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# Poverty and Sustainable Development in Asia

Impacts and Responses to the Global Economic Crisis

Edited by  
Armin Bauer and Myo Thant

A photograph of a man in a white long-sleeved shirt and a cap, smiling broadly. He is sitting in what appears to be a workshop or construction site, surrounded by wooden beams and posts. He is holding a large wooden post with his right hand. The image is overlaid with a semi-transparent orange filter, matching the background of the cover.



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Impacts and Responses to the  
Global Economic Crisis

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# Preface

The worst economic crisis since the Great Depression, hit Asia and the Pacific in 2008–2009. Exports declined, economic growth contracted in many countries and is still at a lower level than in the last decade. While growth has rebounded—albeit at a lower rate—the crisis has revealed structural problems of a growth process in Asia that is not inclusive enough.

The 2008/09 global economic crisis is different from the 1997/98 Asian financial crisis in many ways. It affected people mainly through changes in the labor markets, return migration, losing social protection, and worsening social fabric. The crisis may also have long-term effects on the achievement of the Millennium Development Goals. Furthermore, there are specific gender patterns, with both women (especially garment and electronic sectors) and men (automobile parts and construction sectors) being affected. Finally, the crisis had spatial and demographic pattern by affecting urban migrants, young educated people, and the poor and vulnerable groups. There is also impact on the rural areas. The crisis shows the region's social and economic development sustainability being constrained by structural problems of dualistic labor markets and weak social protection systems.

The crisis revealed prevailing gender patterns. Women benefited greatly from globalization, which created new job opportunities for them in modern export industries. However those jobs were often low paid, low-skilled, and vulnerable. In the crisis, women were frequently the first exposed to retrenchments and reduced pay in export industries like garments or electronics. Reduced opportunities in the informal sector also lowered women's opportunities in the labor market, while at the same time their responsibilities to care for the families were exposed to new challenges due to the lack of formal social safety nets. However, the crisis also changed gender relations when men lost their jobs in construction industries or as overseas foreign workers.

The pace of poverty reduction has been slowed by the crisis. The Asian Development Bank (ADB) estimates suggest that by 2010, about 72 million very poor (\$1.25 international poverty line) and 108 million vulnerable poor (\$2 poverty line) could not escape poverty due to the crisis. Particularly affected are the moderately poor (those around the \$2 poverty line), urban educated youth working in export sectors, and internal migrant workers.

The impact of the crisis on the social sectors (health, education, and social protection) is less visible but should be expected. The immediate impact of the crisis on health is lower than on education.



Migrant workers in particular cut costs by sending their children to cheaper schools in the cities or back home to the villages, resulting in reduced education opportunities for these children. There is so far little evidence for the reduction of government spending on health care. Negative health impacts, however, may come a few years later, when the high costs of the rescue packages need to be refinanced, which may result in budget cuts where traditionally health budgets are affected first.

The crisis revealed weaknesses in the social protection system. With changing population structure, the family-based support systems are not any more effective. Building up innovative and inclusive social protection systems is essential to address the future needs of societies getting older, health and education costs that are rapidly rising, and are increasingly exposed to environmental risks. In addition, special efforts need to be made to include migrants in the new setup of social protection systems.

The crisis comes on top of worsening environments for the poor, aggravated by climate change (for the dryland poor, upland poor, coastal poor, and flood-affected poor) and rural to urban migration (resulting in rising slum poverty). Green growth—to be inclusive and pro-poor—needs to use a spatial approach and focus on the environments in which the poor live. Investments in climate change mitigation have limited direct impact on the lives of the poor. Rather, a rebalancing towards pro-poor green growth would imply more investments to address slum poverty (improving shelter, enhancing the poor's transport means, and addressing all forms of congestion) and dryland poverty, often linked to help the poor adapt to climate change.

ADB quickly responded to the crisis with a total of \$8.94 billion in crisis support for 43 projects, of which 7% was approved in 2008, 82% in 2009 and 11% is programmed for 2010. Of this, 40% was in the form of program loans, 28% was provided through the countercyclical support facility, 21% through nonsovereign operations (especially trade finance), and 11% was in the form of sovereign project loans and grants. Many projects included components financing social protection, labor market, and poverty reduction efforts of the government, especially in Bangladesh, Central Asia and the Caucasus, Indonesia, Mongolia, the Philippines, and Viet Nam.<sup>1</sup>

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<sup>1</sup> For further information, see ADB. 2009. Global Economic Crisis and ADB Response. An Update. December. [www.adb.org/Documents/Policies/Global-Economic-Crisis/in430-09.pdf](http://www.adb.org/Documents/Policies/Global-Economic-Crisis/in430-09.pdf)

This book suggests that the crisis is an opportunity to rethink the model of development in Asia and make growth become more inclusive and sustainable. Issues that need to be more carefully considered include:

