

## The Economic Crisis and Desires for Children and Marriage in Thailand\*

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### Abstract

This study examines the relationships between young Thai women's and men's experiences of economic difficulties due to the economic crisis and their desires for marriage and children, using data from a recent national survey on the economic crisis and demographic and family dynamics. The study found that the experiences of economic hardships due to the crisis were widespread among Thai women and men in their 20s and 30s, although there were considerable gender, regional, and urban-rural differences in the extent of experiencing such hardships. Our multivariate analyses reveal that the effects of the crisis on desires for children and marriage were diverse and indirect. Desired fertility of married women aged 25–39 was reduced, not by their own experiences of economic hardships, but by their husbands'. This implies that the husband's employment is a major factor in determining a woman's perception of the financial feasibility of having children and suggests that, if prolonged, the crisis could lead to lower marital fertility in Thailand. Marriage desires of young unmarried women aged 20–34 were dampened, not by their own hardships, but their mothers' economic difficulties, hinting that the widely documented close emotional ties between mothers and daughters in Thailand may have played a role.

**Keywords:** the economic crisis, Thailand, desired fertility, marriage desires

The Asian economic crisis began in Thailand in June 1997 with the near-collapse of its financial markets [Bhaopichitr 1997; Facts on Life News Services 1998]. In the late 1980s and early 1990s the country had experienced remarkable economic growth, transforming itself into an Asian "economic miracle" [Ito 1998; Lee and Rhee 1999]. This miracle was enhanced primarily through the globalization of Thailand's financial markets, interna-

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tional trades, and direct foreign investments [Jansen 1997; 2001]. Thailand needed foreign capital because its domestic savings were not great enough to finance the high level of investment necessary for rapid growth.<sup>1)</sup> During the early 1990s the dependency on foreign capital continued to grow while the government failed to develop a system for sound macroeconomic management of domestic and international financial markets [Jansen 2001; Kaosa-ard *et al.* 2000]. Consequently, the private sector went on a borrowing spree, which resulted in a skyrocketing foreign debt and a burgeoning current account deficit. This in turn caused a massive exodus of foreign capital, culminating in the financial meltdown during the summer of 1997 [Bello 1998]. Showing what the vulnerability to variations in foreign-capital inflows and outflows can do to a society, Thailand's economic crisis represents an extreme consequence of the malcontents of globalization.

After five years the Thai economy and society are still not out of the devastating effects of the crisis [*The Economist* 2002]. Those effects continue to ripple throughout the country, creating many economic and social problems, including lower wages and salaries, higher living expenses, upsurges in unemployment, and increases in the number of school dropouts [Kaosa-ard *et al.* 2000]. Macroeconomic stress of this magnitude must also have demographic and family consequences. Assessing the effects of economic downturn on fertility and mortality in developing countries in the 1980s, Mason [1997] found that, although the evidence was mixed, the adverse effects of a major and prolonged economic slump on childbearing and survival were not widespread. Comparatively little, however, is known about the demographic effects of an abrupt economic bust after a prolonged boom. It is therefore of interest to study the demographic and family impacts of the Thai crisis because the crisis also occurred in other parts of Asia, and its effects will likely continue to shape the demographic landscape of the region as a whole for some time. Examining how the crisis has influenced families and households, we can also develop a fuller picture of the far-reaching outcome of economic globalization.

Using data drawn from the 2001 National Survey on the Economic Crisis, Demographic Dynamics, and Family (hereafter referred to as the ECODDF), this study examines the relationships between young Thai women's and men's experiences of economic difficulties due to the economic crisis and their desires for marriage and children. We begin by describing the data and measurements employed by the study. Next we look at the degrees and patterns of experiences of economic hardship due to the economic crisis for women and men separately. We then examine the patterns of our two dependent variables—fertility desires among currently married women and men aged 25–39 and marriage desires among never-married women and men aged 20–34. Turning to multi-

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1) According to Jansen [1997], its dependency on external capital did not begin in the late 1980s; rather, the dependency had been a long-standing characteristic of Thai economic development.

variate analyses of desires for children and marriage, we first look at the results of a logistic regression analysis of the effects on women's and men's fertility desires of their experiences of economic hardship related to the economic crisis. We then examine the results of the logistic regression analysis of the effects of economic hardship on desires for marriage among young single women and men. The article concludes with a summary of the findings and a discussion of their implications.

Few comprehensive studies have been made of the sociodemographic impacts of Asia's economic crisis, with the notable exceptions of the Indonesia Family Life Surveys, a collaborative project conducted by the RAND Corporation, the University of California at Los Angeles, and the Demographic Institute of the University of Indonesia [*e. g.*, Frankenberg, Thomas and Beegle 1999] and a case study of Thailand's economic crisis and reproductive health conducted by the College of Population Studies at Chulalongkorn University [Chayovan, Peracca and Ruffolo 2000]. Admittedly, unlike the Indonesia Family Life Surveys, the ECODDF is not a longitudinal survey covering the period prior to the economic crisis. Nonetheless, it provides a unique opportunity to examine the multidimensional consequences of the economic crisis for people and families in Thailand. Through this study, we seek to shed light on the paths through which the crisis influenced individuals' attitudes and perceptions about marriage and the family.

## Data and Measurements

### *Data*

The data for this study are drawn mainly from the ECODDF, the first national family survey covering both women and men of all marital statuses throughout the reproductive age range in Thailand. The survey was intended to collect nationally representative data on a variety of issues pertaining to economic conditions, demographic situations, and family life in Thailand, including experiences and attitudes related to the economic crisis, fertility and other life histories, reproductive health and family planning, family activities, and attitudes toward marriage and the family, as well as the demographic and socioeconomic backgrounds of respondents, their spouses, and other family members. The ECODDF was also intended to parallel the 2000 National Survey on Family and Economic Conditions in Japan. Conducted during March–June and October 2001 by the College of Population Studies (CPS) at Chulalongkorn University in Bangkok, the survey was designed by a research team from Keio University in Tokyo and the CPS.

The ECODDF was based on a national, stratified multistage probability sample of the Thai population, in which 6,100 urban and 6,000 rural households were randomly selected, with the 2000 population census used as the sampling frame. Stratifying Thailand into five regional strata—the North, Northeast, Central Region (excluding Bangkok), South, and Bangkok Metropolis, the CPS randomly selected 21 provinces by probability propor-

tional to population size, except for Bangkok, which was self-representative. Then, dividing the sample provinces into two substrata—municipal (urban) and nonmunicipal (rural) areas—the researchers selected a total urban sample of 6,100 households (2,100 households in the provincial cities and towns and 4,000 households in Bangkok) and a total rural sample of 6,000 households, using multistage systematic or simple random-sampling methods. From these sample households, 9,102 eligible persons—6,068 women and 3,034 men of all marital statuses between the ages of 15 and 49—were selected, with twice as many women as men being sampled (*i. e.*, women were double-sampled). Among those sampled individuals, face-to-face interviews were successfully conducted with 5,065 women and 2,923 men, a response rate of approximately 88 percent.

