on the family (Shorter 1975: Chapter 8; Goldscheider and Waite 1991: Chapter 1).

Less extensively explored, theoretically and empirically, are the reasons for the variations in divorce in many traditional societies. In a small number of traditional societies—characterized by Goode (1993) as "stable high divorce rate systems"—the level of divorce was relatively high prior to modernization and industrialization. And there is some evidence that relatively easy divorce was common in many European societies until the Middle Ages (MacFarlane 1986: 222–223). But in more recent times—the nineteenth century and the first half of the twentieth—divorce was relatively rare and those who did divorce bore a heavy social stigma.

The standard sociological concept of "marriage for life" was commonplace because families were considered as much economic unions as they were reproductive unions. Marital dissolution would have led to loss of essential labor to the household. Of course, marriages were often disrupted by death of a spouse, and rapid remarriage was customary. A single-parent household was at high risk for destitution. Although the loss of love and companionship may have led to heightened marital dissatisfaction, economic necessity and the stigma associated with divorce or desertion kept most marital unions intact in most traditional societies.

Better understanding of the character of varied family systems—traditional low divorce, traditional high divorce, and their modern counterparts—will provide a corrective to the assumed universalism of a single path to modernity and contribute to the development of a cross-cultural theory of family change.

Modernization and family systems in Southeast Asia

Southeast Asia, a region with a population exceeding 500 million, includes ten countries between the Indian subcontinent and China (see Figure 1).

FIGURE 1 Countries of Southeast Asia

While there are common geographical, historical, and cultural features of Southeast Asia, diversity is the hallmark of the region (O'Connor 2000; Reid 1988, 1993; Wolters 1999).

A distinguishing cultural characteristic of Southeast Asia is the high status of women, including a bilateral kinship system, relative to the patriarchal and patrilineal societies of East and South Asia (Andaya 2001; Reid 1988: 162–172; Van Esterik 1996). For the most part, one finds neither strong preferences for male children (Wongboonsin and Ruffolo 1995) nor strong prescriptions favoring residence with the groom's family after marriage (Chamratrithirong et al. 1988). The other defining feature of the region is the "plural society" in the form of multiethnic cities and communities that have been welcoming to peoples, ideas, and cultural practices from elsewhere (Hirschman 2000). Located along the major sea route between the great civilizations of East and South Asia, Southeast Asian port cities, trading networks, and civilizations have drawn peoples from throughout Asia and beyond. Over the centuries, a good share of Chinese-origin peoples have intermarried and blended with local populations in many Southeast Asian

countries, although large numbers of Chinese-origin peoples have retained a separate identity even after three or four generations of local residence (Cushman and Wang 1988; Reid 1996: Chapters 1–3).

The higher status of women in Southeast Asian societies is reflected in their household autonomy and their economic roles outside the home. In addition to their central roles in the planting and harvesting of rice (the mainstay of the agrarian economy), women are also active as sellers and traders in the market (Geertz 1961; Gordon 1964; Kirsch 1996). Another cultural trait of the Malay populations of Southeast Asia (the indigenous peoples of Malaysia, Singapore, Indonesia, and southern Thailand) is tolerance of divorce. In the 1950s divorce rates in Islamic Southeast Asian countries were the highest in the world (Jones 1981: 261; 1997). Very high levels of divorce have been reported in ethnographic studies (Geertz 1961; Nakamura 1983; Singarimbun and Manning 1974), as well as in statistical analyses based on vital statistics and survey data (Guest 1992; Jones 1981, 1994; Jones et al. 1994; Smith 1981).

Although high levels of divorce are sometimes thought to be associated with the relative ease of divorce in Islam—most Malaysian Malays and Indonesians are Muslims—the ease of divorce was part of the cultural fabric of the region before Islam arrived there in the fifteenth century (Jones 1997: 103–104; Tsubouchi 1976). Gavin Jones observes that the high level of divorce in Indonesia and Malaysia is bound up with marriage and family systems that include very early marriage, fairly common polygyny, considerable social and economic independence of women, a strong cultural emphasis on spousal compatibility, economic and moral support from kin for divorced women and their children, and ease of remarriage (Jones 1994: 218–234; 1997: 103–115).

Some divorces in Southeast Asia occur before the marriage is consummated, that is, before the bride and groom live together. For example, Indonesian families traditionally arrange the marriage partners for their teenage daughters, often before girls are 15 years old. If the bride is disappointed by the choice of her husband, she may postpone moving from her parental home to live with the groom (Geertz 1961; Hull and Hull 1987; Nakamura 1983; Singarimbun and Manning 1974). The parents may have arranged the marriage without their daughter's consent, but they are reluctant to compel her to live with the groom if she is adamantly opposed. In such cases, the groom eventually requests a divorce, and the "marriage" is dissolved. The apparent contradiction in this pattern—arranged marriage of adolescents by indulgent parents who do not force their daughters to live with their husbands—reveals a feature of Southeast Asian culture that allows for considerable individual autonomy within the context of tradition.

Although Thailand is not usually considered to have traditionally high levels of divorce similar to those of Malaysia and Indonesia, several anthro-

pological works indicate that marital disruption may have been common among the Thai peasantry and working class (Bumroongsook 1995; Henderson 1971; Philips 1965). Neither traditional Thai culture nor Theravada Buddhism stigmatizes divorce. In practice, divorce is relatively easily obtained by either husband or wife, as it typically involves the informal process in which one of the partners simply moves out (Kirsch 1996; Knodel et al. 1987).

Data and methods

Questions about current marital status and the timing of first marriage are standard features in censuses and demographic surveys throughout the world, but detailed marital history data, with information on the dates of prior marriages and marital dissolutions, are rarely collected. Measures of current marital status do not provide an accurate reading of the incidence of divorce in a society. The number of persons currently divorced is only a fraction of those who have experienced a divorce, since many persons who are currently married may have had a previous marriage that ended in death or divorce. Moreover, current-status measures do not take into account marital duration or the relative exposure to the "risk" of divorce.

In our search for marital history data, we discovered that the data collected as part of the World Fertility Survey (WFS) program in many developing countries during the 1970s represent one of the few sources for comparative research on trends and patterns of divorce. The few studies of marital dissolution based on WFS data were primarily focused on the methods of measurement rather than on trends and patterns of divorce (see, for example, Smith 1981 and Smith et al. 1984). There is a scarcity of recent demographic surveys with comparable marital histories for more recent periods, the major exception being the Indonesian Family Life Survey (Heaton et al. 2001).

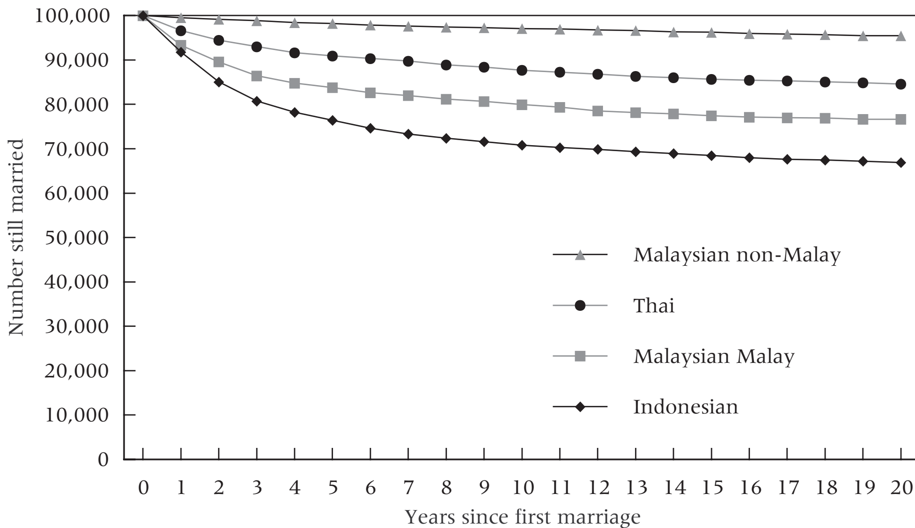
Our analysis is based on WFS data from Indonesia, Malaysia, and Thailand.[1] In all three WFS sources, representative samples of ever-married women under age 50 were interviewed about their maternity and marriage histories, knowledge and use of contraception, fertility intentions and preferences, and socioeconomic background. For this analysis, we exclude 15 women whose status of first marriage was not reported, 36 women whose date of first marriage was reported to have come after the date of dissolution, and 215 women reporting an age at first marriage below age ten. These last cases are most likely to be instances of reporting errors since child marriage was not common in traditional Southeast Asian societies (Singh and Samara 1996). The resulting sample survey sizes are 6,718 women for Indonesia, 5,028 for Malaysia, and 2,928 for Thailand.

It is possible to reconstruct histories of marriage dissolution by either death of spouse or divorce/separation, according to duration of marriage,

from the dates (month and year) of each respondent's first marriage and marital dissolution that were collected as part of the WFS questions on marital histories (Smith 1981: 10–11). In our study, reports of both formal divorce and separation are taken as measures of marital disruption. In some languages, such as Thai, "separation" has a less unfavorable connotation than "divorce." It is plausible that many survey respondents find it easier to report marital dissolutions as separations rather than as divorces.

