

SOCIAL CONSEQUENCES OF THE FINANCIAL CRISIS IN ASIA

James C. Knowles, Ernesto M. Pernia, and Mary Racelis

November 1999

E.M. Pernia is Lead Economist and J.C. Knowles and M. Racelis are consultants at the Economics and Development Resource Center. A summary of this paper with the same title earlier appeared as EDRC Briefing Note No. 16 (July 1999). The authors gratefully acknowledge the many helpful comments and suggestions from the conference participants, as well as from reviewers of the manuscript. They also thank Ludy Pardo for her excellent technical assistance, and Lulu Antonio for her able secretarial support.

**Asian Development Bank
P.O. Box 789
0980 Manila
Philippines**

**©1999 by Asian Development Bank
November 1999
ISSN 0117-0511**

**The views expressed in this paper are those of the
authors and do not necessarily reflect the
views or policies of the Asian Development Bank.**

Foreword

The Asian Development Bank *Economic Staff Paper Series* presents the results of selected preliminary research undertaken by the Economics and Development Resource Center. It is designed to stimulate discussion and critical comment on socioeconomic issues facing the developing countries of the Asian and Pacific region. It is hoped that in some small way the discussion generated by the series will increase our understanding of the development process in the region.

JUNGSOO LEE
Chief Economist
Economics and Development Resource Center

Contents

Abstract	vii
I. Introduction	1
II. Transmission of Social Impacts	2
A. Conceptual Framework	2
B. Methodology	3
III. Prices, Employment, and Income	5
A. Prices	5
B. Employment and Earnings	7
C. Nonlabor Income	12
D. Income Transfers and Remittances	13
E. Household Income	15
IV. Inequality and Poverty	16
A. Distribution of Income	16
B. Poverty	19
C. Regional Income Distribution	21
V. Human Development	22
A. Education	23
B. Health	28
C. Family Planning and Reproductive Health	32
VI. Social Capital	34
A. Community Cooperation and Participation	34
B. Crime and Domestic Violence	37
C. Corruption	39
VII. Environment	39
VIII. Especially Disadvantaged Groups	40
A. The Poor	40
B. Women	41
C. Children	43
D. Youth	44
E. Older Persons	45
F. Vulnerable Occupational Groups	45
G. Informal Sector Workers	46
H. Overseas Migrant Workers	46
I. Urban and Rural Populations	46
J. Ethnic and Religious Minorities	48
K. Institutionalized Populations	48
IX. Responses to the Crisis	48
A. Household Coping Mechanisms	48

B.	Labor-Management Responses	52
C.	Government Responses	53
X.	Conclusion and Implications	59
A.	Key Findings and Lessons	60
B.	Policy Responses	63
C.	Policy Reforms	64
	Appendix	66
	References	72

List of Boxes

1	The Family as a Safety Net	49
2	Adjustments in Use of Social Services	52
3	Creative Thai Teachers	54
4	Community-managed Information Systems	62

List of Figures

1	Inflation in the Study Countries, 1996-1998	6
2	Unemployment Rates, 1997-1998	7
3	Percentage Change in Real Earnings per Worker, 1997-1998	8
4	Percentage Changes in Construction and Manufacturing Employment, 1997-1998	9

List of Tables

1	Changes in the Size Distribution of Real Per Capita Household Expenditure in Thailand, 1996-1998	17
2	Changes in Real Per Capita Expenditure in Indonesia between 1997 and 1998, by 1997 Quartile	17
3	Size Distribution of Nominal Household Income in the Philippines, 1997 and 1998	18
4	Alternative Estimates of Changes in the Poverty Rate in Indonesia, 1997-1998	20
5	Changes in Real Per Capita Income in Thailand between 1996 and 1998	21
6	Changes in Real Per Capita Household Expenditure by Indonesian Province, 1997-1998	22
7	Changes in Enrollment and Dropout Rates among Indonesian Children Ages 13-19, 1997-1998	24
8	Household Expenditure on Private Tutoring in Korea Before and After the Crisis	27
9	Contraceptive Prevalence among Currently Married Women (ages 15-49) in the Philippines, 1993-1998	33
10	Participation in Indonesian Community Development Activities, 1997 and 1998	36
11	Major Reported Crimes in Thailand, 1995-1998	37
12	Changes in Indonesian Household Expenditure Shares, 1997-1998	50

Abstract

This paper assesses the social impact of the Asian financial crisis, drawing on the results of studies in six countries, namely, Indonesia, Republic of Korea, Lao People's Democratic Republic, Malaysia, Philippines, and Thailand. The impacts appear to be less than were anticipated early in the crisis. However, it seems too early to draw conclusions about the eventual social consequences. First, the data on which the present study is based were collected at a relatively early stage in the crisis. There was a lag of several months between the economic effects and the social impacts of the crisis. Second, many of the coping mechanisms used by poor households to maintain current consumption levels are likely to have deleterious consequences in the future. Third, due to data limitations, the study is incomplete in some areas. For these reasons, the study should be considered at best as an interim assessment of the social impact of the crisis. Nevertheless, the study findings make it clear that further monitoring and assessment of the social impact are required.

The Asian financial crisis also provides a rare opportunity to learn how existing social systems function under duress. If the lessons are adequately documented and effectively communicated to policymakers, the experience gained during the crisis can provide a useful guide to needed policy reforms. The crisis has revealed that considerable effort needs to be directed to the further development of social safety nets throughout the region, given the limited capacity of families to sustain their members through difficult times. At the same time, it must be acknowledged that, given the inadequacy of government-fostered safety nets, the family system has yet again carried out its traditional fallback role of seeing its members through tremendous hardships. In developing their social safety nets, most Asian countries will have the benefit of building from the ground up, not only drawing on the experiences of countries outside the region but also shaping systems that are best suited to the needs of Asian societies in the context of an emerging information-based global economy.

I. Introduction

There is now a near-consensus that the Asian financial crisis largely stemmed from structural problems in the banking and corporate sectors, rather than from weak macroeconomic fundamentals. These problems had to do with inordinately high levels of financial leverage, weak supervisory and regulatory frameworks, and excessive risk-taking by both lenders and borrowers, leading to high rates of nonperforming loans. This made banks and corporations highly vulnerable to unexpected capital outflows. A sudden loss of confidence that spawned widespread panic, resulting in massive capital withdrawal, quickly unravelled the financial systems of several Asian economies.

Analysts have differentiated the Asian crisis from the Mexican debacle of 1994-1995 that was caused more by macroeconomic imbalances than by microeconomic problems in the financial sector. It appears that macroeconomic imbalances are easier to resolve, as shown by the Mexican economy's relatively swift rebound. Structural problems at the level of business firms and banks, compounded by inappropriate exchange rate policies, appear to be more involved and take longer to deal with.

The severity of the Asian financial crisis rapidly translated into marked contractions in gross domestic product (GDP) and employment in the affected economies—namely, Indonesia, Korea, Malaysia, Philippines, and Thailand. GDP shrinkages in 1998 ranged from nearly 14 percent in Indonesia to 0.5 percent in the Philippines. In turn, these economic recessions have resulted in adverse social consequences. Although there are increasing signs that the worst of the financial crisis is over and the crisis economies are getting on the road to recovery, the social impacts continue to unfold. The social crisis is likely to be deeper and can be expected to persist long after the crisis economies return to solid growth.

In the aftermath of the financial crisis, a number of rapid assessments on the extent and nature of the social impact appeared. Many were conjectural, some suggesting terribly grim scenarios. Nevertheless, they may have served a purpose in bringing out the human costs of the crisis in bolder relief. However, while the problem has caught the attention of national and international agencies, it called for more in-depth studies based on more timely empirical data. The earlier inferences regarding social impacts were mostly extrapolated from precrisis quantitative data and largely anecdotal information.

In the last quarter of 1998, the Asian Development Bank (ADB) began a more systematic effort at assessing the social consequences of the financial and economic crisis, under a regional technical assistance. The study was designed to assist in devising policy responses to the social crisis and identifying reforms that would strengthen social protection systems in the longer term. To this end, the project attempted to: (i) examine the transmission of adverse social impacts from the financial and economic crisis, and analyze the nature and extent of these impacts; (ii) identify the various groups affected by the crisis and assess the differential impacts on them; (iii) review the various responses to the social crisis of the governments, private sector, nongovernmental organizations (NGOs), and community organizations, as well as of families through household coping mechanisms; (iv) suggest a mechanism for monitoring social impacts over time; and (v) make recommendations for the Bank and other international organizations. The affected Asian developing countries included

in the study are Indonesia, Korea, Lao People's Democratic Republic (PDR), Malaysia, Philippines, and Thailand.

This paper synthesizes the findings of the six country studies. The next section sketches the transmission of social impacts from the financial and economic crisis, and describes the research methodology. The third section analyzes the crisis effects on prices and employment, followed by a discussion of the impact on inequality and poverty as the fourth section. The fifth section then looks at human development in terms of education, health, and family planning. The sixth section touches on social capital, and the seventh looks at the environment. The eighth section highlights the various vulnerable groups, while the ninth section discusses the different responses to the crisis. The final section presents conclusions and policy implications.

II. Transmission of Social Impacts

A. Conceptual Framework

Conceptually, five main channels through which the financial and economic crisis can exert adverse social impacts may be identified. These are prices, labor markets, assets, credit, and government budget.

Currency depreciation invariably begets price increases, primarily of imported goods or items with high import content, such as pharmaceuticals, food, and fuel. However, the degree of price inflation depends in part on the extent of government intervention, which is common in many countries especially with respect to basic goods.

A contraction in GDP translates into a fall in the demand for labor and, hence, higher unemployment or underemployment. Reduced demand for labor is reflected in business failures or retrenchment, wage cuts, shorter work hours, or fewer employee benefits. A regional economic crisis also results in decreased demand for migrant workers. This hurts countries that rely on the overseas labor market for employment of their surplus labor and for worker remittances.

Besides reduced employment earnings, many households bear the loss of lifetime savings due to banking failures or of asset values owing to the collapse of stock and real estate markets. Diminished collateral for loans and high interest rates constrict access to credit for investment or consumption. This then forces households to resort to the informal credit market that imposes punitive interest rates.

Finally, economic downturns result in lower government revenues, while a good deal of public expenditure has to be devoted to the restructuring of financial institutions and debt servicing. Normally, efforts are made to maintain previous spending levels in such basic social services as education and health, but lower real spending in these areas is often inevitable.

The nature and extent of the Asian crisis is such that it negatively affects virtually all population groups. But the severity of the impact varies across social groups, as it does across countries. For instance, construction and factory workers are generally more adversely affected by employment and income effects than are service sector workers, and women more than men. Similarly, consumer price inflation, asset value loss and credit squeeze hurt urban households more than their rural counterparts. Also, the poor and near-poor suffer

more than the nonpoor from government social spending cuts. In like manner, pregnant and child-rearing women, children, and older persons are more badly hit than are other age groups. Overall, the poor and vulnerable groups are the ones that require particular short-term assistance and longer-term protection.

B. Methodology

The typical methodological problem that plagues impact assessment exercises has to do with isolating the effect that is specifically attributable to a factor or event in question. In the present case, the problem is that of disentangling the social impact of the crisis from that of other contemporaneous factors. Principal among the latter are the El Niño weather phenomenon and regional political instability. It may also be desirable to separate the social impact of the crisis from that of the remedial measures, such as public works programs, food distribution, and scholarships, to understand how effective these measures have been.

Clearly, it is impossible to examine the counter-factual, i.e., the social impact of the financial crisis without the other confounding factors, as would be possible in a randomized experiment. Examining the case of developing countries that have gone through financial crises in recent years (e.g., Argentina, Brazil, and Mexico) without the presence of complicating meteorological and political factors is potentially useful. But there are many “unobserved” differences between the two regions that complicate such comparisons.

The brief time period (about two years since the onset of the crisis) and the few countries involved limit the possibility of econometric analysis at the country level. Likewise, the fact that the financial crisis was national rather than local in character (though the weather behavior may be location-specific) makes econometric analysis impractical at the subnational level (e.g., regions or provinces as observation units). Further complicating such an evaluation is the fact that much of the political instability occurring during the crisis has been exacerbated, if not caused, by the crisis itself (e.g., Indonesia and Malaysia).

Given the above problems, more practical methods are often adopted in impact assessments. The main ones are trend analysis and pre-event/postevent analysis. Particularly in the case of macroeconomic effects (e.g., employment, earnings, and consumer prices), a careful examination of trends over time can be quite revealing. The timing, location, and sector of impact of various phenomena may provide useful information about their underlying causes. Household surveys are another important source of information on social impact (e.g., employment, earnings, consumption, prices, and utilization of social services). Although available household surveys usually provide only cross-section (as distinct from longitudinal) data, most of the crisis countries have both precrisis and postcrisis socioeconomic surveys.

Theory-based evaluation is an additional method that can be fruitfully combined with trend and event analysis. In this case, a conceptual framework involving theoretical statements about cause and effect—such as the one presented in the preceding section—can be used to evaluate the available evidence to validate the theory. If the theory is consistent with the observed facts, it can be inferred that the event (e.g., the financial crisis) is the cause of the observed outcomes.

In addition to the economic approach, the study makes use of qualitative data gathered from local communities and households—“listening to people’s voices”—employing

sociological or participatory methods. The participatory approach was limited, however. This is because basic to participatory research in a strict sense is the assumption that people would benefit directly and on their own terms from the information they provide. This self-interest heightens their drive to obtain accurate and useful data. External agencies supportive of this approach necessarily commit themselves to a continuing problem-solving process with the participatory research groups beyond problem formulation and data collection. Thus, the process is developmental rather than exploitative, interactive rather than unidirectional.

The method used in the present study for Indonesia, Lao PDR, Philippines, and Thailand (not for Malaysia and Korea for budgetary reasons and given their relatively advanced economic status) may be more aptly called consultative rather than participatory research. It included the following techniques:

(1) Focus Group Discussions

To tap the insights of vulnerable groups, the four country teams utilized focus group discussion (FGD) and key informant techniques. Focus groups were usually composed of approximately 15 persons representing one set of social characteristics, e.g., male and female small farmer-cultivators, plantation workers, fisherfolk, construction workers, agricultural workers, urban informal settlers ("squatters"), ethnic minorities, commercial sex workers, street and market vendors, and HIV-AIDS sufferers.

The external researcher explained the purpose of the gathering and reasons for seeking the group's views. Each had a checklist of topics the group might cover. These included perceived changes since mid-1997, people's coping mechanisms in light of the changes, government responses, and recommendations to the Asian Development Bank. However, the external researcher encouraged the focus group members to move in the direction that most interested them, ensuring through skillful guidance that the discussion did not go too far afield and remained limited in scope. This was in keeping with the recognition that focus groups are most successful when they cover a few items in greater depth than many items superficially. Where feasible, national level country teams contacted NGOs and government personnel in the field who knew the local people and their circumstances and could facilitate their coming together.

Because the study in Thailand took advantage of a participatory rural assessment already underway as part of a proposed Bank agricultural program loan, the Thai results go well beyond focus group discussions. The team carried out follow-up group interviews to identify resources, did participatory field analysis of the data, and conducted two stakeholder workshops to review the FGD results and formulate recommendations for the agricultural program loan. Urban data were derived from an Urban Community Development Office survey done in the first half of 1998 covering poor urban households.

(2) Key Informant Interviews

These were undertaken at each site with individuals presumed to be especially knowledgeable about local conditions. In Indonesia these included village heads who had also served as respondents in pre-1997 surveys. In Lao PDR, the team interviewed representatives of selected national ministries, mass movements, NGOs, and representatives of

such special sectors as local enterprises, minority boarding schools, and rural restaurants. Also interviewed were province and district level chiefs of staff and sector heads in planning, education, public health, agriculture, labor and social welfare. The Philippine team interviewed *barangay* (village) heads, health and nutrition workers, school principals and head teachers, social workers, and municipal officials. In Thailand, local officials and stakeholders in agricultural development were interviewed.

(3) Small Household Surveys

All four country teams did household surveys alongside the FGDs, enabling them to compare community-level qualitative and quantitative data. They also examined other quantitative data available at the local level that shed further light on the more qualitative results. The Indonesian team added a December 1998 round of the sentinel site One Hundred Village Survey (SSD) data base and the more exploratory On The Ground Survey (SDK). In Lao PDR, semistructured interviews were undertaken of target group households. In the Philippines complementary surveys of 430 households were conducted in over half of the 57 focus group communities. The Thailand study featured small-scale household surveys carried out in districts with high poverty levels and hardest hit by the economic crisis.

The selection of areas for the FGDs relied on three criteria: (i) geographic areas spread nationwide where the impact of the crisis was likely to be heaviest and which were reasonably accessible, (ii) sites in which previous surveys had been undertaken a year or two before the crisis, and (iii) the presence of types of groups that would contribute to the overall diversity and “representativeness” of the investigation.

III. Prices, Employment, and Income

A. Prices

The massive currency devaluations that inaugurated the crisis had an almost immediate impact on the prices of goods and services with high import content. Food prices rose more rapidly in most countries than nonfood prices. Overall inflation occurred to varying extents in the crisis countries, depending on fiscal and monetary policy responses (Figure 1). In Indonesia, for example, where inflation was particularly sharp, money supply grew by 53 percent in 1997 and by 62 percent in 1998. Inflation was moderated in some cases by government subsidies, price controls, and by additional imports. In Indonesia, several commodities were subsidized during the crisis, e.g., gasoline, rice, sugar, cooking oil, and fertilizer (Sigit and Surbakti 1999).

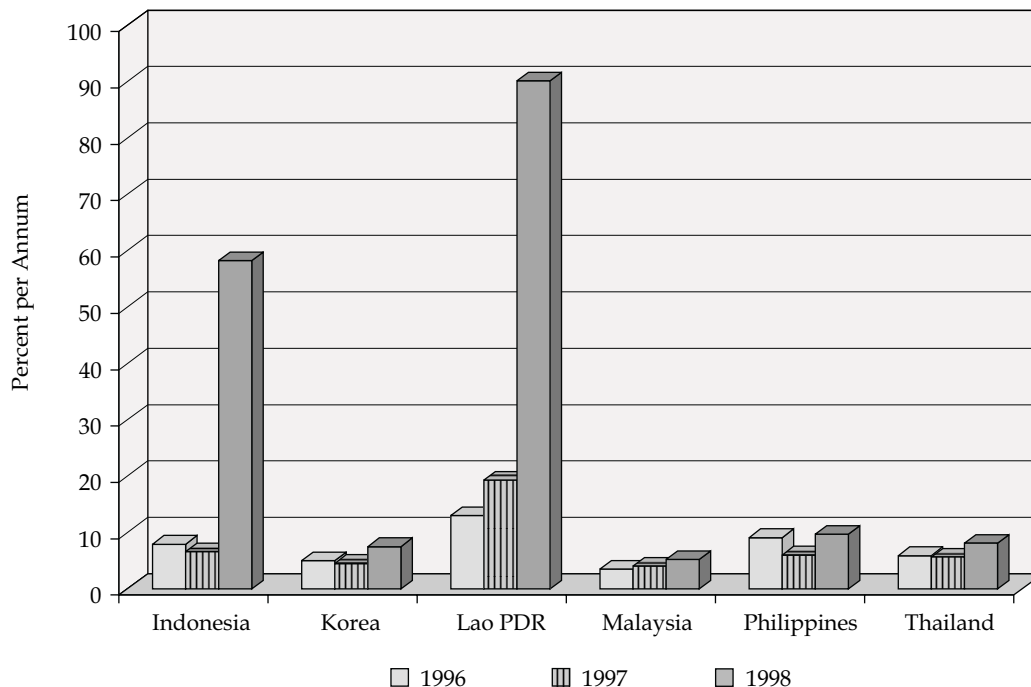
Inflation not only eroded real incomes but, together with the collapse of regional stock markets, also drastically reduced the real value of household savings. Thus, higher prices and lower real wages effectively spread the cost of labor market adjustment over a broader population beyond the unemployed workers.

Focus group discussions in Indonesia suggest that people, aware of sharp price increases in daily necessities such as food and transportation, were forced to make changes in their lifestyles. Most negatively affected were fixed income groups, like civil servants and

some private business employees and factory workers, whose salaries could not keep up with the nearly 60 percent inflation. Even worse affected were informal sector workers.

Agriculture was struck by increases in the price of inputs with a high foreign exchange component (e.g., fertilizers, fuel). Since most animal feed is imported, the price of livestock inputs increased sharply. In Indonesia, the price of poultry feed increased from 700 Rupiah/kg to 3,000 Rupiah/kg, and many poultry farmers in particular shut down their operations (some estimates range as high as 80 percent). Consequently, output in the overall livestock subsector of agriculture declined by 6.4 percent in 1998 (Sigit and Surbakti 1999). For Indonesian farmers, according to FGDs, much higher prices of fertilizers and pesticides and the El Niño drought led to severe agricultural production declines at a time when earnings from farm products were on the rise.

Figure 1: Inflation in the Study Countries, 1996-1998



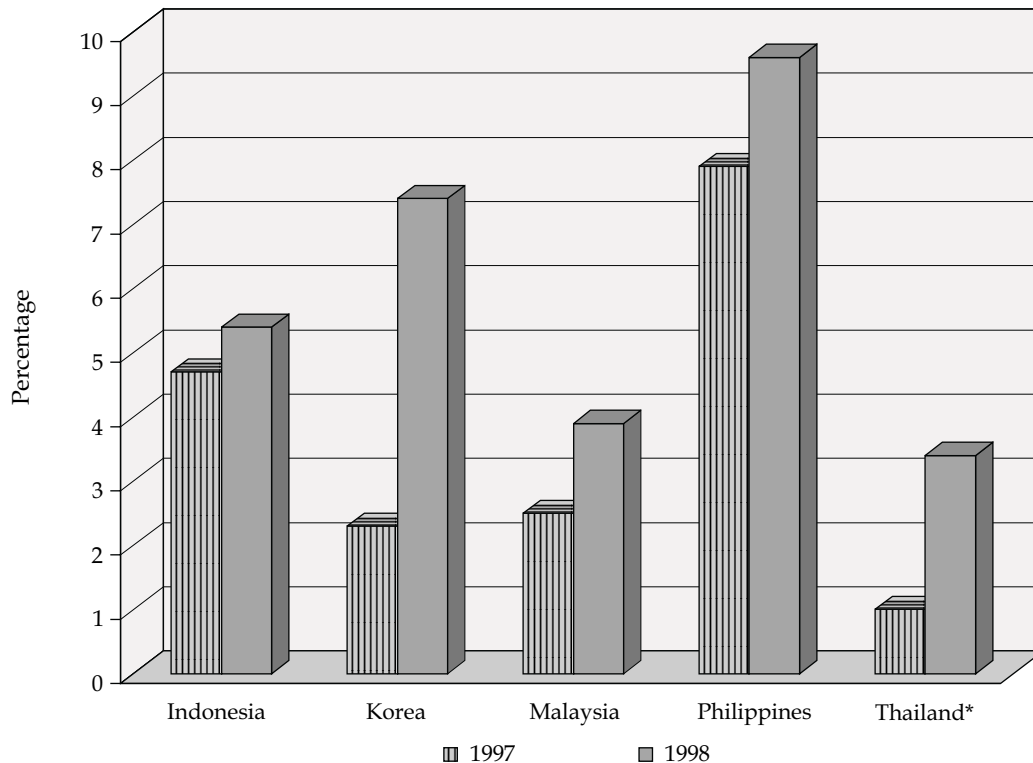
Source: Asian Development Bank (1999).

The FGDs in farming communities of the Philippines reported that prices of farm inputs increased by 15-100 percent, with animal feeds and farm labor registering nearly 100 percent price increases (Reyes et al. 1999). The price of fertilizer increased from 30 to 60 percent, forcing many farmers to use less or none. Many farmers reported that they were unable to take advantage of higher crop prices because landowners and/or traders to whom they were indebted dictated the prices. Farmers also complained about the government's decision to import huge volumes of rice and corn to dampen domestic price increases, which they recognized kept prices of their produce artificially low.

B. Employment and Earnings

Adverse impacts on employment and earnings occurred soon after currency devaluation in most of the crisis countries (Lao PDR appears to be the exception, although it does not yet have any postcrisis employment and earnings data). Unemployment rates increased in all countries, with the largest increase recorded in Korea (Figure 2). In Indonesia, data from the government labor force surveys (Sakernas) indicate that the unemployment rate rose from 4.7 to 5.4 percent between August of 1997 and 1998 (Sigit 1998).

Figure 2: Unemployment Rates, 1997-1998



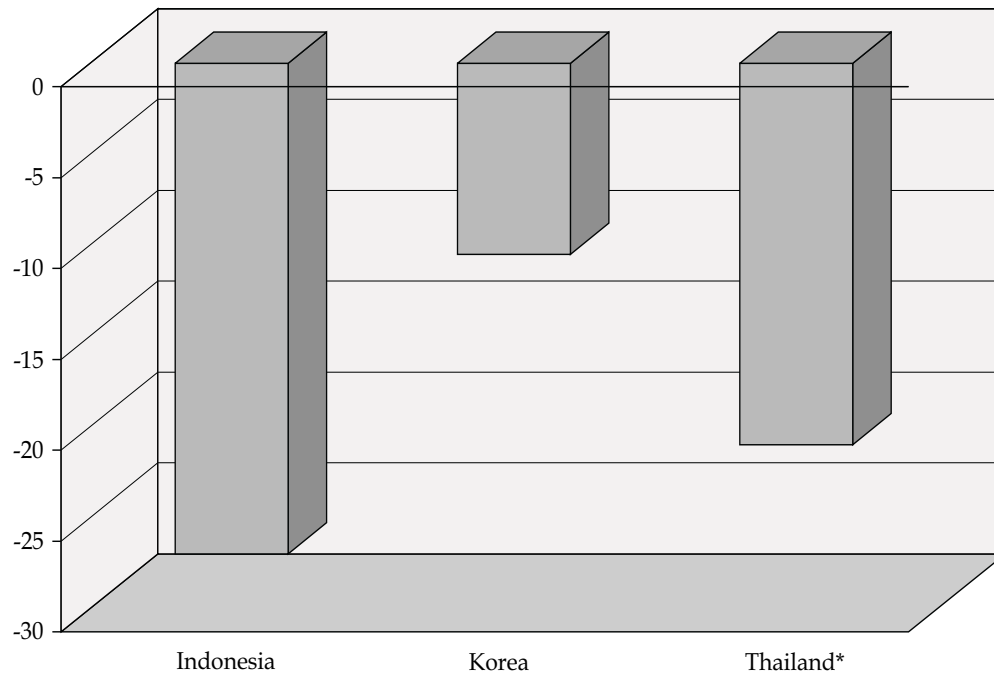
*Wet season (August)

Sources: Indonesia (Sigit and Surbakti 1999); Korea (Moon, Lee, and Yoo 1999); Malaysia (Piei, Johan, and Abubakar 1999); Philippines (Reyes, Manasan, Orbeta, and de Guzman 1999); Thailand (Pongsapich and Brimble 1999).

However, unemployment rates tend to understate the labor market impact of a crisis. In Korea, for example, the economically active population declined by 1 percent during 1998 as the labor force participation rate (LFPR) decreased from 62.2 to 60.5 percent (Moon, Lee, and Yoo 1999). In Indonesia, the proportion of those working less than 35 hours per week increased from 35.8 to 39.1 percent of all workers (Sigit 1998).

Decreases in real earnings (mostly due to inflation rather than to declines in nominal wages) have also occurred in most countries (Figure 3) and have been more important in labor market adjustment during the crisis than either unemployment or reductions in hours worked. In Korea, a large shift in the composition of earnings also occurred, with overtime payments and bonuses declining faster than wages (Moon, Lee, and Yoo 1999).

Figure 3: Percentage Change in Real Earnings per Worker, 1997-1998



*Wet season (August).

Sources: Indonesia (Sigit and Surbakti 1999); Korea (Moon, Lee, and Yoo 1999); Thailand (Pongsapich and Brimble 1999).