Our study has two dependent variables, desired fertility and desires about marriage, and therefore uses two subsamples of the ECODDF.<sup>2)</sup> The analysis of desired fertility focuses on currently married women and men aged 25–39 who had been married for at least four years—that is, to those who were married when the economic crisis began. This restriction to couples married for at least four years led us to choose age 25 instead of age 20 as the lower age limit so that we would minimize a possible bias due to the inclusion of outliers who had married at very young ages.

We imposed the upper age limit of 39 mainly to minimize the bias that would be introduced by including women and, to a lesser extent, men who were not at risk of childbearing. Women's physiological ability to bear children drops precipitously in their 40s with the onset of menopause, and for those older women (and for men whose wives are also likely to be of similar ages) a question about desired fertility would in many cases be irrelevant.<sup>3)</sup> Our data therefore include 1,935 currently married women and 920 currently married men aged 25–39 who had been married for four or more years.

Our analysis of marriage desires focuses on never-married women and men aged 20–34. We again imposed the lower age limit of 20 because the question about experiences of economic hardship due to the economic crisis pertains to the four-year period prior to the 2001 survey. If we had included respondents in their upper teens at the time of the survey, this might have biased the results because of the inclusion of a small minority who started working in their early teens and therefore had a low level of education. We chose the upper age limit of 34 for the analysis of marriage desires because including another type of outlier, unmarried persons at older ages, would distort the results. In our data the proportion never-married was 16.0 percent for women aged 25–29 and 8.7 percent for women aged 30–34; the corresponding proportions for men aged 25–29 and 30–34 were

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2) The cleaning of the survey data is still ongoing, and therefore the results of the analyses reported here are preliminary.

3) It was possible to set (and we considered setting) higher upper age limits for men, or to use the wife's age instead of the man's own age. We decided against doing so primarily because having different age limits for the two sexes would unduly complicate the analysis.

36.0 percent and 12.4 percent.<sup>4)</sup> The sample of single respondents included 468 women and 481 men aged 20–34.

#### *Dependent Variables*

As we have already mentioned, the two dependent variables we examine in this study are desired fertility and desires about marriage. Desired fertility is measured by a dichotomous variable indicating whether or not a married woman or man wants to have more children. The ECODDF asked respondents, “Do you want to have more children?” Three precoded responses were Yes, Uncertain, and No. As we shall see later, only a small percentage of the respondents gave an uncertain response. Therefore, in our measure of desired fertility, we scored the responses as 1 for a positive answer and 0 for a negative or indefinite answer.

We measured marriage desires by a variable indicating whether or not a never-married woman or man wanted to marry someday.<sup>5)</sup> Five precoded responses to this question were Definitely yes, Yes, Uncertain, Probably not, and Definitely not. As we shall see, only a small proportion gave a negative answer (Probably not or Definitely not). We therefore coded our measure of marriage desires as 1 if a respondent chose Definitely yes or Yes, and 0 if otherwise.

#### *Independent Variables*

In the multivariate analyses of desires for children and marriage, we estimate by logistic regression the likelihood of wanting to have more children or wanting to marry, using as the independent variables the economic hardships due to the economic crisis experienced by respondents themselves or by their family members. To measure such experiences, the ECODDF asked respondents:

Since the economic crisis, have you and other people you know experienced any such

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- 4) Alternatively, we could have used different upper age limits for women and men, namely age 29 for women and 34 for men. We decided against doing so in part because the results were not notably different, and also because we wanted to keep our results as simple and straightforward as possible.
  - 5) The ECODDF also asked all those who did not indicate that they definitely did not want to marry someday how soon they would like to marry. Using this variable, we constructed variables indicating whether or not respondents wanted to marry within three years or five years, respectively. However, these additional analyses did not yield significantly different results. Furthermore, a considerable proportion (around 24 percent of both women and men) indicated that they were not sure about when they would like to marry; and even among those who indicated a specific time frame, 16 percent of women and 34 percent of men answered that they would like to marry in ten or more years, a response we considered to be too vague to be realistic. Consequently, we decided not to use this variable as our dependent variable.

economic problems as: unable to find a job; losing a job or [being] laid off; demotion, cut in work hours or salary/wage cut; forced transfer of position or office; forced early retirement; failure or deterioration of [your] own business; drop in the prices of products/produce; or abrupt increases in costs of living/necessary capital investments?

The “other people you know” included the respondent’s spouse, brothers, sisters, father, mother, other male or female relatives, male or female friends, and male or female co-workers. About each of these categories of people whom the respondents knew, the above question was asked, and their responses were precoded as Yes or No.<sup>6)</sup> We scored responses as 1 for Yes and 0 for No.

In our analysis of desired fertility among the currently married sample, we use two dichotomous variables as the independent variables: whether or not the respondent or the respondent’s spouse had experienced any economic crisis-related hardships. In the analysis of marriage desires among single women and men, the independent variables are three dichotomous variables indicating whether or not the respondent him- or herself, the respondent’s father, or the respondent’s mother had experienced at least one of the above-mentioned economic hardships due to the economic crisis. Thus our measures of experiences of crisis-related hardship of the spouse or parents are based on proxy reports from respondents, whereas the reports of economic hardship experienced by the respondents themselves are, of course, self-reports.

#### *Control Variables*

Our analysis of desired fertility has four groups of control variables: (1) basic demographic characteristics including age, region, urban versus rural residence, and number of living children; (2) characteristics of marriage as measured by the age difference between spouses, and whether the current marriage was the first or not; (3) basic socioeconomic characteristics, including the respondent’s own and the spouse’s education and the couple’s income; and (4) household structure as measured by coresidence with the respondent’s own parents or spouse’s parents.

Our multivariate analysis controls for the respondent’s number of living children because desired fertility (wanting to have more children or not) is very much a function of a couple’s existing family size. As we shall show later, because the relationship between the number of living children and desired fertility is in general linear, we specify this covariate as a continuous variable. The respondent’s age is included in the model because, even after we control for family size, desired fertility is, to an extent, a function

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6) For the categories of people other than themselves, we provided a response category of “not applicable” so that we could identify respondents who did not have a spouse, parent, sibling, other relative, friend, or co-worker.

of age. Our preliminary analysis indicated that the effects of age on desired fertility was not always linear, and so we specified age as a categorical variable consisting of three five-year age groups.