The first step in our analysis is to construct life table estimates of the cumulative experience of marital dissolution by duration of marriage. Because marriage can be dissolved by death as well as divorce or separation, we estimate multiple-decrement life tables using standard demographic methods (Preston et al. 2001: Chapter 4). The populations of first marriages at risk of divorce for each year of marital duration are adjusted to include only marriages not disrupted by spousal death (the formulas are presented in the Appendix). Figure 2 shows the survival curve of 100,000 first marriages (l_x^S values), which are subject to marital-duration-specific probabilities of dissolution due to separation and divorce.[2] The l_x^S values presented here do not reflect the impact of marital dissolution due to spousal death, although the duration-specific divorce/separation probabilities (q_x values) were computed on the basis of populations at risk adjusted for all sources of marital dissolution. The survival curves are presented for the four major populations analyzed here: Indonesian, Malaysian Malay, Malaysian non-

FIGURE 2 Life table estimates of the survival of first marriages subject to the risk of divorce or separation by duration of marriage: Indonesia, Malaysia, and Thailand, circa 1974–76



SOURCES: 1976 Indonesian Fertility Survey, 1974 Malaysian Family and Fertility Survey, and 1975 Survey of Fertility in Thailand.

Malay (Chinese and Indian), and Thai women for marriages initiated from the 1940s to the 1960s.

While only a small percentage of Malaysian non-Malay women ever experienced a separation or divorce, almost one-third of Indonesian first marriages eventually ended with a separation or divorce (ignoring spousal deaths). One of our objectives is to explore the reasons for differences in the incidence of divorce between countries and between ethnic communities. A noticeable feature of Figure 2 is that, for each population, most separations or divorces occur early in marriage. The relative differences between populations are approximately the same at any point after the first few years of marriage.

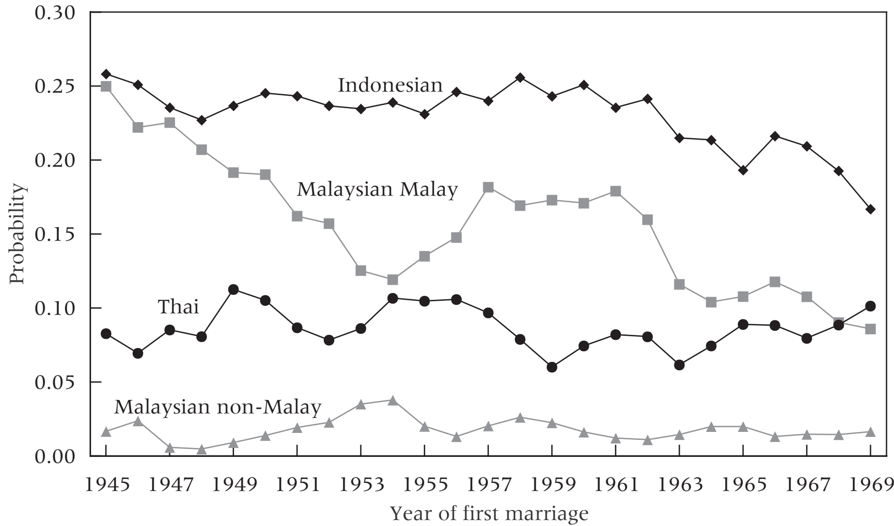
Because most divorces occur early in marriage, our later descriptive analysis uses one point on the survival curve—the proportion of first marriages that end in a separation or divorce within five years after marriage (l_5/l_0)—as an indicator of the level of divorce. The analysis excludes marriages that began less than five years before the date of interview and those that were dissolved by spousal death in the first five years of marriage. The life table analysis allows for the estimation of the risk of divorce (in the first five years of marriage) for several marriage cohorts from the 1940s to the 1960s.

In the subsequent multivariate analysis, we use proportional hazards models, which allow for the inclusion of all ever-married women regardless of marital duration. In that analysis, we estimate the effects of predictor variables on the risk of divorce, net of marital duration and other covariates (Castro Martín and Bumpass 1989; Teachman 1982, 1983). The logistic coefficients are expressed as the natural log of the odds ratio relative to an omitted category. To facilitate interpretation of results, we present the exponentiated coefficients that represent the odds ratio for a particular category relative to the odds ratio for the reference category.

Overall trends in marital disruption

Based on the life table measure of divorce described above (the probability of separation or divorce within the first five years of marriage), Figure 3 shows the estimated trends in marital disruption (a three-year moving average) by year of marriage (from 1945 to 1969) for ever-married women in Indonesia, Malaysia, and Thailand. The Malaysian estimates are presented separately for the Malay and non-Malay populations. Although all of these national populations are heterogeneous, the ethnic divisions within Malaysia are so substantial that a national average is virtually meaningless. The incidence of divorce or separation (hereafter abbreviated as simply divorce) is substantially lower among Malaysians of Chinese and Indian ancestry than among the majority Malay population.

FIGURE 3 Trends in the probability of divorce or separation during the first five years of marriage in Indonesia, Malaysia, and Thailand by year of first marriage: 1945–69



SOURCES: See Figure 2.

Because of the composition of the WFS samples (married women aged 15–49 circa 1975), there is "left censoring" of the age distribution of the estimated population for earlier years. For example, for the first year in the time series of marriage cohorts (1945) the WFS samples include only women who were aged 20 or younger in that year. The upper age of the estimated population rises year by year for successive marriage cohorts. The bias will be small because most women married at a young age, especially in the early years in the series. There may, however, be an upward bias in the estimates of marital disruption for the earliest years in the time series (and perhaps a small bias toward a measured decline in divorce as the sample becomes more representative of the full range of ages at marriage in the early 1950s).

About a quarter of all marriages in Indonesia contracted in the 1940s and 1950s ended in divorce within five years of marriage. A clear decline in the likelihood of divorce for Indonesian marriages began in the 1960s, with the rate dropping below 20 percent and approaching 15 percent by the late 1960s. The Malaysian Malay population, the other Southeast Asian community reputed to have a high tolerance of divorce, also had a divorce rate exceeding 20 percent for marriages in the 1940s. The Malay divorce rate appears to have declined to the low teens by the mid-1950s, but this change may have been due, at least in part, to the bias in the restricted sample of marriage ages in the 1940s. The Malay divorce rate rose temporarily in the late 1950s and then declined further in the l960s, reaching a nadir below

10 percent of marriages by the late 1960s. The Malay decline in divorce during the 1960s closely paralleled the Indonesian decline, although the latter rate was somewhat higher.

The Malay and Indonesian pattern of moderate to high levels of traditional divorce is in sharp contrast to the very low level of marital disruption for the Malaysian non-Malay population and the in-between pattern for Thailand. The non-Malay divorce rate in Malaysia fluctuated within a range from 1 to 4 percent. Thailand's divorce rate hovered around 10 percent for the entire span of years represented here, with no distinct trend.

Social changes in Southeast Asia from the 1940s to the 1960s

The "Asian economic miracle" is a frequent label for the rapid economic growth and development that swept through much of East and Southeast Asia from the 1970s to the 1990s (World Bank 1993). Indonesia, Malaysia, and Thailand were among the more economically successful Asian countries over the last quarter of the twentieth century. The period considered here, from the 1940s to the 1960s, precedes the era of rapid economic growth and development. Nonetheless, significant social, political, and economic changes during this period set the stage for subsequent development.

The 1940s was a period of severe economic contraction, caused in large part by events of World War II. Japanese military forces occupied much of Southeast Asia, including Malaysia (then British Malaya) and Indonesia (then the Dutch East Indies) as well as parts of Thailand. In Indonesia, the post–World War II recovery was slowed by the war for independence from 1945 to 1950. Malaya also experienced a war, known as the Malayan Emergency, between the British colonial government and the Malayan Communist Party from 1948 to the mid-1950s. Malaya gained independence in 1957 in a peaceful transition of power, and then became the core region of Malaysia, which was formed in 1963.[3] Thailand, the only Southeast Asian country not formally colonized by a Western power, also underwent economic and political dislocation during the same period.

The 1950s saw substantial economic recovery in all three countries. New nationalist governments were much more responsive to popular aspirations than the colonial regimes. Major investments were made in health care, education, infrastructure, and other domestic needs. The resumption of international trade, including the economic booms created by wars in the region (Korea in the 1950s and Vietnam in the 1960s), increased earnings from exports and provided the economic base for increased investment and consumption in Southeast Asia. These trends continued during the 1960s as development-oriented governments and a healthy international economy quickened the pace of social change. Economic development in Indonesia lagged

behind that of Malaysia and Thailand because of domestic political instability, but modest progress occurred in the 1950s and again in the late 1960s.