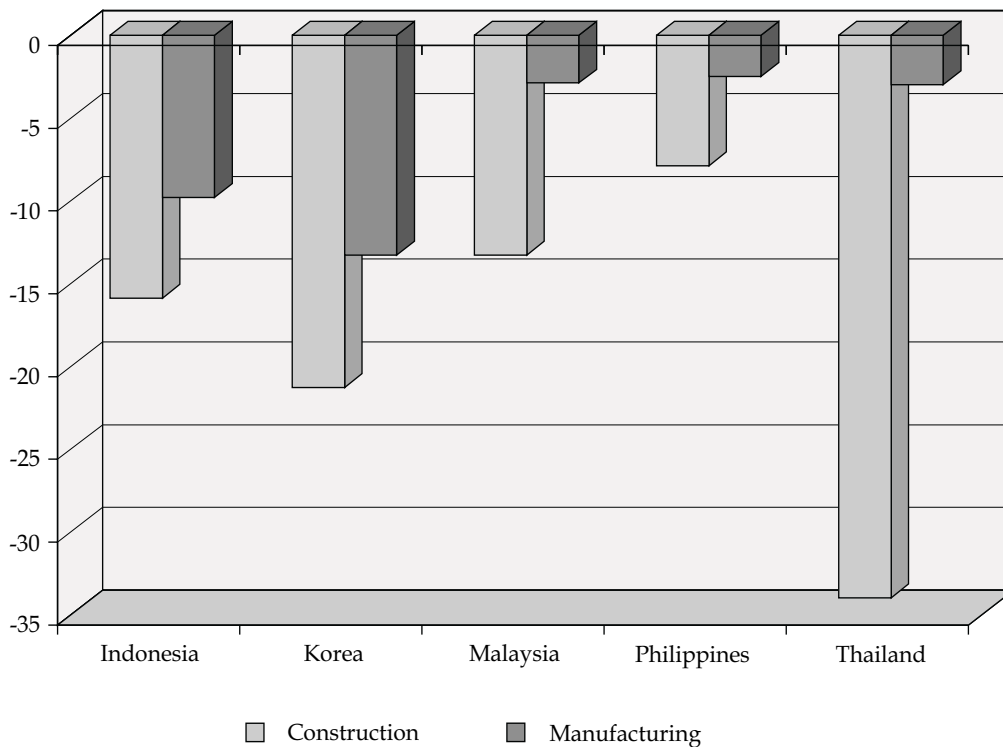
The labor market impact of the crisis has been greater in urban areas of Indonesia and Korea, and probably also in the other countries as well. In Indonesia, the rural labor force grew at an unusually faster pace, while the urban labor force expanded more slowly (Feridhanusetyawan 1999). Rural employment also grew more rapidly while urban employment expanded more slowly. In addition, the decline in real earnings was greater in urban than in rural areas (30 percent versus 25 percent). In Thailand, however, rural employment has been more adversely affected by the crisis, with employment levels down 3.2 percent by August 1998 compared to a decrease of 2.6 percent in urban areas. The long-term transfer of rural workers from agriculture to nonagriculture (especially rural informal sector) jobs has been reversed by the crisis (Brooker Group 1999).

The labor market impact of the crisis has affected some subnational regions more than others. In Indonesia, it is clear that the impact is worst in Java, where approximately two thirds of the population live and which was previously relatively prosperous. In Thailand, the relatively poor Northeast was most seriously hurt, accounting for 63 percent of all employment losses (although it accounts for only 33 percent of the labor force), with Bangkok accounting for 14 percent, the North 11 percent, the Central Region 9 percent, and the South 2 percent (Brooker Group 1999). However, some of the employment loss in the Northeast is drought-related.

Adverse labor market impact has been particularly marked in the construction sector and, to a lesser extent, in the manufacturing sector (Figure 4). In contrast, employment in agriculture and services has increased in several countries. In Lao PDR, there is evidence

that the steep currency devaluation (far in excess of that in Thailand) led to an agricultural boom, with Lao farmers exporting large quantities of their relatively inexpensive produce to Thailand through informal channels (Chamberlain 1999). In Indonesia agricultural employment increased by 13.0 percent between 1997 and 1998 (Sigit 1998). In Korea agricultural employment increased by 4.3 percent, while service sector employment grew by 1.1 percent. In Thailand, service sector employment increased by 5.6 percent between August of 1997 and 1998, as the service sector was able to absorb about 19 percent of the employment losses in other sectors (Brooker Group 1999).

Figure 4: Percentage Changes in Construction and Manufacturing Employment, 1997-1998



Sources: Indonesia (Sigit and Surbakti 1999); Korea (Moon, Lee, and Yoo 1999); Malaysia (Piei, Johan, and Abubakar 1999); Philippines (Reyes, Manasan, Orbeta, and de Guzman 1999); Thailand (Pongsapich and Brimble 1999).

The gender impact of the crisis on employment and earnings is less clear. In Thailand, female employment declined by 3.8 percent between August of 1997 and 1998, compared to 2.5 percent among males (Brooker Group 1999). However, there was no significant gender difference in unemployment rate increases (because the percentage decline in the female labor force was larger than that among males), and the decline in real earnings was less among female workers (the earnings gap between male and female earnings declined by 5.5 percent). In Korea, changes in unemployment rates give the appearance that males were more adversely affected than females. However, the female labor force also declined by 3.8 percent while the male labor force increased by 1.0 percent (Moon, Lee, and Yoo 1999).

If female labor force participation rate had remained unchanged, the female unemployment rate would have increased from 2.3 percent to 10.4 percent.¹

In Indonesia, the female labor force increased more rapidly between 1997 and 1998 (at 4.8 percent) than during the period 1990-1996 (at 2.3 percent), while the male labor force grew at only a slightly higher rate (2.7 percent versus 2.5 percent).² Female employment in 1997-1998 also expanded more rapidly than in 1990-1996, while male employment grew more slowly. The male unemployment rate increased from 4.1 to 5.0 percent while the female unemployment rate increased from 5.6 to 6.1 percent. Real average earnings of female workers declined less than those of male workers in urban areas, but the reverse was the case in rural areas. However, these comparisons do not reflect the additional burdens that women carry beyond the workplace.

More educated workers have been less adversely affected by the crisis in Thailand, Korea and the Philippines. In Thailand, employment among those with primary schooling or less declined by 8 percent between August of 1997 and 1998. Among those with secondary or higher education, employment expanded by 12.2 percent during this same period (Brooker Group 1999). In Korea, those with less than upper secondary education experienced the greatest percentage increase in unemployment rate. In the Philippines, employment among those with completed elementary or less schooling decreased by 1.7 percent between October 1997 and October 1998, while the number of those with some secondary schooling and above increased by 3.7 percent.

Youth have been perhaps most negatively affected by the crisis. In Thailand, there was a sharp rise in unemployment among university graduates in August 1998 as they entered the labor market. In fact, the employment impact of the crisis was concentrated among youth (and particularly among new entrants to the labor force). Persons below age 30 (one third of the labor force) accounted for 60 percent of the increase in unemployment during 1998.³ By contrast, those aged 50 and above experienced little increase in unemployment. In Korea, the employment impact of the crisis has also fallen relatively heavily on the young and on the elderly. Employment among those aged 15-19 and 20-29 decreased by 14.9 and 14.1 percent, respectively; while among those aged 50-59 and 60 and above decreased by 6.4 and 4.4 percent, respectively. On the other hand, employment declined by only 1.1 and 0.7 percent among those aged 30-39 and 40-49, respectively (Moon, Lee, and Yoo 1999).

Youth unemployment has also been relatively high in the Philippines. The proportion of workers in the age group 15-34 declined from 46.5 percent of the work force in July 1997

¹In this case the female labor force would have numbered 8.965 million (458,000 more than it did in 1998). Assuming employment would have been unchanged, unemployment would have numbered 935,000 (instead of 477,000).

²The relatively higher increases in employment among women do not appear to have come at the expense of school attendance. Female school attendance among the working age population (15 and above) increased by 7.7 percent in 1998 (compared to an average annual rate of 0.8 percent during 1990-1996), much more than the 1.2 percent increase among males.

³There is no indication that employment increased among children ages 13-14 during 1998, about 10 percent of whom were in the labor force during the wet season (many of whom were also in school) (Brooker Group 1999). Although the Labor Force Surveys include children 13-14 (as well as children 15 and over), it is difficult to infer much about child labor from the information collected. Children who are in school but not working even one hour per week are identified as "studying" and are recorded among those not in the labor force. As soon as they begin working even one hour per week (which is common in rural areas during the wet season), they are classed as being in the labor force, even though they may continue in school.

to 45.5 percent one year later and to 45.1 percent in October 1998. However, in Indonesia, IFLS data indicate that among men aged 15 and older there was a significant shift toward younger workers. The percent of males aged 15-24 who were employed increased by 17 percent while that of men 55-64 declined by 12 percent (no significant shifts in age composition were observed among female workers). Elderly workers have also been more negatively affected than others in Korea and Indonesia, but they appear to have been helped in the Philippines and to have been largely unaffected in Thailand.

The crisis has led to a larger informal sector share of employment in Indonesia and Korea (but not in Thailand), while information is not yet available in Malaysia and the Philippines. In Indonesia, the share of informal sector employment increased from 62.8 to 65.4 percent (an increase of 6.9 percent between 1997 and 1998 after averaging only 0.4 percent growth during the period 1990-1996), with urban informal sector employment expanding particularly rapidly (10.3 percent versus 5.8 percent in rural areas).⁴ In Korea, the informal sector share of employment increased from 37.1 to 38.8 percent between 1997 and 1998. However, employment decreased in both sectors during this period. The number of unpaid family workers within the informal sector increased by 6.7 percent during the same period, in the absence of which employment in the informal sector would have declined at the same rate as formal sector employment.

Nearly four fifths of rural Thai households reported in FGDs that 1998 was more difficult for them economically than 1997, with over half saying their income had decreased. Welfare declines were mentioned by some 40 percent, the highest proportion located in the Northeast. A shortage of hill rice seeds and irrigation facilities coupled with limited extension services and mismanaged marketing systems affected small farmers, while large farmers made enviable profits. Fisherfolk faced similarly high investment costs for gasoline and equipment. This large overhead substantially limited the profits for those with smaller boats.

At the same time, credit for farm, fisheries, and enterprise development aimed at poor families remained scarce. Farming households cited higher prices for consumer items but lower prices for their produce and labor. Borrowing from money lenders meant higher interest rates, while bank loans with much lower interest rates were not usually available to small farmers or fisherfolk. Urban poor households suffered significantly more than their rural counterparts from increases in rice prices, housing, and household goods. Income inequalities followed suit, with gaps between rich and poor becoming far wider in urban than rural areas.

In Indonesia, export crop plantations cultivating copra, nuts, and chocolate benefited from significant price increases, but the advantages largely went to their owners and not to plantation laborers. The incomes of fisherfolk, especially those engaged in export catches like tuna and shrimp, have risen with significantly higher prices for fish. But again, it is the owners of shrimp ponds and larger, better equipped deep-water fishing boats who get the advantage of this windfall. Small fishermen and women complain of higher maintenance costs for their boats and equipment, offsetting the profits gained from increased fish prices.

⁴These estimates are based on the Sakernas survey, with informal sector workers defined crudely as all self-employed and unpaid family workers (i.e., those working in the formal sector are defined as all employers and employees). By comparison, Susenas data indicate that the informal sector share of employment increased from 64.6 percent in February 1998 to 66.5 percent in February 1999 (Poppele, Sumarto, and Pritchett 1999).

In the Philippines FGDs suggested that some families were negatively affected by the crisis, while others benefited from it. Spiraling prices since mid-1997 forced more than 40 percent of community households to reduce purchases of items that they had been accustomed to having. Rural people moving out of farming blamed this on the high cost of agricultural inputs, the severe drought brought by El Niño, and the stranglehold on agricultural prices exerted by the middlemen-traders. Daily wage earners experienced even more disadvantages as they lost their jobs and replacement employment became scarce. The slowdown in real estate and construction, factory closures, and business retrenchments led to higher unemployment rates for both men and women among the urban poor as well as middle-income families.

In Lao PDR, FGDs indicated that higher prices for agricultural products sold within the country are dramatically enhancing rural producers' earnings, offering incentives for production that were not available prior to the crisis. In the North, villagers report that they have been working harder in the past two years and seeing the results in the expansion of cash crops, forest product collection, and the growth of their swidden and paddy land. Farmers in the East report similar benefits from expanded paddy fields through government support to irrigation. However, poor farmers unable to gain access to water and other agricultural inputs from government had to turn over their land to wealthier farmers who can afford to develop it, thereby increasing the income disparities within the village. In the Central and South regions, fruit, vegetable, and coffee farmers as well as fisherfolk cite similar increases in production and income. Conversion of grazing land to paddy, however, is leading to decreases in livestock production.

Those who have benefited most from heightened production and access to external trade live in the areas of heaviest population densities with good roads and irrigation. Small local manufacturing enterprises and women-managed restaurants there are likewise doing brisk businesses. Those in less accessible places survive through subsistence economies and, although they have not suffered from the crisis, remain poor.

On the other hand, the heaviest blows in Lao PDR have been absorbed by urban-based government employees who lack agricultural land for secondary support. Although government salaries were recently increased on average by 60 percent retroactive to January 1999, only a few of those interviewed had actually received the increase. Private sector wage earners were less affected, since their salaries had generally kept up with inflation.

C. Nonlabor Income

It is likely that the crisis has also had a significant impact on nonlabor income (i.e., interest, rent and profits, including the income of the self-employed). For example, interest income has probably been affected, both positively by the steep increases in interest rates used by central banks to stabilize exchange rates, and negatively by the failure of many financial institutions and the inability of corporate borrowers to meet interest payments. Income in the form of rent has also probably been affected by low rates of occupancy in many properties and by the inability of many tenants to pay their rent. In addition, profits (and other forms of business income), which tend to be sensitive to the business cycle, have probably also been adversely affected by the crisis. Unfortunately, reliable data on nonlabor income are very difficult to obtain in most developing countries.

In Thailand the largest declines in real income are believed to have been suffered by entrepreneurs, particularly in the informal sector (both agricultural and nonagricultural). In Korea, nonlabor income has probably been significantly affected by sharp increases in interest rates and by falling prices and rental values. Asset values and profits are also likely to have declined steeply, but quantitative estimates of these impacts are not yet available.

D. Income Transfers and Remittances

Most of the crisis countries have experienced substantial internal migration flows in recent years, as a sizable proportion of the rural labor force migrated to cities to take advantage of new employment opportunities and as a response to rising productivity in agriculture. Particularly in the case of Indonesia, much rural-to-urban migration has been seasonal and temporary, rather than permanent. The dominant pattern of domestic transfers is usually from migrants to their rural home areas, and these transfers are often an important source of income to poor rural households (and particularly to those of older persons). In addition, many Asians have migrated to other countries, both within and outside the region, in search of higher wages. These sizable migrant flows have also been accompanied by substantial flows of remittances from migrants to family members in their home areas.

(1) Domestic Transfers and Remittances

In Thailand, contrary to early expectations that the crisis would lead to substantial return migration from Bangkok to the rural areas, there is no evidence that increases in agricultural employment reflect return migration of unemployed urban workers to rural home areas (i.e., most of the shift toward agricultural employment has occurred within the rural areas). One postcrisis household survey conducted in rural districts believed to be heavily hit by the crisis recorded about one migrant in every three households (Brooker Group 1999). Half were permanently working elsewhere, while the rest were temporary migrants. Of the temporary migrants, 90 percent were employed in nonagricultural work, 88 percent of whom had migrated outside their own provinces and nearly half of whom reside in Bangkok. Only 55 percent of the enumerated migrants send money home. The average value of remittances is 1,742 baht per month and represents approximately 18 percent of the recipient household's average monthly income. A higher percentage of female-headed households (24 percent) receive remittances than male-headed households (16 percent), and the average value of remittances received by female-headed households is about 10 percent higher than those received by male-headed households. Over half of migrants remitting money are sending the same amount one year after the beginning of the crisis, while 41 percent are sending less (or none), and one percent are sending more.

In Indonesia, the patterns of urban and rural employment changes during the crisis suggest that many laborers have probably moved back to (or remained in) the rural areas (Feridhanusetyawan 1999). In Korea, the fact that the farm sector labor force grew by almost 1.7 percent while the nonfarm labor force contracted by 1.4 percent (as well as an unemployment rate of 7.6 percent in the nonfarm sector versus 1.6 percent in the farm sector) suggests that the net flows of any internal migration were also from urban to rural areas.

(2) Remittances and Transfers from Overseas Migrants

The impact of the crisis on the value of remittances received from overseas migrants depends in part on the economic conditions in the countries in which the overseas migrants work. Migrants working in other Asian countries have in many cases lost their jobs or had their real earnings reduced. However, remittances from migrants working in countries unaffected by the crisis (e.g., the US or the Gulf) have been particularly valuable during the crisis because they arrive in the form of sharply appreciated foreign exchange.

In Thailand, the Labor Ministry established targets for exporting workers to various countries during 1998. For example, the target for Taipei, China was set at 210,000, a 108 percent increase compared to 1997 (*Bangkok Post* 22 November 1998). However, as of September 1998, actual departures were running at about the same levels as in the preceding year. There were also many complaints of fraudulent recruiting practices, including complaints from workers who paid but did not get a job, from those who got jobs but at lower salaries than promised, and from those who were forced to work elsewhere than promised. There were also numerous accounts in the Thai press concerning the repatriation of up to 200,000 illegal foreign workers (mostly Burmese and Cambodian nationals), including reports that they were forced to pay bribes to police and immigration officials at exit points.

In Indonesia, where targets were also established for the export of migrant workers, the number of overseas migrant workers increased sharply after the onset of the crisis, from 255,275 in fiscal year 1997 to 1.26 million during 1998. The level of remittances recorded at the central bank has also increased dramatically, from \$1.30 billion in 1997 to \$3.51 billion in 1998 (up to October 15 only). Since many migrants bring cash and material goods with them when they return or visit, the reported level of remittances significantly underestimates the actual flow.

Indonesia also has a large number of illegal workers abroad, most of whom are believed to be in Malaysia. The Ministry of Manpower in Malaysia estimated that illegal Indonesian workers still numbered 72,191 in November 1998, despite the fact that 38,153 were deported in 1997 and an additional 52,000 were deported up to October 1998. Estimates of the number of Indonesian workers currently entering Malaysia illegally are about 7,700 per month (Feridhanusetyawan 1999).

In the Philippines the number of overseas workers increased slightly from 747,696 in 1997 to 755,684 in 1998 (Reyes et al. 1999). This one percent increase is dramatically lower than the 13 percent growth registered between 1996 and 1997. The slowdown can be traced in part to declining employment opportunities in Asia (where the number of Filipino workers declined by 6 percent in 1998). Countries such as Hong Kong, China; Singapore; and Malaysia were forced to cut back on the hiring of new workers as a result of the crisis. The number of Filipino workers in these countries declined by 18.3, 16.7, and 65.7 percent, respectively, during 1998. Remittances declined by 13.4 percent between January to November 1997 and the same period in 1998 (from \$5.15 billion to \$4.46 billion). However, during this period the value of the peso declined by 20 percent, so remittances rose in terms of their local currency.

In Korea, the government announced a "no-fine scheme" to encourage the repatriation of illegal foreign workers who volunteered to leave Korea. By April 1998 approximately 55,000 illegal foreigners had left the country (Moon, Lee, and Yoo 1999). The total number

of foreign workers in Korea decreased by 35.7 percent between 1997 and 1998 (from 245,000 to 158,000). Consequently, net remittances to Korea increased.

E. Household Income

Real per capita household income declined by 20 percent in Korea⁵ and by 12 percent in the Philippines⁶ between 1997 and 1998. In Thailand, where household income data are available at two-year intervals, data from the government's Socio-Economic Surveys indicate that real per capita income increased by 3.3 percent between 1996 and 1998 (Brooker Group 1999). It is likely that much of this growth occurred between 1996 and 1997 and that per capita income actually declined between 1997 and 1998.

In Indonesia, expenditure data from the 1997 and 1998 Indonesian Family Life Survey (IFLS), a longitudinal survey of 1,934 households in 7 provinces, indicate that real per capita expenditure declined by 24 percent (Frankenberg, Duncan, and Beegle 1999). These estimates of the change in real per capita expenditure use province-specific inflation rates from the Central Bureau of Statistics (BPS) to adjust 1998 nominal expenditure. If one uses the price information collected in the IFLS itself (which indicates that prices increased about 15 percent more than the BPS estimates indicate and that the rate of inflation was about 5 percent higher in rural areas as compared to urban areas), the estimated decline in real per capita expenditure is 39 percent.

Real per capita household income increased more in urban than in rural areas of Thailand (2.7 percent versus 1.7 percent) between 1996 and 1998 (Brooker Group 1999). In Indonesia, however, the reverse was true: real per capita household expenditure declined by 34 percent in urban areas and by 14 percent in rural areas (Frankenberg, Duncan and Beegle 1999).

In Thailand, some interesting gender differences can be observed in the patterns of income and expenditure change between 1996 and 1998. Real per capita *income* increased by 4.9 percent among male-headed households but declined by 0.8 percent among female-headed households. This gender difference is particularly striking in urban areas, where male-headed households gained 4.9 percent while female-headed households lost 4.2 percent of their real per capita income. At the same time, real per capita household *expenditure* declined by 1.8 percent among male-headed households, while it increased by 1.2 percent among female-headed households. The gender difference was even sharper in rural areas (-3.8 percent among male-headed households versus +2.4 percent among female-headed households). These data suggest a tendency toward greater dissaving on the part of female-headed households (e.g., borrowing or pawning/selling assets to maintain consumption levels). However, it is interesting that all of the increased expenditure among female-headed households was due to increases in nonfood expenditure.

⁵This estimate is based on a workplace sample of 5,500 households of workers residing in 72 cities. Consequently, it omits all rural households as well as the households of employers, the self-employed and the unemployed (Moon, Lee, and Yoo 1999).

⁶According to data from the 1997 Family Income and Expenditure Survey and the 1998 Annual Poverty Indicators Survey, per capita income declined by 3.6 percent in nominal terms and by 12.1 percent in real terms (Reyes et al. 1999). However, the methodologies of the two surveys differ, so these estimates may be misleading.

In Indonesia, in the presence of a steep decline in real per capita household expenditure (-24 percent), the food share of total expenditure increased from 60 percent to 74 percent (Poppele, Sumarto, and Pritchett 1999).⁷ The staple food share of total food expenditure also increased, from 24 to 32 percent. In Thailand, however, the food share of total expenditure (33 percent) was unchanged in the presence of a one percent decline in real per capita household expenditure. Nevertheless, the food share declined from 31.8 to 28.8 percent in urban areas and increased from 34.0 to 36.5 percent in rural areas. This probably reflects greater relative price changes in urban areas, as would be expected.

IV. Inequality and Poverty

A. Distribution of Income

The most widely used measures of relative poverty are based on the size distribution of income, which is obtained by calculating the shares of income (or total expenditure) received by various income groups. Available information on changes in the size distribution of income (or expenditure)⁸ suggests that income inequality has increased during the crisis in Thailand, Korea, and Philippines but has probably decreased in Indonesia.⁹

In Thailand, data from the Socio-Economic Surveys indicate that the size distribution of real per capita household expenditure became more unequal during the period 1996-1998 (Table 1). The expenditure share of the richest urban quintile (only 5.5 percent of the total population) increased from 20.5 percent to 22.5 percent.

For Indonesia, Table 2 presents estimates of changes in real per capita expenditure by expenditure quartile from the IFLS (using BPS price deflators). Although these data do not provide a direct measure of changes in the size distribution, the fact that the decline in the overall median is much less than the decline in the overall mean implies that the distribution has become more equal.

⁷Similarly, the "100 villages" survey data indicate that the food share increased from 66 to 76 percent (Poppele, Sumarto, and Pritchett 1999).

⁸Although total household expenditure is often used as a proxy for income, changes in the size distribution of expenditure may give a misleading picture of changes in the size distribution of income during a crisis, for two reasons. First, there may be a tendency for the rich to under-report their expenditure during a crisis to a greater extent than the poor. Second, the ability of the rich to delay large expenditures (e.g., consumer durables, travel) during a crisis is much greater than that of the poor, since such items constitute a larger part of the budgets of the rich.

⁹However, these comparative trends need to be interpreted with caution, as for Indonesia and Thailand real expenditure is used, while for Korea and the Philippines nominal income is used.

Table 1: Changes in the Size Distribution of Real Per Capita Household Expenditure in Thailand, 1996-1998 (1996 and 1998 SES data)

Expenditure Groups	Percent of Total Real per Capita Household Expenditure		Percent Change in Share 1996-1998
	1996	1998	
Urban			
I (low)	2.6	2.5	-1.2
II	4.6	4.6	-0.2
III	6.8	6.7	-1.4
IV	10.0	9.7	-2.7
V	20.5	22.5	10.1
Subtotal Urban	44.4	46.1	3.8
Rural			
I (low)	3.9	3.8	-2.2
II	6.1	5.9	-4.2
III	8.3	8.0	-4.4
IV	11.8	11.3	-4.0
V	25.4	24.9	-1.8
Subtotal Rural	55.6	53.9	-3.0
Total	100.0	100.0	—

Source: Calculated from data provided in Brooker Group (1999).

Table 2: Changes in Real Per Capita Expenditure in Indonesia between 1997 and 1998, by 1997 Quartile (IFLS data)

Quartile	Percent Change in Mean	Percent Change in Median
I (low)	120	49
II	42	12
III	-2	-19
IV	-54	-41
Total	-34	-2

Source: Poppele, Sumarto, and Pritchett (1999).

Table 3 presents the size distributions of nominal household income in the Philippines in 1997 and 1998.¹⁰ It is clear from these data that the degree of income inequality increased sharply between 1997 and 1998. The share of the richest decile increased from 39.3 to 42.9 percent while those of every other decile decreased. The declines in the five poorest deciles are particularly striking (their share of total income declined from 17.5 to 15.3 percent). One measure of relative poverty, the ratio of the top quintile's share of income to that of the bottom quintile, increased from 12.7 to 17.3 percent. These estimated changes in the size distribution of income probably reflect mainly the effects of weather-related declines in agriculture, but crisis-related declines in construction and manufacturing together with continued strong performance in the services sector probably contributed to them as well.

Table 3: Size Distribution of Nominal Household Income in the Philippines, 1997 and 1998 (1997 FIES and 1998 APIS data)

Income Decile	1997 (percent)	1998 (percent)
1 (low)	1.7	1.2
2	2.7	2.2
3	3.5	3.0
4	4.3	3.9
5	5.4	5.0
6	6.8	6.3
7	8.7	8.3
8	11.5	11.1
9	16.3	16.1
10	39.3	42.9
Total	100.0	100.0

Source: Reyes et al. (1999).

In Korea, data from the quarterly Urban Workers' Household Income and Expenditure Survey also suggest that the size distribution of monthly household income has become more unequal during the crisis (Moon, Lee, and Yoo 1999). The Gini coefficient of income inequality (a widely used summary measure of inequality in the size distribution

¹⁰Ideally, one would like to have the size distributions of real per capita income (or expenditure), but the distributions presented should be indicative of the changes that took place in the true size distribution of per capita income. The fact that the income measure has not been adjusted for price changes is quite important, however, given that there was a fairly high degree of regional variation in inflation between 1997 and 1998.

of income) increased from 0.28-0.29 during the last three quarters of 1997 to 0.32-0.33 during the first three quarters of 1998. The share of income received by the richest decile increased from about 22 percent to 24-25 percent during this period, while the share of income received by the poorest two quintiles (40 percent) decreased from 22 to 20 percent. The ratio of the share of the richest quintile to the poorest quintile increased from 4.3-4.5 to 5.5. This workplace-based survey of urban workers excludes rural workers, the unemployed, employers, and self-employed. Since these categories of workers account for an important share of total income and are among those most heavily affected by the crisis, the data from the urban workers' survey give an incomplete picture.

B. Poverty

Many observers expected that the crisis would increase the incidence of absolute poverty (i.e., the proportion of population with income or consumption below the basic minimum, referred to as the "poverty line").¹¹ A fall in the mean level of income, with the size distribution unchanged, causes the cumulative income distribution to shift to the left, increasing the proportion of the population whose incomes fall below the poverty line (called the poverty rate or the poverty headcount ratio). When additionally the size distribution becomes more unequal (as has been the case in Korea, Philippines, and Thailand but perhaps not in Indonesia), the increase in the poverty rate is likely to be greater.