Although the Thai population is relatively homogeneous, there are clear demographic, socioeconomic, and cultural differentials by region [Knodel, Chamrathirong and Debavalya 1987]. Evidence also suggests that the effects of the economic crisis have varied among regions, with the Northeast having been affected most seriously [Thailand, NSO 1997; 2000a; 2000b]. Our model therefore includes a categorical variable that accounts for the five major regions of Thailand—North, Northeast, Central, South, and Bangkok Metropolis. The model also controls for possible urban/rural differences in desired fertility by including a dichotomous variable indicating whether a respondent resided in an urban (municipal) area or not.

Our analysis of desired fertility takes into consideration characteristics of marriage. Those characteristics include age differences between the husband and wife and whether the current marriage is the first marriage or a remarriage. (We did not include age at marriage or duration of marriage in the model primarily because marriage duration and age at marriage are known to have a fairly strong multicollinearity with the number of children already born.) The age difference between spouses reflects both norms and the status relationship between husband and wife. Previous studies indicate that in contemporary Thailand the average age difference between spouses is small (three to four years), with women being much more likely to marry older men than younger men [Limanonda 1994; Prachuabmoh *et al.* 1972]. Given a possible curvilinearity of the effect of the age difference between spouses, our model specifies this variable as a categorical variable consisting of five categories: husband is younger than the wife; both spouses are of the same age; husband is older by one or two years; husband is older by three to five years; and husband is older by six or more years.

Marital separation, dissolution, and remarriage are not unusual among Thais [Knodel, Chamrathirong and Debavalya 1987: 76; Limanonda 1994]. To control for the possible effects of the number of times a respondent had married, our model includes a dichotomous variable indicating whether current marriage was the first marriage or not. Around 7 percent of married women and men included in the analysis of desired fertility reported that they had been married more than once.

Our model controls for basic socioeconomic characteristics of spouses by including the number of years of education of the wife and husband and also the couple's income. Because our preliminary analysis did not clearly indicate curvilinearity or a threshold in the effects of the wife's or husband's education on desired fertility, we introduce these covariates as continuous variables. The mean number of years of education was 7.8 years for married women included in the analysis and 8.7 years for their husbands, whereas it was 9.2 years for married men and 8.1 years for their wives.

As another indicator of the economic status of couples and households, the model

includes the couple's average monthly income for the period from April 2000 to the time of the interview.<sup>7)</sup> Because there were a considerable number of missing cases for couple's income (23 percent of the women and 29 percent of the men), the model includes a dichotomous variable indicating whether the couple's income information was missing or not. By including this variable, we minimize a possible estimation bias resulting from the exclusion of a large number of cases from the analysis.

Our model for the analysis of desired fertility controls for household structure by accounting for the respondent's coresidence with his or her own parents or the spouse's parents. We measure coresidence with parents or parents-in-law by using four dichotomous variables: coresidence with the respondent's own father, own mother, spouse's father (father-in-law), and spouse's mother (mother-in-law). Although considerable urban/rural and regional differences are known to exist in Thailand, living with the wife's parents after marriage (postnuptial matrilocal coresidence) has traditionally been more prevalent than patrilocal coresidence [Limanonda 1994; Podhisita 1994]. As expected, we found matrilocal coresidence to be more prevalent than patrilocal coresidence among both wives and husbands in our study: 23 percent of the wives indicated that they lived with their own parents, whereas only 9 percent of the wives reported living with their spouse's parents. Similarly, 21 percent of the husbands indicated that they lived with their wife's parents, whereas the proportion of husbands who reported living with their own parents was 13 percent. Few individuals (only four wives and no husbands) reported living with both sets of parents.

Our analysis of marriage desires has four groups of control variables: (1) basic demographic traits including age, region, and urban/rural residence; (2) basic socioeconomic characteristics including years of education and respondent's own income; (3) household economic status as measured by parents' home ownership; and (4) household structure measured by coresidence with parents.

Our multivariate model for the analysis of marriage desires controls for respondents' basic demographic traits such as age, region, and urban/rural residence. A desire to marry is a function of age. Because our preliminary analysis indicated that the relation-

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7) We attempted to use the respondent's own income and the spouse's income, rather than couple's income, but decided not to use them primarily because a considerable proportion of married women and men included in the analysis of desired fertility were self-employed or working in agriculture. For those wives and husbands, it would be difficult to assess their income separately. We also tried using such indicators of household living standards as housing quality and ownership of durable consumer goods. We decided against using them primarily because they are influenced by region, urban/rural residence, and occupation/industry of the couples. We attempted to include respondents' and spouses' occupations in the model but decided not to use them in part because a considerable proportion of respondents and their spouses held more than one occupation, or their occupation had changed or was temporary, and also because occupation was found to be correlated with couples' income.

ship between age and marriage desire was not necessarily linear, we specified age as a categorical variable consisting of three five-year age groups. We specified region and urban/rural residence in the same ways as in the analysis of desired fertility of married women and men.

As in the analysis of desired fertility, the model accounts for two basic socioeconomic characteristics, years of education and income. Years of education are measured by a continuous variable. Interestingly, in our data the mean number of years of education was higher (14.9 years) for never-married women aged 20–34 than for never-married men in the same age group (12.8 years). This suggests that as their age goes up, single women become increasingly more selective about marriage in the sense that highly educated women are more likely to stay single than are their less educated counterparts. We measured respondents' own income by a continuous variable indicating the average monthly income for the period from April 2000 to the month of the survey.<sup>8)</sup>

To measure the household economic status of young, never-married women and men independently of their own economic situations, we used parents' home ownership, primarily because the ECODDF did not collect information on parents' income (nor on the income of coresiding siblings). Although information on household income was available, we found that respondents' own income and their household income were associated because household income included the respondents' income. This was especially the case for single men whose household income was low.<sup>9)</sup> Approximately 52 percent of the parents of our respondent single women owned the home in which they resided; the corresponding proportion for our respondent single men was 55 percent. Parental home ownership was strongly associated with their ownership of the land on which the residential home was located: roughly 85 percent of the parents of young single women and men who owned their home also owned the land.

Our model for the analysis of marriage desires includes coresidence with respondents' own parents. This covariate is specified as a categorical variable consisting of four categories: living with both parents, living with the father only, living with the mother only, and not living with parents. We introduced this specification in part because, as mentioned earlier, marital separation and dissolution are not unusual in Thailand, and also because marriage desires of the young, unmarried Thais may differ according to whether they live with both parents or with a single parent. Among

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8) We also tried to include respondents' occupations in the model but decided not to include them for most of the same reasons that we did not include them in the model for married respondents.