- Closing the gap of dualistic labor markets by financing public employment programs for the rural poor, financing labor-based infrastructure, investing in the poor's education through scholarships and vouchers, and promoting employment intensively in small and medium enterprises;
- Building up social protection systems that address the problems of the future, such as costs of catastrophic health issues, costs of education, old age, climate and disaster insurance and protection and/or climate change, and inclusion of migrants in social protection systems;
- Rationalizing social expenditures through public finance and management reforms, and introducing—especially in South Asia—conditional cash transfers to address poverty;
- Addressing urban poverty through slum upgrading, housing finance, and town planning;
- Promoting rural development through food security programs in pro-poor growth potential areas, focused labor-based infrastructure support, decentralized industrialization policies, and active migration programs for areas with little pro-poor growth potentials; and
- Concentrating climate change interventions more on adaptation and linking them to slum improvement, rural development in pro-poor potential areas, and risk prevention measures such as agricultural, asset, and disaster insurance for the poor.

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# Acknowledgment

On 28–30 September 2009, the Asian Development Bank (ADB), the Governments of Viet Nam and the People’s Republic of China (PRC), and the Association of Southeast Asian Nations (ASEAN) Secretariat jointly organized a high-level, Asia-wide regional conference on the social and environmental impact of the global economic crisis on the people in Asia and the Pacific, especially the poor and vulnerable. The conference also served as the *3rd China–ASEAN Forum on Social Development and Poverty Reduction* and the *4th ASEAN+3 High-Level Seminar on Poverty Reduction*.

The high level, Asia-wide regional conference was jointly organized by the State Council Leading Group on Poverty Alleviation and Development of the PRC, the Ministry of Agriculture and Rural Development of the Government of Viet Nam, the ADB, and the ASEAN Secretariat. It was supported by development partners such as the ADB Institute (ADBI), the Australian Agency for International Development (AusAID), the German Development Cooperation (BMZ/GTZ/KfW), the United Kingdom Department for International Development (DFID), the International Labour Organization (ILO), the International Poverty Reduction Center in China (IPRCC), the Japan International Cooperation Agency (JICA), the United Nations Development Programme (UNDP), the World Health Organization (WHO), and the World Bank. We would like to thank all our development partners for making the conference a success and this book possible.

The Hanoi meeting was a major event, in fact the only such large event worldwide, with more than 350 participants from governments, regional think tanks and academia, multilateral and bilateral development agencies, and civil society. More than 60 papers including field studies, impact overviews, and sector and thematic studies were presented. We would like to thank all those who contributed with papers to the conference. We also thank the team of conference organizers: Lu Liqun from the International Poverty Reduction Center of the Government of the People’s Republic of China, Hoang Thi Dzung and Bin Dinh Thi Thanh Huyen from the Ministry of Agriculture and Rural Development of Viet Nam, Mega Irena from the ASEAN Secretariat, and Armin Bauer, Michelle Domingo, Debbie Labarrete, and Myo Thant from the ADB.

This book features only a subset of the papers presented at the Hanoi conference. The book is designed with the needs of policy makers in mind, draws on field and thematic background studies, and covers a large number of countries and cases. The papers have

been revised and updated since the time of the conference. The book is complemented by a website that hosts all the papers presented at the conference ([www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)).

I would like to thank the many authors, as well as my ADB colleagues, Armin Bauer and Myo Thant, and the editor, Jonathan Aspin, for putting this book together in a very short period of time. The publication of the book is a joint undertaking of the ADB and the ADBI in Tokyo.

Xianbin Yao  
Director General  
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# Overview

*Myo Thant and Armin Bauer*<sup>1</sup>

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...the Chinese character for “crisis” also means “opportunity.” We may also consider that the origin of the word crisis is derived from the Greek work *kriēnēn*, which means to decide. ...The current crisis provides an opportunity to decide on actions that put the region’s countries on more sure footing. Let us seize this chance to lay the groundwork for more inclusive sustainable growth....

—President Kuroda, Asian Development Bank

## Background

The global economic crisis began with financial turmoil in the United States that rapidly spread to the rest of the world to create the worst global economic downturn since the Great Depression. Following more than a year of turmoil a full blown banking crisis erupted in September 2008. Financial institutions around the globe had to write off huge loans and the structured finance market collapsed. Financial problems were soon transmitted to the real sectors of major industrial countries pushing them into recession and collapsing world trade.

Asian financial institutions and the banking sector had little exposure to the toxic security assets at the heart of the financial crisis and Asian banks were well capitalized with sound portfolios. Thus, for some time, there was hope of a ‘decoupling’ between Asia and the rest of the world. This hope vanished rapidly as foreign investors reduced their leverage by selling off assets to raise cash and demand for Asian exports declined. Hope turned to fear that the global recession would through increased unemployment and reduction in public spending, lead to an increase in poverty levels and widespread socioeconomic problems. Underlying these fears were three issues specific to Asia.