The changes in the size distribution of real per capita expenditure between 1996 and 1998 (Table 1) suggest that the poverty rate probably increased as the result of the crisis. This is supported by the data on poverty incidence as reported by David et al. (1999)—incidence of poverty rose to 12.9 percent in 1999 from 11.4 percent in 1996. Still, the poverty rate was relatively low in Thailand prior to the crisis, and is probably still comparatively low.

During the early stages of the crisis in Indonesia, the World Bank estimated that a 12 percent contraction in GDP (compared to the actual contraction in GDP of 13.7 percent in 1998) would cause the poverty rate to increase from 11.3 percent in January 1996 to 14.1 percent in March 1999 (Atinc and Walton 1998). The projected increase was larger in urban areas (from 5 to 8.3 percent) than in rural areas (15 to 17.6 percent). A much higher Central Bureau of Statistics poverty rate (39.1 percent) was projected, based on assumed declines in per capita income of 44.1 percent among the low-income population in rural areas and 54.1 percent in urban areas (Sigit 1998).¹² Other estimates of poverty incidence are shown in Table 4.

¹¹This was the experience in recent Latin American crises. However, in Malaysia's most recent crisis (1984-1987), the size distribution of income improved sufficiently to prevent a rise in poverty (Atinc and Walton 1998).

¹²The ILO (1998b) projected similarly high poverty rates for 1998 (48 percent) and 1999 (66 percent) that were widely cited in the press (e.g., *International Herald Tribune* 10 September 1998). However, the ILO projections assumed that nominal household incomes (i.e., household incomes in current Rupiah) would remain constant in 1998 and 1999, while consumer prices (and hence the official poverty lines) would increase by 80 percent in 1998 and 25 percent in 1999. These were grossly inconsistent assumptions.

Table 4: Alternative Estimates of Changes in the Poverty Rate in Indonesia, 1997-1998

Source	Urban		Rural		Total	
	1997	1998	1997	1998	1997	1998
IFLS, using BPS inflation rates	9.2	12.0	12.4	15.2	11.0	13.8
IFLS, using IFLS inflation rates	9.2	15.8	12.4	23.0	11.0	19.9
"100 village" survey, using BPS inflation rates					11.0	14.4
"100 village" survey, using IFLS inflation rates					11.0	18.6
Susenas data, using BPS inflation rates	14.5	17.2	18.00	19.0	16.9	18.3
World Bank projection	5.0	8.3	15.0	17.6	10.1	14.1
BPS projection					11.3 ^a	39.1

^aRefers to 1996.

IFLS means Indonesian Family Life Survey.

BPS means Central Bureau of Statistics.

Source: Sigit (1998).

In the Philippines, the incidence of poverty declined significantly from 44.2 percent in 1985 to 35.5 percent in 1994 and further to 32.1 percent in 1997 (Reyes et al. 1999). Unfortunately, there are no comparable postcrisis estimates of poverty rates in the Philippines, but the increased inequality in the size distribution of income (Table 3), together with the estimated decline in real per capita income, suggest that the poverty rate has probably increased during the crisis.

In addition, a household survey conducted by Reyes et al. (1999) asked respondents whether they considered themselves poor in January 1999 and before the crisis (see also Balisacan 1999). The survey found that 40 percent considered that they were poor before the crisis while 43 percent considered themselves poor in January 1999 (Reyes et al. 1999). Similarly, the surveys of the Social Weather Stations indicate an upward trend in self-rated poverty between 1997 and 1998 (from 63 percent in December 1997 to 64 percent in March 1998, it declined to 62 percent in September 1998).

In Korea, the crisis has led to a sharp increase in the poverty rate, from 3.0 percent in the last quarter of 1997 to 6.4 percent during the first quarter of 1998 and to 7.5 percent during the third quarter of 1998 (Moon, Lee, and Yoo 1999). However, these estimates are probably underestimates of the increase in poverty due to the crisis since they are based on data from the Urban Workers' Survey of Income and Expenditure, which omits all rural workers, as well as the unemployed, employers, and self-employed. On the other hand, the Korean estimates use a relatively generous poverty line of \$7 per day.

In Malaysia, the poverty rate decreased from 9.6 to 6.8 percent between 1995 and 1997 (Piei, Johan, and Abubakar 1999). For 1998, the Mid-Term Review of the Seventh Malaysia Plan reported a poverty incidence of 7.6 percent.

C. Regional Income Distribution

The crisis had different effects in regions within countries. Some of these differences reflect the impact of events other than the crisis (e.g., drought, haze), but in other cases they reflect differing characteristics among the regions' economies.

In Thailand, data from the Socio-Economic Surveys on regional changes in real per capita income between 1996 and 1998 (Table 5) indicate sharp differences among regions as well as between rural and urban areas within regions (Brooker Group 1999).¹³ Bangkok and Bangkok vicinity gained compared with the national average gain of 3.3 percent. The steepest decline was experienced in the Northeast. Some of this regional variation is undoubtedly due to the effects of the drought, which was particularly severe in the Northeast.

Table 5: Changes in Real Per Capita Income in Thailand between 1996 and 1998

Region	Percent Change between 1996 and 1998		
	Urban	Rural	Total
Bangkok	6.8	—	6.8
Bangkok Vicinity	18.3	-17.7	5.4
Central	-10.3	12.7	3.8
North	2.4	-2.1	-0.9
Northeast	-7.1	-2.8	-3.9
South	-17.8	6.0	-0.9
Total	2.7	1.7	3.3

Source: The Brooker Group (1999).

In Indonesia, IFLS data on changes in real per capita expenditure by province are broadly consistent with the interpretation of more severe crisis impact in Java (Table 6). The data in column 2 also indicate that income levels prior to the crisis are a poor predictor of the impact of the crisis. This finding has significance for future safety net policy, since it cannot be assumed that crisis-related assistance is necessarily needed most in areas with a high precrisis concentration of the poor.

¹³Regional changes in real per capita expenditure between 1996 and 1998 (also obtained from the Socio-Economic Surveys) follow a similar pattern to the changes in real per capita income.

Table 6: Changes in Real Per Capita Household Expenditure by Indonesian Province, 1997-1998

Province	Mean per Capita Expenditure in 1997 (Rupiah per Month)	Absolute Change, 1997-98 (Rupiah per Month)		Percent Change	
		Mean	Median	Mean	Median
Jakarta	385	-115	-6	-30	-3
West Java	366	-154	-10	-42	-6
Central Java	234	-45	0	-19	0
South Kalimantan	217	-47	-27	-22	-17
South Sumatra	187	-18	12	-10	11
North Sumatra	183	-18	-14	-10	-11
Nusa Tenggara Barat (NTB)	173	-23	-7	-13	-7

Source: Poppele, Sumarto, and Pritchett (1999).

Similarly, data from the Kecamatan Crisis Impact Survey indicate that the reported tendency to sell assets to meet basic needs was worse in a higher percentage of Java's *kecamatan* (subdistricts) than in other regions of the country. The only provinces that came close to Java's average (77 percent) were heavily drought and haze-affected provinces of Nusa Tenggara Barat (NTB), East Kalimantan, and South Kalimantan, in contrast to Bengkulu, South Sumatra, North Sulawesi, Central Sulawesi, and Maluku.

V. Human Development

The adverse impact on human development occurs for several reasons. First, although social services are subsidized, households still incur direct and associated costs in availing themselves of these services. Consumers must still pay something for most of the social services they consume. With reduced incomes and higher prices (such as for medicines and school supplies), they tend to consume less than what is individually or socially optimal. Second, human capital investment takes time, which becomes scarcer as households work longer hours to cope with falling incomes. Third, the quality and quantity of government-provided social services tend to decline owing to budget reductions and massive shifts of clients from private to public providers. Fourth, as households try to maintain current levels of consumption, they are constrained to reduce human capital investments or even deplete existing stocks. These negative impacts on human investment are particularly deleterious.

A. Education

Education budgets have been cut in most of the crisis countries. The exception is Malaysia, where initial steps to reduce education budgets were eventually reversed.¹⁴ Budget cuts have generally spared the personnel line item but have instead fallen mainly on such items as teaching materials, teacher training, and maintenance of buildings and equipment. Since these items tended to be underbudgeted even before the crisis and because their cost has increased with inflation, the cuts have probably diminished the quality of schooling.

In the Philippines, for example, where over 80 percent of its budget was earmarked for personnel, the Department of Education, Culture and Sports (DECS) had little choice but to reduce allocations for such key educational inputs as textbooks, desks and chairs, school buildings, and teacher training (Reyes et al. 1999). No obligations for these items were made up to the end of December 1998, despite the fact that the textbook-to-pupil ratio was only 1:8.

In Thailand, following rapid growth in education budgets in the early 1990s, the nominal education budget declined about 6 percent from 214 billion baht in 1996/1997 to about 202 billion baht in 1997/1998 as the government trimmed its budget in conformity with IMF guidelines (Brooker Group 1999). The line items in the budget that experienced the greatest cuts were expenses and supplies, which declined by 30 percent, and equipment, property and construction, which fell by 46 percent. In a spot survey of 220 schools, two fifths of schools reported budget cuts averaging 27 percent, while nongovernment (supplementary) budgets fell by 35 percent between 1997 and 1998, as donations from parents, local communities and other sources declined due to the crisis. Three fifths of the schools reported that budget cuts and disbursement delays led in particular to a lack of teaching materials. Surveyed schools in Bangkok suffered budget cuts to a much lesser extent than did schools in other regions. For example, more than two fifths of school officials reported that their schools had experienced budget cuts in construction and maintenance during 1997/1998; yet none of the nine schools surveyed in Bangkok experienced such cuts.

There is little if any evidence that the crisis has led to reduced primary school enrollments. In Thailand, for example, a spot survey of 99 primary schools obtained no evidence that the crisis has had a negative impact on primary school enrollments (Brooker Group 1999). However, the crisis has had negative effects on secondary school enrollment (particularly among girls and among the poor) in all countries for which data are available. Dropout rates have also increased in most countries—more so among boys than among girls in Thailand, Indonesia, and Philippines—and many children have shifted from private to public schools (particularly in the Philippines, which has a relatively large private education sector). The 121 surveyed lower and upper secondary schools in Thailand reported significant increases in school leavers¹⁵ during the 1997/1998 and 1998/1999 schoolyears. Males accounted for about 60 percent of school leavers at the upper secondary level, a share that

¹⁴In Malaysia, the government initially announced a cutback in education expenditure of 2 percent as part of its response to the currency crisis. This was increased to 18 percent in December 1997 but was eventually reversed in July 1998. The education development budget also received an additional RM300 million in July 1998 as part of a government effort to buttress the social safety net. The final budget provided for an overall increase of 26 percent in 1998 and an additional 8 percent in 1999.

¹⁵School leavers are those who drop out of school as well as those who transfer to other schools, usually the public schools.

has been fairly constant during the past three years. About one quarter of the schools reported increased numbers of transfers from private schools.

In Indonesia, steep enrollment rate declines were forecast by some observers.¹⁶ However, a “stay in school” campaign, funded by the government and donors (World Bank, ADB, or UN), was implemented that provided information and scholarships to poor children in junior secondary school together with grants to schools to make up for lost revenue. Although it is difficult to know how effective this program has been, it is clear that the crisis has not yet had a dramatic effect on enrollment, particularly at the primary level.¹⁷ For example, data from the “100 villages” survey indicate that enrollment rates among children ages 7-12 years increased from 89.1 to 92.7 percent between 1997 and 1998 (Sigit 1999). However, data from the same source indicate that enrollment rates among older children (ages 13-15) decreased from 69.0 to 65.2 percent between 1997 and 1998 and that the decline was larger among girls than among boys (5 percent versus 2 percent). IFLS data also indicate that enrollment rates among youth aged 13-19 declined (Table 7).¹⁸

**Table 7: Changes in Enrollment and Dropout Rates among Indonesian Children
Ages 13-19, 1997-1998**

	Percent Enrolled			Dropout Rate		
	1997	1998	Percent Change	1997	1998	Percent Change
Gender						
Male	61.5	56.9	-7	12.1	17.7	+46
Female	59.4	55.9	-6	12.3	16.2	+32
Residence						
Urban	66.8	61.6	-8	11.1	17.5	+58
Rural	54.0	51.5	-5	13.5	16.8	+24
Per Capita Expenditure Level in 1997						
I (low)	51.5	45.9	-11	14.2	25.5	+80
II	64.0	56.7	-11	13.1	17.6	+34
III	62.1	59.6	-4	13.2	15.5	+17
IV	66.9	64.5	-4	7.3	9.5	+30
Total	1,431	1,691		972	1,141	

Source: Frankenberg, Duncan, and Beegle (1999).

¹⁶During the much milder economic shock of 1986-1987 in Indonesia, gross enrollment rates fell from 62 percent to 52 percent at the junior secondary level and took almost a decade to recover. Moreover, most of the observed decline in enrollment occurred among poor households (Atinc and Walton 1998).

¹⁷In interpreting these data, however, it is useful to keep in mind that the largest enrollment declines during a previous economic decline occurred with a lag (Poppele, Sumarto, and Pritchett 1999).

¹⁸Although aggregate changes to enrollment and dropout rates among children ages 7-12 have been relatively small, IFLS data (not presented in Table 7) indicate that fairly sharp changes have occurred among the poorest income quartile (an enrollment rate decline of 5 percent and an increase in the dropout rate from 1.3 to 6.2 percent).

In FGDs Indonesian parents in both rural and urban areas reported that they struggled to keep their primary-level children in school. Junior high school students posed a greater problem because parents could barely sustain the fees for their boarding schools or pay transportation costs to the larger towns where the schools were located. Poor people complained that they could no longer afford tuition fees, uniforms, books, notebooks, and school supplies. Hence, they felt compelled to withdraw their children or not enroll them at all in the next academic year.

Where poorer parents had to choose which children to send to school, they usually favored those at the elementary level, and withdrew the older siblings, especially the girls, from the much costlier junior high schools. Few even in better times reached senior high school levels. Other children dropped out to work in farming, fishing, or other household enterprises. The social safety net program of scholarships to poor primary school children appears to have helped arrest potential enrollment decline in some communities.

In the Philippines, enrollment data from DECS indicate that total primary school enrollment increased by 0.7 percent between the 1997/1998 and 1998/1999 schoolyears. However, this is lower than the rate of growth of the primary school age population and considerably lower than the increase of 3.3 percent in the previous year. Enrollment in grade 1 actually declined by 3.4 percent, suggesting that one coping strategy used by parents is to delay their children's entry into school while letting children already in school continue. Primary school enrollment in private schools declined sharply (-10.3 percent overall and -10.1 percent for entry into grade 1), in marked contrast to the previous year when it increased by 5.6 percent (including a 4.3 percent increase in grade one enrollment). DECS data also show declines in primary school dropout rates in both public and private schools.

The DECS data show a sharp decline in secondary school enrollment (-7.9 percent) and an even sharper decline in first year enrollment (-9.3 percent) between the 1997/1998 and 1998/1999 schoolyears. Private secondary school enrollment declined even more steeply (-12.1 percent overall and -13.0 percent in the initial year of secondary school). However, some of the decline in private secondary school enrollment began the previous year, in the wake of the enactment of the Free Secondary Education Act of 1998, when private secondary school enrollment declined by 2.6 percent. Accordingly, not all of the decline in private secondary school enrollment between 1997/1998 and 1998/1999 can be attributed to the crisis. In addition, the secondary school dropout rate increased by 8.7 percent.

The FGDs conducted in 57 Philippine communities reported that there have not only been declines in enrollment and increases in dropouts in response to the crisis but also increased absenteeism and decreased student participation in special school activities, such as scouting (Reyes et al. 1999). Many families reported difficulty coping with increases in tuition fees and other school expenses (school materials, uniforms, food, and transportation). They reported that increased absenteeism was due to: (i) the need for children to help out on the farm to save on labor costs; (ii) the need for children to watch over younger siblings while parents work; and (iii) the lack of basic school supplies and money for allowances, transportation, and lodging. They noted that the absences led to poor grades and poorer quality education. Participants also reported that decreased income led sometimes to children skipping breakfast before going to school and their walking to school instead of using public transportation—both of which have contributed to a decline in children's interest in school.

In urban poor communities, the 10 percent dropout rates included many more boys than girls. In rural sites, however, more girls than boys left school in the higher elementary grades. Upland and fishing communities experienced declines in grade one enrollment as well as in high school. Parents in all types of communities could no longer cope with increases in tuition fees and expenses for uniforms, school supplies, food, transportation money, and lodging for boarders. Moreover, some needed their children to help on the farm or in fishing, or watch younger children. Absenteeism and students sleepy in class from skipping a nonexistent breakfast resulted in low grades, poor learning, and demoralization.

Many parents with children in expensive private high schools chose to transfer their children to less costly public schools. Urban focus groups, especially, worried about the number of out-of-school youth hanging around and leaning toward drugs, prostitution, and teen-age pregnancies. One group bemoaned the fact that education as a strategy for poverty alleviation appeared to be faltering.

In Korea, the crisis has been associated with declines in kindergarten, primary, and middle school enrollment but with increases in high school and tertiary school enrollment. The kindergarten gross enrollment rate (i.e., the ratio of kindergarten enrollment to the kindergarten age group) declined sharply from 39.9 percent in 1997 to 37.2 percent in 1998. This probably reflects not only a strong income effect (parents tend to regard kindergarten as a luxury) but also decreased demand for childcare due to the decline in female employment (Moon, Lee, and Yoo 1999). The primary school enrollment rate declined slightly (from 98.6 to 98.3 percent) while that for middle school declined from 101.0 to 99.9 percent. Since children are not legally eligible to work until age 15 (corresponding roughly to the second year of middle school), it is unlikely that increased employment among children is the source of these changes. Lack of income to pay for schooling is the more likely reason.

In contrast, the high school enrollment rate increased from 94.6 to 95.6 percent, while that for tertiary schooling increased sharply from 68.8 to 74.3 percent. The continuation rate from general high school to tertiary schooling increased from 81.4 to 83.9 percent between 1997 and 1998, while that from vocational high school to tertiary schooling shot up from 29.2 to 35.7 percent. These increases in enrollment at the upper levels probably reflect changes in private costs large enough to overcome negative income effects, i.e., a decline in the opportunity cost of schooling (expected earnings) due to steep increases in unemployment rates among youth and sharp declines in real earnings. This would appear to be a healthy response to the labor market effects of the crisis on the part of youth (well over half of all job loss occurred among workers aged 15-29).

Changes in enrollment may offer only a partial picture of the full impact of the crisis on education. In Korea, as in most Asian countries, private household expenditure is a very important component of the total cost of schooling, particularly at the secondary level. Data from a study conducted by the Korea Consumer Protection Board (Moon, Lee, and Yoo 1999) indicate that household expenditure on private tutoring (an important component of the private cost of schooling) declined by 24 percent during the crisis (by 28 percent at the middle and high school levels). Moreover, the decline was not evenly distributed among income groups (Table 8). In the lowest income group expenditure on private tutoring declined by 39 percent, whereas in the highest income group it declined by only 13 percent. These data suggest that the crisis has significantly widened the gap in human capital investment between the rich and the poor, with long-term implications for economic growth and equity.

Table 8: Household Expenditure on Private Tutoring in Korea before and after the Crisis

	Mean Expenditure per Child (Korean Won)		
Group	Before the Crisis	After the Crisis	Percent Change
School Levels			
Kindergarten	234,500	186,000	-21
Elementary	282,400	213,400	-24
Middle & High School	271,100	195,000	-28
Tertiary	169,000	127,500	-25
Income Levels			
I (low)	156,600	95,200	-39
II	210,300	151,800	-28
III	275,500	219,200	-20
IV	320,000	279,300	-13
Totals	135,200	103,000	-24

Source: Moon, Lee, and Yoo (1999).

In Malaysia, the crisis has had a particularly sharp impact on tertiary education. Due to excess demand for a limited number of domestic university slots, it is estimated that as many as 54,000 Malaysian students were studying abroad (11,000 of whom were publicly sponsored, 1,600 were privately sponsored, and the rest were sponsored by their families). With the onset of the crisis, both the decline in household income and the sharp increase in the domestic currency cost of foreign schooling led many of the privately financed students to return home.¹⁹ Consequently, the demand for domestic tertiary schooling increased dramatically. In 1998 there were 112,000 applicants for 40,222 university places in Malaysia (compared to 27,118 applicants for 15,964 places in 1995). The result of this shifting pattern of tertiary education has been large numbers of students coping with cramped and overflowing classes, inadequate infrastructure and facilities, and insufficient or outdated libraries and computers (Piei, Johan, and Abubakar 1999).

In Lao PDR, while enrollment rates appear not to have been affected by the crisis, school administrators worry that teachers whose wages are long delayed may resign from government service (Chamberlain 1999). Fortunately, most teachers live in or near their home villages, where they can claim a share of family farm produce. Of serious concern are government boarding schools specifically established for ethnic minorities, a number of them for girls. Monthly budgets are insufficient to feed students adequately and signs of malnutrition are appearing.

¹⁹Although publicly supported students already abroad were allowed to remain there, the government did not sponsor additional students for overseas study (apart from those in the "top universities program").

B. Health

Public health budgets have declined in real terms in all countries except Malaysia. Whereas personnel line items have been protected in most cases, expenditure on drugs has decreased steeply, leading in some cases to serious shortages of drugs. In Thailand, the Ministry of Public Health (MOPH) budget for fiscal year 1998 was 64 billion baht, down 9 percent from the previous year (Brooker Group 1999). The budget for fiscal year 1999 is 62.5 billion baht, a further decrease of 2 percent from fiscal year 1997 levels. In real terms the MOPH budget is 23 percent lower in fiscal year 1999 compared to fiscal year 1997. In a spot survey of 180 public health facilities (162 health centers and 18 district hospitals), more than two thirds of the facilities claim that their 1998 budgets for medicines and drugs were either cut, delayed, or were insufficient to meet the facility's increased needs, and nearly four fifths of the facilities believe that the resulting shortages have lowered the quality of care they provide (although, interestingly, household survey respondents indicated that the quality of care had improved on balance at government health centers and district hospitals since the onset of the crisis). Facilities reported that they usually rely on private donations and receipts from user fees to make up for budgetary shortfalls. However, revenue from these sources also declined by 36 and 21 percent, respectively. Facilities reported that the most frequently used method to cope with the reduced availability of drugs was to limit the amount and variety of drugs supplied to clients. As with schools, public health facilities in Bangkok appeared to experience fewer budget cuts than those in other regions. For example, 60 percent of surveyed facilities responded that their budgets for drugs had been cut or delayed in 1998 as compared to 1997. However, only 22 percent of Bangkok's facilities experienced such budget cuts or delays, compared to 65 percent of surveyed facilities in the Northeast and 67 percent in the North.

Household expenditure on health care has declined sharply in real terms in Indonesia, Korea, and Thailand. In Thailand, data from the 1996 and 1998 Socio-Economic Surveys indicate that household real expenditure on medical care declined by 41 percent—35 percent in urban settings and 46 percent in rural areas (Brooker Group 1999). All of the decline occurred with respect to the medical services subcategory of medical care; there was no change on balance in drug expenditure.²⁰ The decreased spending on health care is striking in magnitude and has involved all urban and rural income groups.²¹ In Indonesia, IFLS data indicate that the share of medical care expenditure in total expenditure declined by 14 percent among urban households and by 40 percent among rural households between 1997 and 1998, despite the fact that health care prices increased more rapidly than the general price level (Frankenberg, Duncan, and Beegle 1999).

The utilization of public health facilities has increased in all countries except Indonesia, reflecting significant shifts of consumers from expensive private providers to less expensive public health facilities. In Thailand, data from a survey of 180 public health facilities indicate that the utilization of public health facilities increased significantly between 1997 and 1998 (e.g., a 15 percent increase in new patients generally and a 22 percent increase in children under 5). It is believed that about two thirds of the change reflects increased

²⁰The Thailand data indicate that there has also been a strong move away from private health services toward self-medication. It appears that households delay or avoid medical care as a coping mechanism. When it becomes necessary, however, they opt for lower cost public facilities or for self-treatment.

²¹In Korea, in contrast, the declines have been relatively greater among lower-income groups.

utilization by new free health card holders²² as well as persons switching from private facilities (Brooker Group 1999). Despite these shifts, about one third of the population prefers not to use district hospitals and 59 percent do not use government health centers, reflecting the widespread belief that quality of care is much higher in the private sector.

The facility survey reported a 22 percent increase in anemia among pregnant women, possibly reflecting a switch to less nutritious foods. However, there was no increase in the incidence of malnutrition among children and only a slight increase (4 percent) in the number of underweight babies born (i.e., less than three kilos). There was no increase in the proportion of patients referred to higher facilities, suggesting that people are not waiting longer before seeking medical care. However, there are some signs of increased stress among the population (e.g., a 30 percent jump in complaints related to the muscular/skeletal system, increased patient requests for psychological counseling). Almost two thirds of the facilities (and nearly half of the households surveyed) reported that drug use has risen significantly in the community since the beginning of the crisis. However, 94 percent of households surveyed state that there has been no increase in the number of suicides in their community since the crisis, despite frequent media assertions to the contrary.

In Indonesia, the available evidence suggests that the utilization of health services declined during the crisis. IFLS data show an insignificant decline between 1997 and 1998 in the percent of adults obtaining any health care during the past month (Frankenberg, Duncan, and Beegle 1999). The IFLS data also indicate that the percentage of children ages 0-15 who used any health services during the past month declined from 26 to 20 percent. Both the IFLS and Susenas show a significant shift in the type of health facilities visited. IFLS data indicate that, among adults who obtained any health care, the percent visiting a *puskesmas* (public health center) declined from 47 to 37 percent while the proportion of adults visiting private doctors and traditional practitioners increased. Similarly, data from the Susenas indicate that the proportion of people reported ill who sought care at a *puskesmas* decreased from 40.5 to 35.3 percent (Sigit 1998). There were also important shifts observed in the type of provider visited by children. The percent of all visits to *posyandu* (village health posts) declined from 59 to 36 percent, while the percent of visits to private doctors increased from 12 to 19 percent. Despite the reduction in health care utilization by children (and particularly in the main source of preventive care, the *posyandu*), there is no consistent evidence of any decline in immunization rates (although the percent of children under three who received vitamin A supplements 6 months prior to the interview date declined from 55 to 43 percent).²³

Although it is still unclear why Indonesians have unexpectedly shifted from the public to the private sector during the crisis, the most likely explanation is that crisis-induced quality deterioration has been greater among public providers. The IFLS data show, for example, that the availability of most antibiotics (including those used to treat tuberculosis) and contraceptives declined at public health facilities between 1997 and 1998 while increasing at

²²Surveyed facilities reported that the number of free health cards issued has increased from 44,143 to 164,294 since the crisis began. The number of free cardholder visits increased by 17 percent (75,057 visits) between 1997 and 1998, which can be compared to the overall increase of 115,096 visits reported by the surveyed facilities.

²³This change probably reflects supply conditions. According to IFLS data the availability of vitamin A at public health facilities declined from 88 to 72 percent between 1997 and 1998 and from 56 to 40 percent at private facilities.

most private providers. In addition, although private providers tend to be more expensive than public providers, the rate of price increases was actually higher among public providers. For example, the median price of an intrauterine device (IUD) insertion increased by 90 percent at public health facilities but by only 25 percent at private facilities. Since the absolute price increases were similar in most cases, it appears that public providers have directly passed on increases in the cost of drugs, whereas the higher fees of private providers include a charge for services as well as drugs.

A government health card entitling the holder to free health services was greeted with skepticism by villagers in FGDs. Some did not believe they would receive quality medicine or services compared to regular paying patients. Moreover, the health center seemed to be closed more frequently than it was open, and the local midwife more interested in serving villages of her selection. In addition, the groups questioned the criteria for identifying poor families for health card distribution, and indicated that card holders were not informed of their rights and responsibilities under the program.