9) We considered using some other indicators of household living standard such as ownership of durable consumer goods. But we decided not to employ that variable because such ownership was highly correlated with respondents' own income. This was so probably because respondents themselves had purchased some durable household goods, such as a television set, mobile phone, automobile, motorcycle, or computer.

unmarried women and men in our sample, approximately 45 percent lived with both parents; the proportions living with the father only or the mother only were around 4 percent and 15 percent, respectively.

### Experiences of Hardship Due to the Economic Crisis

Before turning to the results of our multivariate analyses, we look first at the patterns of experiences of economic hardship due to the economic crisis, as reported by respondents. As shown in Table 1, around one-half of married women and 58 percent of married men reported that they themselves had experienced one or more economic hardships due to the economic crisis. Fifty-two percent of the married women in our study also reported that their husband had had economic difficulties, and 43 percent of the married men indicated that their wife had experienced such economic hardships. As for never-married respondents in our sample, 31 percent of the women and 43 percent of the men reported that they themselves had experienced hardships due to the economic crisis. Thus, regardless of respondents' marital status, a higher proportion of men than of women were found to have experienced economic hardships since the onset of the crisis.

**Table 1** Percentages Experiencing Economic Difficulties Due to the Economic Crisis among Respondents Themselves and Their Family Members, by Selected Characteristics: Currently Married Women and Men Aged 25–39 and Never-married Women and Men Aged 20–34, Thailand, 2001

Characteristic	Married Women		Married Men		Single Women			Single Men		
	Self	Spouse	Self	Spouse	Self	Father	Mother	Self	Father	Mother
Total	51.1	51.8	57.6	43.3	30.5	22.2	24.5	43.5	20.6	21.8
Own age										
20–24	—	—	—	—	25.6	29.5	30.2	40.3	25.3	24.1
25–29	52.4	56.6	59.9	46.2	33.0	17.9	19.2	46.0	16.8	20.0
30–34	51.5	52.6	53.7	37.3	39.3	10.3	17.8	51.1	10.0	16.2
35–39	49.7	47.5	59.7	46.6	—	—	—	—	—	—
Region										
North	40.3	40.4	48.5	37.6	21.6	16.9	16.9	41.8	25.0	27.4
Northeast	64.2	62.6	67.2	51.8	44.3	22.6	22.1	56.2	21.0	23.4
Central	38.9	44.0	49.6	35.7	21.6	20.8	25.9	31.7	12.2	12.3
South	54.9	57.4	65.8	50.6	34.2	33.1	38.1	50.7	27.6	34.6
Bangkok	41.6	40.1	46.9	28.9	35.4	20.9	21.7	35.6	21.2	17.1
Place of residence										
Urban	39.5	36.2	43.2	30.1	28.4	22.8	24.5	33.6	14.7	13.4
Rural	55.4	57.6	62.3	47.5	34.1	21.0	24.5	51.9	25.8	29.1
(No. of cases)	(1,924)	(1,923)	(912)	(909)	(467)	(459)	(466)	(479)	(475)	(475)

Notes: Percentages shown above are weighted, but the numbers of cases are unweighted. Currently married men and women are limited to those who have been married for four or more years.

Considerably higher proportions of married men and women than of unmarried men and women reported having experienced economic hardships. This was probably because our subsample of currently married respondents, being slightly older, tended to have been in the labor force longer than their never-married counterparts and therefore had been exposed longer to the risk of experiencing hardships related to the economic crisis. It may also be the case that marriage leads men and women to shoulder major economic responsibilities, thus exposing married individuals to a higher risk of experiencing economic hardships.

We found notable age patterns in reported experiences of economic hardships due to the crisis. Table 1 shows that the proportion of married women (and of their spouses) experiencing economic difficulties tends to decrease at higher ages, whereas for married men and their spouses the relationship between age and experiences of crisis-related hardships is U-shaped. On the other hand, the proportion of never-married women and men experiencing economic hardships increases almost linearly as their age increases. Regardless of single respondents' sex, the proportion of parents (both father and mother) reported to have experienced such economic difficulties tends to decrease as the age of respondents (and therefore their parents) goes up.

From Table 1 we can also see large regional differentials in the proportion experiencing economic hardships since the economic crisis began, with notably higher proportions of women and men in the Northeast and the South reporting such difficulties. Proportionately more residents in rural areas than in urban areas also reported economic hardships due to the crisis. This finding is contrary to evidence given by earlier reports that were published shortly after the economic crisis began in Thailand, according to which urban areas suffered higher unemployment and other forms of economic downturn than rural areas [Daorueng 1998; Sugisaki 1999]. The crisis may have hit urban areas harder initially because in Thailand it started with the meltdown of the financial sector, resulting in the collapse of scores of financial houses and the closure of factories that were concentrated in urban areas. Our finding suggests that economic hardship subsequently spread to rural areas, causing greater labor uncertainty and restlessness there. The higher level of economic hardship in rural areas may also be due in part to the fact that the government's labor and social welfare offices earlier supported the return of unemployed urban workers to their hometowns and villages to ease urban joblessness [Daorueng 1998].

Our multivariate analysis indicates that the Northeast and the South continue to have greater economic hardship than other regions (data not shown). Urban areas also continue to have significantly lower levels of hardship related to the crisis than do rural areas. The analysis indicates that men and women in primary industries and women in service industries have a significantly greater likelihood of experiencing economic hardship than do those in other sectors of the economy. This finding suggests not only that persons in primary and service industries have been more vulnerable to economic

stress, but also that people who had been engaged earlier in other occupations (*e. g.*, in professional, technical, white-collar, and blue-collar jobs) moved into agriculture and service industries in response to restructuring due to the crisis. We found men and women with higher levels of education more likely to have avoided economic hardship than their less educated counterparts.