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<sup>1</sup> Myo Thant is a principal regional cooperation specialist, and Armin Bauer is a senior economist at the Asian Development Bank (ADB). This chapter does not necessarily reflect the views of the ADB.

First, many export reliant countries in Asia such as the Republic of Korea, Thailand, Indonesia, and Malaysia had been severely affected by the 1997 Asian financial crisis. Recovery from this crisis had taken some time and only at considerable cost to national pride, confidence, and resources in almost all cases. The countries however took to heart the harsh lessons of the crisis and instituted banking and financial reforms and in some cases, social protection measures. This, and a more efficient banking system, would protect them from a severe social crisis, despite further losses in the labor markets.

A second issue was general awareness among Asian policy makers that while the region had grown very rapidly in a quarter of a century, much needed to be done and the export engine–reliant development model being utilized had innate weaknesses that a global recession would exacerbate. Inclusive labor growth, social protection, and environmental sustainability were missing in many countries. Despite sustained growth, 1.6 billion Asians live on less than \$2 a day and about 20% in extreme poverty under the international \$1.25 poverty line. Social and environmental dimensions of poverty in the region are also frightening: 1.6 billion in rural Asia have no access to improved sanitation, 700 million have no access to safe water, and 100 million children are out of school (Bauer 2009). In order to prevent further poverty, countries needed more inclusive growth with broader labor market participation in global value chains, which was now disrupted by reduced demand for final products in industrialized countries.

In other cases the growth model being utilized is heavily dependent on migration and remittances, tourism revenue, and high commodity prices, which were also dependent on global and to a great extent, industrialized country economic prosperity. Countries, which were in transition from planned to market economies but were still essentially closed to the global economy in 1997, were faced with a unique situation. As with older market economies, they faced the problem of reduced demand for their exports but in the transition to market economies, had largely given up by choice or fiscal necessity, the traditional social protection mechanisms of the planned economy era and were therefore in a weaker position to respond to the global recession.

A third issue common to several countries in Asia was that while there had been substantial interest during the 1997 crisis on establishing social safety nets, in general, once the crisis was over and growth resumed, discussions on social protection systems gradually subsided. Thailand, which reported an increase in adult mortality in the 1996–1999 period, expanded programs to provide health care

for the poor and voluntary health insurance cards for the near poor. Indonesia provided scholarships for the poorest students and block grants for schools in the poorest communities while an expanded and redesigned workfare program was launched. A social safety net program was established in 1998 and a conditional cash transfer program unveiled in mid-2008. Elsewhere, the need to maintain social protection in a globalized and highly interdependent world economy was even less well heeded.

The chapters in this volume are based on some of the presentations made at the regional high-level conference on “Impact of the Global Economic Slowdown on Poverty and Sustainable Development in Asia and the Pacific,” which was held in Hanoi, Viet Nam on 28–30 September 2009. The conference, which was organized in collaboration with many different multilateral and bilateral development agencies, succeeded in exchanging experiences and views on the impact of the global recession and the different responses being implemented. Over 300 participants from the public sectors, academia, and civil society attended this meeting, which was the largest of its sort in Asia. This volume is likely to be of interest to a wide range of readers since the papers included cover a broad spectrum and large number of Asian countries. The papers were chosen carefully on the basis of accessibility as well as intellectual rigor and inclusion of previously unavailable data, much of it generated from field studies.

The volume is evenly divided between a section on the impact of the crisis and channels of transmission and the latter half that examines country responses. Limitations of space prevented publication of many deserving papers although this is to some extent overcome by the inclusion of “boxes” that provide a précis of these papers. Further, all papers presented at the conference are hosted in a website: ([www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp))

As further information and data gradually emerge, our understanding of the crisis and its impacts will undoubtedly improve. The chapters in this volume, however, suggest four lessons or issues that are likely to be robust and even be strengthened by new facts as they gradually emerge. These issues are

- the crisis has affected countries in different ways,
- the channels of transmission of the crisis differ by country,
- there is great diversity in response, and
- development paradigms may need to be carefully re-evaluated.

## **Impact of the crisis**

The economies of all countries in Asia and the Pacific were affected by the crisis (Table 1). After growing at rapid rates in the previous 3 years, most countries experienced a decline in growth rates in 2008, which continued into 2009. Countries that were open in the sense of high dependence on exports suffered more than those that were less reliant on export-driven growth. Many in the former group experienced their worst economic performances in over a decade and saw an actual contraction of their economies. Two of the three largest Asian countries, India and Indonesia, were however affected only marginally by the crisis due to relatively little reliance on exports and the strength of the domestic economy. The People's Republic of China (PRC), on the other hand, was severely affected by a sharp drop in demand for its exports and only through massive public expenditures, was it able to prevent a sharp reduction in growth rates. Other transitional economies such as Viet Nam, Cambodia, and many Central Asian economies were less fortunate in terms of impact as well as having the fiscal resources to counter the effects of the crisis.