The direction of social change during this period is evident in Table 1, which reports the levels of education, employment before marriage, and age at marriage among women during the three decades (the 1940s, 1950s, and 1960s) for the three countries in our sample. These variables, which represent the independent variables for the subsequent analysis of divorce, reflect some of the primary circumstances in the lives of women in Indonesia, Malaysia, and Thailand for this period.[4]

In the 1940s, the characteristics of newly married women reveal the very traditional nature of all three societies.[5] Most Southeast Asian women entered marriage as teenagers without any formal schooling (though not in Thailand); and if they had any work experience, it was only as unpaid family workers in agriculture. There were, of course, small minorities of women in each country with more modern characteristics, but their numbers increased only modestly in the 1950s. By the 1960s, however, newly married women were more likely to have some schooling and to have married at an older age. These trends varied considerably among the three national populations.

Very few Indonesian women who married in the 1940s had received any formal schooling, but by the 1960s half of new brides had some schooling and more than 10 percent had attended secondary school. Indonesian women married at a very young age: in the 1940s more than 95 percent were below age 20, and half were below age 15. By the 1960s, however, only about one in four Indonesian women married below age 15. Changes were less evident in other dimensions of the lives of Indonesian women, and there was virtually no change in premarital work experience. More than half of Indonesian women had not worked prior to marriage.

The fraction of Malaysian brides with no formal schooling declined from 67 percent in the 1940s to 21 percent in the 1960s; the comparable figures in Thailand were 34 percent and 14 percent. Only one in 20 Malaysian women worked in the modern sector (nonagricultural paid work) before marriage in the 1940s, but by the 1960s the figure was one in four. In Thailand, in contrast to Malaysia and Indonesia, 90 percent of women worked before marriage, but almost all were employed as unpaid workers in family agriculture. The fraction of Thai brides who had worked in paid nonagricultural employment rose from 9 to 18 percent between the 1940s and the 1960s.

Significant change in age at marriage also occurred in Malaysia and Thailand. In the 1940s, 80 percent of Thai brides and 90 percent of Malaysian brides were below age 20 at the time of marriage. By the 1960s, the fraction of teenage brides was less than 60 percent in both countries. These estimates of age at marriage are affected by the truncated age distributions for the earliest marriage cohorts (especially from the 1940s), as noted ear-

TABLE 1 Trends in education, age at first marriage, and employment before marriage among women married before 1970 in Indonesia, Malaysia, and Thailand by marriage cohort

	Marriage cohort (percent)			
	1940s[a]	1950s	1960s	Total
Indonesia				
Total	100	100	100	100
Level of education				
None	84	73	50	65
Some primary	10	16	22	17
Completed primary	4	6	16	10
Lower secondary	2	4	7	5
Middle secondary and above	—	2	6	3
Employment before marriage				
Agriculture unpaid	18	15	14	15
Agriculture paid	11	10	9	10
Nonagriculture unpaid	4	3	3	3
Nonagriculture paid	16	19	18	18
Did not work	52	52	55	53
Age at first marriage				
Less than 15	56	36	28	36
15–19	42	49	52	49
20–24	3	13	17	12
25 and older	—	2	4	3
N	*(1,339)*	*(2,559)*	*(2,820)*	*(6,718)*
Malaysia				
Total	100	100	100	100
Level of education				
None	67	46	21	41
Some primary	26	40	38	36
Completed primary	4	10	27	15
Lower secondary	2	3	7	4
Middle secondary and above	1	2	7	4
Employment before marriage				
Agriculture unpaid	22	16	12	16
Agriculture paid	12	15	17	15
Nonagriculture unpaid	2	2	1	2
Nonagriculture paid	5	14	25	16
Did not work	59	54	45	51
Age at first marriage				
Less than 15	41	20	8	21
15–19	51	56	47	51
20–24	8	19	33	22
25 and older	—	4	12	6
N	*(1,266)*	*(1,736)*	*(2,026)*	*(5,028)*

…/

TABLE 1 (continued)

	Marriage cohort (percent)			
	1940s[a]	1950s	1960s	Total
Thailand				
Total	100	100	100	100
Level of education				
No formal education	34	24	14	21
Some primary (1–4 yrs)	64	72	79	74
Beyond compulsory level (5+ yrs)	—	4	8	5
Employment before marriage				
Agriculture unpaid	62	60	57	59
Agriculture paid	14	14	14	14
Nonagriculture unpaid	4	4	4	4
Nonagriculture paid	9	13	18	15
Did not work	10	9	7	9
Age at first marriage				
Less than 20	81	62	58	63
20–24	19	33	33	31
25 and older	—	5	9	6
N	*(476)*	*(1,103)*	*(1,349)*	*(2,928)*

— No observations
[a]The 1940s cohort of Indonesian and Malaysian women includes women who first married from 1935 to 1949, and the 1940s cohort of Thai women includes women who first married from 1940 to 1949.
SOURCES: See Figure 2.

lier. This may account for part of the observed change from the 1940s to the 1950s.

Because ethnicity is the dominant feature of Malaysian society, and divorce patterns vary widely across the three major groups in Malaysia, our analysis includes a parallel analysis of social change comparing patterns for Malaysian Malays, Chinese, and Indians in Table 2. For this time period, the Malay population was slightly more than half of the population of Malaysia, the Chinese about one-third, and the Indian community about 10 percent of the total population.

Historically, the Malaysian Malay population was the most rural and agrarian, while the Chinese were much more likely to reside in urban areas. The Indian community was intermediate between the two. The rapid pace of social change in Malaysia (Malaya) in the decades following World War II led to major social gains for all ethnic communities in the country. For example, in the 1940s more than half of Indian and Chinese brides and almost three-fourths of Malay brides had not been to school. By the 1960s, about 80 percent of the brides in each community had some formal schooling, and from 10 to 20 percent had reached secondary school. The proportion of Chinese women who had worked in the modern sector (nonagricul-

TABLE 2 Trends in education, age at first marriage, and employment before marriage among women married before 1970 in Malaysia by ethnicity and marriage cohort

	Marriage cohort (percent)			
	1940s	**1950s**	**1960s**	**Total**
Malay				
Total	100	100	100	100
Level of education				
None	73	49	22	46
Some primary	24	39	38	34
Completed primary	2	10	30	15
Lower secondary	1	1	6	3
Middle secondary and above	0	1	5	2
Employment before marriage				
Agriculture unpaid	29	22	19	23
Agriculture paid	8	10	11	10
Nonagriculture unpaid	2	2	1	2
Nonagriculture paid	3	5	11	7
Did not work	58	60	58	59
Age at first marriage				
Less than 15	54	29	13	30
15–19	43	58	58	54
20–24	3	11	23	13
25 and older	0	2	6	3
N	*(810)*	*(1,028)*	*(1,031)*	*(2,869)*
Chinese				
Total	100	100	100	100
Level of education				
None	57	45	21	36
Some primary	31	40	40	38
Completed primary	7	8	22	15
Lower secondary	2	4	8	5
Middle secondary and above	2	3	8	5
Employment before marriage				
Agriculture unpaid	11	8	6	8
Agriculture paid	15	20	22	20
Nonagriculture unpaid	2	2	2	2
Nonagriculture paid	11	31	43	33
Did not work	60	39	27	37
Age at first marriage				
Less than 15	9	2	1	3
15–19	71	55	29	46
20–24	20	36	50	39
25 and older	0	7	20	12
N	*(322)*	*(522)*	*(786)*	*(1,640)*

…/

TABLE 2 (continued)

	Marriage cohort (percent)			
	1940s	1950s	1960s	Total
Indian				
Total	100	100	100	100
Level of education				
None	55	31	19	32
Some primary	31	44	33	36
Completed primary	6	11	27	16
Lower secondary	4	11	8	8
Middle secondary and above	3	5	12	7
Employment before marriage				
Agriculture unpaid	3	2	1	2
Agriculture paid	32	30	33	32
Nonagriculture unpaid	1	—	—	0
Nonagriculture paid	2	8	15	9
Did not work	63	60	51	57
Age at first marriage				
Less than 15	43	25	15	25
15–19	49	49	61	54
20–24	8	19	20	17
25 and older	—	7	5	5
N	*(118)*	*(177)*	*(193)*	*(488)*

— No observations
NOTE: This analysis excludes 31 respondents whose ethnicity was reported as "others."
SOURCE: 1974 Malaysian Family and Fertility Survey.

tural paid employment) before marriage rose from 11 to over 40 percent, but there was much less change in premarital work experience for Indian and Malay brides over these three decades. In the 1940s and 1950s, the overwhelming majority of Malaysian women, regardless of ethnicity, married before age 20. In the 1960s, female age at marriage rose, perhaps as increasing numbers of women attended secondary school.

Trends in and correlates of divorce

Table 3 shows the life table estimate of the probability of a marriage ending in divorce or separation within the first five years of marriage for three marriage cohorts (the 1940s, 1950s, and 1960s) reported by women in each country; Table 4 presents the same information for the major ethnic groups in Malaysia. The estimates of divorce are also presented for each time period by region, language/ethnicity group, education, premarital work experience, and age at marriage (the number of observations for each cell in Tables 3 and 4 is presented in Appendix Tables 1 and 2).