### Levels and Patterns of Desires for Children and Marriage

We next look at the levels and patterns of our two dependent variables, desires for children and marriage. Table 2 presents the percentage distribution of fertility desires among currently married women and men aged 25–39 who had been married for at least four years, by the number of living children, in 2001. We notice first that the proportion of respondents wanting no children or no more children is unexpectedly high among those with no children or only one child. Among women who were childless or had only one child, the proportions not wanting any (more) children are 18 percent and 42 percent, respectively.<sup>10</sup> As for men, the corresponding proportions are 17 percent and 30 percent. Nonetheless, as expected, the proportion of women and men who wanted to have more children decreases dramatically (and the proportion who did not want to have any more children increases) as their family size increases. The proportion of women and men who were uncertain about wanting more children was very small and shows no clear parity

**Table 2** Percentage Distribution of Fertility Desires by the Number of Living Children: Currently Married Women and Men Aged 25–39 Married for at Least Four Years, Thailand, 2001

Sex and Whether (More) Children Are Desired	Number of Living Children:					Total
	Zero	One	Two	Three	Four +	
Women						
Yes	80.1	54.2	17.4	7.2	2.1	28.0
No	17.8	41.6	81.0	92.6	97.9	70.0
Uncertain	2.1	4.3	1.6	0.2	0.0	2.0
(No. of cases)	(102)	(530)	(931)	(299)	(70)	(1,932)
Men						
Yes	76.5	67.1	25.3	23.7	5.4	40.6
No	17.4	29.7	70.6	72.3	92.8	55.5
Uncertain	6.1	3.2	4.1	4.0	1.8	3.8
(No. of cases)	(58)	(307)	(418)	(103)	(31)	(917)

Note: Percentages shown above are weighted, but the numbers of cases are unweighted.

10) For comparison, in Japan in 1994 the percentages not wanting (more) children among wives under age 45 who had no children or one child were 13 percent and 17 percent, respectively. The corresponding proportions for South Korean wives under age 45 in 1994 were 7 percent and 34 percent. For details, see Tsuya and Choe [2003].

pattern, with merely 2 percent of women and about 4 percent of men giving an uncertain answer.<sup>11)</sup>

We can also see that the level of fertility desired by women is lower than the level desired by men, and that this gender difference increases as family size increases. A study conducted in Japan and South Korea in the mid-1990s found similar gender differences in desired fertility [Tsuya and Choe 2003]. This result is as expected because, although both parents undoubtedly feel the financial costs and time pressures related to childbearing and childrearing, it is the mother who normally shoulders most of the childcare responsibilities on a day-to-day basis.

Turning to the levels and patterns of marriage desires among the unmarried subsample, we can see from Table 3 that while a large majority of single women and men aged 20–34 said that they wanted to marry someday, the proportion wanting or definitely wanting to marry was lower among women than among men (60 percent versus 78 percent). The degree of uncertainty was also higher among women than among men (28 percent versus 20 percent). Further, although the proportions indicating that they definitely or probably did not want to marry constitute small minorities, the total proportion for those who did not want to marry is much higher among women than among men (12 percent versus 3 percent). The proportion expressing a firmly negative answer (“definitely do not want to marry”) is especially high among women in the 30–34 age group, implying a possible selectivity of highly educated women who are much less marriage- or family-oriented (and more career-oriented) in this age group than are women in the other age groups. These findings indicate that although a large majority of young, single Thai women and men desire to marry someday, women have less enthusiasm for

**Table 3** Percentage Distributions of Marriage Desires by Age: Never-married Women and Men Aged 20–34, Thailand, 2001

Desire for Marriage	Women				Men			
	20–24	25–29	30–34	20–34	20–24	25–29	30–34	20–34
Definitely yes	30.1	18.0	21.0	24.7	39.7	35.4	30.1	37.2
Yes	37.1	39.4	24.7	35.3	44.2	34.6	39.8	40.7
Uncertain	25.8	32.4	26.8	27.9	15.0	26.0	23.9	19.5
Probably not	4.4	4.6	6.4	4.9	0.2	2.0	0.0	0.8
Definitely not	2.6	5.6	21.1	7.2	1.0	1.9	6.1	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(No. of cases)	(242)	(137)	(89)	(468)	(260)	(153)	(68)	(481)

Notes: The distributions above are based on responses to the question “Do you want to marry someday?” The percentages are weighted, but the numbers of cases are unweighted.

11) In Japan and South Korea the level of ambivalence was much higher among currently married women and men under age 45 in 1994. The percentages of wives in the two countries giving an indefinite answer were 19 percent and 9 percent, respectively; the corresponding percentages for men were 24 percent and 9 percent.

marriage than men and that single women are more ambivalent about marriage than their male counterparts.

### Results of the Multivariate Analysis of Desired Fertility

Using multivariate analysis, we examined the effects of experiencing economic hardship since the onset of the economic crisis on desired fertility among our sample of currently married Thai women and men. Table 4 presents the means of the covariates used in the

**Table 4** Means of the Covariates Used in the Analysis of Wanting to Have More Children: Currently Married Women and Men Aged 25-39 Married for at Least Four Years, Thailand, 2001

Variables	Women	Men
Experienced economic hardships		
Self	0.493	0.569
Spouse	0.503	0.424
Own age (Ref: 25-29)		
30-34	0.372	0.352
35-39	0.373	0.476
Number of living children	1.856	1.723
Region (Ref: Central)		
North	0.208	0.196
Northeast	0.260	0.220
South	0.204	0.239
Bangkok	0.148	0.145
Living in an urban area	0.316	0.300
Age difference between spouses (Ref: Husband older by 1-2 years)		
Husband younger	0.099	0.130
Same age	0.078	0.110
Husband older by 3-5 years	0.315	0.301
Husband older by 6+ years	0.307	0.162
Remarriage	0.067	0.067
Years of education		
Own education	7.814	9.250
Spouse's education	8.667	8.063
Couple's average monthly income <sup>a</sup>	9.158	8.811
Couple's income missing	0.230	0.290
Coresidence with parents		
Own father	0.125	0.074
Own mother	0.184	0.120
Spouse's father	0.050	0.112
Spouse's mother	0.080	0.164

<sup>a</sup> Average income of a couple per month in 1,000 bahts for the period from April 2000 to the month of interview. (100 bahts=US \$2.3)

**Table 5** Estimated Odds Ratios from the Logistic Regression Analysis of Wanting to Have More Children: Currently Married Women and Men Aged 25–39 Married for at Least Four Years, Thailand, 2001

Variable	Women	Men
Experienced economic hardships		
Self	1.132	1.292
Spouse	0.725*	0.781
Own age		
25–29	1.000	1.000
30–34	0.707*	0.738
35–39	0.343**	0.515**
Number of living children	0.203**	0.250**
Region		
North	0.811	0.939
Northeast	1.490*	1.920*
Central	1.000	1.000
South	1.136	1.379
Bangkok	0.780	1.159
Living in an urban area	0.941	1.106
Age difference between spouses		
Husband younger	0.648*	0.561*
Same age	0.564*	1.063
Husband older by 1–2 years	1.000	1.000
Husband older by 3–5 years	0.643**	1.133
Husband older by 6+ years	0.457**	1.093
Remarriage	1.940*	3.052**
Years of education		
Own	0.984	0.987
Spouse	1.003	1.014
Couple's average monthly income <sup>a</sup>	1.006 <sup>‡</sup>	1.007
Couple's income missing	1.082	1.037
Coresidence with parents		
Own father	0.613*	0.868
Own mother	1.023	0.867
Spouse's father	1.037	1.027
Spouse's mother	1.016	0.855
Log-likelihood	– 848.61	– 481.23
LR chi <sup>2</sup> (23)	524.60	227.18
Prob > chi <sup>2</sup>	0.000	0.000
No. of observations	1,884	877

<sup>‡</sup> Significant at .10 level. \* Significant at .05 level. \*\* Significant at .01 level.