Turk and Mason in their chapter provide a qualitative assessment of the impact of the crisis on five countries: Cambodia, the Lao People's Democratic Republic (Lao PDR), Mongolia, Thailand, and Viet Nam. Papanek and Basri discuss the impact of the global crisis on Indonesia, a country that was greatly affected by the 1997 crisis, and draw lessons for neighboring economies. They conclude that the recession has had a surprisingly limited macroeconomic impact. However, they note the slow development of job opportunities despite a decade of export growth. They also note the need for social protection programs that address the needs of the poor.

Economic growth contracted in Pacific island economies in 2009, in many cases continuing a trend that started in 2008 (the Cook Islands, the Fiji Islands, Kiribati, the Federated States of Micronesia, Palau, and Samoa). Mellor discusses the impact on social sectors of commodity price volatility in Papua New Guinea and concludes that certain population sub-groups may be hard hit even though the overall economy is fairly resilient. The crisis has made the eradication of poverty a yet more elusive goal as well as making the attainment of Millennium Development Goals more difficult. Chatterjee and Kumar discuss this issue in their chapter and note that the situation is particularly serious for least developed countries and Pacific island economies.



**Table 1: Growth Rates of Selected Asian Economies**

	2006	2007	2008	2009
Central Asia	13.3	12.1	6.1	2.7
Armenia	13.2	13.7	6.8	-14.4
Azerbaijan	34.5	25.4	10.8	9.3
Georgia	9.4	12.3	2.3	-3.9
Kazakhstan	10.7	8.9	3.3	1.2
Kyrgyz Republic	3.1	8.5	8.4	2.3
Tajikistan	7.0	7.8	7.9	3.4
Turkmenistan	11.4	11.6	10.5	6.1
Uzbekistan	7.2	9.5	9.0	8.1
East Asia	9.4	10.4	7.3	5.9
China, People's Republic of	11.6	13.0	9.6	8.7
Hong Kong, China	7.0	6.4	2.1	-2.7
Korea, Republic of	5.2	5.1	2.2	0.2
Mongolia	8.6	10.2	8.9	-1.6
Taipei, China	5.4	6.0	0.7	-1.9
South Asia	9.0	8.7	6.4	6.5
Afghanistan	8.2	12.1	3.4	15.1
Bangladesh	6.6	6.4	6.2	5.9
Bhutan	6.4	14.1	11.5	6.0
India	9.7	9.2	6.7	7.2
Maldives	18.0	7.2	6.3	-3.0
Nepal	3.7	3.3	5.3	4.7
Pakistan	5.8	6.8	4.1	2.0
Sri Lanka	7.7	6.8	6.0	3.5
Southeast Asia	6.1	6.5	4.3	1.2
Brunei Darussalam	4.4	0.2	-1.9	-1.2
Cambodia	10.8	10.2	6.7	-2.0
Indonesia	5.5	6.3	6.0	4.5
Lao People's Democratic Republic	8.7	7.8	7.2	6.5
Malaysia	5.8	6.2	4.6	-1.7
Myanmar	7.0	5.5	3.6	4.4
Philippines	5.3	7.1	3.8	0.9
Singapore	8.7	8.2	1.4	-2.0
Thailand	5.1	4.9	2.5	-2.3
Viet Nam	8.2	8.5	6.2	5.3

Source: Asian Development Bank 2010.

## **Channels of transmission**

Channels of transmission of the crisis differ by country. Many countries have been affected by the reduction in demand for their products and early in the crisis much concern over an increase in open unemployment was expressed. Further, it was believed that this unemployment would be concentrated in export industries in specific regions and would affect women in particular given the large proportion of women in low skilled export industry jobs. The situation was thought to be particularly serious in the PRC where 22 million migrant workers were estimated to be unemployed by the beginning of 2009. Concern over the unemployment of new university graduates and particularly those from rural areas, was also expressed. (Min Tang 2009). Unemployment in Cambodia, where 70% of total exports emanate from garments exported to the United States, was also thought to be particularly high.

In other countries such as Tajikistan, the Philippines, Nepal, Bangladesh, and the Kyrgyz Republic where remittances as a share of GDP were all over 10%, concerns about either forcible repatriation of migrants or declines in remittance flows were expressed early. Pacific island economies such as Samoa, Tonga, and the Fiji Islands were also affected by the decline in remittances. The available evidence indicates that countries that depended on remittances from the Middle East were less affected by the crisis than those countries that depended on remittances from industrialized economies.