TABLE 3 Life table estimates of the probability $(1-(l_5/l_0))$ of marital disruption during the first five years of marriage among women in Indonesia, Malaysia, and Thailand by marriage cohort

	Marriage cohort (probability)			
	1940s	1950s	1960s	Total
Indonesia				
Total	0.26	0.24	0.21	0.23
Current region of residence				
Jakarta City	0.20	0.21	0.17	0.19
Yogyakarta City	0.22	0.22	0.20	0.21
West Java	0.36	0.33	0.31	0.33
Central/East Java	0.26	0.26	0.24	0.25
Bali	0.08	0.04	0.04	0.04
Language spoken at home				
Indonesian	0.14	0.16	0.15	0.15
Regional language	0.27	0.25	0.22	0.24
Level of education				
None	0.26	0.26	0.22	0.25
Some primary	0.29	0.27	0.28	0.28
Completed primary	0.15	0.16	0.19	0.18
Lower secondary	—	0.14	0.09	0.11
Middle secondary and above	—	0.04	0.04	0.04
Employment before marriage				
Agriculture unpaid	0.25	0.27	0.24	0.25
Agriculture paid	0.25	0.27	0.29	0.28
Nonagriculture unpaid	0.19	0.25	0.23	0.23
Nonagriculture paid	0.18	0.19	0.15	0.17
Did not work	0.29	0.25	0.21	0.24
Age at first marriage				
Less than 15	0.32	0.34	0.33	0.33
15–19	0.20	0.21	0.19	0.20
20–24	0.03	0.10	0.10	0.10
25 and older	—	0.08	0.10	0.09
Malaysia				
Total	0.16	0.10	0.07	0.10
Current region of residence				
Rural area	0.19	0.13	0.09	0.13
Small town	0.08	0.05	0.06	0.06
Metropolitan	0.04	0.04	0.02	0.03
Ethnic group				
Malay	0.24	0.15	0.12	0.17
Chinese	0.01	0.01	0.01	0.01
Indian	0.04	0.04	0.04	0.04
Level of education				
None	0.18	0.13	0.11	0.15
Some primary	0.11	0.09	0.08	0.09
Completed primary	0.00	0.07	0.05	0.05
Lower secondary	—	0.02	0.05	0.06
Middle secondary and above	—	0.03	0.01	0.02

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TABLE 3 (continued)

	Marriage cohort (probability)			
	1940s	1950s	1960s	Total
Malaysia (continued)				
Employment before marriage				
Agriculture unpaid	0.24	0.12	0.11	0.16
Agriculture paid	0.12	0.12	0.06	0.10
Nonagriculture unpaid	—	0.09	0.14	0.11
Nonagriculture paid	0.07	0.03	0.04	0.04
Did not work	0.14	0.11	0.08	0.11
Age at first marriage				
Less than 15	0.26	0.22	0.19	0.23
15–19	0.09	0.08	0.08	0.08
20–24	0.04	0.04	0.04	0.04
25 and older	—	0.04	0.02	0.03
Thailand				
Total	0.09	0.09	0.08	0.09
Current region of residence				
North	0.08	0.13	0.09	0.10
Northeast	0.09	0.10	0.10	0.10
South	0.21	0.15	0.09	0.14
Central	0.05	0.03	0.08	0.05
Bangkok	0.04	0.05	0.04	0.05
Ethnic group				
Thai Buddhist	0.08	0.09	0.08	0.08
Thai Chinese	—	0.00	0.05	0.02
Thai Muslim	0.32	0.33	0.11	0.23
Level of education				
No formal education	0.14	0.13	0.11	0.13
Some primary (1–4 yrs)	0.07	0.08	0.08	0.08
Beyond compulsory level (5+yrs)	—	0.07	0.04	0.05
Employment before marriage				
Agriculture unpaid	0.09	0.10	0.08	0.09
Agriculture paid	0.10	0.09	0.09	0.09
Nonagriculture unpaid	—	0.08	0.06	0.08
Nonagriculture paid	0.09	0.06	0.07	0.06
Did not work	0.08	0.12	0.15	0.12
Age at first marriage				
Less than 20	0.11	0.12	0.11	0.11
20–24	0.02	0.05	0.04	0.04
25 and older	—	0.06	0.06	0.06

— Fewer than 25 observations
NOTE: For Malaysia, life table estimates for 31 respondents for whom the ethnic group identity was “others” are not reported.
SOURCES: See Figure 2.

TABLE 4 Life table estimates of the probability (1–(l_5/l_0)) of marital disruption during the first five years of marriage among women in three ethnic groups in Malaysia by marriage cohort

	Marriage cohort (probability)			
	1940s	1950s	1960s	Total
Malay				
Total	0.24	0.15	0.12	0.17
Current region of residence				
Rural area	0.25	0.17	0.13	0.18
Small town	0.17	0.09	0.13	0.13
Metropolitan	0.10	0.09	0.06	0.08
Level of education				
None	0.26	0.19	0.18	0.22
Some primary	0.18	0.13	0.15	0.15
Completed primary	—	0.10	0.08	0.08
Lower secondary	—	—	0.07	0.07
Middle secondary and above	—	—	0.00	0.02
Employment before marriage				
Agriculture unpaid	0.29	0.15	0.14	0.19
Agriculture paid	0.28	0.24	0.17	0.22
Nonagriculture unpaid	—	—	—	0.14
Nonagriculture paid	0.12	0.13	0.12	0.12
Did not work	0.21	0.15	0.11	0.15
Age at first marriage				
Less than 15	0.30	0.25	0.22	0.27
15–19	0.16	0.11	0.12	0.13
20–24	—	0.13	0.09	0.10
25 and older	—	—	0.09	0.09
Chinese				
Total	0.01	0.01	0.01	0.01
Current region of residence				
Rural area	0.00	0.01	0.00	0.01
Small town	0.00	0.01	0.02	0.01
Metropolitan	0.02	0.02	0.00	0.01
Level of education				
None	0.00	0.02	0.01	0.01
Some primary	0.01	0.01	0.01	0.01
Completed primary	—	0.00	0.00	0.00
Lower secondary	—	—	0.03	0.03
Middle secondary and above	—	—	0.00	0.00
Employment before marriage				
Agriculture unpaid	0.00	0.02	0.00	0.01
Agriculture paid	0.00	0.03	0.01	0.01
Nonagriculture unpaid	—	—	—	0.06
Nonagriculture paid	0.05	0.00	0.00	0.01
Did not work	0.00	0.01	0.01	0.01

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TABLE 4 (continued)

	Marriage cohort (probability)			
	1940s	**1950s**	**1960s**	**Total**
Chinese (continued)				
Age at first marriage				
Less than 15	0.00	—	—	0.00
15–19	0.01	0.02	0.00	0.01
20–24	0.00	0.00	0.01	0.01
25 and older	—	0.00	0.00	0.00
Indian				
Total	0.04	0.04	0.04	0.04
Current region of residence				
Rural area	0.01	0.05	0.05	0.04
Small town	—	—	0.04	0.09
Metropolitan	0.03	0.00	0.00	0.01
Level of education				
None	0.02	0.04	0.14	0.05
Some primary	0.05	0.04	0.02	0.03
Completed primary	—	—	0.00	0.03
Lower secondary	—	—	—	0.08
Middle secondary and above	—	—	—	0.00
Employment before marriage				
Agriculture unpaid	—	—	—	—
Agriculture paid	0.00	0.08	0.05	0.05
Nonagriculture unpaid	—	—	—	—
Nonagriculture paid	—	—	0.03	0.02
Did not work	0.07	0.03	0.03	0.04
Age at first marriage				
Less than 15	0.10	0.09	0.04	0.08
15–19	0.00	0.02	0.03	0.02
20–24	—	0.00	0.05	0.02
25 and older	—	—	—	—

— Fewer than 25 observations
NOTE: Thirty-one respondents who considered their ethnic group identity as "other" than these three groups were not included in this analysis.
SOURCE: 1974 Malaysian Family and Fertility Survey.

The trends reported in Tables 3 and 4 parallel those reported in Figure 3, with divorce rates that are high and falling in Indonesia and Malaysia, but moderate and stable in Thailand. More than one in five Indonesian marriages ended in divorce within five years, while less than one in 10 Thai marriages were disrupted. The overall Malaysian divorce rate is comprised of two completely different ethnic patterns and trends. The Malay divorce rate of 24 percent in the 1940s declined to only 12 percent of marriages in the 1960s. The divorce rates of Chinese and Indians in Malaysia were ex-

tremely low (1 and 4 percent, respectively) and unchanging. There is a striking parallel in the ethnic variations in divorce in Malaysia and Thailand. The Thai Muslim population, which lives predominately in southern Thailand near the border with Malaysia, has a divorce rate with a level and trend comparable to the Malaysian Malay population. The estimate of divorce among self-identified Chinese Thais[6] is extraordinarily low—close to that of Chinese in Malaysia.