<sup>a</sup> Average income of a couple per month in 1,000 bahts for the period from April 2000 to the month of interview. (1 baht = US \$0.023)

logistic regression analysis of wanting to have more children among those respondents. Table 5 presents the estimated odds ratios of the effects of the covariates for women and men, separately. We can see in Table 4 that characteristics of female respondents and male respondents under consideration are in general similar, with most of the gender differences in expected directions. An exception is age difference between spouses. Our respondent women tended to be married to men who were considerably older than they were, whereas our respondent men tended to be married to women who were closer in age.

We can see from Table 5 that husbands' experiences of economic hardship due to the crisis significantly lowered women's fertility desires, whereas their own experiences of such hardships did not have statistically significant effects. We interpret this finding as suggesting that married women's desires for children were dampened by their husbands' (but not by their own) economic difficulties, probably because a woman's perception of the financial prospects of the family hinged upon how well her husband had done in providing for their family. A husband's job loss, pay cut, or other employment setback related to the crisis may have led the wife to feel more insecure about having more children because such hardships for the husband, who was likely to be the main breadwinner of the family, signaled future uncertainty about the financial basis for raising a larger family. We observe similar patterns in the relationship between economic hardship and desired fertility for men, but the effects of their own and their wives' experiences of economic hardship on men's fertility desires all proved to be statistically insignificant. This finding suggests that men's desires for children have been largely unaffected by their own and their wives' experiences of economic setbacks since the crisis began.

Turning to the effects of the control variables, we can see that desires for children decline significantly and almost linearly as women and men age. The degree of decline by age is stronger and clearer for women than for men. This finding suggests that, net of the other covariates of the model, women's desires for children decline more sharply than men's as they age, producing a wider gender gap in desired fertility at older ages (ages 30–39).

As expected, for both women and men, desired fertility drops dramatically as the number of living children increases. With the other factors of the model held constant, one additional child reduces the proportion of women and men wanting to have more children by 20 and 25 percent, respectively.

We see statistically significant regional differences in the desired fertility of Thai women and men. Compared with those living in the Central region, women and men living in the Northeast were more likely to want more children. Being the poorest and least developed region of the country, the Northeast is also the most traditional in its marriage and family-building patterns [Knodel, Chamrathirong and Debavalya 1987; Limanonda 1994; Podhisita 1994]. Our finding suggests that the Northeast has the highest

level of desired fertility among both women and men. Net of the other factors in the model, however, we found no statistically significant urban-rural difference in desired fertility for either women or men.

Among the covariates of our model, the most influential factors are characteristics of marriage as measured by age differences between spouses and the number of times married. For women, the relationship between age difference and fertility desires assumes an inverted U-shape. Specifically, women who were older than or the same age as their husbands had a significantly lower level of desired fertility than did women who were younger than their husbands by one or two years. Women whose husbands were at least three years older than they were also likely to have significantly lower desires for children, compared with women who were younger than their husbands by only one or two years. Moreover, the older the husband, the lower the level of a woman's desired fertility. Thus the husband's being older than the wife by a few years, the husband's being younger than the wife, the husband's having the same age as the wife, or the husband's being much older than the wife all seem to reduce a woman's fertility desires. As for men's desired fertility, an age difference between spouses does not have a statistically significant effect, except for a small group of men whose wives were older than themselves. Among that group the desire for children was significantly lower than it was among men who were older than their wives by one or two years.

Compared with respondents who were in their first marriage, women and men who had remarried were much more likely to want more children. This tendency was especially strong among men: remarried men were about three times more likely to want more children than first-married men. Respondents (especially men) who had remarried tended to have a strong desire to have children with their new spouse, possibly because they viewed children as a means to solidify the marital bond.

With regard to socioeconomic characteristics of women and men, net of the other factors of the model, the educational level of both spouses did not affect their fertility desires. Having a higher household income somewhat increased women's (but not men's) desire for children, although this finding is not statistically significant at the conventional level of 5 percent. It suggests that as more financial resources are available for herself and her husband, a woman is more likely to want more children. This again implies the importance of financial resources and security to women when they consider their fertility desires.

Finally, coresidence with their parents or their husband's parents affected women's desired fertility. Women who lived with their own father had significantly less desire for children than did women who did not live with their parents or parents-in-law. This result is puzzling because coresidence with their own mother or their husband's parents had no effect women's desires for children. Coresidence with parents or parents-in-law did not have statistically significant effects on men's desires for children.

### Results of the Multivariate Analysis of Marriage Desires

We now turn to the results of the logistic regression analysis of desires to marry someday among young, never-married women and men. Table 6 presents the means of the covariates used in the analysis, and Table 7 presents the estimated odds ratios of these covariates. We can see from Table 6 that in our sample young, unmarried women tended to be more urban than young, single men, with a higher concentration in Bangkok. As mentioned earlier, these young women were also better educated than their male counterparts.

From Table 7 we can see that the experience of crisis-related economic hardship by young women's mothers significantly reduced the young women's desire for marriage, whereas neither their own nor their fathers' experience of such economic difficulties affected their desire for marriage. With regard to young, single men, their own and their parents' experiences of economic hardship since the onset of the crisis did not significantly influence their marriage desires. As to why their mothers' experiences of eco-

**Table 6** Means of the Covariates Used in the Analysis of Wanting to Marry: Never-married Women and Men Aged 20–34, Thailand, 2001

Variables	Women	Men
Experienced economic hardships		
Self	0.321	0.430
Father	0.224	0.221
Mother	0.247	0.232
Own age (Ref: 20–24)		
25–29	0.293	0.318
30–34	0.190	0.141
Region (Ref: central)		
North	0.130	0.168
Northeast	0.109	0.170
South	0.175	0.208
Bangkok	0.389	0.306
Living in an urban area	0.654	0.526
Years of education	14.874	12.796
Own average monthly income <sup>a</sup>	6.440	6.637
Parents' home ownership	0.521	0.552
Coresidence with parents (Ref: neither)		
Both parents	0.453	0.447
Father only	0.035	0.036
Mother only	0.139	0.160