In a large number of countries, the tourism sector is a major contributor to the economy through employment generation and foreign exchange earnings. Southeast Asian tourist industries in Thailand, Cambodia, and Singapore were substantially affected by the recession as were those in the Maldives, the Fiji Islands, the Cook Islands, Samoa, and Vanuatu. Tourist arrivals declined as did average expenditure per tourist, although in some cases, this was partially offset by an increase in regional tourism.

In other countries, a key transmission route was the sudden drop in commodity prices. Oil producers such as Kazakhstan and Tajikistan were affected by the drop in oil prices while copper-producing Lao PDR and Mongolia were affected by both price declines and volatility.

Rosey Hurst and her co-authors discuss the impact of the global economic slowdown of value chain labor markets in four Asian countries. They found that enterprises across sectors have responded to the crisis by reducing workers' hours and retrenchment with temporary and migrant workers being most affected.

Two chapters in this volume discuss the impact of the crisis on informal sector workers. Sinha, using a CGE model shows, how decline in demand for regular labor can be reflected in the supply of informal labor in India. Zoe Horn examines the issue of women in the informal sector in India, Indonesia, Pakistan, and Thailand. She concludes that the informal sector has no safety cushions and that in the wake of a recession, short-, medium- and long-term relief measures are needed. Emergency relief measure should be complemented by suspension of laws and regulation which prohibit the livelihood of informal sector workers.

Nicola Jones and her co-authors examine how the crisis affects gender and social protection in Asia. They find that there are discernible gender impacts and recommend that policy responses need to be more gender sensitive and women's voice and collective action should be promoted. Dasgupta and Williams focus on Cambodia's garment industry and find women workers bearing much of the brunt of the impacts owing to their preponderance in the sector, which has been most affected.

Three chapters in the volume discuss the impact of the crisis on rural areas. Dang discusses the impact in Viet Nam where demand for agricultural exports declined and return migration from urban areas added to problems in the rural areas. Zhang examines empirical evidence from a 12-city survey within the PRC. The chapter provides quantitative evidence of the impact of the crisis, coverage of social insurance programs and household-coping strategies. Muto and her co-authors discuss urban-rural transmission mechanisms in Indonesia based on a survey in central Java and South Sulawesi, Indonesia. Riester's chapter complements these three chapters and examines the impact of the global recession on labor migration and remittances in Nepal, the Philippines, Tajikistan, and Uzbekistan. She notes that impacts differ widely and that rebalancing local and regional job markets is essential in the long run while short-term measures such as social transfers are needed to cope with increased poverty in the wake of the crisis and declining remittances.

## **Diversity in response**

How countries responded to the crisis depended on several factors including availability of fiscal resources, prior existence of social protection institutions as well as extent of government commitment to social protection. Responses also differed according to the transmission mechanism of the global recession. Nonetheless, two common

responses can be seen. First, countries reacted very rapidly to the crisis, occasionally even before reliable information was available. Second, countries pursued loose monetary policies. Among the more developed Asian countries, frequent rounds of interest rate cutting were seen. In other countries working capital was made more available through different means including subsidies.

Given the absence of automatic stabilizers, most Asian countries relied on discretionary fiscal stimulus measures to resuscitate their economies although, here again, many countries were constrained by lack of fiscal space or access to external assistance. Fiscal stimulus was substantial in many countries notably the PRC and Thailand. The PRC's strong fiscal position allowed it to unveil a CNY4 trillion (about \$600 billion) fiscal stimulus package that focused on transport, rural infrastructure, disaster relief, low-income housing, and the environment. Thailand, Kazakhstan, and Viet Nam also implemented large fiscal stimulus programs that are estimated to be above 10% of 2008 GDP (UNDP 2009). Other countries such as the Republic of Korea, Singapore, and Malaysia are also thought to have fiscal stimulus of between 5%–10%. Information on what the additional resources were used for is more difficult to ascertain particularly given differing definitions of social protection used. The general conclusion, however, is that there is little evidence of significant interventions to address poverty consequences.

Several countries, including Bangladesh and Thailand, increased civil service salaries while others made it easier to send remittances from abroad. The stimulus was frequently used for labor market interventions either through assistance to sectors or industries that were most affected by the crisis or incentives to retain or rehire laid-off workers such as Singapore's Jobs Credit Scheme. The impact of the crisis in India and Bangladesh may have been considerably nullified by the use of different employment creating schemes. India expanded the use of its National Rural Employment Generation Act (NREGA), which was created in 2005 and guarantees 100 days of paid labor to rural poor. Similarly, Bangladesh employed employment generation programs for hard core poor as well as a national service program for higher secondary certificate holders. Cash handouts were also utilized, most notably in Thailand and the PRC where one-time payments of CNY100 and CNY150 were given to rural and urban households, respectively. One response, which was greatly expected and feared but did not appear, was repatriation of foreign workers. A number of countries including Sri Lanka, Pakistan, the Maldives, Mongolia, and Tajikistan negotiated standby arrangements and other programs with the IMF to meet macroeconomic difficulties that were exacerbated by

the crisis. Countries also tapped financial resources, which were provided by the multilateral development banks. The Asian Development Bank, for example, provided \$8.94 billion in crisis support of which almost one-third was provided through a countercyclical support facility (ADB 2009).