The cultural roots of communities that tolerate medium to high levels of divorce are also evidenced in the regional and linguistic groups in Indonesia.[7] The incidence of divorce is highest in West Java, where about a third of all first marriages end in a divorce within five years. The divorce rate is only slightly lower in Central and East Java, where about a quarter of all marriages are disrupted in the same time period.[8] The Indonesian island of Bali, where Hinduism is the predominant religion, has a very low divorce rate—more comparable to the non-Malay population in Malaysia and the Thai Chinese population than to the other groups in Indonesia. The incidence of divorce in the capital city of Jakarta and among Indonesian speakers is intermediate, with a rate in the medium to high teens. The Indonesian Chinese population is over-represented in both of these categories, though probably as a relatively small minority (only 3 percent of the Indonesian population is of Chinese heritage).

In Malaysia, the ethnic Malay community has a much higher divorce rate than the Chinese and Indian communities. In Thailand, a similar division occurs, with Muslim Thais having a high divorce rate and Chinese Thais having very low divorce rates. Buddhist Thais (who represent more than 90 percent of the population of Thailand) have an intermediate level of divorce, much lower than the Muslim populations in either Indonesia or Malaysia, but higher than the Chinese in Thailand or Malaysia and the Balinese in Indonesia.

In addition to the strong association between cultural groups and the propensity to divorce, Tables 3 and 4 also suggest an association between "traditional" social roles and divorce. This is most clear for rural/urban location and educational attainment. Just as Jakarta had a lower level of divorce than the rest of Java and Bali, Bangkok (and Central Thailand) has the lowest level of divorce in Thailand. There is also a strong association between rural residence and a higher prevalence of divorce in Malaysia. The pattern in Malaysia is not simply a manifestation of ethnic composition across rural/urban categories, because the relationship holds within the Malaysian Malay population. Divorce is very low among the Malaysian Chinese and Malaysian Indian populations across all social and geographical categories.

In all three countries, lower educational attainment (especially among women with no education) is associated with higher divorce. Within Malaysia, this is most evident for the Malay population. For those with middle

secondary schooling in Indonesia and Malaysia, and some secondary schooling in Thailand (admittedly very small fractions of the population have secondary schooling), divorce drops to very low levels. These patterns suggest that women in modern social roles are less tolerant of divorce than are women in more traditional statuses.

The relationship between premarital work experience and divorce is more variable across societies. In Indonesia and Malaysia, women who worked in traditional sectors, such as agricultural and nonagricultural unpaid jobs (probably family businesses) before marriage had a higher incidence of divorce than women who worked in the modern sector (nonagricultural paid work). This pattern, however, is not found in Thailand, where women who did not work prior to marriage had a higher divorce rate than women who did. In Indonesia, women who did not work had divorce rates comparable to women working in the traditional sector. Within the Malaysian Malay population, the divorce rate among women not working is closer to the lower level of divorce of women working in the modern sector.

These societal differences may be partially due to measurement problems or to the different proportions of women who worked prior to marriage. In all three societies, very few young women worked in the modern sector before marriage. In traditional Southeast Asian societies, most single women probably helped in the household and in the family economy instead. The Thai survey seems to have captured this pattern, with about 60 percent of Thai women reporting having worked in unpaid family agriculture prior to marriage. Perhaps the less than 10 percent of Thai women who did not work prior to marriage are different on other characteristics that are correlated with divorce. On the other hand, more than half of Indonesian and Malaysian Malay brides did not work before marriage. This may be because they married at a very early age or did not consider their work around the house to be real "employment." In these settings, it is more difficult to interpret premarital employment as an indicator of social position or as a socializing experience leading to greater independence.

A clear and consistent inverse relationship between age at marriage and the likelihood of divorce is found in all three societies. Women who married before age 15 (only measured in Malaysia and Indonesia, because very few Thai women married before 15) had the highest propensity of divorce. Women who married in their late teens were considerably more likely to divorce than women who married in their early 20s.

Multivariate analysis of divorce within populations

Table 5 presents proportional hazards models of divorce separately for four populations: Indonesian, Thai, Malaysian Malay, and Malaysian non-Malay.

TABLE 5 Proportional hazards estimates of the odds of marital disruption among women married prior to 1970 in Indonesia, Malaysia, and Thailand by marriage cohort and social and cultural characteristics

	Indonesia				Thailand		
Variable	**Model 1**	**Model 2**	***N***	**Variable**	**Model 1**	**Model 2**	***N***
Marriage cohort				Marriage cohort			
1940s and before	1.000	1.000	*1,339*	1940s and before	1.000	1.000	*476*
1950s	0.891*	1.071	*2,559*	1950s	1.015	1.177	*1,103*
1960s	0.734***	1.027	*2,820*	1960s	0.908	1.063	*1,349*
Current region of residence				Current region of residence			
West Java		1.000	*1,334*	North		1.000	*705*
Jakarta City		0.845*	*1,005*	Northeast		1.148	*1,035*
Yogyakarta City		0.655***	*690*	South		1.007	*315*
Central/East Java		0.727***	*3,065*	Central		0.787	*630*
Bali		0.162***	*624*	Bangkok		0.765	*243*
Language spoken at home				Ethnic group			
Regional language		1.000	*6,075*	Thai Buddhist		1.000	*2,702*
Indonesian		0.691***	*643*	Thai Chinese		0.298*	*93*
				Thai Muslim		1.872**	*133*
Level of education				Level of education			
None		1.000	*4,380*	No formal education		1.000	*614*
Some primary		1.032	*1,153*	Some primary education		0.716**	*2,160*
Completed primary		0.729***	*668*	Beyond compulsory level		0.696	*154*
Lower secondary		0.601***	*310*				
Middle secondary and above		0.287***	*207*				
Employment before marriage				Employment before marriage			
Agriculture unpaid		1.000	*1,036*	Agriculture unpaid		1.000	*1,723*
Agriculture paid		1.075	*673*	Agriculture paid		1.176	*398*
Nonagriculture unpaid		0.927	*215*	Nonagriculture unpaid		1.751*	*123*
Nonagriculture paid		0.998	*1,211*	Nonagriculture paid		1.279	*434*
Did not work		0.999	*3,583*	Did not work		1.664**	*250*
Age at first marriage				Age at first marriage			
Less than 15		1.000	*2,448*	Less than 20		1.000	*1,852*
15–19		0.663***	*3,265*	20–24		0.585***	*901*
20–24		0.423***	*829*	25 and older		0.709	*175*
25 and older		0.542**	*175*				
–2 log likelihood	35633.188	35087.263	—	–2 log likelihood	6210.434	6132.612	—
Degrees of freedom	2	18	—	Degrees of freedom	2	16	—
N	*6,718*	*6,718*	*6,718*	*N*	*2,928*	*2,928*	*2,928*

TABLE 5 (continued)

	Malaysian Malay			Malaysian Non-Malay		
Variables	**Model 1**	**Model 2**	***N***	**Model 1**	**Model 2**	***N***
Marriage cohort						
1940s and before	1.000	1.000	*810*	1.000	1.000	*456*
1950s	0.596***	0.779**	*1,028*	0.999	1.231	*708*
1960s	0.511***	0.926	*1,031*	0.726	1.085	*995*
Current region of residence						
Rural area		1.000	*2,422*		1.000	*1,047*
Small town		0.917	*279*		1.661	*487*
Metropolitan		0.802	*168*		1.249	*625*
Level of education						
None		1.000	*1,321*		1.000	*756*
Some primary		0.692***	*985*		0.947	*813*
Completed primary		0.432***	*430*		0.599	*321*
Lower secondary		0.349***	*76*		1.956	*129*
Middle secondary and above		0.269*	*57*		1.143	*140*
Employment before marriage						
Agriculture unpaid		1.000	*656*		1.000	*138*
Agriculture paid		1.174	*280*		1.493	*482*
Nonagriculture unpaid		0.834	*49*		2.023	*36*
Nonagriculture paid		1.443*	*197*		1.453	*604*
Did not work		0.900	*1,687*		1.189	*899*
Age at first marriage						
Less than 15		1.000	*872*		1.000	*170*
15–19		0.556***	*1,543*		0.374**	*1,027*
20–24		0.527***	*375*		0.174***	*735*
25 and older		0.373***	*79*		0.247**	*227*
–2 log likelihood	9804.208	9691.860	—	1212.900	1185.947	—
Degrees of freedom	2	15	—	2	15	—
N	*2,869*	*2,869*	*2,869*	*2,159*	*2159*	*2,159*

*p<.05, **p<.01, ***p<.001
SOURCES: See Figure 2.

To provide comparability with our earlier descriptive analysis, we limit the sample for the multivariate analysis to women married before 1970 (the three marital cohorts are identified as the 1940s and before, 1950s, and 1960s). The first model for each population shows the trend in divorce based on the single independent variable of marriage cohort; Model 2 adds measures of cultural characteristics—region and language/ethnicity, socioeconomic status (education and premarital work experience), and age at first marriage—as covariates. The first question addressed in the multivariate analysis is whether the trend toward lower divorce is an outcome of changes in population characteristics. The second question is whether the bivariate relationships observed between cultural, socioeconomic, and demographic characteristics and marital disruption seen in Tables 3 and 4 are modified with the introduction of additional covariates in Table 5.