<sup>a</sup> Average income of an individual per month in 1,000 bahts for the period from April 2000 to the month of interview. (1 baht=US \$0.023)

**Table 7** Estimated Odds Ratios from the Logistic Regression Analysis of Wanting to Marry: Never-married Women and Men Aged 20–34, Thailand, 2001

Variables	Women	Men
Experienced economic hardships		
Self	1.225	1.109
Father	1.296	1.191
Mother	0.497*	1.238
Own age		
20–24	1.000	1.000
25–29	0.532*	0.589*
30–34	0.357**	0.798
Region		
North	0.830	0.738
Northeast	1.509	5.618**
Central	1.000	1.000
South	1.973*	1.347
Bangkok	1.124	1.083
Living in an urban area	0.853	0.864
Years of education	1.024	1.111**
Own average monthly income <sup>a</sup>	1.025	0.980 <sup>‡</sup>
Parents' home ownership	1.372	0.623
Coresidence with:		
Both parents	0.515*	0.734
Father only	0.395	5.198
Mother only	0.560	0.733
Neither	1.000	1.000
Log-likelihood	– 285.43	– 223.887
LR chi <sup>2</sup> (23)	30.65	55.22
Prob > chi <sup>2</sup>	0.015	0.000
No. of observations	453	463

<sup>‡</sup> Significant at .10 level. \* Significant at .05 level. \*\* Significant at .01 level.

<sup>a</sup> Average income of an individual per month in 1,000 bahts for the period from April 2000 to the month of interview. (1 baht = US \$0.023)

conomic hardship lowered young women's desire to marry, we speculate that the strong emotional ties between daughters and their mothers may have played a role. Because Thai daughters tend to be emotionally closer to parents than are sons [Keyes 1976; Podhisita 1994], and also because children are usually emotionally closer to their mother than to their father [Limanonda 1994; Mulder 2000: 69–73], the strong emotional bonds between the young women in our study and their mothers may have made them less inclined to marry when their mothers had economic difficulties.

The single women's desires for marriage tend to decrease almost linearly with age. For the single men, the relationship between their age and their marriage desires is curvilinear: the level of marriage desires was the lowest for men at ages 25–29. We found

significant regional differences in marriage desires of single women and men. Compared with women living in the Central region, women in the South were more likely to want to marry someday. Compared with men in the Central region, men residing in the Northeast were much more likely to want to marry. We found no statistically significant urban-rural differences in the level of marriage desires, however.

Socioeconomic traits of single men influenced their desires for marriage. On the one hand, education had a strongly positive and significant effect: a one-year increase in education raised the proportion of single men who wanted to marry someday by 11 percent. On the other, higher income tended to reduce men's marriage desires, although this result is not statistically significant at the conventional level of 5 percent. By contrast, education and income did not significantly affect women's desire for marriage. Nor did the economic status of their parents, as measured by parents' ownership of the home, affect women's (or men's) marriage desires.

Coresidence with parents influenced women's desire to marry in the sense that women who lived with both parents were significantly less likely to want to marry than were women who did not live with their parents. Interestingly, women living with their father but not with their mother were also less likely to want to marry. In contrast, men who lived with their father but not with their mother tended to have much stronger marriage desires than did men who were not living with their parents. These results are not statistically significant because the proportions of women and men living with only their father were very small (around 4 percent). Nonetheless, women living with only their father were less likely to want to marry, probably because they played the role of homemaker, taking care of the father and other family members. In contrast, young men living with only their father had strong desires for marriage, probably because they felt acutely the inconveniences caused by the absence of the mother, who would normally shoulder household tasks and care for the father and other family members.

### **Summary and Discussion**

This study has found that the effects of the economic crisis as measured by experiences of economic hardship among Thai women and men in their 20s and 30s have been pervasive, with more than one-half of the married women and men surveyed reporting such experiences. Even among the young, single respondents, the effects of the economic crisis have been substantial: nearly half of the single men and 30 percent of the single women surveyed reported having experienced economic hardships since the crisis began. We also found gender, regional, and urban-rural differences in the effects of the crisis. A higher percentage of men than of women reported experiencing economic hardship. The percentages of women and men who experienced economic difficulties were notably higher in the Northeast and the South than in other regions. For both sexes the

proportion experiencing such difficulties was higher among rural residents than among those living in urban areas.

Judging from the relatively high proportions of married women and men with no children or only one child who did not want to have any children or more children, the level of desired fertility in Thailand today is not high. Nonetheless, for both men and women, we found the level of desired fertility to decrease drastically as the number of children they already had increased. Women's desired fertility was lower than men's, and the gender difference in desired fertility was greater at older ages. It is mostly the woman who shoulders major responsibilities for raising children, and the costs and pressures associated with childrearing tend to increase as family size becomes larger. This in turn results in an increasing gender gap in desires for children among women and men with larger families.

Although a large majority of young, unmarried women and men expressed the desire to marry someday, our study reveals a large gender difference in the desire for marriage, women expressing less interest than men. Moreover, the level of ambivalence toward marriage was higher among single women than among single men.

Our multivariate analysis of desired fertility suggests that the economic crisis has negatively affected women's fertility desires through their husbands' economic difficulties, those difficulties including a job loss, pay cut, or other employment-related setback. This finding in turn implies that the husband's employment is a major factor in determining a woman's perception of the financial feasibility of having children and suggests that, if prolonged, the crisis could lead to lower marital fertility in Thailand.

Not only do such demographic factors as age, number of living children, and region affect fertility desires, but also characteristics of the marriage as measured by the age difference between spouses and the number of times married have strong effects on the fertility desires of both sexes. We found that although couples' socioeconomic characteristics did not exert strong effects on desired fertility, a higher income tended to increase women's (but not men's) desire for children. This again seems to indicate the enhancing effect of a couple's financial security on women's desired fertility.

The crisis may have also dampened the marriage desires of young, single women by causing economic hardships for their mothers. Our multivariate analysis shows that having a mother who experienced economic hardship due to the crisis significantly reduced the marriage desires of young, unmarried women. Though we are not certain why their mothers' economic setbacks negatively affected women's desires for marriage, the widely documented close emotional ties between mothers and daughters in Thailand may have played a role.

Our study suggests that the paths through which the economic crisis has affected desires for children and marriage are diverse and indirect. By implication, to account fully for its sociodemographic effects on family formation and family planning, it is necessary to take into consideration the economic and demographic situations of not

only individual women and men but also their family members, including their parents and, if married, the spouse and his or her parents.