The volume includes 10 chapters on responses of different countries. Bauer et al. note that social protection remains relatively neglected in Asian rescue packages. They argue that increased social protection requires fiscal resources as well as fundamental reform of social protection. Donors can make a positive contribution to this although certain principles need to be followed. Donges looks at the issue of addressing unemployment and poverty issues through infrastructure development projects and discusses in some depth programs in Cambodia, India, Indonesia, and the Philippines. He highlights the importance of technical and institutional resources in ensuring successful implementation of infrastructure programs. Castel evaluates the fiscal implications of Viet Nam's social protection strategy and concludes that it is fiscally possible to boost pension system participation. Asher examines the impact of the global crisis on demographic and labor market trends with a focus on pensions. He discusses the key technical issues that must be considered and concludes that given the heterogeneity of Asian countries, progress on pensions is likely to be uneven and less rapid than desired. Bender and Rompel examine social protection reform dynamism in Indonesia and Viet Nam. While there are differences between the two countries, they find that the pace of reform was not affected by the global recession. They further conclude that it is possible to initiate a reform process even at relatively low income levels. Walker and Hall present the case of Mongolia and its Child Money Program in the face of a severe recession. Scholz discusses the role of unemployment insurance and concludes that in East Asia, unemployment insurance is still underdeveloped even though many countries in the region have fiscal and administrative capabilities. He further notes that the development of unemployment insurance requires government direction and a better balance between public interventions and private profit orientation.

The possible adverse effects on health and education as a result of the global recession were widely discussed from the very beginning of the crisis. Accordingly, a number of countries have included health components in their fiscal stimulus programs. Cambodia is implementing a health equity fund while Viet Nam is establishing a health care fund for the poor. The PRC will spend \$125 billion over 3 years to extend basic health care to 90% of its citizens. Kwon and his co-authors conclude that the 1997 Asian crisis had severe impacts

on health sectors of many in Indonesia and Thailand as a result of reduced income and lower public health expenditures. Their survey in Bangladesh, the PRC, and Nepal however shows little evidence of immediate negative impacts. Nevertheless they argue that governments should use the crisis as an opportunity for reforming both health care systems and policies. Key policies that require attention are strengthening health care financing and improved monitoring capabilities. Weber and Pietschulek argue that although the crisis does not affect the Philippines' health insurance system, the system needs urgent improvement in terms of coverage of the unemployed and the poor. Sarvi examines the implication of the economic recession on quality, equity, and financing of education and concludes that in the short term, improved monitoring and support to girl's education as well as disadvantaged children is essential. He makes a strong pitch for support to technical and vocational education training and skills development.

## **Longer-term perspectives**

As of the beginning of 2010, the crisis stage of the global recession had passed. Credit for a rapid recovery is due to many factors including rapid and concerted actions by developed countries as well as large fiscal expenditures by many Asian countries. Within Asia, the PRC's stimulus played a major role in ensuring that the recession was not deeper and recovery was faster. Large expenditures in the PRC ensured greater demand for Asian exports as well as higher commodity prices. Asian countries were, however, also fortunate in that agricultural food prices were low as were oil prices compared to the high levels in the recent past. Countries, however, cannot count on good fortune and expenditures of large countries to maintain social prosperity. The rapid recovery of the region's economies should, therefore, be used as an opportunity to reexamine the nature of the development process and consider adoption of an inclusive growth strategy. Some movement in this direction can be seen from increased use of the term "rebalancing."

What the term actually means is, however, less clear. In some contexts, it refers to correcting imbalances of those countries whose output greatly exceeds expenditure, by altering production structure and diversifying demand (ADB 2009b). It may also refer to endogenization of social issues into the growth process with an emphasis on not only quantitative but qualitative growth as well. Whatever the exact definition, the term requires further thinking if the crisis is not to become a lost opportunity for ensuring equitable and sustained

growth. Fresh thinking is needed on how to make the growth process more inclusive in labor markets, for social and municipal services, and in social protection. Acknowledgement that development processes in an increasingly integrated world can be disruptive and a larger or more effective role for the public sector in the process of development, is desirable, is needed, as is awareness of gender, regional, and income class fault lines in the process of development.