The coefficients in Table 5 are expressed as the ratio of the odds of divorce to nondivorce for each category relative to the comparable odds of the reference category for each variable. For example, the reference category of the 1940s marriage cohort in Model 1 for Indonesia has a standard odds ratio of 1.0 (the odds for the 1940s divided by itself). The odds ratio for the 1950s is .891, or about 11 percent less than the 1940s level. The decline continued with the 1960s marriage cohort, which had an odds ratio about 26 percent less than the 1940s.

The observed trend in divorce in Indonesia, as measured by marriage cohort in Model 1, is statistically significant. The multivariate analysis, reported in Model 2, shows that the declining trend of divorce in Indonesia can be explained by changes in the characteristics of the population, with the most important factor being the rise in the educational attainment of Indonesian women (based on additional analyses not reported here).

Region of residence and ethnicity are overlapping categories in Indonesia. West Java, predominately the home of the Sundanese-speaking community, has the highest level of divorce in the country. Bali, whose population speaks its own language (Balinese) and follows Hinduism rather than Islam, has the lowest incidence of divorce. Other categories are intermediate. The effect of residence in Jakarta remains significant, though its impact is reduced, holding constant the proportions in the ethno-linguistic communities and by educational attainment. The true effect of urban residence is perhaps most clearly shown with the contrast between the coefficients for Yogyakarta City and Central and East Java. Most of the inhabitants of Yogyakarta and the broader region (Central and East Java) belong to the same ethnic community (Javanese).

Education has a very strong and significant negative relationship with divorce in Indonesia. The effect of education on lowering the probability of divorce is direct and not simply the result of the fact that women with more education marry later (highly educated women do marry at older ages, but

this relationship does not explain the effect of schooling on divorce) or have different premarital work experiences. About one in five Indonesian women work in nontraditional economic roles (nonagricultural paid employment) prior to marriage, but there is no association between work experience and marital disruption.

Age at marriage has a strong negative net impact on the likelihood of divorce in Indonesia, holding constant region, language spoken, education, and premarital work experience. One possible interpretation of this finding is that very young brides, especially those less than age 15, may have less compatible marriages than older brides in their late teens and 20s who have more say in the selection of their marriage partner.

The multivariate analysis for Thailand shares some features with the Indonesian patterns, but presents significant differences as well. In contrast to Indonesia and Malaysia, there has been no trend in the divorce rate in Thailand. The rate of about 10 percent of marriages ending in divorce within five years is considerably below the Indonesian and Malaysian levels, although it is still relatively high for a traditional society.

The multivariate results show that the regional variation in divorce in Thailand (observed in Table 3) is largely a function of ethnic composition. With ethnicity included as a covariate, the higher level of divorce in southern Thailand is not statistically significant. Nor are the lower probabilities of divorce in Bangkok and Central Thailand (reported in Table 3) statistically significant in Table 5 when education and other covariates are included. In contrast, there are very strong effects of ethnicity, with Chinese Thais having much lower odds and Thai Muslims much higher odds of divorce than the majority Thai Buddhist community. The high level of divorce among Muslims and the low level of divorce among Chinese are only modestly influenced by including education and age at marriage as covariates in the model. The Chinese finding must be considered tentative because there are fewer than 100 Thai Chinese in the Thailand WFS sample.

As in Indonesia, there are strong net effects of education and age at marriage on the likelihood of divorce in Thailand. Until recently, compulsory primary education in Thailand consisted of only four years of schooling, and very few persons went beyond that level. The effect for secondary schooling is in the expected direction, but the coefficient is not statistically significant. The effects of premarital work experience are not consistent with any plausible hypothesis. The very small numbers of women who work in nonagricultural unpaid employment (family businesses) or who did not work prior to marriage have higher divorce rates than the majority of Thai women who work in family agriculture before marriage. The higher level of divorce of nonworking women is not explained by any of the covariates.

In contrast to Indonesia and Malaysia, there are few marriages of women before age 15 in Thailand. Marrying above age 20 has a very strong and sig-

nificant impact on lowering the odds of divorce relative to those who marry earlier. The coefficient for Thai women who marry at age 25 or later is in the expected direction, but smaller in absolute size and not statistically significant. The impact of age at marriage on the probability of divorce is not linear, but reflects a sharp gradient between the teenage years and the early 20s.

More complex patterns are revealed in the multivariate models of divorce for Malaysian Malays, but a simple picture emerges for the predominately Chinese and Indian non-Malay communities. For non-Malays, only age at marriage is a significant predictor of divorce. Very young brides, those below age 15, are highly prone to divorce. Women who marry in their 20s are less likely to divorce compared to those who marry in their late teens.

Malaysian Malays have experienced a dramatic reduction in divorce from the 1940s to the 1960s. This trend has been largely driven by rising educational levels and especially by rising age at marriage. The level of divorce among marriages contracted in the 1960s is not significantly different from that of the 1940s after all variables are held constant. This means that "modernization," as measured by rising educational levels and later age at marriage, accounts for the observed decline in the incidence of divorce. One might argue that these changing characteristics, such as rising education and age at marriage, are consequences rather than indicators of modernization.

The lower level of divorce among Malays living in metropolitan areas (as observed in Table 4) is largely explained by the characteristics of the people who live there. Education has a powerful and striking effect on lowering the likelihood of divorce; the impact of schooling on divorce is direct and not mediated by a later age at marriage. Premarital work experience has no systematic net impact on the probability of divorce. Marrying above the age of 15 greatly lowers the chances of divorce among Malaysian Malays. Only small differences are found in the divorce rate for persons who marry in their late teens relative to women who marry in their 20s.

Multivariate analysis of divorce across populations

Our final analysis pools data for the three countries to determine whether the country and ethnic differences can be explained as a consequence of the socioeconomic variables measured here. Table 6 presents two series of models of the combined WFS data for Indonesia, Malaysia, and Thailand. The first series includes country as an independent variable, and the second series uses ethnic groups as the major sociocultural independent variable.

For both series, the first model includes the three marriage cohort categories, representing temporal change, and dummy variables for the three countries (or the major ethnic groups). The second model adds educational attainment, premarital work experience, and age at first marriage as covariates.

TABLE 6 Proportional hazards estimates of the odds of marital disruption among women married prior to 1970 in a pooled sample from the Indonesia, Malaysia, and Thailand surveys by marriage cohort and social and cultural characteristics

	By country		By ethnic group		
Variable	**Model 1**	**Model 2**	**Model 1**	**Model 2**	***N***
Marriage cohort					
1940s and before	1.000	1.000	1.000	1.000	*3,081*
1950s	0.812***	0.994	0.852***	0.998	*5,398*
1960s	0.663***	0.941	0.732***	0.972	*6,195*
Country					
Indonesia	1.000	1.000	—	—	*6,718*
Malaysia	0.409***	0.499***	—	—	*5,028*
Thailand	0.400***	0.579***	—	—	*2,928*
Ethnic group					
Javanese		—	1.000	1.000	*3,780*
Indonesian		—	0.692***	0.767**	*643*
Sundanese		—	1.379***	1.280***	*1,194*
Madurese		—	0.820	0.715**	*274*
Balinese		—	0.174***	0.190***	*609*
Indonesian other		—	0.531***	0.577***	*218*
Malaysian Malay		—	0.614***	0.666***	*2,869*
Malaysian Chinese		—	0.068***	0.096***	*1,640*
Malaysian Indian		—	0.164***	0.186***	*488*
Thai Buddhist		—	0.356***	0.496***	*2,702*
Thai Chinese		—	0.108***	0.162***	*93*
Thai Muslim		—	0.864	0.917	*133*
Level of education					
None		1.000		1.000	*7,071*
Some primary		0.833***		0.810***	*6,530*
Post primary		0.598***		0.544***	*1,073*
Employment before marriage					
Agriculture unpaid		1.000		1.000	*3,553*
Agriculture paid		1.020		1.136*	*1,833*
Nonagriculture unpaid		0.948		0.991	*423*
Nonagriculture paid		0.913		1.047	*2,466*
Did not work		0.988		1.022	*6,419*
Age at first marriage					
Less than 15		1.000		1.000	*3,679*
15–19		0.550***		0.623***	*7,498*
20–24		0.304***		0.409***	*2,840*
25 and older		0.324***		0.465***	*657*
–2 log likelihood	59364.516	58821.369	58613.632	58272.444	—
Degrees of freedom	4	13	14	23	—
N	*14,674*	*14,674*	*14,674*	*14,674*	*14,674*

*p<.05, **p<.01, ***p<.001
SOURCES: See Figure 2.

Although we find similar effects of the covariates on divorce (as evident in Table 5), the effects of the covariates in Table 6 are influenced by the differential sample sizes of the three surveys. This means that findings in the combined analysis are closer to the patterns in Indonesia and Malaysia (than to those in Thailand) because of their larger survey samples.