Despite reductions in the use of medical care and shifts toward the use of private providers, evidence on the impact of the crisis on health outcomes is quite mixed. Data from the Susenas indicate that the percentage of the population who reported health problems increased from 12.8 to 14.6 percent between 1997 and 1998 (Sigit 1998). In contrast, data from the IFLS show a decline in reported morbidity among adults during the preceding month from 82 to 79 percent and a decline among children from 70 to 69 percent. No significant changes in nutritional status (height for age or weight for height) have been observed yet among children under 5 years. Among adults (18 years and older), however, the proportion with body mass index under 18 increased from 13.6 to 15.4 percent between 1997 and 1998. At the same time, hemoglobin levels improved significantly among the population ages one year and above. Physical assessments (e.g., lung capacity, blood pressure, sit-to-stand time) also improved, and there was no change in the overall health status score assigned by the survey's examining paramedics.

In the Philippines, the procurement of drugs has been most harshly affected by the financial crisis, as the Department of Health (DOH) continued to give the highest priority to the payment of staff salaries. Accordingly, there was a sharp contraction in the supply of drugs in the government health system. The delivery of public health services was also adversely affected, due to delays in obligating previously allotted funds. Obligation-to-allotment ratios averaged only 53 percent by the end of December 1998. In particular, the ratios for immunization, family health, and maternal and child health services were all below 50 percent. Local government finances were also hard-hit by the crisis. Both central government block grants and locally generated revenue declined from expected levels. Data from a sample of 20 local government units indicate that per capita spending on maintenance and other operating expenses declined in 13 of the 20 (Reyes et al. 1999). This has adversely affected the availability of drugs in *barangay* health stations, rural health centers, and devolved hospitals.

The FGDs conducted in 57 communities (*barangays*) throughout the country mentioned deterioration in the quality of government health services as one of the key effects of the crisis (Reyes et al. 1999). In particular, they noted the absence of drugs that used to be abundant and free at local health centers. In addition, they noted that the facilities were poorly maintained, that there were reductions in personnel and/or their allowances, that feeding programs had been suspended, and that many previously free services (e.g., preg-

nancy tests) were no longer free. In contrast to the FGDs, a survey of 430 households conducted in 31 of the FGD communities found that only 3 percent of the respondents thought that the quality of care in health centers had worsened, while 26 percent thought that it had improved. Household respondents did think, however, that prices had increased about 20 percent for drugs and 50 percent for hospital and private clinic services.

According to key informant interviews (involving community leaders, health workers, nutrition scholars, principals or head teachers, and social workers)²⁴ conducted in 31 of the FGD communities, there were no noticeable changes in immunization rates or in the number of pregnant women receiving tetanus toxoid vaccination. The key informants also indicated that the number of malnourished children had declined (although it apparently increased in subsistence farming and fishing communities), contrary to the impression obtained in the focus group discussions. However, DOH Field Health Services and Information System (FHSIS) reports indicate that both the number and proportion of moderately and severely malnourished children aged 6-59 months decreased in four of the six regions (of the 12 regions covered by the FGDs) that had completed their 1998 reports by January 1999. FHSIS reports for these six regions also indicate that immunization coverage declined in five of the six (although the absolute number of children immunized increased in three of the five).

In Korea, government expenditure on health declined sharply (-46 percent) between 1997 and 1998, reflecting declining tax revenues as well as the need for steep increases in government expenditure to support financial restructuring and to provide unemployment benefits (Moon, Lee, and Yoo 1999). However, the total number of outpatient visits (both public and private) increased by 3.8 percent in 1998 (as compared to a 9.5 percent increase in 1997), while the number of inpatient admissions declined only slightly (by 0.5 percent, compared to an increase of 6.9 percent in 1997). The total per visit cost of outpatient care increased by only 7.0 percent (compared to 6.5 percent in 1997), while the total per admission cost of inpatient care has increased by 9.9 percent (compared to 6.2 percent in 1997). The relatively slow inflation in medical care prices (lower than the consumer price index) may be due to price controls imposed by Korea's universal health insurance system. However, the effect of rising costs (due to devaluation) in the presence of relatively stable prices has put a lot of private medical care providers under intense pressure.

Data from the Ministry of Health and Welfare indicate that immunization rates among children one year of age have remained at nearly the same level as before the crisis, although there has been a tendency for parents to switch their source of immunizations to heavily subsidized public health centers (Moon, Lee, and Yoo 1999). However, data from the Korea Consumer Protection Board collected in 13 cities in September 1998 indicate that health care expenditure has declined among the aged.

In Malaysia, the government health budget has been relatively protected, increasing by 14.4 percent in 1998 and by an additional 6.5 percent in 1999. It is reported that private hospitals and clinics have registered decreases of 15-50 percent in the number of patients using their services since the advent of the crisis (Piei, Johan, and Abubakar 1999). At the same time, the patient load in government hospitals has increased 10-18 percent. It is unclear to whether these shifts have affected the quality of care in government facilities. There is also no postcrisis information yet on private medical care expenditure, on the utilization of services, or on health outcomes.

²⁴Additional key informants were also interviewed in the municipalities in which the sample barangays are located, including the municipal accountant, budget officer, health officer, and social welfare officer.

In Lao PDR, public health officials and villagers in all regions reported better health and nutrition conditions attributable to an overall improvement in socioeconomic conditions and effective dissemination of health related information to the general public. Diseases still abound, however, the latest being HIV/AIDS. A clear result of the crisis emerges in the high costs of medicine, now 4-5 times the price they were in 1997, and the inability of government hospitals to subsidize the cost of medicine for those who cannot afford them. Sometimes sliding scales for payment of medicine and hospitalization in some hospitals help out the poorer patients. In addition, the resources available to handicapped children in Vientiane centers have been insufficient to meet their nutritional and other basic needs.

C. Family Planning and Reproductive Health

In Indonesia, IFLS data indicate that contraceptive prevalence increased from 56.6 to 57.3 percent, while women's satisfaction with family planning services was unchanged.²⁵ However, among users, the proportion of women using injectables decreased from 39 to 37 percent. Focus groups and key informants reported that up to two thirds of the users in some villages changed the form of contraception from the favored but expensive injection to the cheaper pills, or implants if these were free. Although IUDs were free, women tended to avoid them for religious reasons. Declining purchasing power and the higher prices for services and imported contraceptive devices encouraged users to shift to cheaper alternatives. Key informants reported additionally that new acceptors were more difficult to recruit. Beginning to emerge is the expected rise in early marriages for women, a common response of parents in times of hardship.

The IFLS data also show some evidence of a shift from public to private providers, particularly in the case of injectables. The proportion of users reporting the puskesmas as their source declined from 27 to 19 percent, while those reporting midwives as their source increased from 45 to 53 percent. This source shift may reflect greater difficulties experienced by public providers in maintaining supplies of contraceptives. Of 219 public health facilities from which the IFLS collected data, 49 percent indicated that they experienced a change in the availability of family planning services during 1998, compared to only 35 percent of 387 private providers, and that this change in availability made service provision more difficult for 72 percent of the public facilities.

In the Philippines, the available contraceptive prevalence survey data indicate that contraceptive prevalence has been declining since 1996 (Table 9). Although overall use regained 1996 levels in urban areas in 1998, it continued to decline steeply in rural areas. Given this downward trend, there is no way to determine from these data whether the crisis has contributed additionally to the decline between 1997 and 1998. However, the decline in modern method use began only in 1998.

²⁵Similarly, Susenas data show a slight increase in prevalence from 55.4 to 55.6 percent between February 1997 and February 1998 (Sigit 1998).

**Table 9: Contraceptive Prevalence among Currently Married Women
(ages 15-49) in the Philippines, 1993-1998**

	Total	By Type of Method		By locality	
		Modern	Traditional	Urban	Rural
1993	40.0	24.9	15.1	43.0	36.8
1996	48.1	30.2	17.9	50.7	45.5
1997	47.0	30.9	16.1	50.0	44.1
1998	46.5	28.2	18.3	50.7	42.2

Source: Reyes et al. (1999)

In Thailand a study sponsored by the United Nations Fund for Population Activities (UNFPA) found that the budgets of four reproductive health programs of the MOPH were reduced from 1.5 billion baht in 1997 to 1.325 billion baht between fiscal year 1997 and 1998 (Brooker Group 1999). These programs included: HIV/AIDS, maternal and child health and nutrition, health promotion for school-age children and youth, health promotion for adults, and family planning. Among other effects of these budget cuts, condom distribution in brothels and other commercial sex establishments was reduced.

In Korea, there are yet no postcrisis contraceptive prevalence data. However, data from the Planned Parenthood Federation of Korea indicate a 14 percent increase in family planning services provided between the first quarters of 1997 and 1998 (compared to fairly stable increases of 3 percent in earlier years). Most of this increased demand was for vasectomies and sterilization (19 and 13 percent, respectively) compared to IUDs (5 percent), suggesting that much of the increase reflects source switching instead of increases in overall use (Moon, Lee, and Yoo 1999). However, Planned Parenthood Federation also reports steep increases in counseling services for unwanted pregnancies and contraceptives (75 percent and 122 percent, respectively, over the previous year), while counseling for sexually transmitted diseases (STDs) increased at the same rate as in the previous year (37 percent).

In Malaysia, according to a 1998 government-sponsored study, the availability and accessibility of the population to contraceptives and family planning services has not been adversely affected by the crisis (Piei, Johan, and Abubakar 1999). FGDs held as part of the study found that clients were "comfortable with their usual clinic and centre for reproductive health and family planning." The study also reported that lower-income couples and the urban self-employed are particularly sensitive to the need for family planning. Some percentage of the couples reported that they were waiting until the economy recovers before having another child. A majority of rural women in particular expressed a preference for delaying childbearing during the recession.

In Lao PDR, the already minimal interest in family planning has further waned as a result of the economic boost in rural areas fostered by the crisis. This trend is related to the 85 percent of the Lao population characterized as residents of labor intensive agricultural societies living in upland and highland settings, where children are indicators of wealth and prestige.

Data from Thailand and Korea indicate no changes in patterns of prenatal care or professionally attended births. However, in Indonesia there has been a significant shift away from professionally attended births, particularly in urban areas. Susenas data, for example, indicate that the percent of women whose births are professionally attended has declined, particularly in urban areas. The proportion of deliveries attended by doctors has decreased in urban areas from 17.6 to 14.3 percent while the proportion attended by midwives has decreased from 65.4 to 58.4 percent. At the same time, the proportion attended by traditional birth attendants has increased from 15.7 to 18.7 percent while the proportion attended by family members has increased from 0.3 to 7.3 percent.²⁶ The percentage of mothers breastfeeding their babies at 12 months old has declined from 42.6 to 33.3 percent (with the decrease greater in urban areas), while the percent of mothers combining breastfeeding with solid food has increased from 54.5 to 64.6 percent.

VI. Social Capital

Social capital is defined as the norms, reciprocal ties, and trust built up among members of a community that stem from and result in mutual benefits and cooperation (Racelis 1999). The country studies were asked in particular to report evidence of crisis impact in the areas of community cooperation and participation, crime, and violence. The crisis appears to have strengthened community cooperation and participation in Thailand and Korea, but to have diminished it in Indonesia. Crime rates have increased since the onset of the crisis in Thailand, Korea, and Malaysia (and anecdotally in the other countries as well).

A. Community Cooperation and Participation

Many of the communities in the crisis countries have enjoyed noteworthy levels of community cooperation and voluntary participation in community institutions. In some cases these have been reinforced by the crisis. In Thailand, cuts in government budgets and the corresponding reduction of services in many instances seem to have benefited the formation of community social capital. With the often heavy hand of government now more distant, local people could exert their own initiatives and organize more effectively, "taking off where the government has left off." Throughout the country, people's organizations have proliferated, often through NGO efforts. They mobilize to promote common interests ranging widely from water, credit, savings, and vegetable production to women's well-being, youth initiatives, home food manufacture, and sea disaster prevention. Levels of participation in community organizations are impressive. Government's role in the villagers' view is not to "direct" the process but to facilitate and support it through training schemes and extension services.

Strong community organizations helped people take advantage of government credit schemes and grants to set up small businesses and revolving funds. Women's groups were extremely active in developing savings groups and income-generating activities or micro-enterprises covering everything from agricultural food processing and preservation of fish

²⁶At the national level the changes have been as follows: doctors (-1.7 percent), midwives (-5.3 percent), paramedics (-0.3 percent), traditional birth attendants (+1.7 percent), and family members (+5.4 percent).

sauce and fried durian, for example, to weaving or sewing activities. Households went into mushroom cultivation, duck raising, and integrated farming, opening stores and even gasoline stations. These new opportunities encouraged migrant family farm labor to return to their village. Organized farmers' groups exchanged information on prices and other critical matters, and coordinated agriculturally related activities, including irrigation and organic agriculture. In urban centers as well, community groups were engaged in several kinds of self-help activities, including savings clubs, income enhancement, and networking.

Similarly, in Korea there have been numerous examples of communities organizing to assist groups most adversely affected by the crisis. For example, an announcement by the Ministry of Education in August 1998 that the number of school children missing lunch had increased encouraged a group of women's organizations and religious groups to organize a campaign to distribute free bag lunches to children without lunch (Moon, Lee, and Yoo 1999). The Christian doctor's society at Kyunghee University Hospital opened a special clinic in March 1998 to provide overseas migrant workers with free medical care on Saturday afternoons. Another organization (the "Dail Community") provided free meals to the homeless near Seoul Station during an early period when there were no resources for this purpose available in the government budget. A voluntary association of artists also organized free performances of plays, dances, and sing-alongs for the unemployed and homeless. The nationwide unemployment relief movement "Easier Together", which began in June 1998, is an important example in Korea of community cooperation to alleviate the adverse impact of the crisis. This movement brought together numerous social, religious, labor, and management groups that contributed funds for the relief of the unemployed (Moon, Lee, and Yoo 1999). Donations for the poor have also increased. A decline of 65 percent in donations by financially strapped firms has been more than offset by an increase of 24 percent in individual donations.

In Indonesia, focus groups and key informants reported that communities continued traditional practices and ceremonies toward sustaining the more vulnerable groups in times of hardship, even though this became increasingly more difficult for villagers and outside donors as poverty deepened. For example, schools took a tolerant position when parents could not pay school fees, and even factories sometimes donated basic food to poor families and the elderly. As time went on, however, the hardship and uncertainty engendered by the crisis took its toll on social capital. The fast-growing numbers of the needy overwhelmed the system and the wealthier donors who normally sustained them. Any collaborative activity that called for money ran the risk of failure. *Gotong-royong*, or organized reciprocal labor activities among neighbors, and *jumpitan*, household contributions of a small amount of rice or money to help the poor, were practiced less and less, and in one case abolished. Community lotteries (*arisan*) fell by the wayside because people could no longer afford them. The need to use as much time as possible in the food and income quest superseded voluntary work for the community, whether that entailed attending village meetings, or joining the neighborhood night patrol, or preparing food for group projects.

Even religious activities suffered. Men who were now working longer and harder in the paddy fields often felt too exhausted to attend evening recitations of the Qu'ran. The same applied to thanksgiving ceremonies celebrating mutual assistance aimed at overcoming the community's shared poverty. Given the actual decline in mutual assistance, village heads felt less inclined to convene thanksgiving events. Gambling, rape, and violence against women seemed to be on the increase. The erosion of mutually supportive activities

characteristic of Indonesian culture in favor of more individually and household-based survival initiatives may well undermine the sense of community that has long been a source of pride among Indonesian villagers.

The IFLS surveys asked adults whether they participated in various community activities during the preceding year. Their responses (Table 10), which were obtained by re-interviewing a subset of the same sample one year later, clearly indicate decreases in community participation between 1997 and 1998.

Table 10: Participation in Indonesian Community Development Activities, 1997 and 1998

	Percent Participating		Percent Change
	1997	1998	
All Adults			
Community meetings	22.7	18.2	-20
Voluntary labor	29.4	23.0	-22
Community improvement	16.6	14.5	-13
Men			
Security organization	32.9	30.8	-6
Women			
Women's group (PKK)	9.1	7.3	-20
Community health post	20.5	16.5	-20

Source: Frankenberg, Duncan, and Beegle (1999).

In the Philippines, some community groups addressed possible threats to peace and order by holding regular consultative assemblies to assess the situation, instituting a curfew for teenagers, and monitoring movements of people, especially strangers, in the area. Civic-minded adults took the initiative to organize out-of-school youth for training in value formation and spirituality. Many village and urban communities reported, however, that government infrastructure projects aimed at improving community life had either been delayed or suspended. This stemmed from reallocation of priorities or the unwillingness of funding agencies to provide additional financial support for increases in raw material costs.

In Lao PDR, rural communities expressed joy over their suddenly improved economic circumstances. While they recognized this might in the long run undermine valued norms and behavior, for the moment they were elated at their good fortune. A predictable source of future social disruption could already be identified, however, in ethnically mixed communities. Some saw this as a desirable integrating situation, but others predicted the emergence of old patterns of ethnic dominance and competitive advantage—with detrimental consequences. The new roadside villages represent this scenario. Further, policy changes linked to emerging new socioeconomic arrangements, like land reform measures in swidden cultivation areas, will also almost certainly lead to intergroup tensions.

B. Crime and Domestic Violence

The struggle for survival brought on by the severe impact of the crisis on employment, income, and prices led to increased crime rates, even within previously close-knit and harmonious communities. In Thailand, data from the Police Department indicate relatively sharp increases between 1997 and 1998 in the incidence of reported major crimes (Table 11). With the exception of auto thefts, all crime types increased by more in 1998 than in either 1996 or 1997, and the increases for some types of crime (murder, assault, theft) are striking.

Table 11: Major Reported Crimes in Thailand, 1995-1998

Type of Crime	Number Reported, 1995	Percent Change Relative to the Preceding Year		
		1996	1997	1998
Murder	4,452	-1.5	0.2	27.5
Attempted murder	4,071	-0.9	8.1	9.5
Assault	16,053	-4.6	4.3	11.8
Theft	42,125	3.7	6.0	25.7
Vandalism	3,276	-2.5	11.5	14.4
Motorcycle theft	10,087	18.5	-1.3	26.4
Auto theft	2,204	33.6	30.6	-0.3
Narcotics	149,452	12.8	4.4	28.0
Total	231,810	9.7	4.7	25.7

Source: Pongsapich and Brimble (1999).

Even rural communities have experienced cattle rustling and other forms of petty theft. For example, in Kuchinarai District of Kalasin Province a team of thieves entered villages known for raising substantial numbers of livestock loaded cattle onto a 6-wheel truck and successfully made off with them (Pongsapich 1999).

In Indonesia, the violence and looting directed against the ethnic Chinese business community in Indonesia (including the rape of a reported 400 women) is an extreme example of how the crisis has contributed to increased crime and violence. In addition, higher prices of some products have encouraged theft. For example, mass looting of coffee plantations in East Java led to an estimated loss of 10-20 percent of production (Sigit 1998). Cacao plantations in East Java also suffered from looting, as did palm oil plantations in North Sumatra and shrimp ponds. Most focus groups deplored the rapidly deteriorating safety and order situation. Many had personal experience of petty theft within their neighborhood and in the fields of food and agricultural products. These criminal activities were done not only at night but during the daytime as well. With neighborhood security systems weakened by the lack of community volunteers, households had to fend for themselves by keeping watchdogs; safety-proofing doors, windows, and trellises; and installing alarm systems.

The sense of serious threat to personal safety was fueled by screaming headlines in national and regional newspapers. "Rise in Crime Terrifies City" proclaimed the *Jakarta Post*, which also dubbed Jakarta a "city of fear". The media spoke of new patterns of crime resulting from both the financial and political crises. These included robberies committed in broad daylight on city streets and tollways, with murder sometimes included, and looting and fraud through black market money exchanges. Crimes committed by amateurs were likewise on the increase. Housewives, desperate fathers, high school students, and runaway children were arrested for stealing food and money or even holding up taxi drivers. Children began to appear in large numbers on city streets, many of them engaged in petty thievery and drugs. The quality of crime took an ugly turn when perpetrators would actually kill their victims for a pair of shoes, a piece of jewelry, or a bit of food. By sensationalizing the problems emanating from increasing poverty and social disorganization, media distortions led people to believe the incidence of crime was even worse than it actually was.

By comparison, the 1998 IFLS survey asked respondents whether certain factors in their environment had changed during the past 12 months, among them crime levels. In contrast to the impression created by media accounts (and by the focus groups), more than half of the respondents (57 percent of men and 62 percent of women) indicated no change. Among those who perceived a change, only 14 percent of male respondents considered that they were worse off compared to 7 percent who considered they were better off (the corresponding percentages among women were 16 percent versus 4 percent). The rest either perceived no change (8 percent) or did not know how they were affected by the change (Frankenberg, Duncan, and Beegle 1999). This is only one of many examples in this report where the information obtained from standard surveys appears to conflict with that obtained from the use of qualitative methods (focus groups, key informant interviews, analysis of newspaper articles). It is difficult to say what accounts for these differences.

In the Philippines, the peace and order situation did not seem much different from two years earlier, and no significant disturbances in the peace and order situation were reported. One should recall, however, that the country study research sites were deliberately chosen so as not to be in or near areas controlled by the New People's Army or Muslim rebel groups. The urban poor and fishing communities, however, mentioned an increased incidence of drug-related problems, since heroin (*shabu*) could be bought anywhere like candy.

In Korea, the total number of crimes increased by 11.7 percent between 1997 and 1998, compared to an increase of 8.2 percent in the preceding year (Moon, Lee, and Yoo 1999). In particular, the increase in theft and robberies and violent crime has been relatively higher in metropolitan areas (15.7 and 16.0 percent respectively, compared to increases of 7.6 and 9.7 percent in other parts of the country). Indicative of a further breakdown in social capital is the steep increase in domestic violence. Crimes of patricide, lineal ascendant assault, and injury have increased by 65.2, 46.3, and 16.1 percent, respectively. In addition, counseling services for divorce have increased by 18.2 percent in 1998, compared to an increase of only 0.2 percent in the previous year.

In Malaysia, according to a July 1998 report from the Police Department, the overall index of crime increased by 31 percent in 1998 compared to the same period in 1997 (Piei, Johan, and Abubakar 1999). Juvenile crime was up 13 percent (with the largest increase registered in petty and vehicle thefts and house break-ins). The Welfare Department has also reported an increase in the number of cases of domestic violence (507 cases through August 1998, compared to 603 cases in all of 1997).

C. Corruption

The crisis has led to emergency social safety net interventions of unprecedented magnitude in Indonesia and Thailand. Huge loans have been provided to support these expenditures, and there is great pressure to move the money as quickly as possible to those in need. Such an environment, perhaps given further impetus by the eroding real wages of government workers, is conducive to massive corruption. However, the country studies have not yielded any information about the effects of the crisis on levels of corruption.

VII. Environment

Government budgets for environmental protection have declined in Korea and Malaysia since the onset of the crisis (and probably also in the other affected countries). In Korea, government expenditure on environmental protection decreased by 12.2 percent in the second supplementary budget of fiscal year 1998 (Moon, Lee, and Yoo 1999). Although the total level of spending on environmental protection (including all special accounts) subsequently increased by 3.6 percent, it was not enough to restore spending to precrisis levels. In Malaysia, budget allocations for the Ministry of Science, Technology and Environment were reduced. This has somewhat restricted the funds available for environmental monitoring, conducting environmental impact assessments, and enforcing environmental regulations (Piei, Johan, and Abubakar 1999). However, while there were cuts made in the budget, the Ministry adjusted its expenditures to curtail nonessential activities and ensure that important and priority activities continued as usual. Malaysia has also had to contend with severe (though not directly crisis-related) water shortages and air pollution (the notorious "haze" from Indonesia).

People's intense quest for additional income during the crisis has placed strains on forest, fishing, and water resources in most of the crisis countries. In Thailand, the main environmental consequence of the crisis was a mounting water shortage. Encroaching forest users jeopardized already scarce water sources and posed threats to ethnic minorities residing there. Moreover, farmers using large amounts of chemical fertilizers and pesticides have polluted the surrounding water table, killed the mangrove forests, and left the soil in poor quality. Industries trying to remain solvent by reducing costs and enhancing competitiveness have paid much less attention to environmental controls than previously.

In Indonesia, the environmental consequences of the crisis have gained little attention compared to other developments. Yet some of them have a great potential to harm the entire country. Those people who returned to their villages often turned to the natural resource base for support. In South Sulawesi, people from various subdistricts cleared 13 hectares of protected forest and natural conservation and production forests, displaying an authorization letter from the village head. The resulting erosion will likely affect not only the forest itself, but also the marine environment as loose earth disgorges into the sea.

Similarly overexploited was the marine environment when fishermen killed large and small fish by using explosive devices or draining a small riverbed to catch them. Even when normal fishing methods were used, the sheer number of people seeking to catch and sell them—now including entire families—placed a severe strain on coastal resources. Another threat came from industries economizing on waste treatment. In the process, they

discharged polluted wastewater into adjacent fields or shrimp ponds, thereby jeopardizing investments in trillions of rupiahs. In urban areas, population pressures on city infrastructure that were not repaired because of fund shortages led to the continuing degradation of the environment.

In Lao PDR, with the intensification of agriculture, especially toward opening new land for dry season rice, most of the streams in the Mekong Plain have been pumped dry. The two-year drought has contributed its share to this ecological setback. Water shortages have become a critical issue. Farmers who had borrowed money from the bank to prepare their paddy fields found themselves unable to repay the loans because of crop failures due to insufficient water. The decrease in grazing land converted to agriculture forced farmers to sell off their livestock, thereby depleting their major source of natural fertilizer. In the North, commerce based upon forest products was causing serious ecological problems for traditional ethnic minorities. In addition, the Eastern Region had to contend with an active crossborder trade in wildlife with Viet Nam—and ultimately the PRC—some of the birds and animals representing endangered species used for culinary and medicinal purposes.

Although observers in Thailand and Malaysia noted reductions in air pollution in capital cities, only one country study reported official levels. Data on air pollution in Seoul indicate improving levels of sulfur dioxide and total suspended particulate matter, consistent with precrisis trends. In contrast, ozone levels have continued to increase (Moon, Lee, and Yoo 1999).

VIII. Especially Disadvantaged Groups

Although the Asian crisis has hurt virtually everyone in the society, some particularly vulnerable groups have suffered substantially greater adverse effects.

A. The Poor

The crisis appears not to have produced the sharp increases in absolute poverty that some predicted for three reasons. First, the impact of the crisis in most countries has been greater among urban populations whose income levels tend to be considerably above the poverty line. Second, the massive devaluations that initiated the crisis have benefited the agricultural sector in some cases, and this is the source of income for most households near the poverty line. Third, poverty reduction brought about by robust economic growth in the past appears not to be so easily reversed. In Indonesia, for example, data from the Kecamatan Crisis Impact Survey show little correlation between various indicators of crisis impact and precrisis estimates of the incidence of poverty based on the Susenas surveys (Poppele, Sumarto, and Pritchett 1999).

Although the employment and income impact of the crisis has not been disproportionately greater on the poor than on other groups, the poor (and particularly their children) have suffered more from its impact because their low incomes and poor education provide them with fewer options to overcome these setbacks. Their ability to augment their incomes by working harder, by economizing on less critical expenditures, or by borrowing or selling their assets to maintain their consumption levels are all less than that of educated middle-income and upper-income groups. Accordingly, their coping mechanisms are more likely

to involve reductions in investments in human capital. The consequences for people already in dire situations can be sobering indeed.

B. Women

Women (and female-headed households) have generally been harder hit by the employment and income impact of the crisis in Korea, Malaysia, Philippines, and Thailand—but less clearly so in Indonesia. However, women have had to add income-earning activities in many cases to their already heavy work burdens at home and on family farms. Accordingly, their apparent relative employment gains in Indonesia may be illusory. In Korea, there is evidence that the heightened threat of layoffs during the crisis has led to increased sexual harassment and abuse in the workplace and that increased unemployment among female heads of households has been associated with particularly severe social impacts (e.g., increased juvenile delinquency, lower high school continuation rates). In Indonesia, additionally, declines in school enrollment have been greater among female children.