We are not certain whether the identified effects of the crisis on desires for children and marriage among Thai women and men are short-term responses, or more or less irrevocable. Mason [1997] suggests that the effects of economic downturns on the demand for children tended to be temporary and procyclical in developing countries at late stages of demographic transition in the 1980s. According to recent reports on the economic conditions in Thailand [e. g., Kaosa-ard *et al.* 2000; *The Economist* 2002], the Thai economy is on the way to recovery. If Mason's suggestion applies to the recent and more acute crisis in Thailand, once the economy recovers, women's and men's desires for marriage and children may also bounce back. We cannot ignore the possibility, however, that once having experienced such a shock, young Thais may have undergone changes in their desires for children and marriage that are likely to linger long after the recovery. More studies are needed to explain the magnitudes and the mechanisms of the demographic effects produced by the economic crisis in Thailand and elsewhere in Asia.

#### References

- Bello, Walden. 1998. Globalization in Crisis: The End of a "Miracle." *Multinational Monitor* (February). <http://www.globalpolicy.org/globaliz/econ/globcris.htm>
- Bhaopichitr, Kirida. 1997. Thailand's Road to Economic Crisis. *The Nation* (Bangkok), December. <http://www.hartford-hwp.com/archives/54/113.html>
- Chayovan, Napaporn; Peracca, Sara; and Ruffolo, Vipan Prachuabmoh. 2000. *Thailand's Economic Crisis and Reproductive Health: A Case Study of Bangkok, Any Tong and Sri Saket*. Bangkok: College of Population Studies, Chulalongkorn University.
- Daorueng, Prangtrip. 1998. Crisis Promises More Pain for Workers. *InterPress Third World News Agency (IPS)*, December 26. <http://www.hartford-hwp.com/archives/50/050html>
- Facts on Life News Services. 1998. Issues and Controversies: Asia's Economic Crisis. March 20. <http://www.facts.com/icof/i00063.htm>
- Frankenberg, Elizabeth; Thomas, Duncan; and Beegle, Kathleen. 1999. *The Real Costs of Indonesia's Economic Crisis: Preliminary Findings from the Indonesian Family Life Surveys*. Labor and Population Program Working Paper Series, No. 99-04. Santa Monica, CA: RAND.
- Ito, Takatoshi. 1998. The Development of the Thailand Currency Crisis: A Chronological Review. *Kaigai-Toshi Kenkyusho Ho* [Journal of Research Institute for International Investment and Development] 24 (9 / 10): 68-93.
- Jansen, Karel. 1997. *External Finance in Thailand's Development: An Interpretation of Thailand's Growth Boom*. London: Macmillan.
- . 2001. Thailand, Financial Crisis and Monetary Policy. *Journal of the Asia Pacific Economy* 6 (1): 124-152.
- Kaosa-ard, Mingsarn; Yusanas, C.; Plangpraphan, J.; Charoenpiew, P.; Wijukprasert, P.; Meethom, P.; Leangcharoen, P.; Jarungrattanapong, R.; Sae Hae, S.; Jitsuchon, S.; Rungjan, S.; Keawmesri T.; and Uparasit, U. 2000. *Social Impact Assessment: Synthesis Report*. Bangkok: Thailand Development Research Institute.
- Keyes, Charles F. 1976. In Search of Land: Village Formation in the Central Chi River Valley, Northeast Thailand. *Contributions to Asian Studies* 9: 45-63.
- Knodel, John; Chamrathirong, Apichat; and Debavalya, Nibhon. 1987. *Thailand's Reproductive Revolution: Rapid Fertility Decline in a Third World Setting*. Madison: University of Wisconsin

- Press.
- Lee, Jong-Wha; and Rhee, Changyong. 1999. *Social Impacts of the Asian Crisis: Policy Challenges and Lessons*. Occasional Paper 33. New York: United Nations Development Programme, Human Development Report Office. [http://hdr.undp.org/docs/publications/occasional\\_papers/oc33a.htm](http://hdr.undp.org/docs/publications/occasional_papers/oc33a.htm)
- Limanonda, Bhassorn. 1994. Family Formation in Rural Thailand: Evidence from the 1989–90 Family and Household Survey. In *Tradition and Change in the Asian Family*, edited by Lee-Jay Cho and Moto Yada, pp. 383–400. Honolulu: East-West Center.
- Mason, Andrew. 1997. The Response of Fertility and Mortality to Economic Crisis and Structural Adjustment Policy during the 1980s: A Review. In *Demographic Responses to Economic Adjustment in Latin America*, edited by George Tapinos, Andrew Mason, and Jorge Bravo, pp. 17–33. Oxford: Clarendon Press.
- Mulder, Niels. 2000. *Inside Thai Society: Religion, Everyday Life, Change*. Chiang Mai: Silkworm Books.
- Podhisita, Chai. 1994. Coresidence and the Transition to Adulthood in the Rural Thai Family. In *Tradition and Change in the Asian Family*, edited by Lee-Jay Cho and Moto Yada, pp. 363–381. Honolulu: East-West Center.
- Prachuabmoh, Visid; Knodel, John; Prasitrathsin, Suchart; and Debavalya, Nibhon. 1972. *The Rural and Urban Population of Thailand: Comparative Profiles*. Institute of Population Studies, Chulalongkorn University Research Report No. 8. Bangkok: Thai Watana Panich Press.
- Sugisaki, Shigemitsu. 1999. Economic Crisis and Recovery in Asia and Its Implications for the International Financial System. Paper presented at the Meeting on Development Cooperation: Responding to the Asia Crisis, sponsored by the International Monetary Fund, Sydney, March 5.
- Thailand, National Statistics Office (NSO). 1997. *The Report of the Labor Force Survey: Round 2–May 1997*. Bangkok: National Statistics Office, Office of Prime Minister.
- . 2000a. *The Report of the Labor Force Survey: Round 2–May 2000*. Bangkok: National Statistics Office, Office of Prime Minister.
- . 2000b. *The Report of the Labor Force Survey: Round 3–August 2000*. Bangkok: National Statistics Office, Office of Prime Minister.
- The Economist*. 2002. Special Report—East Asian Economies: The Lost (Half) Decade. July 6.
- Tsuya, Noriko O.; and Choe, Minja Kim. 2003. Investments in Children’s Education, Desired Fertility, and Women’s Employment. Chapter 5 in *Marriage, Work, and Family Life in Comparative Perspective: Japan, South Korea, and the United States*, edited by Noriko O. Tsuya and Larry L. Bumpass. Honolulu: University of Hawaii Press (forthcoming).