The downward trend in divorce in the baseline models in Table 6 (in both series) is a function of the larger sample sizes of the Indonesian and Malaysian surveys (this trend is not evident for Thailand). When all covariates are included in the second model in each series, the period coefficients are no longer statistically significant. This finding means that the covariates in Model 2 (especially the trend away from very young ages at marriage) can account for the observed decline in divorce in Southeast Asia from the 1940s to the 1960s.

The country effects in the first series show that Malaysia and Thailand have much lower levels of marital disruption than Indonesia and that the between-country differences cannot be explained by national differences in socioeconomic composition or age at marriage. The ethnic effects in the second series reveal a more complex pattern of within- and between-country ethnic variations. The Javanese population in Indonesia is set as the reference for these comparisons—first, because the Javanese are the largest single ethnic community in Southeast Asia and second, because the Javanese population has a very high divorce rate. Although the Sundanese population has a higher divorce rate than the Javanese community, this difference is relatively minor compared to the much lower incidence of divorce among the Balinese, Malaysian Chinese, Malaysian Indians, and Thai Chinese. In these populations, divorce is very rare.

At the relatively high level of divorce among the Javanese (below the Sundanese level) are the Indonesian Madurese (primarily on the island of Madura) and the Thai Muslims. Next are the remaining Indonesian-speaking population and the Malaysian Malay community. At an intermediate level, well below the high-divorce populations in Malaysia and Indonesia but much higher than the low-divorce populations, is the Thai Buddhist population. These ethnic differentials narrow only slightly with the introduction of the covariates. In other words, the incidence of divorce across these cultural groups would not disappear if they shared similar socioeconomic characteristics and age at marriage patterns.

There are no systematic effects of premarital employment on divorce, but schooling and age at marriage have a strong direct impact on reducing divorce that is independent of the national or cultural groupings of the pooled data.

Discussion

Western social scientists have the tendency to assume that studies of their own societies represent universal patterns. Some general sociological over-

views of theories and research on divorce do not even mention traditional high-divorce societies (Raschke 1987; Huber and Spitze 1988). The results presented here, building on earlier work by Goode (1993) and Jones (1994, 1997), challenge the conventional sociological wisdom that divorce is low in traditional societies and that the trend in divorce rates is invariably a one way street from low to high levels.

We have examined trends and correlates in the incidence of divorce among first marriages in Indonesia, Malaysia, and Thailand using retrospective marital histories collected as part of the World Fertility Survey program in the mid-1970s. In all three countries, levels of divorce were considerably higher than those expected to prevail in traditional societies prior to modernization. On the Indonesian island of Java, over one-fifth of marriages were disrupted by divorce within five years; in Thailand, the comparable figure was about 10 percent. The level of divorce for the Malay population in Malaysia was intermediate between the Indonesian and Thai levels. Across the three marriage cohorts represented here, the divorce rate was falling in Malaysia and Indonesia, and stable in Thailand.

Two additional findings emerge from our analysis. The first is that, at the individual level, divorce is correlated with lower socioeconomic status and more traditional demographic characteristics. Rural residence, low levels of education, and a very young age at marriage are associated with higher levels of divorce. Indeed, changes in these characteristics largely account for the decline of divorce in Malaysia and Indonesia.

The second finding is the persistence of sociocultural, ethnic, and religious group differentials in levels of divorce. There are three basic groups. The first, the Muslim populations of Indonesia (Sundanese, Javanese, and Madurese), Malaysia (Malay), and Thailand, all have very high divorce rates. The second group is the Thai Buddhist population with a moderate level of divorce, and the third group is the very-low-divorce populations of Balinese, Malaysian Chinese and Indians, and Thai Chinese. There are variations in the level of divorce within these populations, especially the first group, but these are less significant than the distinctions between the populations. These cultural differences appear to be rooted in the social fabric of these populations, in the sense that they are not measurably attenuated when educational levels, geographic location, premarital work experience, and age at marriage are included as covariates in multivariate models.

One of the cultural features that distinguish the ethnic groups with high levels of traditional divorce from those with low divorce is kinship organization. Traditional family structures in Southeast Asian societies are almost universally bilateral, in contrast to the custom of patrilineal descent among East and South Asian peoples (and their descendants who are resident in Indonesia, Malaysia, and Thailand). Although not strictly matrilocal, newly married Southeast Asian couples are open to matrilocal residence (Chamratrithirong 1984; Keyes 1995; Tsubouchi 1976). Residence with the

bride's family is most common in Thailand, especially among rural peoples in the north and northeast (Keyes 1995: 133). This difference in family structure may explain the anomalously low divorce among the Balinese population in Indonesia, who appear generally to follow a patrilocal residence pattern after marriage (Geertz and Geertz 1975: 161). Of course, many marriage partners come from the same rural village, so they are geographically proximate to both the bride's and groom's families.

What cultural factors might account for the much higher rate of divorce in traditional Indonesian and Malay cultures relative to the moderately high levels in traditional Thailand? It appears that earlier age at marriage is a partial explanation, but most of the cultural differences remain even after we include age at marriage as a covariate. Little stigma appears to be attached to divorce in Malay/Indonesian culture, but premarital pregnancy is seen as a major threat to family honor—a characteristic feature of Islam in Indonesia, Malaysia, and in other cultural contexts. This fear of premarital pregnancy may have been a major force behind the pressure for early marriage—by age 15 or even younger. An adaptation to early marriage in Malay/Indonesian culture is the safety valve of relatively easy divorce, including the unusual phenomenon of divorces following unconsummated marriages. This cultural pattern, although it is associated with the failure of a marriage, has several positive outcomes for the family of the bride and for the bride herself. The elaborate wedding ceremony has affirmed the social status of the family, and the young divorcée is now considered an adult with greater independence than before, including having a greater role in the choice of her next marriage partner (Geertz 1961).

These findings require reconsideration of the dominant theoretical perspective that modernization leads to a rise in divorce. The conventional theory does not assert that individuals in modern societies are less happy or less satisfied with marital partners than was true in past times, but rather that modernity brings more opportunities and choices. Although this argument is convincing, it makes the additional assumption that married couples in traditional societies were bound together by strong economic and ideological demands. These conditions are certainly more variable across societies than the conventional theory suggests.

Families are the basic economic unit in all premodern societies, but this does not necessarily mean the conjugal family. In traditional Southeast Asian societies with bilateral kinship structures, multigenerational families often provide economic security for young married couples, and this security remains when a marriage is dissolved through death or divorce. Young married couples often live with or near the wife's family, and rural women are generally economically active in planting and harvesting rice—the primary agricultural activity in the region. These conditions, and the potential economic support from a wife's natal family, provide an institutional envi-

ronment in which wives do not need to tolerate bad marriages (or incompatible husbands) simply because they fear becoming destitute if the marriage is dissolved.

The traditional pattern of high divorce in Southeast Asia began to erode in the 1960s with the spread of education and later marriage (Heaton et al. 2001). These characteristics were associated with a greater individual choice of marriage partners and perhaps a greater degree of marital compatibility. And modernity appears to have created a stigma of divorce, which was traditionally associated with the elements of social and economic "backwardness" in the region. Yet as Western cultural values, including an emphasis on individualism, have deepened their hold on popular imagination around the world, the future of marriage and the family in Southeast Asia is uncertain. Perhaps the decline of traditional divorce in the 1960s and 1970s will be followed by a rise in "modern divorce." If this happens, there may not be a readily available social safety net to assist divorced women and their children.

APPENDIX TABLE 1 Number of married women exposed to the risk of marital disruption during the first five years of marriage in Indonesia, Malaysia, and Thailand by marriage cohort

	Marriage cohort (N)			
	1940s	**1950s**	**1960s**	**Total**
Indonesia				
Total	1,339	2,559	2,820	6,718
Current region of residence				
Jakarta City	157	382	466	1,005
Yogyakarta City	134	297	259	690
West Java	267	504	563	1,334
Central/East Java	742	1,158	1,165	3,065
Bali	39	218	367	624
Language spoken at home				
Indonesian	110	241	292	643
Regional language	1,229	2,318	2,528	6,075
Level of education				
None	1,122	1,857	1,401	4,380
Some primary	138	400	615	1,153
Completed primary	54	161	453	668
Lower secondary	24	91	195	310
Middle secondary and above	1	50	156	207
Employment before marriage				
Agriculture unpaid	236	395	405	1,036
Agriculture paid	142	266	265	673
Nonagriculture unpaid	48	84	83	215
Nonagriculture paid	213	483	515	1,211
Did not work	700	1,331	1,552	3,583
Age at first marriage				
Less than 15	743	929	776	2,448
15–19	560	1,252	1,453	3,265
20–24	36	327	466	829
25 and older	0	51	125	176
Malaysia				
Total	1,266	1,736	2,026	5,028
Current region of residence				
Rural area	915	1,183	1,371	3,469
Small town	178	271	317	766
Metropolitan	173	282	338	793
Ethnic group				
Malay	810	1,028	1,031	2,869
Chinese	332	522	786	1,640
Indian	118	177	193	488
Level of education				
None	852	793	432	2,077
Some primary	334	691	773	1,798
Completed primary	45	166	540	751
Lower secondary	20	52	133	205
Middle secondary and above	15	34	148	197