Addressing the problems caused by such fault lines will require an ability to conceptualize and act over relatively long-term horizons so that global recessions of which there will inevitably be more, will be less socially disruptive than the current one. Definitional differences exist but inclusive growth in which economic opportunities are both more level as well as larger, will be needed. Further, social protection measures should be seen as an integral component of the growth process. At one level it is merely good governance since it provides protection for those most adversely affected and most vulnerable to external shocks. At another level it is sound economic policy. Properly designed social protection measures sustain and protect prior investment in human resources as well as serve as a means of stimulating national growth by transferring savings into demand for local products and services. A well-designed social protection system can also help markets function better by enabling workers to take more entrepreneurial risks.

Many Asian countries face challenges in improving or implementing social protection systems including political resistance, lack of resources and limited capacity in establishing functional monitoring systems required for targeting. Notwithstanding these problems, greater introspection and a careful reexamination of the development models currently being used is for many countries a worthy activity that should not be postponed. It is largely along these lines that five chapters on environment and recession issues are included in this volume. Anbhumozhi and Bauer argue in their chapter that the global crisis presents an opportunity to remove policies that are environmentally harmful. Yamaguichi and Yangi similarly argue that renewable energy will become increasingly important in Asia although it will require strong political leadership and support. Kalirajan et al. argue that it is possible to increase and sustain positive links between trade and the environment through promotion of technology. The relationship between climate change and poverty are examined in two chapters. Benoit argues that investing in female education contributes to the establishment of climate resilience in Asia. Steele and Taishi argue that the crisis presents an opportunity for a green recovery and discuss how the green growth concept can be made operational.

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# The impact of the world recession on Indonesia and an appropriate policy response: Some lessons for Asia

*Gustav F. Papanek and M. Chatib Basri<sup>1</sup>  
with Daniel M. Schydrowsky<sup>2</sup>*

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## Introduction

This chapter examines the impact of the global recession on Indonesia, the largest country in Southeast Asia. The chapter examines the impact on unemployment and the policies that have been utilized by the government to minimize the impact of the recession. The chapter concludes with a section on lessons for other Asian countries.

### 1. The recession and Indonesia—A surprisingly small macroeconomic impact

In the early stages of the global recession,<sup>3</sup> it was feared that Indonesia would be hard hit. Export earnings were expected to decline by 30% or \$30 billion–\$40 billion, which would be a loss of 7.5%–10.0% of national income. Add declining remittances and tourist income, and a sharp decline in expected foreign private investment, and the direct cost of the recession was expected to be a more than 10% decline of national income.

Indirect costs, as the impact worked its way through the economy, would nearly double that (a “multiplier” of 1.8–2.0). The direct and indirect costs of the world recession on an initial analysis therefore were estimated to result in a horrific decline of 15% or more in gross domestic product (GDP).

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<sup>2</sup> Daniel Schydrowsky, at the Boston Institute for Developing Economies, developed the macro model that generated the multiplier, the benefits from reduced import prices, and the net effect on growth of GDP. He is not responsible for other aspects of this paper, although his comments were most helpful.

<sup>3</sup> We use the shorthand “recession” instead of the longer “world economic slowdown.”

However, these estimates ignore the offsetting benefits of the recession (and the costs of the subsequent recovery). Table 1 indicates all the international variables to be taken into account. It demonstrates the importance of systematically evaluating the impact of the recession (or other changes in the world economy) through all the channels connecting Indonesia to that economy.

The decline in prices in the world market harms Indonesian exports, but it also has benefits of \$14 billion due to lower prices for all imports. Other offsets to the cost of recession include:

- a reduction in needed imported inputs into exports, of \$2 billion as exports decline;
- lower shipping costs for exports and imports;
- lower interest on the private debt; and
- a government deficit, augmented by a stimulus package, adding a further \$7 billion to demand.

*In sum, the net direct impact of the recession in calendar 2009 is \$10 billion after offsetting direct gains against direct losses.* However, use of annual data understates the impact of the recession. The Indonesian recession actually lasted from October 2008 to September 2009. During that 12-month period, the value of exports was down a further 6%, or \$7 billion, compared to calendar 2009. For 2010, our very preliminary forecast, based on the improvement in the world economy, is for a net rise of \$18 billion in export earnings. Other earnings, as from tourism and migrants, also increase. But in a mirror image of the decline during the recession, these increased earnings are partially offset by increased quantities of imports at higher prices, higher shipping costs, and a lower government deficit.

In addition to the direct effects, the indirect effects—the “multiplier”—must not be ignored. The size of the multiplier has not so far been estimated in Indonesia but that is no reason for ignoring it. Indirect losses occur as the direct losses work their way through the economy: as exporters and their workers spend less, sales and production decline throughout the economy. To take account of these second- and third-round effects (and so on) one needs to use an input–output table, plus an estimate of the leakages that eventually stop the effects from cumulating endlessly in the economy. The results for 2010 are in Table 2. (Similar calculations were made for 2009 and are available from the authors.)