In Thailand, according to focus groups and key informant interviews, urban poor women suffered most as a result of the crisis, especially as heads of households without male support. They had to address their children's food, educational, and other needs virtually alone with extremely limited and irregular earnings. Rural women had to struggle along with the men to gain access to additional employment and income on and off farm, in fishing enterprises and forest areas. Organized women's groups proliferated to take advantage of earning opportunities. As elsewhere, women had the responsibility of stretching household budgets to accommodate family needs, and worrying about adolescent children sent to work in the city. Their own health was being jeopardized by anemia, the consequence of deferring to their children and husband in food allocations and care. Access to affordable family planning and reproductive health services also became more difficult.

In Indonesia, women who are not already combining household duties with income earning activities feel compelled to do so during times of hardship. This is one hedge against the alternative of withdrawing their older children from school to join the income quest. The past two years have seen new kinds of ventures in this regard. Occupations traditionally relegated to males, like fishing on the open sea, now have to accommodate women. On the other hand, women have had to compete with the male relatives of fishing enterprise owners in fish-salting or oyster shucking, normally women's work. Traditional norms of the division of labor by gender thus appeared to be breaking down.

Meanwhile, more and more women sought to intensify their ongoing work as agricultural laborers, food vendors, laundresses and the like. Where they heard that government was making available special programs for children, like food supplements at child weighing centers or health cards, women sought these out. They bore the burden of taking their more frequently sick children to public hospitals or clinics, often waiting half a day or more for a consultation. Reorganizing the household budget in favor of food allocation was also their responsibility. In regard to family planning, many women decided to save money by opting for pills instead of the more convenient but expensive injections they had earlier favored. Difficult times were also revealing a trend for adolescent women to yield to their parents' decision to marry early and become the responsibility of their husband's family, regardless of their own personal preferences. The decline in school enrollment has also been greater among female children and youth.

In the Philippines, women in their role as household managers had the task of stretching household budgets, no matter how meager the earning of their husband and contributing household members. They called forth maximum ingenuity to find cheap food substitutes, like beef or pork innards instead of actual meat, chicken feet or necks instead of drumsticks or breasts to augment soups and vegetables, dried instead of fresh fish, cassava or sweet potatoes instead of rice at every meal, and for the poorest, two instead of three meals. The first items to go in favor of food were clothing, dining out, and leisure activities. Many women who had not done so before insisted on working outside the home through direct selling, ambulant peddling of fish and vegetables, accepting laundry work, or opening up small food stands and neighborhood *sari-sari* stores.

Women also took on the task of seeking credit and income to put food on the table, ensure their children went to school, treat sick family members, and start or sustain their microenterprises. Their drive to improve the family's financial situation, implying that the husband was not fulfilling his traditional role as breadwinner, often put a strain on husband-wife relations. Focus groups reported cases of domestic violence from fierce disagreements on these issues. A further source of worry for women was the shortage of medicine in government hospitals for sick family members. They remained anxious about older children whom they had to send for domestic or other work in large cities far away from their protection.

In Korea, although changes in the unemployment rate do not indicate that the crisis impacted more severely on women than men, closer examination reveals that many women dropped out of the labor force. If changes in labor force participation are taken into account, the employment impact of the crisis has been much greater among women. The rate of female layoffs has also been significantly higher in the restructured financial sector. The increased jeopardy of women to layoffs has triggered a sharp increase in sexual harassment and assault in the work place (Moon, Lee, and Yoo 1999). According to data from the Korea Sexual Violence Relief Center, counseling services for sexual harassment and assault in the work place have increased by 41 percent in 1998 (counseling for all purposes increased by 29 percent during this period). It is also reported that many incidents of sexual harassment and assault were linked to the threat of layoffs in connection with downsizing.

The social impact of unemployment is particularly severe when it involves female heads of household. According to a report of the Presidential Commission on Women's Affairs, the frequency of juvenile delinquency is almost 12 times higher among children from households headed by an unemployed female as compared to households headed by a male (Moon, Lee, and Yoo 1999). Continuation rates to higher education have also decreased more in households headed by an unemployed female.

In Lao PDR, an emerging group of women offering commercial sexual services explained their new activities as a desire to assist their poor parents, make their parents' life easier in old age, and help younger siblings get a good education. Despite the social stigma, they wanted to take advantage of fairly high prices for their sexual services while they were still young and desirable. At the same time, they feared acquiring sexually transmitted diseases, including HIV/AIDS, and being arrested or subject to extortion for their illegal activities.

Rural women also experienced greater earning power through intensification of economic activities on the farm, informal trade, and new opportunities in enterprise development, such as roadside restaurants. More remote minority women continued drawing

on forest resources for survival and striving to live peacefully with other minority groups. Where these resources were being rapidly depleted, they faced the prospect of greater poverty and possible resettlement to alien surroundings threatening to their culture and psychological well-being. Those who had attended government boarding schools had to find ways of reintegrating into their home societies or the national culture.

C. Children

The country studies found no consistent evidence that children have been pulled out of school in large numbers and put to work. School enrollment changes have been moderate in most countries and/or consistent with precrisis trends, in part probably due to social safety net interventions sponsored by the Bank and other donors. There is no evidence yet that the crisis has significantly affected the health of most children. For example, there is no evidence yet in any country of increased malnutrition since the onset of the crisis. Immunization rates have been maintained at precrisis levels in all countries except the Philippines (where government data show significant reductions in coverage in several regions). However, there has been an increase since the crisis in begging, child abuse, child prostitution, number of street children, and reported instances of child abuse in Thailand, Indonesia and the Philippines.

In Thailand, on the whole, children appeared to be faring reasonably well, partly owing to government social safety nets applied to them. There is no evidence of increased child labor in the available survey data. Nonetheless, some children were being withdrawn from studies, especially at the high school level. The nutritious lunches with milk that used to be served at primary school dining halls were cut as the costs of food rose. A number of "hard core" school-aged children never enrolled at all, more so than in the past. More babies were born with close to low birth weights. A growing number of out-of-school youth in cities ran the risk of being pulled into drug use, prostitution, and criminality. NGOs report increases of 10-15 percent in the number of street children and in child abuse cases since the crisis began.

In Indonesia, unfortunately, data on the impact of the crisis on child labor are not available because the labor force survey (Sakernas) ceased collecting employment data on children aged 10-14 when the government increased the legal minimum working age to 15 years (Feridhanusetyawan 1999). However, it is evident that the crisis has pushed many children of the poor onto the streets of major cities. In 1998, according to the Minister of Social Affairs, the number of street children in Jakarta more than quadrupled, from 3,000 prior to the crisis to 13,000 (Feridhanusetyawan 1999).

According to key informants, child survival, development, and security have all been threatened by the crisis. Low birth weight babies with heightened chances of dying early increased in 1997-1998, reflecting mothers' malnourished levels. Although no strong evidence of significant increases in malnutrition has appeared, the inability of many households to buy more nutritious food, like meat, chicken, eggs, fish, and milk increases the likelihood that large numbers of young children will suffer from some form of malnutrition over time. Iodine intake has declined with the shift to noniodized salt, which may affect children's mental development. First grade enrollment has been deferred for many younger children, while older siblings, especially girls, were taken out of school to join the family workforce. Some wound up far away in cities where they could easily be exploited as domestic servants,

factory labor, or street vendors. Those who became street children searching for food and money had little protection and became prey to pimps, policemen, and gangs, who incorporated them into their criminal activities.

In the Philippines, economic conditions create an environment that is not conducive to maintaining family cohesion. When parents must leave home for the day or for longer periods of time, their children are too often left to fend for themselves. Further, many focus groups expressed their apprehensions about having to send their older children to work in large cities far away from the family.

Immunization of young children and pregnant women has faltered, leading to diseases like tetanus among the newborn. Health budget cuts meant that children were less able to get medicine and quality care from health centers and hospitals. The failure to keep up iodized salt distribution raised the prospect of cretinism among the deprived children. Urban poor children were left alone more and more as both parents struggled to earn outside the household premises.

In Korea, the education of children (particularly kindergarten-age children) has been adversely impacted by the crisis. In addition, there is evidence that more children are being abandoned by their parents and that domestic adoptions are a declining share of the total. The number of children in welfare institutions increased by 0.6 percent in 1998, reversing a downward trend that began in 1990 (during which the number declined by 27 percent). The number of children adopted increased by 6.9 percent in 1998 (compared to an increase of 4.8 percent in 1997). At the same time, overseas adoptions increased by 11.8 percent, reversing a previously declining trend in the number of overseas adoptions since 1993, while domestic adoptions were unchanged (having increased during the two previous years by 19.9 and 14.9 percent). According to the Ministry of Education there has been a sharp increase in the number of school children who miss lunch. Although the number in middle and high school who missed lunch had declined by 3.9 percent in 1997, it increased by 268 percent (to 43,760) in 1998 (Moon, Lee, and Yoo 1999).

In Lao PDR, children of ethnic minorities in government boarding schools were most likely to suffer from insufficient funds for food, clothing, and education.

D. Youth

Youth aged 18 and above have been particularly hard-hit by the employment impact of the crisis in Thailand, Korea, and Philippines (and probably also in Malaysia, but less clearly so in Indonesia). In Korea, youth have suffered considerably more from the employment impact of the crisis. Employment decreased in 1998 by 14.9 percent and 14.1 percent in the age groups 15-19 and 20-29 (compared to an overall decrease of 5.3 percent). There has been a sharp increase of 20 percent in the number of juvenile offenders in 1998, compared to an annual growth rate of 10 percent during the three preceding years (Moon, Lee, and Yoo 1999).

In some cases, their enforced idleness has led to increased crime, drug abuse, prostitution, teen pregnancies, and has contributed to political instability. However, in other cases youth have responded to decreased employment opportunities by remaining in (or returning to) school in Indonesia, Korea, and Malaysia.

In the Philippines, most of the focus group communities reported cases in which high school and college children, especially, were withdrawn from their studies. This was so that

they could mind their younger siblings while both parents were away working, or go to work themselves. Some became domestic helpers in the cities of Manila, Cebu, and Davao, often facing personal danger and exploitation. Others were sold into prostitution by their own relatives. Unemployed out-of-school youth were susceptible to drugs and criminal activities, as well as early marriages. Ill-prepared to face the rigors of family life, the teen-aged husband and wife were almost surely condemning their future children to a life of poverty.

E. Older Persons

Older persons have been adversely affected by the employment impact of the crisis in Korea and Indonesia, but not in Thailand (the other country studies have not reported on the older persons). In Korea, there is evidence that the crisis has reduced the incomes and degree of independence among the older persons.²⁷ Some income sources of the older persons tend also to be relatively fixed in money terms (e.g., pensions, rent, interest) and are therefore vulnerable to the inflationary effects of a crisis. The health of the older persons, like that of young children and women of child-bearing ages, is also particularly vulnerable to increases in the cost of medical care (Ariff et al. 1998). Unfortunately, none of the country studies yielded information on the health impact of the crisis among older persons, although the Korea study notes that private health expenditure declined most among this group.

F. Vulnerable Occupational Groups

Employees in manufacturing and construction have experienced more negative employment impacts than workers in other sectors. Construction workers have been particularly vulnerable to the effects of the crisis in all the affected countries because they work in a sector that produces a nontradeable output heavily dependent on imported inputs and bank credit. Factory workers have been vulnerable to layoffs in all countries (except Lao PDR)²⁸ because the products they produce often have high import content and because manufacturing firms tend to be sensitive to credit shortage and high interest rates. Many construction and factory workers also live in urban areas, where the cost of living is higher, and in most cases they need to purchase all or most of the food their families consume.

In contrast, employment opportunities for agriculture and service sector workers have generally improved during the crisis. However, partly due to the ability of these sectors to absorb unemployed workers from other sectors, real per capita incomes have tended to decline more than in other sectors.

²⁷A recent survey of the older persons indicates that the proportion of self-supporting older persons has declined from 37.2 to 34.1 percent since the onset of the crisis (Moon, Lee, and Yoo 1999). The proportion of the older persons who rely on wages as their main source of income has declined from 27.9 to 23.3 percent.

²⁸In Lao PDR many of the manufacturing enterprises (particularly in textiles) are branches of multinational companies that have been able to supply them with necessary credit and intermediate goods during the crisis.

White-collar workers were initially hard-hit by the crisis, but many (particularly the more educated among them) have fairly easily obtained other (lower-paying) jobs. In fact, there is evidence that white-collar workers have displaced other less-qualified workers in many jobs. The underemployment of qualified workers is an important negative outcome of the crisis.

Government workers whose salaries tend to be inflexible in the short run have been particularly vulnerable to the crisis in countries experiencing rapid inflation (Indonesia, Lao PDR). In other countries, however, they have benefitted from the higher levels of job security.

G. Informal Sector Workers

The impact of the crisis in the informal sector has mainly been in the form of declining real income per worker rather than open unemployment. It is usually assumed that all self-employed and unpaid family workers are employed in the informal sector when analyzing labor force survey data. In this case, the data suggest that the informal sector share of employment has increased in Indonesia and Korea, but not in Thailand. However, labor force surveys do not provide data on the incomes earned in the informal sector (since according to their definitions informal sector workers do not earn wages).

Credit is an important input for the informal sector. The difficulties experienced by informal sector firms in obtaining bank loans have reportedly led them to make greater use of money lenders, whose interest rates are typically much higher (often more than twice those charged by banks). The credit crunch has impelled informal sector traders to return to the traditional 5:6 credit arrangement under which they borrow 5 units of currency in the morning to purchase stocks, returning 6 units to the money lender at the end of the day (World Bank 1998b). The prices of many other inputs used by the nonagricultural informal sector (e.g., fuel and utilities) have also risen sharply.

H. Overseas Migrant Workers

Overseas migrants working in other Asian countries have been adversely affected by the crisis (e.g., Indonesian workers in Malaysia, Burmese workers in Thailand). In Korea, the drastic devaluation of the won provided overseas workers with a strong incentive to leave. In fact, the number of registered foreign workers declined by 16.4 percent between 1997 and 1998 (Moon, Lee, and Yoo 1999). In Malaysia, an estimated one million migrant workers have lost their jobs; of these, 270,150 migrant workers repatriated in 1998. Since most migrant workers have incurred labor brokerage debts that can only be repaid after several years of work, loss of employment has meant that many cannot repay these debts (Piei, Johan, and Abubakar 1999). However, migrants working outside the region who receive their pay in dollars and other relatively strong currencies have clearly benefitted from the crisis (Illo 1998).

I. Urban and Rural Populations

Urban populations have been more adversely affected by the crisis than their rural counterparts. In Thailand, focus groups indicated that urban households were more likely

than rural households to be worse off in 1998, with Bangkok and the Northeast sheltering the largest proportions of affected families.²⁹ This stemmed largely from the impact of unemployment and higher prices on families who had no fallback position. Nonetheless, rural families had their share of problems. Farm wages and incomes fell when competing workers migrated back from rural or urban informal sector jobs. Farm products commanded lower prices not commensurate with higher prices for consumption items. Borrowing from informal moneylenders meant paying higher interest rates than before. While prices for agricultural goods were high during the first year of the crisis, the benefits were soon captured by middlemen and landowners, to the disadvantage of small farmers trapped in an exploitative marketing system.

In Indonesia, data from the IFLS indicate that real per capita household expenditure declined more in urban than in rural areas (34 percent versus 13 percent, using the official BPS price deflators). Data from the Kecamatan Crisis Impact Survey lead to the same conclusion (Poppele, Sumarto, and Pritchett 1999). Among the 20 hardest hit areas, 14 are urban; whereas among the 20 least hit areas, 13 are rural. In every province of the country the proportion of *kecamatan* (subdistricts) reporting that the proportion of people "selling assets to meet basic needs" was higher in urban than in rural areas. Whether urban poverty rates increased more than rural poverty rates depends on the choice of price deflator. Use of the BPS deflators suggests that the urban poverty rate increased more than the rural poverty rate (by 30 percent versus 23 percent), whereas use of the IFLS deflators suggests that it increased more in rural areas (85 percent versus 72 percent). However, declines in school enrollment were greater in urban areas.

In the Philippines, farming and fishing families were seriously affected by the high prices of inputs like fertilizers, pesticides and animal feed; fuel for fishing boats; and transportation to market. This caused some of them to abandon farming or fishing in search of better income opportunities. The drought brought on by El Niño further undermined farm productivity, as was evident in coconut plantations also. Traders and landowners dictated the prices of rice and corn, placing small farmers with weak bargaining power at a disadvantage. Devolution of agricultural services to local governments weakened technical support for farmers. Government importation of rice and corn was seen as the major reason for the very low buying prices of rice and corn in 1998. Urban families also suffered, however, from job losses through factory and business closures, and the near collapse of the construction industry. Reduced demand for services provided by small entrepreneurs and own-account service workers also had negative consequences on their income.

In Lao PDR, urban-based government employees have been most gravely affected by the crisis because their salaries have not been able to keep up with extremely high inflation rates. This contrasts with rural households, which have benefited greatly from expanded informal trade opportunities within the country and across the Thai border.

²⁹However, as noted earlier, data from the national Socio-Economic Surveys indicate that Bangkok enjoyed relatively greater income gains between 1996 and 1998 as compared both to other regions (and especially compared to the Northeast) and to other urban areas.

J. Ethnic and Religious Minorities

When economic circumstances worsen it is natural for people to look for scapegoats, and ethnic and religious minorities have been traditional targets for such attacks. The recent experience of Chinese and Christian minorities in Indonesia provides a clear example. In some countries, however, ethnic and religious minorities live in remote areas and are relatively insulated from the effects of the crisis. In Indonesia, as mentioned earlier, the worst effects of the crisis have been clearly felt on the island of Java. In Lao PDR, however, ethnic minorities are seen as most vulnerable because with greater exposure to outside markets, they are liable to be exploited and relegated to the lowest ranks of society. More intense exploitation of forest zones inhabited by many ethnic minorities has also been occurring in response to the crisis. As their access to traditional natural resources declines, they may not be able to make the adjustment to other kinds of economic arrangements.

K. Institutionalized Populations

Institutionalized populations—both adults (e.g., the disabled and older persons) and children in orphanages and boarding schools designed to serve ethnic minorities from remote areas—have been severely hit by the crisis in Lao PDR and Thailand, due to reductions in government budgets, rapid inflation, and reductions in charitable donations. In Thailand, medical assistance from the Ministry of Public Health to the Foundation for Handicapped Children has been reduced by one third since the onset of the crisis (Brooker Group 1999). In Lao PDR, government boarding schools established for ethnic minorities, a number of them for girls, have had to cope with shrinking monthly budgets in the presence of rapidly rising food prices and this has led to signs of malnutrition among students (Chamberlain 1999). Institutionalized populations are particularly vulnerable because there are few coping mechanisms.

IX. Responses to the Crisis

Many of these responses have made significant contributions to lessening the social impact of the crisis and, in a few cases unfortunately, to worsening it especially in the longer term (e.g., household reductions in health and education expenditure).³⁰

A. Household Coping Mechanisms

There are many ways that households respond to changes in their economic environment (income and prices). These include adjustments in their consumption and saving, increased work effort, migration (domestic and international) to obtain higher-paying jobs,

³⁰Although other sectors of civil society, e.g., NGOs, community organizations, professional associations, religious groups, media, and other groups, undoubtedly played significant roles in addressing the needs of the affected poor, their efforts were not a focus of the study. This lacuna might well be addressed in subsequent research. For a discussion of the responses of regional organizations and international donors, consult Pernia and Knowles (1998).

and changes in their utilization of social services such as education and health care (Box 1). Households tend to purchase less of everything when their incomes decline, and reduce their purchases more of items whose *relative* prices have increased.³¹ Within food categories, households tend to substitute cheaper, lower-quality sources of calories (cereals, roots, tubers) for more expensive, higher-quality sources (meat, fish, fruit, and vegetables).³² Clearly, the rich have more scope for making such downward quality adjustments than do the poor.

Box 1: The Family as a Safety Net

The brunt of weathering the financial crisis fell on Asia's institutional safety net, the family system. Households reduced spending and also borrowed from relatives, money lenders, or banks to make ends meet. Women, especially, established small home enterprises, like mushroom cultivation, preserved food, handicrafts, or food stalls. Children attending private schools or a school far from home were moved to less costly and nearby schools. Family labor on farms, orchards, and fishing boats intensified. Farmers substituted organic farming for fertilizer and pesticide-driven production. Family members encroached on forest areas to convert swidden plots to agriculture, collect forest products, and hunt animals for food or sale.

In Indonesia, most focus group participants adopted a passive posture in confronting the crisis, seeing themselves as powerless to change the situation. Nonetheless, living in that situation generated a series of coping responses, whether or not these were consciously formulated. Reducing food consumption entailed giving up more expensive meat, chicken, or eggs in favor of cheaper food. Families ate less or went down to two meals a day and no longer dined out. Cutting down meant eliminating entertainment in the form of movies and sports, not inviting guests to one's home, or serving much simpler fare to visitors. Householders joined religious activities less often because they were too tired from working hard in their paddy fields or catching fish to spend time at the mosque in the evenings. Food offerings at ceremonial events were of lower quality than before, and donations declined.

Women sought work or additional work as laundresses, food vendors, and proprietors of small stores. Men, too, attempted to combine farming or fishing with additional earning opportunities. Even children joined the effort by working in the fields or on fishing boats and helping with home-based supplementary income projects like baking cookies. Idle land on the farm or in the home lot was converted to a kitchen garden for tomatoes, cassava, sweet potatoes, and peppers. Others left their villages to work in cities or abroad, while still others returned to join family members in the village. Finally, to protect themselves from theft and violence, people organized neighborhood patrols, built fences, and reinforced doors and windows. Wealthier families left their expensive cars in the garage and drove used cars instead to avoid becoming targets of robberies or holdups.

Households may also save a smaller share of their income, selling or pawning previously acquired assets (e.g., land, appliances, livestock, jewelry), taking salary advances, or borrowing money from money lenders. Not only in this area but also in decisions to pull children out of school and put them to work, and in failure to meet periodic mortgage payments are household responses to the crisis motivated by a strong need to maintain current consumption levels even at the expense of reductions in future consumption.

³¹The main exception to this general proposition is with respect to "inferior goods", i.e., those goods and services whose consumption tends to fall in absolute terms as incomes rise. In an economic crisis, when household incomes decline, the consumption of such inferior goods is likely to decrease less (or possibly even to increase, depending on relative price changes) compared to other goods.

³²In the presence of more limited food supplies there may also be changes in the allocation of food among household members (e.g., parents may reduce their own food intake more than that of their children). However, most surveys do not obtain information on the intrahousehold allocation of consumption.

In Thailand, focus group discussions indicate that rural residents migrated to Bangkok or other urban centers in the northeast, where they doubled up with relatives and friends in slum settings. Almost half reduced remittances to their families in rural areas. Workers formerly in agriculture and manufacturing enterprises went into informal trading. Families reduced other expenditures in favor of food, failed to enroll their children in school, and shifted from private to public health services and to self-medication. Urban poor households defaulted on housing and other loan payments, while their rural counterparts also faced penalty interest rates on borrowed money and possible loss of their land collateral. Many looked for new employment, a second job, or simply worked harder and longer hours to earn more. They sent their older children to city streets to raise money for their own schooling, despite the danger of becoming drug users and commercial sex workers.

The country studies found that households increased the food share of total consumption in Indonesia, Philippines, and rural Thailand, but not in urban Thailand or urban Korea (probably due to relatively higher inflation in food prices in the latter two cases). Households also tended to reduce expenditure for consumer durables (particularly clothing) as well as anything else they thought they could postpone. Unfortunately, this included more significant decreases in expenditure on medical care in Indonesia, Korea, Philippines, and Thailand and significant decreases in expenditure on education in Indonesia.

In Indonesia, IFLS data indicate that the share of food expenditure in total expenditure increased between 1997 and 1998 in both urban and rural areas (Table 12). The data also show a clear tendency within the overall food category to substitute staples for meat. The data also indicate that households reduced expenditure on most nonfood items, including health and education. Households postponed expenditure on durables and human capital investments in order to meet their most basic immediate need for calories.

**Table 12: Changes in Indonesian Household Expenditure Shares, 1997-1998
(percent)**

Item	Urban			Rural		
	1997	1998	Change	1997	1998	Change
Food	59.0	64.0	8	76.2	80.8	6
Selected foods						
Staples	13.0	20.6	59	30.6	39.4	29
Meat	12.7	10.4	-18	12.5	9.7	-22
Nonfood						
Alcohol/tobacco	4.1	5.7	41	4.4	4.0	-9
Health	1.7	1.5	-14	1.2	0.7	-40
Education	4.9	4.5	-8	2.4	1.8	-24
Household goods	8.2	6.8	-17	3.6	3.2	-12
Transport	3.2	3.2	1	1.8	1.5	-16
Clothing	2.9	2.5	-16	2.2	1.5	-32
Housing	10.8	9.1	-15	6.1	4.8	-21
Recreation	2.6	2.1	-21	1.8	1.7	-7
Sample Population	762	762		1,078	1,078	

Source: Frankenberger, Duncan, and Beegle (1999).

Similarly, Philippine families reported in focus groups having allocated more of the household budget for food, sacrificing other essentials like clothing, education, health care, and cutting out recreation altogether. Some housewives prepared only one dish to go with rice, and themselves ate only two meals a day in order to give their children three meals. Families eliminated snacks between meals, and cooked just enough to avoid leftovers. Over three fourths of fishing communities and one half of urban poor groups reported sleeping longer hours in the morning so that their first meal would be the equivalent of lunch. Many went into backyard vegetable and small livestock production, or ventured into fishing, carrying goods in the market, or scavenging.

Families acquired second-hand clothing, wore hand-me-downs, adjusted school uniforms from the previous year, or bought only one new set. They decreased transportation expenses: they walked instead of riding conveyances; took jeepneys rather than tricycles; combined errands to consolidate transportation expenses; requested traveling neighbors to purchase items for them in town; and looked for shorter, cheaper routes. They sought loans and sold assets like land, appliances, and jewelry. Household appliances and lighting were disconnected to cut down on electricity, while some people made a point of attending weddings, birthday parties, and other celebrations to eat better food. These coping mechanisms had their limitations. Undesirable changes in food consumption took their toll by lowering children's resistance, leading to more illnesses.

Households in urban Korea increased savings.³³ However, many households in the study countries report increased borrowing to support general living costs, as well as to pay for children's schooling and, to a lesser extent, medical care (Box 2). In Thailand, SES data indicate that the population living in indebted households increased from 52 to 60 percent between 1996 and 1998 (Brooker Group 1999).

A postcrisis survey of rural households in heavily affected rural districts found that 40 percent of households had no savings at all and, of those that did save, 71 percent had less than 5,000 baht (about \$135) and 93 percent had less than 10,000 baht (Brooker Group 1999). Similarly, a postcrisis survey of poor urban households (Brooker Group 1999) revealed that of 55 percent currently in debt, 27 percent have borrowed to meet daily living expenses as a direct result of the crisis while an additional 12 percent have borrowed to pay for their children's education (only 2 percent indicated that they had borrowed to pay for medical care). Households tended to borrow from informal sector money lenders (35 percent) or savings groups (28 percent), with only 17 percent borrowing from banks and other formal lenders.

In the Philippines, about 17 percent of 430 surveyed households reported that they had sold some assets during the past 18 months. The most common assets sold were land (21.2 percent), appliances (18.2 percent), and jewelry (18.2 percent). Only 3 percent of respondents reported that they had sold their houses, most of whom were from fishing communities. In farm areas, sale of livestock was most common (77 percent), whereas among the urban poor the most common asset sold was jewelry (43 percent). The reasons given

³³In Korea consumption expenditure among urban workers declined by 16.8 percent in 1998, compared to a decline of 14.4 percent in income. Apparently, urban workers perceive the crisis not as a short-term shock but as a longer-term change to which they need to adjust their long-term consumption and saving behavior (as well as possibly further building up their savings in the short run as a precaution) (Moon, Lee, and Yoo 1999).

for selling assets included: general consumption needs (52 percent), school expenses (11 percent), health care (8 percent), and loan repayment (4 percent). Only 3 percent of respondents indicated that they had sold assets to provide capital for a productive activity.