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APPENDIX TABLE 1 (continued)

	Marriage cohort (N)			
	1940s	1950s	1960s	Total
Malaysia (continued)				
Employment before marriage				
Agriculture unpaid	275	273	246	794
Agriculture paid	155	262	345	762
Nonagriculture unpaid	23	34	28	85
Nonagriculture paid	67	237	497	801
Did not work	746	930	910	2,586
Age at first marriage				
Less than 15	517	353	172	1,042
15–19	645	978	947	2,570
20–24	102	334	674	1,110
25 and older	2	71	233	306
Thailand				
Total	476	1,103	1,349	2,928
Current region of residence				
North	118	288	299	705
Northeast	162	362	511	1,035
South	66	112	137	315
Central	103	249	278	630
Bangkok	27	92	124	243
Ethnic group				
Thai Buddhist	431	1,024	1,247	2,702
Thai Chinese	14	39	40	93
Thai Muslim	31	40	62	133
Level of education				
No formal education	162	268	184	614
Some primary (1–4 yrs)	303	794	1,063	2,160
Beyond compulsory level (5+yrs)	11	41	102	154
Employment before marriage				
Agriculture unpaid	297	659	767	1,723
Agriculture paid	67	149	182	398
Nonagriculture unpaid	20	49	54	123
Nonagriculture paid	43	145	246	434
Did not work	49	101	100	250
Age at first marriage				
Less than 20	384	685	783	1,852
20–24	92	364	445	901
25 and older	0	54	121	175

— Fewer than 25 observations
NOTE: For Malaysia, life table estimates for 31 respondents for whom the ethnic group identity was "others" are not reported.
SOURCES: See Figure 2.

APPENDIX TABLE 2 Number of married women exposed to the risk of marital disruption during the first five years of marriage in three ethnic groups in Malaysia by marriage cohort

	Marriage cohort (N)			
	1940s	1950s	1960s	Total
Malay				
Total	810	1,028	1,031	2,869
Current region of residence				
Rural area	701	852	869	2,422
Small town	69	110	100	279
Metropolitan	40	66	62	168
Level of education				
None	594	504	223	1,321
Some primary	194	401	390	985
Completed primary	14	104	312	430
Lower secondary	6	13	57	76
Middle secondary and above	2	6	49	57
Employment before marriage				
Agriculture unpaid	231	227	198	656
Agriculture paid	68	103	109	280
Nonagriculture unpaid	15	24	10	49
Nonagriculture paid	25	55	117	197
Did not work	471	619	597	1,687
Age at first marriage				
Less than 15	437	297	138	872
15–19	348	601	594	1,543
20–24	24	110	241	375
25 and older	1	20	58	79
Chinese				
Total	322	522	786	1,640
Current region of residence				
Rural area	140	220	375	735
Small town	89	137	189	415
Metropolitan	103	165	222	490
Level of education				
None	190	234	167	591
Some primary	102	211	318	631
Completed primary	24	43	176	243
Lower secondary	8	19	59	86
Middle secondary and above	8	15	66	89
Employment before marriage				
Agriculture unpaid	38	42	45	125
Agriculture paid	49	106	171	326
Nonagriculture unpaid	7	10	18	35
Nonagriculture paid	38	162	341	541
Did not work	200	202	211	613
Age at first marriage				
Less than 15	29	12	5	46
15–19	235	287	231	753
20–24	67	186	391	644
25 and older	1	37	159	197

…/

APPENDIX TABLE 2 (continued)

	Marriage cohort (N)			
	1940s	1950s	1960s	Total
Indian				
Total	118	177	193	488
Current region of residence				
Rural area	70	108	121	299
Small town	19	23	27	69
Metropolitan	29	46	45	120
Level of education				
None	65	54	37	156
Some primary	37	77	64	178
Completed primary	7	19	52	78
Lower secondary	5	19	16	40
Middle secondary and above	4	8	24	36
Employment before marriage				
Agriculture unpaid	3	3	2	8
Agriculture paid	38	53	64	155
Nonagriculture unpaid	1	0	0	1
Nonagriculture paid	2	15	29	46
Did not work	74	106	98	278
Age at first marriage				
Less than 15	51	44	28	123
15–19	58	87	117	262
20–24	9	34	38	81
25 and older	0	12	10	22

— Fewer than 25 observations
NOTE: Thirty-one respondents who considered their ethnic group identity as “other” than these three groups were not included in this analysis.
SOURCE: 1974 Malaysian Family and Fertility Survey.

Appendix: Multiple-decrement life table

Using standard life table notation, let:

${}_1D_0$, ${}_1D_1$, ${}_1D_2$ … ${}_1D_X$ be the number of spousal deaths during the 1st, 2nd, 3rd, and x years after the date of the first marriage,

${}_1S_0$, ${}_1S_1$, ${}_1S_2$ … ${}_1S_x$ be the number of separations/divorces during the 1st, 2nd, 3rd, and x years after the date of the first marriage,

N_0, N_1, N_2 … N_x be the numbers of marriages that were begun one or more years, two or more years, three or more years, and x years before the date of the interview.

For the first year of marriage, the population at risk of marital dissolution is simply the number of marriages that began at least one year before the interview, or:

$$l_0 = N_0$$

For the second year of marriage, the population at risk is the population of marriages that began two years before the interview (N_1) minus the number of mar-

riages dissolved during the first year of marriage that occurred to persons whose marriages began at least two years before the interview.

$$l_1 = N_1 - ({}_1D_0^{N(x)} + {}_1S_0^{N(x)})$$

where ${}_1D_0^{N(x)} + {}_1S_0^{N(x)}$ are the number of marital dissolutions caused by spousal deaths and separations/divorces during the first year of marriage for marriages that were begun at least one year before the interview. This last term is necessary to exclude dissolved marriages from the risk pool. For all subsequent marital duration intervals:

$$l_x = N_x - \Sigma_0^{x-1}({}_1D_x^{N(x)} + {}_1S_x^{N(x)})$$

where ${}_1D_x + {}_1S_x$ are summed from the first year of marriage up to x–1 years of marriage for the population of persons whose marriages began x or more years prior to the survey interview.

The probabilities of marital dissolution due to spousal death for each year of marital duration are estimated by:

$$\begin{aligned}{}_1q_0^{D} &= {}_1D_0/l_0\\ {}_1q_1^{D} &= {}_1D_1/l_1\\ &\dots\\ {}_1q_x^{D} &= {}_1D_x/l_x,\end{aligned}$$

and the probabilities of marital dissolution due to separation or divorce are estimated by:

$$\begin{aligned}{}_1q_0^{S} &= {}_1S_0/l_0\\ {}_1q_1^{S} &= {}_1S_1/l_1\\ &\dots\\ {}_1q_x^{S} &= {}_1S_x/l_x\end{aligned}$$

The series of ${}_1q_x^{S}$ values can be used to generate a life table survival curve of the "still married" population (l_x^{S} values) that are subject to the attrition of separation/divorce for each year of marital duration.

Notes

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1 These surveys were officially known as the 1976 Indonesian Fertility Survey, the 1974 Malaysian Family and Fertility Survey, and the 1975 Survey of Fertility in Thailand. The Indonesian Fertility Survey was limited to the islands of Java and Bali, which accounted for about two-thirds of the Indonesian population in the 1970s. The Malaysian Family and Fertility Survey covered only Peninsular Malaysia, which comprised 84 percent of the Malaysian population.

2 The abridged life tables for four populations are available upon request.

3 Malaysia was created with the union of independent Malaya and the three former British colonies of Singapore, Sabah, and Sarawak. Singapore subsequently left Malaysia in 1965.

In this article, we refer to Malaysia, but our data are limited to Peninsular Malaysia, which is the former Malaya, excluding Sabah and Sarawak on the island of Borneo.

4 Even though World Fertility Surveys are relatively comparable, many of the variables were constructed in accordance with local conditions. Therefore, many of the variables (e.g., education, geographical subdivisions, etc.) are coded somewhat differently from country to country. We think that these variables are measuring the same broad categories, although the exact classifications are not the same.

5 The marriage cohort of the 1940s is selective of women who married at a young age. The WFS samples included women aged 15 to 49 in the mid-1970s, therefore excluding women who were born before 1925.

6 There may be a much higher fraction of the Thai population with Chinese ancestry, with some respondents not reporting themselves as Chinese.

7 Region and ethnic/linguistic groups overlap considerably in Indonesia. In Table 3, we highlight regional patterns and identify only two linguistic groups: those who speak either Indonesian or a regional language at home.

8 The ethnic variations in levels of divorce within countries are greater than the differences between countries. In Indonesia, the Sundanese linguistic community, which is primarily concentrated in West Java, has long been noted as having the greatest propensity for divorce (Jones 1994: 195–200). The estimate of a 50 percent level of divorce for first marriages among Sundanese women married in the 1940s may well be the world record for a traditional society.

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