In Indonesia, anecdotal evidence suggests that many Indonesians have been selling their physical assets (e.g., radios, bicycles) to finance current consumption. However, data from the “100 villages” survey (which, however, is not nationally representative) indicate that an index of asset ownership actually increased by 47 percent in Java-Bali and by 121 percent in the Western islands, while it did not change in the Eastern islands (Poppele, Sumarto, and Pritchett 1999).

Almost two thirds of households (63 percent) reported having borrowed money during the past 18 months, most of whom borrowed from relatives, friends, and informal sector lenders, with 44 percent indicating that they had borrowed more than they borrowed before the crisis. The main uses of borrowed money included: general consumption needs (32 percent), school expenses (27 percent), medical care (21 percent), appliance purchases (19 percent), household repairs (16 percent), and to support productive activities (16 percent). About 30 percent of borrowers in farming communities used loan proceeds to support farm production. Interest rates tended to be above 20 percent per month (in some cases, as high as 20 percent per week).

Box 2: Adjustments in Use of Social Services

Households reported shifting from private to public schools (particularly in the Philippines) and from private to public health providers in all of the crisis countries, except in Indonesia, where use of private health providers increased at the expense of government facilities. In Korea, significant shifts occurred in the source of medical care during the crisis. In the case of outpatient care, Korean consumers shifted away from relatively expensive general hospitals and hospitals/clinics to relatively inexpensive public health centers, herbal clinics, and pharmacies. In the case of inpatient care, they shifted from relatively expensive general hospitals to hospital/clinic providers.

In the Philippines, focus groups reported that health care became more inaccessible to poorer families as the cost of medicine and private medical care rose while government services deteriorated. People turned to herbal remedies, indigenous health practitioners, and self-medication, and sought the assistance of local officials, NGOs, and God through prayers.

Many Philippine families struggled to keep their children in school, taking advantage where they could of special government, NGO, and community scholarship programs. They also transferred their children from private schools to public schools. Children had to take turns in that older children about to graduate would remain in school while their younger siblings stopped with the understanding that upon graduation their older sibling would finance their schooling. Parents enrolled children in shorter, less expensive vocational rather than academic courses. Children walked long distances to school to save on transportation, had smaller allowances or none at all, and did not bring nor buy food at recess. A few relied on better-off children to share their snacks. Teachers noticed pupils coming to class untidy or not in uniform because their parents could not afford laundry soap, there was no water for washing, or they only had one uniform. Students could not submit assigned projects owing to lack of money for the materials. Sometimes they scavenged paper from garbage cans to use in school. Older children worked part-time to earn money for their schooling.

B. Labor–Management Responses

Although there are instances during the crisis in which businesses responded to diminished market demand by simply laying off workers, there are also numerous cases

where labor and management have worked together to minimize the social impact of the crisis. In Korea, a survey of 400 enterprises conducted by the Federation of Korean Trade Unions found that 52 percent of the surveyed firms had imposed a freeze on new recruitment, 17 percent had used early retirement, and 14 percent had used reductions in the number of hours worked (ILO 1998a). However, despite impressive economic growth during the past two decades, there has been little progress in Korea (as well as in the other crisis countries) in modernizing worker-management relations in order to allow workers to air grievances and resolve disputes (Atinc and Walton 1998). This has led to many strikes and other forms of job actions, some of which have been violent. Hyundai Motor Company, for example, reported that strikes at its plants alone have cost the company \$540 million.

In the Philippines, trade unions and employers reached agreements in February and March 1998 to avoid layoffs and strikes (Illo 1998). The government has also been effective in persuading employers to allow adjustments in real wages to control labor costs instead of resorting to layoffs (World Bank 1998b). In Malaysia many employers have implemented alternative measures such as pay cuts and temporary and voluntary layoffs before resorting to permanent layoffs. During the period August-December 1998, for example, 795 employers implemented pay cuts involving 22,514 workers; 52 employers implemented temporary layoffs involving 6,342 workers; and 336 employers implemented voluntary layoffs involving 6,193 workers (Piei, Johan, and Abubakar 1999).

C. Government Responses

Governments have responded to the crisis with a broad range of measures to cushion its adverse impacts. One of government's main responses has been to reallocate its budget, usually reducing expenditure on investment and national defense while maintaining expenditure on government salaries and social services and increasing it for social safety net programs and for the recapitalization of financial institutions.

Although social safety nets are relatively undeveloped in the crisis countries as compared to those in industrialized countries, governments have nevertheless drawn on a wide range of interventions, including: (i) employment regulations; (ii) unemployment insurance and other forms of assistance to the unemployed; (iii) job retraining and job creation; (iv) pensions and provident funds; (v) public works and other forms of income maintenance; (vi) price controls and subsidies; and (vii) maintaining access to social services. During the crisis some governments also borrowed money from ADB and the World Bank to support their safety net programs and have made key policy reforms, both to improve the effectiveness of their social safety nets (e.g., extended coverage, shift to more targeted forms of support) and to strengthen the financing and provision of social services.

(1) Fiscal Adjustments

The Philippine government adjusted its budget during the crisis in much the same way that it did during the previous crisis of 1983-1985 (Reyes et al. 1999). Early in 1998 the government imposed a 25 percent reserve on nonpersonnel costs for all national government agencies (however, this was lifted in July 1998). At the same time it imposed a 10 percent reserve on local block grants to local government units. Expenditure obligations were reduced most for economic services (30 percent) and national defense (17 percent).

Budgets for social services and general public services were relatively protected, in part because they have relatively high shares of protected personnel expenditure in their budgets. Nevertheless, allocations for education and health services did decline in real terms during 1998.

Governments also used various ways to cope with declining budgets. In Thailand, before safety net funds became available, public education and health personnel took the initiative to develop innovative ways of compensating for budget cuts or delays and students' financial problems. They made better use of resources and raised alternative funds (Box 3).

To compensate for the increased cost and reduced supply of medicine, health facilities lessened the amount and variety of drugs offered to patients, giving them only small amounts of essential medicines. Charging patients for medicine and birth control pills became a common practice. Borrowing medicine or drugs from the other nearby health centers or the community hospital was sometimes successful. NGO budgets were occasionally used to pay for drugs. Medical staff advised patients to opt for more of the traditional, cheaper herbal medicine and improve training activities for better health. One community hospital near the border received donations from the Cambodian government to help their citizens who crossed the border.

Box 3: Creative Thai Teachers

Teachers put previously idle areas into use, and teachers' living quarters became makeshift classrooms. They sought the communities' and students' assistance in repairing buildings and maintaining school facilities. Some made the long trip to Bangkok to seek donations from NGOs, rich patrons, and a friendly monk. Judicious prioritizing of already funded building maintenance work resulted in savings. Funds for travel and other items budgeted for teachers' meetings were rechanneled to purchase school supplies.

Reduced school lunch budgets were dealt with by asking students to bring their own rice, while the accompanying dishes were prepared in school. Free lunches were targeted for the poorest students on a rotating basis. The very poorest got a free lunch daily; the next poorest got a free lunch three days a week, and the less poor only two days a week. Housewives in the community were asked to cook lunch for the students. Free food was served not to individuals but to groups of students who divided it into smaller portions. Teachers shared their food with the students, who reciprocated by washing the dishes. Programs were postponed and funds reallocated to the lunch scheme. Land was provided on which students could grow vegetables or raise chickens for use in the lunch program. Monks from the local temples also turned over some of their leftover food to the students. The hosts of funeral vigils were asked to contribute donations to the lunch program.

The scarcity of teaching materials and costs of school uniforms had to be overcome. Teachers shifted to using free local materials easily found in the village. Old teaching materials were resurrected and textbooks were issued to students again and again. Written answers to used exercise books were erased and the notebook reused. Some principals in opportunity schools asked parents to pay tuition fees of 100-200 baht per term, which were then applied to buying teaching materials.

(2) Employment Regulations

In Thailand, precrisis regulations limited severance pay to six months' wages for employees in a job for three years or more. However, the Labour Protection Act of January 1998 provided eight months of pay to workers with 6-10 years of service and ten months to workers with more than 10 years of service (ILO 1998a). In addition, health insurance

coverage was extended free (for six months, prior to the crisis, but increased to one year during the course of the crisis). The Labour Protection Act of January 1998 also provided for the establishment of an Employees' Welfare Fund, a compulsory provident fund for employees in enterprises with ten or more employees (which, although it has not yet been implemented, is still under discussion).

In Korea, all employers of five or more employees are required by law to provide at least one month's wages in severance pay for each year of service (ILO 1998a). Under current law laid-off workers may also continue their health insurance for up to six months; however, to do so they must pay both the employees' and employers' contributions (although under the terms of the Tripartite agreement of February 1998 unemployed workers were allowed to extend for up to one year and have to pay only the employees' contribution).

In Malaysia, the government revised the Employment Act of 1955 to include the introduction of flexible working hours and the formalization of part-time work. More women and those in the rural areas are encouraged to join the labor market. The government is also studying the proposal for a "retrenchment fund" wherein each worker would be required to contribute RM1 per month to the fund while employers would pay another RM1. The fund would be used to pay adequate and prompt compensation to laid-off workers, in addition to the severance pay they are entitled to under the Employment Act of 1955 (Piei, Johan, and Abubakar 1999).

(3) Unemployment Insurance and other Forms of Assistance to the Unemployed

Of the countries included in the study, only Korea has an unemployment insurance program. It is of recent origin, however, and provided only limited coverage and for a limited duration when the crisis began (ILO 1998b). However, in January 1998, coverage was extended to firms with more than 10 employees (only those with 30 or more employees were initially covered) and, in March 1998, to firms with more than 5 employees and to temporary/part-time workers (Moon 1998). The minimum level of benefits was also raised to 70 percent of the minimum wage, with a longer duration of benefits when the unemployment rate exceeds a certain level. However, coverage is still available only to workers who have been employed for at least 6 months.

In Thailand, the Ministry of Labour and Social Welfare launched a Center for Assistance to Laid-off Workers very early on in the crisis (August 1997). This Center is a one-stop service for laid-off workers that assists with severance pay, social security cards, job placement and counseling, training courses, and low-interest loans and is linked to the Department of Employment's Bangkok and provincial offices (Royal Thai Government 1998). In addition, the Ministry has sponsored several job fairs, an employment website, and mobile counselling and training units. Loans are also provided to the unemployed for purposes of starting small businesses.

(4) Job Retraining and Job Creation

Korea has extensive vocational training and employment services networks. However, its resources and institutional capabilities were inadequate to the massive requirements of the current crisis. The government job placement system was designed to

handle about 300,000 unemployed workers, as compared to the 1.5 million it had to deal with during the crisis (ILO 1998a, Atinc and Walton 1998). Korea has also developed a job creation program of start-up loans for unemployed professionals and managers to help them set up their own ventures and a loan program to improve working conditions in occupations in which foreigners currently hold many jobs (so that Koreans would be willing to take such jobs).

In the Philippines, the Department of Labor and Employment (DOLE) was instructed by an Economic Summit to assist displaced workers and affected overseas workers (Illo 1998). The DOLE assistance package includes provision for monitoring job losses, labor displacement, and job creation; training grants for displaced workers; assistance in finding new jobs; and a program of dialogues and symposia to promote better industrial relations while improving productivity. Social security funds in the amount of 300 million pesos have also been used to fund a program providing low-interest loans for the retraining of unemployed workers (Lim 1998).

In Malaysia the government has created several funds designed to expand employment during the crisis. They include: (i) a RM300 million fund that provides low-interest loans to farmers and to the Farmers' Association; (ii) a program that provides RM100 million in loans to the hard-core poor for income generation activities in rural areas; (iii) a "Small-Scale Entrepreneur Fund" (RM100 million) and an "Economic Business Group Fund" (RM150 million) that provide microcredit to petty traders, hawkers, and small entrepreneurs including women entrepreneurs, in urban areas; (iv) a "Small and Medium-Scale Industry (SMI) Fund" (RM1 billion) to assist companies involved in manufacturing for export; and (v) a "National Higher Education Fund" (RM300 million) that provides assistance to students in local institutes of higher learning (Piei, Johan, and Abubakar 1999).

(5) Pensions and Provident Funds

Indonesian workers were permitted to withdraw funds from their provident fund accounts if they had been members for 5 years and unemployed for six months. However, the average value of these accounts is typically quite small and in some cases was seriously eroded by crisis-related inflation.

Malaysia also maintains an Employees Provident Fund (EPF), as well as a pension scheme for civil servants. The amount accumulated in the EPF is about RM140 billion. Partial withdrawals (up to one third of the total contribution) are possible at age 50 while a full withdrawal is permitted when an employee reaches 55 (the retirement age). Limited withdrawal is also permitted for the purchase of a home, medical expenses, and investments in approved fund management institutions. However, there is no formal withdrawal provision oriented to meeting the needs of employees during an economic crisis (Piei, Johan, and Abubakar 1999).

(6) Public Works and other Forms of Income Maintenance

The Korean government has provided cash grants and loans to the unemployed to cover general living expenses and to help pay for education, health, and housing expenses (ILO 1998a, Moon 1998). However, eligibility requirements for cash support are quite strict

(only about 78,000 workers received cash benefits in 1998),³⁴ and there remains a sizable gap in coverage between those eligible for cash assistance and those eligible to receive unemployment insurance (i.e., those previously working in small firms). Korea has also implemented a public works program to respond to the needs of those unemployed who are outside the scope of its unemployment benefits system (ILO 1998a).

Indonesia has developed large programs of labor-intensive public works to help cope with unemployment during the crisis (ILO 1998a). For 1998/1999 these programs were budgeted at \$2 billion and were expected to generate 2 million person years of employment (ILO 1998b). The use of a uniformly low wage (equal to 75 percent of the minimum wage in Indonesia) helps to ensure that mainly the poor are attracted into such programs (i.e., they are self-targeting). It has been estimated that it costs about \$4-5 to transfer \$1 to the poor through the Indonesian public employment programs, compared to almost \$8 when untargeted cash transfers are used (Atinc and Walton 1998).

The Indonesian government has also targeted those suffering from the crisis through relief programs that focus on food security, employment creation, and small business development. These have been instituted in participatory ways through consultations with community groups. Data from the 1998 IFLS indicate that financial or material assistance was available to some extent in 86 percent of the sample Indonesian communities (Frankenberg, Duncan, and Beegle 1999). Although 44 percent of sample households reported having received some type of assistance during the previous six months (including assistance from family and friends), the amounts were quite small in relation to their total monthly expenditure (less than 1 percent). The median value of assistance received from family and friends was Rupiah 50,000 over a six-month period, while aid from government and NGOs averaged Rupiah 13,900 and savings from purchases at subsidized markets averaged about Rupiah 7,500. Cash was most often received from family and friends, followed by rice, sugar, vegetables, and fruit. Rice was most often distributed by the government and NGOs and through subsidized markets, followed by sugar, cooking oil, and noodles. Multivariate analysis of the receipt of assistance during the previous six months found positive relationships (significant at the 0.10 level for most sources of assistance in both urban and rural areas) with per capita household expenditure, male headship, head of household's education, and proportion of household members ages 0-14 years. In particular, the positive relationship (significant at the 0.10 level in rural areas and at the 0.05 level in urban areas) between per capita expenditure and assistance received from the government and NGOs suggests that such assistance has not been well-targeted.

The Malaysian government has also increased welfare payments to the hard-core poor during the crisis and has withdrawn a mandatory pay cut for civil servants that was announced in the 1998 budget. It also provided a RM400 cash payment to civil servants in December 1998 (Piei, Johan, and Abubakar 1999). Welfare is currently given to the needy, including the elderly, children, women, disabled, poor, and indigenous peoples (*orang asli*). During the crisis the government has increased welfare by RM7.3 million annually. For example, from 1 January 1999 the elderly under the scheme received RM100 monthly instead of the RM70 they received previously.

In the Philippines, the Department of Social Welfare and Development also administers a program of cash transfers to the poor, but the total budget amounts to only 1/70th of the education budget (World Bank 1998b).

³⁴An additional 233,000 workers received in-kind transfers and subsidized loans (Moon 1998).

(7) Price Controls and Subsidies

The Indonesian government has made extensive use of subsidies and other measures to control consumer prices during the crisis. Out of a total recurrent budget of Rupiah 205.5 trillion in 1998/1999, the government allocated about Rupiah 80 trillion for various subsidies (Sigit 1998). Exchange rate subsidies were provided for some items (e.g., medicines and medical instruments), while straight subsidies were provided for other items (e.g., fertilizer, livestock feed, and gasoline) and for some credit programs. The state-owned electrical utility postponed a second price increase of 18 percent, following an earlier increase of 20 percent over 1994 prices, at an annual cost to the government of Rupiah 700 billion (Sigit 1998). Price increases in response to devaluation-induced inflation were postponed as well by state-owned airline, water, and telephone companies. Additional rice was also imported in an effort to contain domestic price increases. The government also encouraged the development of alternative distribution outlets. Many local governments also tried to prevent price increases in local markets, but without success.

In the Philippines, in addition to controlling energy prices, the government encouraged the development of sari-sari stores to sell basic commodities like sugar, cooking oil, milk, sardines, and noodles at low prices. The stores are located in areas where they are easily accessible to consumers, especially in depressed and remote barangays. By the end of January 1999 there were 1,231 additional sari-sari stores in the country. The government has also distributed rice discount cards to poor families with large numbers of children entitled to a discount of P2.50 per kilo of rice (Reyes et al. 1999). Subsidies were also provided for the purchase of iron-fortified rice in areas where there was a significant degree of iron deficiency.

In Malaysia, prices are administered for many basic consumer goods. A total of 46 items are covered under the Supply Control Regulations. Supplies of 21 items are monitored year-round, whereas the remaining items are monitored only during festival seasons. Among the 21 items monitored year-round, the prices of 11 items are administered, i.e., white sugar, wheat flour, round steel bars, cement, petrol, sweetened condensed milk, liquid propane gas (LPG), standard loaf bread and cooking oil. The only item subsidized is LPG. The government has also banned the export of certain food items. Since mid-October 1998 foreigners have also been prohibited from carrying four essential items across the border (cooking oil, sugar, sweetened condensed milk, and flour).

(8) Ensuring Access to Social Services

In Thailand, free health cards entitling the holder to treatment at reduced cost in government health facilities were distributed to many of the unemployed and low-income families. The Thai government also launched a US\$ 42.5 million loan program in the Ministry of Education (funded by ADB) to make loans available to parents of 100,000 children with annual incomes of less than 300,000 baht designed to keep children in upper secondary school and university. An additional US\$25 million scholarship program was designed to assist 200,000 primary and lower secondary students who have dropped out or are unable to continue their schooling.

The Indonesian government also developed a program (funded by the Asian Development Bank and the World Bank) providing scholarships to students from poor families

(as well as block grants to schools serving predominantly poor populations) to prevent dropout rates from increasing during the crisis. Local government officials have also issued certificates to poor people who needed a reduction in their tuition or access to medical care at reduced cost.

X. Conclusion and Implications

The present study has identified and documented a wide range of significant social impacts of the Asian crisis in six countries. In some cases, the impacts have been less than were anticipated early in the crisis. However, such findings should not be misinterpreted. It is still too early to draw conclusions about the ultimate social impact of the crisis, for several reasons. First, the data on which the present study is based were collected at a relatively early stage in the crisis. Yet there was a lag of several months between the financial and economic impacts of the crisis, which were almost immediate compared to the social impact. Accordingly, it is unlikely that the full social impact of the crisis is reflected in the study's findings. Second, many of the coping mechanisms used by households (especially poor households) to maintain current consumption levels when faced with sharp decreases in income are likely to have serious negative consequences in the future. Third, due to data limitations, the studies are incomplete in some areas. For example, while the studies have been able to obtain some information on the short-run health impact of the crisis in some cases (e.g., immunization, malnutrition, family planning, safe motherhood), there are other potentially serious health impacts for which data are presently unavailable (e.g., the impact of the crisis on tuberculosis treatment and on micronutrient deficiencies). All of these considerations suggest that the present study should be viewed more appropriately as an interim assessment, rather than as a final assessment, of the social impact of the crisis. However, though preliminary and partial in nature, the study's findings should suffice to make it abundantly clear that further monitoring of the crisis' social impact is needed.

Beyond its capacity to cause great hardships and suffering for millions of people, the Asian financial crisis nevertheless provides a unique opportunity to learn how existing social systems function under duress. If the lessons are adequately documented and effectively communicated to policymakers, the experience gained during the current crisis can provide a useful guide to needed policy reforms. For example, the crisis has revealed that considerable effort needs to be directed to the further development of social safety nets throughout the region, especially given a perceived weakening in the capacity of families to sustain their members through a severe crisis, a by-product of decades of rapid socioeconomic change and urbanization. At the same time, it must be acknowledged that given the inadequacy of government-fostered safety nets, the family system has yet again carried out its traditional fallback role of seeing its members through difficult times. In developing their social safety nets, most Asian countries will have the benefit of building from the ground up, drawing not only on the experiences of countries outside the region but also shaping systems that are best suited to the needs of Asian societies in the context of an emerging information-based global economy.

As a result of the current crisis most Asian governments are acutely aware of their responsibility to develop improved systems to protect against adverse social impacts during future crises. At the same time, they are also more realistic about the financial constraints

they face in developing these systems than they were when their economies were experiencing rapid growth. Such an environment provides a new opportunity to move forward with needed policy reforms that were previously neglected.

Although the further development of social safety nets and related policy reforms is considered urgent in the present context, measures should not be adopted unless they are first carefully evaluated against standard criteria of efficiency and equity.³⁵ Existing components of social safety nets also need to be carefully evaluated against the same criteria. For example, are price controls on basic consumer goods the most efficient and equitable way to limit the adverse social impact of crisis-induced inflation on the poor? Are untargeted subsidies the most efficient and equitable way to ensure that the poor have access to basic food and social services?

The ADB loans to Indonesia under the Social Protection Sector Development Program provide an illustration of how to combine effective short-term assistance to alleviate the effects of the crisis with policy reforms designed to promote greater efficiency and equity over the longer term. Policy reforms to promote increased efficiency under this program include: strengthening of private schools, use of block grants to facilitate more effective decentralization, support to managed health care, and provision of incentives to schools that are successful in reducing drop-out rates. Policy reforms to promote greater equity include the use of targeted subsidies to the poor to support school attendance (junior secondary school scholarships), block grants to poor communities, block grants to village midwives to support maternal and child health outreach services for poor families, and use of a new method to allocate central government funds between districts that reflects each district's poverty status.

A. Key Findings and Lessons

The following key findings and lessons emerge from this study:

Coping mechanisms. The present study has found that households (and to a lesser extent, governments) have employed a wide range of mechanisms to cope with the adverse impacts of the crisis. Some of these are relatively harmless and pose little risk to the future welfare of the populations concerned (e.g., working longer hours, substituting cheaper foods for more expensive foods, delaying purchases of consumer durables). However, others simply result in shifting the social impact of the crisis into the future, or from one generation to the next. Examples include: borrowing to maintain current consumption, selling productive assets, delaying needed medical care, and withdrawing children from school. The study's findings also suggest that because the poor typically have fewer and more limited coping options available to them, the ones they use tend to be more harmful than those used by middle-income and upper-income groups. The lesson that emerges is that assistance needs to be channeled not necessarily to those most affected by the crisis but rather to those who are least able to cope with its adverse impacts (certainly the poor, but also some other groups, e.g., institutionalized populations).

³⁵In the case of efficiency, do the proposed measures address critical market failures and do they do so with minimal distortionary costs? In the case of equity, do the proposed measures benefit the desired target groups (typically the poor, but also specially vulnerable groups, such as women and children)?

Social safety nets. Most of the affected countries have only limited social safety nets. For example, only Korea has a functioning unemployment insurance program, which at the onset of the crisis provided benefits of limited magnitude and duration only to employees of enterprises with 30 or more employees. Still, as a group, the existing social safety nets of the crisis countries include a fairly wide range of measures (some of which, as previously noted, probably do not measure up to standard economic criteria of efficiency and equity). This breadth of regional experience creates an opportunity for the affected countries to benefit significantly by learning what works and what does not work, based on the collective experience of other countries in the region.

Targeting. Most government subsidies are currently untargeted within the region and do little to promote equity (i.e., most of the subsidies are captured by middle-income and upper-income groups). The absence of established and tested procedures for targeting assistance to vulnerable groups has hampered government responses to the crisis. Evidence cited in the study from the IFLS surveys in Indonesia, for example, suggests that the distribution of free and subsidized food has not been well-targeted in Indonesia. Means testing is routinely used only in Korea, where the preponderance of wage and salary workers greatly facilitates formal targeting. Although formal means testing may be impractical in economies with smaller formal sectors, a variety of other targeting mechanisms are available. These include: geographic targeting, self-targeting (used often with public works programs), selective subsidies to goods and services used mainly by the poor, community-based targeting (used widely during the crisis in Indonesia and Thailand), and various ad hoc methods (e.g., health providers scaling fees according to perceived ability to pay). Targeting is more challenging during a crisis because there is much “churning” into and out of the ranks of the poor. A lot of experimentation, coupled with careful evaluation, is needed in the region to develop effective targeting mechanisms for use in connection with social safety nets. National governments, in consultation with local governments and civil society groups, could set up targeting schemes to ensure that the most vulnerable sector of society get the benefits of targeted programs.

Monitoring systems. Most of the crisis countries (Lao PDR is the exception) have well-developed and adequately funded statistical systems, including regularly scheduled household surveys, which provide the information needed by planners and policymakers to monitor the pace of long-term socioeconomic development. However, with the exception of basic macroeconomic and labor force data, these systems fall short of providing the timely information needed to monitor the broader social impact of short-term economic fluctuations (see Appendix 1). In addition, the statistical departments in some countries clearly need assistance to develop the capability to process survey data more quickly than they are able to do at present. In addition, there is an urgent need for participatory, community-level monitoring systems to provide information about dimensions of social impact for which surveys using structured (closed-ended) questionnaires are less suitable (Box 4). A major remaining challenge is to find cost-effective ways to move community-level data up the system to regional and national policymakers without compromising its quality. Local government units, NGOs, and community-based organizations should be specifically identified as stakeholders in the process. NGOs assist not only in helping to train local residents to conduct the research, but also to create mechanisms for holding local officials accountable for the needed action.

Box 4: Community-managed Information Systems

The Asian crisis has highlighted the critical need to set up nationwide tracking systems capable of yielding timely information on how ordinary people, especially the poor, are affected by international, national, and local events. A significant contribution to this effort will come from thousands of communities in every country, organizing to assess their own situations and taking steps toward addressing them. The effectiveness of their actions expands considerably when local government officials incorporate community findings into local plans for addressing short-term emergencies and longer-term prevention and developmental programs. History shows that motivated communities can transform themselves from victims into active problem solvers. Periodic crises have, after all, always characterized the lives of poor peasant farmers, indigenous minorities, and the urban poor.

Indeed, the negative effects of the Asian crisis have been mitigated by long-standing community traditions targeting help to the poorest families. The study provides ample proof of this community support. Dire threats to their well-being and ways of life have forced them to develop community social mechanisms that enable them to ride out the storm, or at least give them breathing space toward new solutions. Sometimes governments have helped, but there are also times that they have not.

While community support institutions in Indonesia, like reciprocal labor exchange, household contributions to the poor, community lotteries, and volunteer night patrols weakened as the crisis worsened, the basic structures nonetheless remained in place offering succor to many of the neediest. In the Philippines, community leaders organized programs to keep out-of-school youth occupied, and monitored the movements of strangers who might be taking advantage of the situation to foment social unrest. When the Thai government became hard-pressed to provide services, community residents took advantage of this reduced pressure from the center to initiate local-level actions. Often assisted by NGOs, people's organizations developed or expanded credit and savings schemes, water systems, vegetable production, home food manufacturing, small-scale business enterprises, and other programs to enhance the well-being of women and youth. They set up information systems on prices and trade, coordinated organic agricultural schemes, and adapted their irrigation needs accordingly. Lao farmers, classified typically as informal sector workers, quickly responded to the favorable exchange rates of the Thai market to increase their food production considerably, while women set up roadside restaurants to draw cross-border-trade customers.

Clearly, community residents readily take on information generation and monitoring activities when these serve their own decision-making needs. They do so by word of mouth, as in the case of the Lao farm families, or by systematically recording useful data, as in the Thai case. Donor-funded programs in Indonesia and the Philippines, enabling community-level institutions, like health centers, village midwives, and primary and secondary schools, to receive and manage various forms of assistance, likewise illustrate the interest and capacity of ordinary people to chart information they can use. Relying largely on local NGOs to help people set up these innovative systems, such efforts need to be recognized and valued by local officials as intrinsic to good governance.

Poverty monitoring. During the current crisis it has been particularly difficult to monitor the impact of the crisis on poverty. Part of the problem has been the limited availability of accurate, region-specific price data under conditions in which both relative and absolute price changes have been extremely large.³⁶ It is also questionable whether household expenditure data provide an adequate basis for monitoring poverty rates during a crisis, since a variety of household coping mechanisms that cannot be sustained over time (e.g., sale of assets, borrowing) may be employed in the short run, even by poor and near-poor households. Given the importance of tracking poverty more closely in a crisis environment, poverty incidence might well be determined annually. The same would apply to assessments

³⁶Price data are needed to adjust poverty lines for price changes between surveys. When price changes are large in magnitude, and especially when major changes occur in the relative prices of food and nonfood items, the standard consumer price indexes (CPI) may be misleading if used to adjust poverty lines for the effects of inflation (since the relative weights in a poverty line are typically quite different from those in a CPI).

of the nutritional status of children and women of child-bearing age. Further, new conceptual and methodological developments linking poverty to social exclusion can be added for a deeper understanding of its causes and consequences.

Public provision of social services. The crisis has placed great strains on public health systems, and on public school systems in some areas, as many have shifted from private to public providers of social services at a time when government budgets were being cut. This has led to even poorer quality services than usual from government facilities, and it has also led to the demise of many private sector providers of social services. Since the latter are generally more efficient and more highly valued by consumers, the experience during the current crisis suggests that something is wrong. The underlying problem is that most of the crisis countries have too heavily relied on supply-side subsidies to government providers of social services to protect access of the poor to such basic services. What is needed is a shift from general supply-side to targeted demand-side subsidies (health insurance, vouchers) that empower poor consumers to choose freely between competing government, private, and NGO providers.

B. Policy Responses

Public works programs can be very effective as short to medium-term income maintenance programs. Key requirements to incorporate into the design of such programs are: (i) that the activities produce socially useful infrastructure; (ii) that wages are not too high in relation to local wages, so that the support is well-targeted to the poor; (iii) that suitable measures are taken to ensure the participation of women and younger workers; and (iv) that an inventory of suitable projects is ready at all times. Careful planning needs to be done in advance, however, to avoid the kinds of delays that were experienced during the present crisis (as well as to avoid funding projects of only marginal value).

Microcredit programs can also be effective short to medium-term interventions. They can be helpful not only in expanding employment opportunities in the medium term but also in reducing borrowing costs to households that need to borrow money to meet short-term needs. Special attention should be given, however, to ensuring that the very poor and women benefit from these programs.

Voluntary and formal tripartite agreements involving business, labor, and government to avoid layoffs and strikes and to absorb decreases in demand for labor through real wage adjustments have also proven themselves to be effective in the short to medium term to reduce open unemployment (and thereby spread the cost of labor market adjustments among a larger group).

Credit and loans for job creation, small and medium-scale enterprises, and retraining programs may also make a useful contribution to employment expansion in the medium term. However, in the case of retraining programs, care must be taken to provide training in skills for which there is an immediate demand and to involve private sector training institutions through the use of vouchers. It is not obvious that the direct provision of vocational training by government institutions is an efficient solution to the need for a better trained work force.

Special attention needs to be given to the development of youth retraining and education programs during a crisis. The present study has found that the labor market impact

of the crisis has fallen most heavily on youth aged 15-29 (and particularly among women). Governments need to have in place systems of loans and scholarships that will enable unemployed youth to return to school to acquire additional skills during a crisis (or that will enable them to remain in school). It may also be possible for governments to develop plans to facilitate the rapid expansion of training facilities during a crisis (e.g., by temporarily employing the educated unemployed like teachers, and by temporarily renting unused space for training facilities). Helping youth acquire additional skills during a crisis instead of being idle will not only contribute to a better trained and educated workforce but also lessen other social impacts of a crisis such as crime.

Advanced planning should be in place to help governments prioritize budget expenditures during a crisis. Across-the-board reductions that apply equally to key social services (education and health) at a time when many are switching from private to public sources of these services or that limit rural infrastructure development should be avoided. Similarly, cuts that protect personnel line items at the expense of needed complementary inputs (e.g., teaching materials, medicines) should be discouraged. Within social services, it is also important to prioritize support for those programs that benefit the poor (e.g., rural clinics as distinct from urban hospitals).

Putting into place an effective monitoring system, as discussed above and in the following section, should be a medium-term priority. Particular attention needs to be given to developing the capability to process and analyze data in a timely fashion and to ensure that the system's financing is secure during a crisis. The importance of building the capabilities of local governments, NGOs, and community-based organizations to participate actively in the formulation and implementation of policy reforms should not be understated.

The crisis countries should convene to review and share their experience with existing social safety nets during the current crisis. In particular, governments have in some cases found themselves working more closely with NGOs than in the past; and this experience needs to be reviewed for possible lessons learned. As part of any regional assessment of the performance of social safety nets during the current crisis, the role and contributions of the family and other traditional social institutions (including religious groups) will need to be reviewed also for possible lessons learned.

C. Policy Reforms

Governments need to develop more efficient, equitable, and adequately funded social safety nets to deal with future economic crises. Social safety nets should take into consideration not only the region's current circumstances but also likely future trends, in terms of income growth, aging, urbanization, formalization of the labor force, democracy, and governance.

Greater emphasis needs to be placed on poverty eradication, so that a smaller percentage of the people would be severely vulnerable to future crises. Although the economic impact of the current crisis has not fallen disproportionately on the poor in most cases, the social impacts of the crisis have clearly been greater among the poor, due to their more limited opportunities to initiate effective coping mechanisms.

Governments should begin moving away from reliance on the direct provision of social services and supply-side subsidies to more targeted demand-side financing that encourages fair competition among government and private and NGO providers, and that

empowers the poor to choose the services that best meet their needs. Expanding health insurance coverage is one measure that will contribute to this objective, as will increased use of vouchers. In addition, extensive experimentation and careful evaluation are required to develop more effective targeting mechanisms.

Tripartite (employers, labor, government) institutions and collective bargaining need to be strengthened in all countries of the region to facilitate smooth employment and wage adjustments to future crises.

Reforms in the banking and corporate sectors need to be pursued, while the competitiveness of markets and the government's regulatory role must be strengthened. At the same time, corruption needs to be combatted vigorously and convincingly. Indications are that strengthening democratic institutions can limit the adverse social impact of future crises.

Appendix

I. Monitoring Systems

Appropriate and effective information systems are required to monitor the social impact of future crises in a timely manner. Such systems are needed not only to identify which groups are most adversely affected but also to provide useful feedback on the effectiveness of social safety nets. In most of the crisis countries, many of the necessary components are either already in place or under development. However, the experience of the current crisis has revealed that the existing monitoring systems in most countries do not yet provide enough timely information on the social impact of a crisis. A well crafted early warning system supported by institutional arrangements that rapidly stimulate the appropriate responses is essential.

A. Macroeconomic Data

Key macroeconomic data are needed to monitor the primary impact of the crisis on prices, labor market impacts, and household incomes. Most of the countries in the region have regular systems for monitoring consumer prices, including variations across regions (although price data are collected only in urban areas in some countries). For poverty monitoring purposes, it would also be helpful to have a price index whose weights more closely reflect the consumption basket of the poor and near-poor in urban and rural areas (instead of the average urban consumer).

Labor force surveys also provide extensive data in most countries on employment and earnings. The main gap is with respect to the informal sector, which is not clearly identifiable in most surveys and for which income data are typically not available. Other gaps include information on domestic income transfers and income from profits, rent, and interest. Household survey data have to be used to fill these gaps.

B. Household Surveys

Multipurpose household surveys are needed to monitor the impact of the crisis on household income and expenditure (including information on nonlabor sources of income and income transfers). In addition, multipurpose surveys should be used to collect information on the utilization, especially by women, children, and other vulnerable groups, of education and health services (e.g., current school enrolment, highest grade level attained, number of outpatient health visits and inpatient days during the preceding 2-4 weeks, use of preventive care, and household expenditure on schooling and medical care). Although service statistics are available from ministries of education and health for these same (or similar) indicators, the advantage of surveys (apart from quicker access) is that the utilization indicators can be linked up with other household characteristics (e.g., income, gender of household head). The preliminary results from such surveys should be available within 6-9 months following completion of the field work (as was achieved with the 1998 IFLS 2+ survey).

Multipurpose surveys do not have to be large or complex. A survey of 5,000 to 10,000 households is sufficient for most countries. If possible, it should be done on an annual basis. If not, however, having some baseline data from a multipurpose survey, together with a tested questionnaire and experienced staff, should be an essential part of any crisis monitoring system. Community, health facility, and school surveys can be easily added to the household survey to collect information at the community level on retail prices and on the availability and quality of social services. For crisis monitoring purposes it is desirable that at least part of the survey be longitudinal on a rotating basis, so that the experience of the same households can be monitored over time. The IFLS, for example, is an ongoing longitudinal household and community survey implemented by RAND, Lembaga Demografi (University of Indonesia), and University of California Los Angeles. Initially conducted in 1993, a second full survey was conducted during August-December 1997; and a special 25 percent sample was reinterviewed for crisis monitoring one year later (with funding from the National Institutes of Health, United States Agency for International Development, World Bank, World Health Organization, and United Nations Fund for Population Activities). Although the IFLS is a rather complex survey designed to facilitate in-depth research on a wide range of issues, it provides a good starting point for the development of needed multipurpose surveys as part of a crisis monitoring system.

In the Philippines, the World Bank (1998a) is supporting the development of an Annual Poverty Incidence Survey to provide for annual poverty monitoring during the three-year interval between Income and Expenditure Surveys. At present the data available for monitoring the social impact of crises are quite limited. For example, estimates of poverty incidence are available only once in three years, while estimates of the prevalence of malnutrition are prepared only once in five years. Some information is available at the local level, but it takes the system a long time to pass it up to decisionmakers. For example, it takes the Department of Education, Culture and Sports about one year to process and make available data on school enrolment obtained from school districts. The National Statistics Office also seems to require a year or more to process the data from major surveys such as the Family Income and Expenditure Survey.

C. Community Surveys

In Indonesia several different organizations collect and assemble village-level data that are used, for example, by the government to determine the village's eligibility for subsidized loans and various types of social services. Examples are the annual National Family Planning Coordinating Board (BKKBN) village survey of Family Welfare Status that classifies individual households into one of several "welfare groups" on the basis of several dozen indicators. Couples from the poorest groups are eligible for free or discounted contraceptives and other benefits. Other sources of village data include the Indonesian Family Welfare Movement's *Dasa Wisma* community self-reporting system, the National Village Potential Census (PODES), and the community modules of the IFLS.

The National Anti-Poverty Commission in the Philippines has developed a community-based monitoring system in 20,000 barangays. However, field visits to several barangays by the Philippine country study team (Reyes et al. 1999) revealed that many communities have not conducted the survey every six months, as originally envisioned. Moreover, the data have not been successfully consolidated and transmitted to policymakers at the provincial and central levels.

D. Participatory Monitoring

The establishment of a participatory monitoring system is one way to ensure that social safety net schemes and community empowerment projects reach the target groups as planned (Pongsapich 1999). Thailand, for example, is developing a participatory monitoring system for use with the implementation of projects supported by the social funds. Similar community monitoring systems are being used in Indonesia in connection with several donor-funded programs designed to channel assistance directly to community-level institutions (e.g., health centers, village midwives, primary and secondary schools).

Participatory systems that make effective use of a wide range of qualitative methods may also be able to obtain more accurate information about some types of social impacts than is possible using standard survey methods. The present study has encountered several instances in which the findings from focus groups, key informant interviews, and spot surveys—which are often a part of participatory community monitoring systems—have differed significantly from those of household surveys. Since any crisis-monitoring system needs to have both accurate and timely information, more research is needed to determine which types of information can be most reliably and cost-effectively obtained from various quantitative and qualitative methods.

A major challenge facing community monitoring systems is to find a cost-effective way of transmitting information on a timely basis from communities to regional and national decisionmakers during a crisis. Some systems have opted for integrating community-level monitoring systems into existing government administrative structures. Although an obvious choice and probably the only feasible way to collect information on every community, there are at least three potential problems with this approach. First, government bureaucracies tend to be inefficient and their work tends to be of poor quality. Even if it is possible to move information up through the government bureaucracy on a timely basis, such a system is likely to be relatively expensive and therefore unsustainable. Second, a government-based system will be vulnerable to budget cuts and shifting priorities during a crisis, so that the system may break down at precisely the time it is most needed. Third, there is a risk that the information emanating from communities may be distorted by government bureaucrats to promote political or other objectives (e.g., to make a case for additional funding). Under these circumstances, it may be desirable to experiment as well with

alternative, NGO-based systems of community monitoring that are (at least initially) implemented in a sample (preferably, randomly selected) of communities.

The effectiveness of community monitoring systems stems mainly from the experience of having government or other stakeholders take the action as a result of the information before them. Hence, building the capability of local governments to plan and carry out programs in a participatory way is crucial to the process.

E. Other Information Sources

In addition to the routine collection of macroeconomic data and the implementation of multipurpose household surveys at regular intervals, a variety of other information sources (e.g., newspaper and media reports, opinion polls, purposive sample surveys, sentinel surveys, focus groups, rapid assessments, participatory assessments, interviews with key persons) are needed to provide additional information on the dimensions and impact of the crisis, on how individuals, households, communities, and local governments are responding to the crisis, and on the indirect effects of their responses. These additional sources of information can also be used to monitor more closely the social impact of the crisis on such specially vulnerable groups as women, children, youth, older persons, and the disabled.

It is important that this information reach policymakers and that they respond in a positive manner. Otherwise they may find themselves having to reckon with higher pressure approaches that also deliver messages, like mass demonstrations, sit-ins, and strikes.

Indonesia has obtained a broad range of information on the social impact of the crisis, most of which was obtained from ongoing surveys. The Central Bureau of Statistics (BPS) has implemented a sentinel data collection effort in "100 villages" since 1994 (with initial support from the United Nations Children's Fund). Village surveys were conducted in 1994 and 1997 in these villages, which are located in eight provinces and which were selected to represent major geographic, ecological, and sociocultural types of Indonesian settlements. Beginning July 1997, a series of household surveys were conducted in these same villages (120 randomly selected households were interviewed and subsequently reinterviewed in each village). These households were reinterviewed in August 1998. In addition, a Kecamatan Crisis Impact Survey, a qualitative survey of key informants from all (about 4,000) *kecamatan* (subdistricts) was conducted by BPS (financed by the Ford Foundation).

In the Philippines, the Social Weather Stations conducts periodic surveys of people's perception of their quality of life. From June 1997 to December 1997, for example, the proportion of respondents indicating that they were poor increased from 58 to 63 percent, the reported unemployment rate rose from 7.1 to 9.9 percent, and the average number of months respondents reported they had been looking for work increased from 5.4 to 7.8 months (Lim 1998). Respondents reporting crime break-ins in Metro Manila increased from 3 percent in April 1997 to 6 percent in December 1997, and those reporting that they had been victimized by physical violence in the National Capital Region increased from zero to 5 percent.

F. Key Indicators and Data Sources

A minimum set of indicators is needed to measure the social impact of a crisis. The indicators will be most useful if they are available for several years prior to a crisis (since trend analysis has proven itself to be a very useful tool in the present study). The list identifies the kinds of data needed (as well as the source) to calculate the needed social indicators.

Macroeconomic data

Real GDP, by sector (industry)

Consumer price index, by commodity, region (and by urban-rural groupings within regions)

Producer prices (particularly data on key agricultural inputs)

Employment and earnings

From standard labor force surveys:

Labor force, by region (including urban-rural within regions), age, gender, occupation, and education
 Employment, by sector (including informal subsectors); region (including urban-rural within regions); age (including children aged 10-14, and possibly younger in some countries); gender; occupation; and education
 Unemployment, by region, age, gender, occupation, and education
 Underemployment, by sector (including informal subsectors), region (including urban-rural within regions), age, gender, occupation, and education
 Earnings, by sector (including informal subsectors), region (including urban-rural within regions), age, gender, occupation, and education
 Average hours worked, by sector (including informal subsectors), region (including urban-rural within regions), age, gender, occupation, and education

From administrative sources:

Number of overseas migrant workers, disaggregated by gender
 Value of remittances (in US\$)

From multipurpose household surveys:

Standard characteristics of all household members (e.g., age, sex, marital status, education, relationship to household head, migrant status)
 Employment, hours worked, and earnings of each household member aged 5 and above, by sector and characteristics of the enterprise (whether family-owned, size)
 Income, expenses, and characteristics of family-owned businesses
 Farm income and characteristics

Household income and assets

From multipurpose household surveys:

Real per capita household income (where feasible to collect), by region (including urban-rural within regions)
 Real per capita household consumption (or expenditure), by commodity group
 Size distribution (by decile) of real per capita income (where feasible)
 Size distribution of real per capita consumption (or expenditure)
 Poverty head-count rate, by urban-rural and by gender of household head
 Indebtedness of household
 Assets (financial and nonfinancial, including key consumer durables and housing characteristics)

*Human development (education and health)***II. Education**

From multipurpose household surveys:

Current enrollment status by type of school (public or private), level and grade, highest grade completed, performance on most recent standard examination of children aged 3-25
 Education expenses for each child in school during the past year by category (e.g., fees, uniforms, books, supplies, transport, tutoring, meals)
 Participation of each child in special school activities and extra-curricular activities
 Whether each child has received a scholarship or government loan or is entitled to fee waivers, free textbooks, etc.
 Perception of quality of local schools (public and private, where relevant)

Hours spent per week on homework (students)
 Hours spent per week assisting children with homework (parents)

From administrative sources:

Education budget, by line item (e.g., personnel, teaching materials); by level (preschool, primary, etc.); and by region (if available)
 Current school enrollment and number of repeaters by level (preschool, primary, middle, high school), grade, gender, and region (including urban-rural within region)
 Tertiary and vocational/technical enrollment by type of school (public, private) and by gender of students
 Number of teachers by level and category

From school surveys:

Examination scores on most recent standard examination by grade level and by gender of student
 Absentee rates by grade level and by gender
 Sources of revenue (e.g., government budget, parent fees and contributions, community contributions)
 Budget for teaching materials

III. Health

From multipurpose household surveys:

Recent morbidity (including indicators of severity) of all household members
 Information on treatment sought, i.e., type of facility visited (including public or private), provider seen, number of visits, whether hospitalized, total amount paid to provider, additional expenses for drugs, transport costs, and whether person treated self either before or after (cost of drugs and source)
 In-patient care during the past 12 months, by type of facility, length of stay, reason, total amount paid to facility, total other cost (e.g., drugs purchased outside), transportation cost, other costs
 Whether person is insured (or holds health card), and characteristics of insurance
 Whether person entitled to fee waivers
 Whether immunizations are complete for children under 1 year
 Current use of contraceptives, by method, source (type of facility, cost) for all women aged 15-49
 Use and source of prenatal care, whether immunized against tetanus (currently pregnant women)
 Place and date delivered, type of person attending (doctor, midwife, trained birth attendant) and cost (women delivering during the past year)
 Anthropometry (weight for age or weight for height)
 Perception of quality of care at nearest outpatient and inpatient facilities (public and private)

From administrative sources:

Health budget, by line item (personnel, drugs, etc.); by facility (hospitals, health centers, etc.); by function (curative care, public health); and by region (if possible)
 Number of outpatient visits (by type) to public health facilities (by type)
 Number of inpatient admissions and average length of stay by type of hospital
 Number of health personnel by facility and category

From health facility surveys:

Current stocks of basic drugs and contraceptives
 Whether stockouts during past three months
 Source of revenue (e.g., government budget, user fees, community contributions)
 Number of hours normally open per week
 Fees charged for basic services (e.g., outpatient visit, inpatient day, obstetric delivery, antibiotics)
 Prices of drugs and contraceptives in pharmacies

Community participation

From multipurpose household surveys:

Participation in community activities

From administrative sources:

Number of major crimes reported and number of arrests, by region (including urban-rural within regions), monthly if possible

Number of institutionalized persons by type (e.g., orphans, disabled, older persons)

Number of street children

Number of cases of sexual harassment in the workplace, monthly

Number of cases of child abuse, monthly

Number of abandoned children, monthly

Data on air and water pollution, monthly

References

- Ariff, M., Moh. H. Piei, D. Wong, and S. Y. Abubakar, 1998. "Responding to the Economic Crisis in Malaysia: A Pro-human Development Perspective." Paper prepared for the UNDP Regional Bureau for Asia and the Pacific. Mimeographed.
- Asian Development Bank, 1999. *Asian Development Outlook 1999*. Hong Kong: Oxford University Press for the Asian Development Bank.
- Atinc, T. M., and M. Walton, 1998. "East Asia's Social Model after the Crisis." Paper prepared for the Asia Development Forum, Manila, Philippines, 9-13 March.
- Brooker Group, The, Development Alternatives, Inc., and Chulalongkorn University, 1999. "Socio-economic Challenges of the Economic Crisis in Thailand." Draft Final Report for T.A. No. 2995-THA. Asian Development Bank, Manila, Philippines.
- Chamberlain, J., 1998. "Social Impact Assessment in the Lao PDR." Outline prepared for the Inception Workshop of the Social Impact Assessment of the Financial Crisis in Selected Developing Member Countries (RETA 5799), Asian Development Bank, Manila, Philippines.
- _____, 1999. "The Social Impact of the Economic Crisis in the Lao PDR." Paper prepared for RETA 5799, Asian Development Bank, Manila, Philippines.
- David, I.P., A. Asra, and M. de Castro, 1999. Poverty Incidence in the Asia-Pacific Region: Data Situation and Measurement Issues. EDRC Briefing Note No. 17, Economics and Development Resource Center, Asian Development Bank, Manila, Philippines.
- Feridhanusetyawan, T., 1999. "The Impact of the Crisis on the Labor Market in Indonesia." Report prepared for the Asian Development Bank, Manila, Philippines.
- Frankenberg, E., T. Duncan, and K. Beegle, 1999. The Real Costs of Indonesia's Economic Crisis: Preliminary Findings from the Indonesian Family Life Surveys. Labor and Population Program Working Paper Series 99-04, RAND, Santa Monica, CA.
- Illo, J. F. I., 1998. "Gender Dimensions of the Financial and Economic Crisis in the Philippines." Draft Report to the Asian Institute of Technology, Bangkok. Mimeographed.
- International Labor Office, 1998a. "Employment Challenges of the Indonesian Crisis." Report prepared for the ILO Jakarta Office.
- _____, 1998b. "The Social Impact of the Asian Financial Crisis." Technical report for discussion at the High-Level Tripartite Meeting on Social Responses to the Financial Crisis in East and South-East Asian Countries, Bangkok, 22-24 April.
- Lim, J. Y., 1998. "The Social Impact and Responses to the Current East Asian Economic and Financial Crisis: The Philippine Case." Philippine Country Paper prepared for the United Nations Development Programme/Regional Bureau for Asia and the Pacific (UNDP/RBAP). Mimeographed.
- Moon, H., 1998. "Social Impact of the Current Economic Crisis in Korea." Outline prepared for the Inception Workshop of the Social Impact Assessment of the Financial Crisis in Selected Developing Member Countries (RETA 5799), Asian Development Bank, Manila, Philippines.
- Moon, H., H. Lee, and G. Yoo, 1999. "Social Impact of the Financial Crisis in Korea: Economic Framework." Paper prepared for RETA 5799, Asian Development Bank, Manila, Philippines.
- Pernia, E. M., and J. Knowles, 1998. Assessing the Social Impact of the Financial Crisis in Asia. EDRC Briefing Notes No. 6, Economics and Development Resource Center, Asian Development Bank, Manila, Philippines.
- Piei, M. H., M. bt. Johan, and S. Y. Abubakar, 1999. "The Social Impact of the Asian Crisis: Malaysian Country Paper." Paper prepared for RETA 5799, Asian Development Bank, Manila, Philippines.
- Poppele, J., S. Sumarto, and L. Pritchett, 1999. "Social Impacts of the Indonesian Crisis: New Data and Policy Implications." SMERU, Jakarta. Unpublished mimeo.

- Pongsapich, A., 1999. "Social Impact of the Financial Crisis in Thailand." Paper prepared for RETA 5799, Asian Development Bank, Manila, Philippines.
- Pongsapich, A., and P. Brimble, 1999. "Assessing the Social Impacts of the Financial Crisis in Thailand." Paper prepared for RETA 5799, Asian Development Bank, Manila, Philippines.
- Racelis, M., 1999. "Poverty Eradication: Asset Reform or 'Photo-ops'?" *Philippine Daily Inquirer*, 30 May, page 9.
- Reyes, C. M., R. G. Manasan, A. C. Orbeta, and G. G. de Guzman, 1999. "Social Impact of the Regional Financial Crisis in the Philippines." Paper prepared for RETA 5799, Asian Development Bank, Manila, Philippines.
- Royal Thai Government, 1998. "Background Paper," Paper prepared for the Consultative Meeting on Social Impact of the Economic Crisis and Responses from the Government, Private Sector, Civil Society and International Community. Bangkok.
- Sigit, H., 1998. "Social Impact of the Economic Crisis in Indonesia, Tentative Study Outline and Workplan." Outline prepared for the Inception Workshop of the Social Impact Assessment of the Financial Crisis in Selected Developing Member Countries (RETA 5799), Asian Development Bank, Manila, Philippines.
- Sigit, H., and S. Surbakti, 1999. "Social Impact of the Economic Crisis in Indonesia." Paper prepared for RETA 5799, Asian Development Bank, Manila, Philippines.
- World Bank, 1998a. "Responding to the Crisis: Backing East Asia's Social and Financial Reforms." Available: <http://www.imf.org>. June 29.
- _____, 1998b. "The Socioeconomic Impact of the Financial Crisis in the Philippines." Report of a Mission to the Philippines. East Asia and Pacific Regional Office. Mimeographed.

OTHER PUBLICATIONS FROM THE ECONOMICS AND DEVELOPMENT RESOURCE CENTER

MONOGRAPH SERIES

(Published in-house; Available through ADB Office of External Relations; Free of charge)

EDRC REPORT SERIES (ER)

- | | |
|--|--|
| <p>No. 1 ASEAN and the Asian Development Bank
—<i>Seiji Naya, April 1982</i></p> <p>No. 2 Development Issues for the Developing East and Southeast Asian Countries and International Cooperation
—<i>Seiji Naya and Graham Abbott, April 1982</i></p> <p>No. 3 Aid, Savings, and Growth in the Asian Region
—<i>J. Malcolm Dowling and Ulrich Hiemenz, April 1982</i></p> <p>No. 4 Development-oriented Foreign Investment and the Role of ADB
—<i>Kiyoshi Kojima, April 1982</i></p> <p>No. 5 The Multilateral Development Banks and the International Economy's Missing Public Sector
—<i>John Lewis, June 1982</i></p> <p>No. 6 Notes on External Debt of DMCs
—<i>Evelyn Go, July 1982</i></p> <p>No. 7 Grant Element in Bank Loans
—<i>Dal Hyun Kim, July 1982</i></p> <p>No. 8 Shadow Exchange Rates and Standard Conversion Factors in Project Evaluation
—<i>Peter Warr, September 1982</i></p> <p>No. 9 Small and Medium-Scale Manufacturing Establishments in ASEAN Countries: Perspectives and Policy Issues
—<i>Mathias Bruch and Ulrich Hiemenz, January 1983</i></p> <p>No. 10 A Note on the Third Ministerial Meeting of GATT
—<i>Jungsoo Lee, January 1983</i></p> <p>No. 11 Macroeconomic Forecasts for the Republic of China, Hong Kong, and Republic of Korea
—<i>J.M. Dowling, January 1983</i></p> <p>No. 12 ASEAN: Economic Situation and Prospects
—<i>Seiji Naya, March 1983</i></p> <p>No. 13 The Future Prospects for the Developing Countries of Asia
—<i>Seiji Naya, March 1983</i></p> <p>No. 14 Energy and Structural Change in the Asia-Pacific Region, Summary of the Thirteenth Pacific Trade and Development Conference
—<i>Seiji Naya, March 1983</i></p> <p>No. 15 A Survey of Empirical Studies on Demand for Electricity with Special Emphasis on Price Elasticity of Demand
—<i>Wisarn Pupphavesa, June 1983</i></p> <p>No. 16 Determinants of Paddy Production in Indonesia: 1972-1981—A Simultaneous Equation Model Approach
—<i>T.K. Jayaraman, June 1983</i></p> <p>No. 17 The Philippine Economy: Economic Forecasts for 1983 and 1984
—<i>J.M. Dowling, E. Go, and C.N. Castillo, June 1983</i></p> <p>No. 18 Economic Forecast for Indonesia
—<i>J.M. Dowling, H.Y. Kim, Y.K. Wang, and C.N. Castillo, June 1983</i></p> <p>No. 19 Relative External Debt Situation of Asian Developing Countries: An Application of Ranking Method
—<i>Jungsoo Lee, June 1983</i></p> | <p>No. 20 New Evidence on Yields, Fertilizer Application, and Prices in Asian Rice Production
—<i>William James and Teresita Ramirez, July 1983</i></p> <p>No. 21 Inflationary Effects of Exchange Rate Changes in Nine Asian LDCs
—<i>Pradumna B. Rana and J. Malcolm Dowling, Jr., December 1983</i></p> <p>No. 22 Effects of External Shocks on the Balance of Payments, Policy Responses, and Debt Problems of Asian Developing Countries
—<i>Seiji Naya, December 1983</i></p> <p>No. 23 Changing Trade Patterns and Policy Issues: The Prospects for East and Southeast Asian Developing Countries
—<i>Seiji Naya and Ulrich Hiemenz, February 1984</i></p> <p>No. 24 Small-Scale Industries in Asian Economic Development: Problems and Prospects
—<i>Seiji Naya, February 1984</i></p> <p>No. 25 A Study on the External Debt Indicators Applying Logit Analysis
—<i>Jungsoo Lee and Clarita Barretto, February 1984</i></p> <p>No. 26 Alternatives to Institutional Credit Programs in the Agricultural Sector of Low-Income Countries
—<i>Jennifer Sour, March 1984</i></p> <p>No. 27 Economic Scene in Asia and Its Special Features
—<i>Kedar N. Kohli, November 1984</i></p> <p>No. 28 The Effect of Terms of Trade Changes on the Balance of Payments and Real National Income of Asian Developing Countries
—<i>Jungsoo Lee and Lutgarda Labios, January 1985</i></p> <p>No. 29 Cause and Effect in the World Sugar Market: Some Empirical Findings 1951-1982
—<i>Yoshihiro Iwasaki, February 1985</i></p> <p>No. 30 Sources of Balance of Payments Problem in the 1970s: The Asian Experience
—<i>Pradumna Rana, February 1985</i></p> <p>No. 31 India's Manufactured Exports: An Analysis of Supply Sectors
—<i>Ifzal Ali, February 1985</i></p> <p>No. 32 Meeting Basic Human Needs in Asian Developing Countries
—<i>Jungsoo Lee and Emma Banaria, March 1985</i></p> <p>No. 33 The Impact of Foreign Capital Inflow on Investment and Economic Growth in Developing Asia
—<i>Evelyn Go, May 1985</i></p> <p>No. 34 The Climate for Energy Development in the Pacific and Asian Region: Priorities and Perspectives
—<i>V.V. Desai, April 1986</i></p> <p>No. 35 Impact of Appreciation of the Yen on Developing Member Countries of the Bank
—<i>Jungsoo Lee, Pradumna Rana, and Ifzal Ali, May 1986</i></p> <p>No. 36 Smuggling and Domestic Economic Policies in Developing Countries
—<i>A.H.M.N. Chowdhury, October 1986</i></p> |
|--|--|

- No. 37 Public Investment Criteria: Economic Internal Rate of Return and Equalizing Discount Rate
—*Ifzal Ali, November 1986*
- No. 38 Review of the Theory of Neoclassical Political Economy: An Application to Trade Policies
—*M.G. Quibria, December 1986*
- No. 39 Factors Influencing the Choice of Location: Local and Foreign Firms in the Philippines
—*E.M. Pernia and A.N. Herrin, February 1987*
- No. 40 A Demographic Perspective on Developing Asia and Its Relevance to the Bank
—*E.M. Pernia, May 1987*
- No. 41 Emerging Issues in Asia and Social Cost Benefit Analysis
—*I. Ali, September 1988*
- No. 42 Shifting Revealed Comparative Advantage: Experiences of Asian and Pacific Developing Countries
—*P.B. Rana, November 1988*
- No. 43 Agricultural Price Policy in Asia: Issues and Areas of Reforms
—*I. Ali, November 1988*
- No. 44 Service Trade and Asian Developing Economies
—*M.G. Quibria, October 1989*
- No. 45 A Review of the Economic Analysis of Power Projects in Asia and Identification of Areas of Improvement
—*I. Ali, November 1989*
- No. 46 Growth Perspective and Challenges for Asia: Areas for Policy Review and Research
—*I. Ali, November 1989*
- No. 47 An Approach to Estimating the Poverty Alleviation Impact of an Agricultural Project
—*I. Ali, January 1990*
- No. 48 Economic Growth Performance of Indonesia, the Philippines, and Thailand: The Human Resource Dimension
—*E.M. Pernia, January 1990*
- No. 49 Foreign Exchange and Fiscal Impact of a Project: A Methodological Framework for Estimation
—*I. Ali, February 1990*
- No. 50 Public Investment Criteria: Financial and Economic Internal Rates of Return
—*I. Ali, April 1990*
- No. 51 Evaluation of Water Supply Projects: An Economic Framework
—*Arlene M. Tadler, June 1990*
- No. 52 Interrelationship Between Shadow Prices, Project Investment, and Policy Reforms: An Analytical Framework
—*I. Ali, November 1990*
- No. 53 Issues in Assessing the Impact of Project and Sector Adjustment Lending
—*I. Ali, December 1990*
- No. 54 Some Aspects of Urbanization and the Environment in Southeast Asia
—*Ernesto M. Pernia, January 1991*
- No. 55 Financial Sector and Economic Development: A Survey
—*Jungsoo Lee, September 1991*
- No. 56 A Framework for Justifying Bank-Assisted Education Projects in Asia: A Review of the Socioeconomic Analysis and Identification of Areas of Improvement
—*Etienne Van De Walle, February 1992*
- No. 57 Medium-term Growth-Stabilization Relationship in Asian Developing Countries and Some Policy Considerations
—*Yun-Hwan Kim, February 1993*
- No. 58 Urbanization, Population Distribution, and Economic Development in Asia
—*Ernesto M. Pernia, February 1993*
- No. 59 The Need for Fiscal Consolidation in Nepal: The Results of a Simulation
—*Filippo di Mauro and Ronald Antonio Butiong, July 1993*
- No. 60 A Computable General Equilibrium Model of Nepal
—*Timothy Buehrer and Filippo di Mauro, October 1993*
- No. 61 The Role of Government in Export Expansion in the Republic of Korea: A Revisit
—*Yun-Hwan Kim, February 1994*
- No. 62 Rural Reforms, Structural Change, and Agricultural Growth in the People's Republic of China
—*Bo Lin, August 1994*
- No. 63 Incentives and Regulation for Pollution Abatement with an Application to Waste Water Treatment
—*Sudipto Mundle, U. Shankar, and Shekhar Mehta, October 1995*
- No. 64 Saving Transitions in Southeast Asia
—*Frank Harrigan, February 1996*
- No. 65 Total Factor Productivity Growth in East Asia: A Critical Survey
—*Jesus Felipe, September 1997*
- No. 66 Foreign Direct Investment in Pakistan: Policy Issues and Operational Implications
—*Ashfaq H. Khan and Yun-Hwan Kim, July 1999*

ECONOMIC STAFF PAPERS (ES)

- No. 1 International Reserves: Factors Determining Needs and Adequacy
—*Evelyn Go, May 1981*
- No. 2 Domestic Savings in Selected Developing Asian Countries
—*Basil Moore, assisted by A.H.M. Nuruddin Chowdhury, September 1981*
- No. 3 Changes in Consumption, Imports and Exports of Oil Since 1973: A Preliminary Survey of the Developing Member Countries of the Asian Development Bank
—*Dal Hyun Kim and Graham Abbott, September 1981*
- No. 4 By-Passed Areas, Regional Inequalities, and Development Policies in Selected Southeast Asian Countries
—*William James, October 1981*
- No. 5 Asian Agriculture and Economic Development
—*William James, March 1982*
- No. 6 Inflation in Developing Member Countries: An Analysis of Recent Trends
—*A.H.M. Nuruddin Chowdhury and J. Malcolm Dowling, March 1982*
- No. 7 Industrial Growth and Employment in Developing Asian Countries: Issues and Perspectives for the Coming Decade
—*Ulrich Hiemenz, March 1982*
- No. 8 Petrodollar Recycling 1973-1980. Part 1: Regional Adjustments and the World Economy
—*Burnham Campbell, April 1982*
- No. 9 Developing Asia: The Importance of Domestic Policies
—*Economics Office Staff under the direction of Seiji Naya, May 1982*

- No. 10 Financial Development and Household Savings: Issues in Domestic Resource Mobilization in Asian Developing Countries
—Wan-Soon Kim, July 1982
- No. 11 Industrial Development: Role of Specialized Financial Institutions
—Kedar N. Kohli, August 1982
- No. 12 Petrodollar Recycling 1973-1980. Part II: Debt Problems and an Evaluation of Suggested Remedies
—Burnham Campbell, September 1982
- No. 13 Credit Rationing, Rural Savings, and Financial Policy in Developing Countries
—William James, September 1982
- No. 14 Small and Medium-Scale Manufacturing Establishments in ASEAN Countries: Perspectives and Policy Issues
—Mathias Bruch and Ulrich Hiemenz, March 1983
- No. 15 Income Distribution and Economic Growth in Developing Asian Countries
—J. Malcolm Dowling and David Soo, March 1983
- No. 16 Long-Run Debt-Servicing Capacity of Asian Developing Countries: An Application of Critical Interest Rate Approach
—Jungsoo Lee, June 1983
- No. 17 External Shocks, Energy Policy, and Macroeconomic Performance of Asian Developing Countries: A Policy Analysis
—William James, July 1983
- No. 18 The Impact of the Current Exchange Rate System on Trade and Inflation of Selected Developing Member Countries
—Pradumna Rana, September 1983
- No. 19 Asian Agriculture in Transition: Key Policy Issues
—William James, September 1983
- No. 20 The Transition to an Industrial Economy in Monsoon Asia
—Harry T. Oshima, October 1983
- No. 21 The Significance of Off-Farm Employment and Incomes in Post-War East Asian Growth
—Harry T. Oshima, January 1984
- No. 22 Income Distribution and Poverty in Selected Asian Countries
—John Malcolm Dowling, Jr., November 1984
- No. 23 ASEAN Economies and ASEAN Economic Cooperation
—Narongchai Akrasanee, November 1984
- No. 24 Economic Analysis of Power Projects
—Nitin Desai, January 1985
- No. 25 Exports and Economic Growth in the Asian Region
—Pradumna Rana, February 1985
- No. 26 Patterns of External Financing of DMCs
—E. Go, May 1985
- No. 27 Industrial Technology Development the Republic of Korea
—S.Y. Lo, July 1985
- No. 28 Risk Analysis and Project Selection: A Review of Practical Issues
—J.K. Johnson, August 1985
- No. 29 Rice in Indonesia: Price Policy and Comparative Advantage
—I. Ali, January 1986
- No. 30 Effects of Foreign Capital Inflows on Developing Countries of Asia
—Jungsoo Lee, Pradumna B. Rana, and Yoshihiro Iwasaki, April 1986
- No. 31 Economic Analysis of the Environmental Impacts of Development Projects
—John A. Dixon et al., EAPI, East-West Center, August 1986
- No. 32 Science and Technology for Development: Role of the Bank
—Kedar N. Kohli and Ifzal Ali, November 1986
- No. 33 Satellite Remote Sensing in the Asian and Pacific Region
—Mohan Sundara Rajan, December 1986
- No. 34 Changes in the Export Patterns of Asian and Pacific Developing Countries: An Empirical Overview
—Pradumna B. Rana, January 1987
- No. 35 Agricultural Price Policy in Nepal
—Gerald C. Nelson, March 1987
- No. 36 Implications of Falling Primary Commodity Prices for Agricultural Strategy in the Philippines
—Ifzal Ali, September 1987
- No. 37 Determining Irrigation Charges: A Framework
—Prabhakar B. Ghate, October 1987
- No. 38 The Role of Fertilizer Subsidies in Agricultural Production: A Review of Select Issues
—M.G. Quibria, October 1987
- No. 39 Domestic Adjustment to External Shocks in Developing Asia
—Jungsoo Lee, October 1987
- No. 40 Improving Domestic Resource Mobilization through Financial Development: Indonesia
—Philip Erquiaga, November 1987
- No. 41 Recent Trends and Issues on Foreign Direct Investment in Asian and Pacific Developing Countries
—P.B. Rana, March 1988
- No. 42 Manufactured Exports from the Philippines: A Sector Profile and an Agenda for Reform
—I. Ali, September 1988
- No. 43 A Framework for Evaluating the Economic Benefits of Power Projects
—I. Ali, August 1989
- No. 44 Promotion of Manufactured Exports in Pakistan
—Jungsoo Lee and Yoshihiro Iwasaki, September 1989
- No. 45 Education and Labor Markets in Indonesia: A Sector Survey
—Ernesto M. Pernia and David N. Wilson, September 1989
- No. 46 Industrial Technology Capabilities and Policies in Selected ADCs
—Hiroshi Kakazu, June 1990
- No. 47 Designing Strategies and Policies for Managing Structural Change in Asia
—Ifzal Ali, June 1990
- No. 48 The Completion of the Single European Community Market in 1992: A Tentative Assessment of its Impact on Asian Developing Countries
—J.P. Verbiest and Min Tang, June 1991
- No. 49 Economic Analysis of Investment in Power Systems
—Ifzal Ali, June 1991
- No. 50 External Finance and the Role of Multilateral Financial Institutions in South Asia: Changing Patterns, Prospects, and Challenges
—Jungsoo Lee, November 1991
- No. 51 The Gender and Poverty Nexus: Issues and Policies
—M.G. Quibria, November 1993
- No. 52 The Role of the State in Economic Development: Theory, the East Asian Experience, and the Malaysian Case
—Jason Brown, December 1993
- No. 53 The Economic Benefits of Potable Water Supply Projects to Households in Developing Countries
—Dale Whittington and Venkateswarlu Swarna, January 1994
- No. 54 Growth Triangles: Conceptual Issues and Operational Problems
—Min Tang and Myo Thant, February 1994

- No. 55 The Emerging Global Trading Environment and Developing Asia
—Arvind Panagariya, M.G. Quibria, and Narhari Rao, July 1996
- No. 56 Aspects of Urban Water and Sanitation in the Context of Rapid Urbanization in Developing Asia
—Ernesto M. Pernia and Stella LF. Alabastro, September 1997
- No. 57 Challenges for Asia's Trade and Environment
—Douglas H. Brooks, January 1998
- No. 58 Economic Analysis of Health Sector Projects- A Review of Issues, Methods, and Approaches
—Ramesh Adhikari, Paul Gertler, and Anneli Lagman, March 1999
- No. 59 The Asian Crisis: An Alternate View
—Rajiv Kumar and Bibek Debroy, July 1999
- No. 60 Social Consequences of the Financial Crisis in Asia
—James C. Knowles, Ernesto M. Pernia, and Mary Racelis, November 1999

OCCASIONAL PAPERS (OP)

- No. 1 Poverty in the People's Republic of China: Recent Developments and Scope for Bank Assistance
—K.H. Moinuddin, November 1992
- No. 2 The Eastern Islands of Indonesia: An Overview of Development Needs and Potential
—Brien K. Parkinson, January 1993
- No. 3 Rural Institutional Finance in Bangladesh and Nepal: Review and Agenda for Reforms
—A.H.M.N. Chowdhury and Marcelia C. Garcia, November 1993
- No. 4 Fiscal Deficits and Current Account Imbalances of the South Pacific Countries: A Case Study of Vanuatu
—T.K. Jayaraman, December 1993
- No. 5 Reforms in the Transitional Economies of Asia
—Pradumna B. Rana, December 1993
- No. 6 Environmental Challenges in the People's Republic of China and Scope for Bank Assistance
—Elisabetta Capannelli and Omkar L. Shrestha, December 1993
- No. 7 Sustainable Development Environment and Poverty Nexus
—K.F. Jalal, December 1993
- No. 8 Intermediate Services and Economic Development: The Malaysian Example
—Sutanu Behuria and Rahul Khullar, May 1994
- No. 9 Interest Rate Deregulation: A Brief Survey of the Policy Issues and the Asian Experience
—Carlos J. Glower, July 1994
- No. 10 Some Aspects of Land Administration in Indonesia: Implications for Bank Operations
—Sutanu Behuria, July 1994
- No. 11 Demographic and Socioeconomic Determinants of Contraceptive Use among Urban Women in the Melanesian Countries in the South Pacific: A Case Study of Port Vila Town in Vanuatu
—T.K. Jayaraman, February 1995
- No. 12 Managing Development through Institution Building
—Hilton L. Root, October 1995
- No. 13 Growth, Structural Change, and Optimal Poverty Interventions
—Shiladitya Chatterjee, November 1995
- No. 14 Private Investment and Macroeconomic Environment in the South Pacific Island Countries: A Cross-Country Analysis
—T.K. Jayaraman, October 1996
- No. 15 The Rural-Urban Transition in Viet Nam: Some Selected Issues
—Sudipto Mundle and Brian Van Arkadie, October 1997
- No. 16 A New Approach to Setting the Future Transport Agenda
—Roger Allport, Geoff Key, and Charles Melhuish, June 1998
- No. 17 Adjustment and Distribution: The Indian Experience
—Sudipto Mundle and V.B. Tulasidhar, June 1998
- No. 18 Tax Reforms in Viet Nam: A Selective Analysis
—Sudipto Mundle, December 1998
- No. 19 Surges and Volatility of Private Capital Flows to Asian Developing Countries: Implications for Multilateral Development Banks
—Pradumna B. Rana, December 1998

STATISTICAL REPORT SERIES (SR)

- No. 1 Estimates of the Total External Debt of the Developing Member Countries of ADB: 1981-1983
—I.P. David, September 1984
- No. 2 Multivariate Statistical and Graphical Classification Techniques Applied to the Problem of Grouping Countries
—I.P. David and D.S. Maligalig, March 1985
- No. 3 Gross National Product (GNP) Measurement Issues in South Pacific Developing Member Countries of ADB
—S.G. Tiwari, September 1985
- No. 4 Estimates of Comparable Savings in Selected DMCs
—Hananto Sigit, December 1985
- No. 5 Keeping Sample Survey Design and Analysis Simple
—I.P. David, December 1985
- No. 6 External Debt Situation in Asian Developing Countries
—I.P. David and Jungsoo Lee, March 1986
- No. 7 Study of GNP Measurement Issues in the South Pacific Developing Member Countries. Part I: Existing National Accounts of SPDMCs—Analysis of Methodology and Application of SNA Concepts
—P. Hodgkinson, October 1986
- No. 8 Study of GNP Measurement Issues in the South Pacific Developing Member Countries. Part II: Factors Affecting Inter-country Comparability of Per Capita GNP
—P. Hodgkinson, October 1986
- No. 9 Survey of the External Debt Situation in Asian Developing Countries, 1985
—Jungsoo Lee and I.P. David, April 1987
- No. 10 A Survey of the External Debt Situation in Asian Developing Countries, 1986
—Jungsoo Lee and I.P. David, April 1988
- No. 11 Changing Pattern of Financial Flows to Asian and Pacific Developing Countries
—Jungsoo Lee and I.P. David, March 1989
- No. 12 The State of Agricultural Statistics in Southeast Asia
—I.P. David, March 1989

- | | |
|---|---|
| <p>No. 13 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1987-1988
—Jungsoo Lee and I.P. David, July 1989</p> <p>No. 14 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1988-1989
—Jungsoo Lee, May 1990</p> <p>No. 15 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1989-1992
—Min Tang, June 1991</p> | <p>No. 16 Recent Trends and Prospects of External Debt Situation and Financial Flows to Asian and Pacific Developing Countries
—Min Tang and Aludia Pardo, June 1992</p> <p>No. 17 Purchasing Power Parity in Asian Developing Countries: A Co-Integration Test
—Min Tang and Ronald Q. Butiong, April 1994</p> <p>No. 18 Capital Flows to Asian and Pacific Developing Countries: Recent Trends and Future Prospects
—Min Tang and James Villafuerte, October 1995</p> |
|---|---|

SPECIAL STUDIES, COMPLIMENTARY (SSC)

(Published in-house; Available through ADB Office of External Relations; Free of Charge)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Improving Domestic Resource Mobilization Through Financial Development: Overview <i>September 1985</i> 2. Improving Domestic Resource Mobilization Through Financial Development: Bangladesh <i>July 1986</i> 3. Improving Domestic Resource Mobilization Through Financial Development: Sri Lanka <i>April 1987</i> 4. Improving Domestic Resource Mobilization Through Financial Development: India <i>December 1987</i> 5. Financing Public Sector Development Expenditure in Selected Countries: Overview <i>January 1988</i> 6. Study of Selected Industries: A Brief Report <i>April 1988</i> 7. Financing Public Sector Development Expenditure in Selected Countries: Bangladesh <i>June 1988</i> 8. Financing Public Sector Development Expenditure in Selected Countries: India <i>June 1988</i> 9. Financing Public Sector Development Expenditure in Selected Countries: Indonesia <i>June 1988</i> 10. Financing Public Sector Development Expenditure in Selected Countries: Nepal <i>June 1988</i> 11. Financing Public Sector Development Expenditure in Selected Countries: Pakistan <i>June 1988</i> 12. Financing Public Sector Development Expenditure in Selected Countries: Philippines <i>June 1988</i> 13. Financing Public Sector Development Expenditure in Selected Countries: Thailand <i>June 1988</i> 14. Towards Regional Cooperation in South Asia: ADB/EWC Symposium on Regional Cooperation in South Asia <i>February 1988</i> 15. Evaluating Rice Market Intervention Policies: Some Asian Examples <i>April 1988</i> | <ol style="list-style-type: none"> 16. Improving Domestic Resource Mobilization Through Financial Development: Nepal <i>November 1988</i> 17. Foreign Trade Barriers and Export Growth <i>September 1988</i> 18. The Role of Small and Medium-Scale Industries in the Industrial Development of the Philippines <i>April 1989</i> 19. The Role of Small and Medium-Scale Manufacturing Industries in Industrial Development: The Experience of Selected Asian Countries <i>January 1990</i> 20. National Accounts of Vanuatu, 1983-1987 <i>January 1990</i> 21. National Accounts of Western Samoa, 1984-1986 <i>February 1990</i> 22. Human Resource Policy and Economic Development: Selected Country Studies <i>July 1990</i> 23. Export Finance: Some Asian Examples <i>September 1990</i> 24. National Accounts of the Cook Islands, 1982-1986 <i>September 1990</i> 25. Framework for the Economic and Financial Appraisal of Urban Development Sector Projects <i>January 1994</i> 26. Framework and Criteria for the Appraisal and Socioeconomic Justification of Education Projects <i>January 1994</i> 27. Guidelines for the Economic Analysis of Projects <i>February 1997</i> 28. Investing in Asia <i>1997</i> |
|---|---|

SPECIAL STUDIES, ADB (SS, ADB)

(Published in-house; Available commercially through ADB Office of External Relations)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <i>Rural Poverty in Developing Asia</i>
M.G. Quibria, ed.
Vol. 1: Bangladesh, India, and Sri Lanka (1994)
\$35.00 (paperback)
Vol. 2: Indonesia, Republic of Korea, Philippines, and Thailand (1996)
\$35.00 (paperback) 2. <i>External Shocks and Policy Adjustments: Lessons from the Gulf Crisis</i>
Naved Hamid and Shahid N. Zahid, eds., 1995
\$15.00 (paperback) 3. <i>Financial Sector Development in Asia: Country Studies</i>
Shahid N. Zahid, ed., 1995
\$55.00 (hardbound) | <ol style="list-style-type: none"> 4. <i>Gender Indicators of Developing Asian and Pacific Countries</i>
Asian Development Bank, 1993
\$25.00 (paperback) 5. <i>Indonesia-Malaysia-Thailand Growth Triangle: Theory to Practice</i>
Myo Thant and Min Tang, eds., 1996
\$15.00 (paperback) 6. <i>Emerging Asia: Changes and Challenges</i>
Asian Development Bank, 1997
\$30.00 (paperback) |
|---|--|

SPECIAL STUDIES, OUP (SS,OUP)

(Co-published with Oxford University Press; Available commercially through Oxford University Press Offices, Associated Companies, and Agents)

1. *Informal Finance: Some Findings from Asia*
Prabhu Ghatte et. al., 1992
\$15.00 (paperback)
2. *Mongolia: A Centrally Planned Economy in Transition*
Asian Development Bank, 1992
\$15.00 (paperback)
3. *Rural Poverty in Asia, Priority Issues and Policy Options*
M.G. Quibria, ed., 1993
\$25.00 (paperback)
4. *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*
Myo Thant, Min Tang, and Hiroshi Kakazu, eds., 1994
\$36.00 (hardbound)
5. *Urban Poverty in Asia: A Survey of Critical Issues*
Ernesto Pernia, ed., 1994
\$18.00 (paperback)
6. *Critical Issues in Asian Development: Theories, Experiences, and Policies*
M.G. Quibria, ed., 1995
\$15.00 (paperback)
\$36.00 (hardbound)
7. *From Centrally Planned to Market Economies: The Asian Approach*
Pradumna B. Rana and Naved Hamid, eds., 1995
Vol. 1: Overview
\$36.00 (hardbound)
- Vol. 2: *People's Republic of China and Mongolia* \$50.00 (hardbound)
- Vol. 3: *Lao PDR, Myanmar, and Viet Nam* \$50.00 (hardbound)
8. *Financial Sector Development in Asia*
Shahid N. Zahid, ed., 1995
\$50.00 (hardbound)
9. *Fiscal Management and Economic Reform in the People's Republic of China*
Christine P.W. Wong, Christopher Heady, and Wing T. Woo, 1995
\$15.00 (paperback)
10. *Current Issues in Economic Development: An Asian Perspective*
M.G. Quibria and J. Malcolm Dowling, eds., 1996
\$50.00 (hardbound)
11. *The Bangladesh Economy in Transition*
M.G. Quibria, ed., 1997
\$20.00 (hardbound)
12. *The Global Trading System and Developing Asia*
Arvind Panagariya, M.G. Quibria, and Narhari Rao, eds., 1997
\$55.00 (hardbound)
13. *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, 2nd ed.
Myo Thant, Min Tang, and Hiroshi Kakazu, eds., 1998
\$55.00 (hardbound)

SERIALS

(Co-published with Oxford University Press; Available commercially through Oxford University Press Offices, Associated Companies, and Agents)

1. *Asian Development Outlook (ADO; annual)*
\$36.00 (paperback)
2. *Key Indicators of Developing Asian and Pacific Countries (KI; annual)*
\$35.00 (paperback)

JOURNAL

(Published in-house; Available commercially through ADB Office of External Relations)

1. *Asian Development Review (ADR; semiannual)*
\$5.00 per issue; \$8.00 per year (2 issues)

BULLETIN

(Published in-house; Available through ADB Office of External Relations; Free of charge)

1. *Research Bulletin (RB; semiannual)*