The multiplier of indirect effects is 1.85, nearly doubling the direct effects. But because of lower world prices in 2009, Indonesia spends less on imports, becoming more self-reliant and less trade-dependent.

**Table 1: Direct impact of the world economic recession on Indonesia—Summary** (\$ billion, rounded)

	Actual 2008	Actual or Forecast 2009	Forecast 2010	Decrease [-] or increase from	
				2008– 2009	2009– 2010
<b>A. 1. Goods exports—Gross</b>	<b>137</b>	<b>116</b>	<b>134</b>	<b>-21.0</b>	<b>18.0</b>
2. Imported inputs at 18% of exports	24.7	20.9	24.1	-3.8	3.2
3. Change in quantity exported at 50% of change in value of exports (calculated from exports at constant prices)				10.5	9.0
4. Change in imported inputs due to change in quantity exported at 18%				1.9	-1.6
5. Effect of 12% decline in prices of imported inputs into exports in 2009; in 2010 prices assumed back to 2008 level, that is increase by 13%–14%				2.5	-3.3
<b>Net change in goods exports = 1+4+5</b>				<b>-16.6</b>	<b>13.1</b>
<b>B. 6. Exports of services—Total of 7+8+9+10</b>				<b>0.2</b>	<b>-2.9</b>
7. Migrant remittances				-0.9	0.1
8. Tourism				-1.3	0.2
9. Shipping				2.2	-3.1
10. Interest on private debt				0.2	-0.1
<b>C. 11. Private investment—14+17</b>	<b>89.6</b>	<b>88.8</b>	<b>92.7</b>	<b>-0.8</b>	<b>3.9</b>
12. Domestic private investment	100	103	107	3.0	4.0
13. Minus imported inputs at 18%	18	18.5	19.3	0.5	0.7
14. <i>Net domestic private investment—12-13</i>	82	84.5	87.7	2.5	3.3

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Table 1 continued

	Actual 2008	Actual or Forecast		Decrease [-] or increase from	
		2009	Forecast 2010	2008– 2009	2009– 2010
15. Foreign direct investment	9.3	5.3	6	-4.0	0.7
16. Minus imported inputs at 18%	1.7	1.0	1.1	-0.7	0.1
17. <i>Net foreign direct investment—15–16</i>	7.6	4.3	4.9	-3.3	0.6
<b>D. 18. Government deficit net 19–20</b>	<b>0.3</b>	<b>7.1</b>	<b>6.8</b>	<b>6.8</b>	<b>-0.3</b>
19. Gross deficit	0.4	8.4	8	8.0	-0.4
20. Spent outside Indonesia at 15%	0.06	1.3	1.2	1.2	0.1
<b>E. Total impact of recession and recovery</b>				<b>-10.5</b>	<b>13.8</b>

Note: Annual data for most items under B and C for 2009 are not yet available. Fourth quarter is an estimate.

Sources: Authors' calculations, using Statistics Indonesia (BPS) data compiled by the World Bank for goods exports and imports; Bank Indonesia data for services and investment; and Ministry of Finance data for government.

As a result, the multiplier measuring indirect effects increases to 1.94 during the recession. There are also indirect gains, primarily lower prices for imports of consumer and capital goods.

After systematically taking account of all gains and losses for 2009, we see a reduction of just \$6 billion in income, equal to a 1.4% reduction in the GDP growth rate. As growth in 2008 was 6%, after a 1.4% loss, growth is forecast to be roughly 4.5% in 2009, consistent with other growth estimates. This means that the Indonesian economy would still be growing despite the recession—a far cry from the first estimate of a decline of as much as 10% in the economy, made because it failed to take account of offsetting benefits.

By the fourth quarter of 2009, Indonesia was coming out of the recession. It lasted just a year. Just as the decline was moderate, and substantially driven by declining demand for Indonesia's exports, so will the recovery be, in our forecast: moderate and substantially driven by increased income from exports. And the change in export earnings was primarily commodity driven: 85% of the decline in exports was due to lower prices and, in most cases, lower quantities exported of

commodities. The increase in exports in the last quarter is even more dominated by commodities (92%). Under current policies, Indonesia is therefore highly dependent on the vagaries of the world commodity market and the change in prices that prevails there. If prices continue to rise for copper, coal, and palm oil, Indonesia will continue to grow at a good pace; if commodity prices falter, so will the Indonesian economy.

Indonesia has weathered the recession well, largely explained by the following factors:

- It is well known that Indonesia is less trade dependent than many economies in Asia, as well as less remittance and tourism dependent than some. Rather, the primary source of growth of Indonesia's GDP since 1997 has been domestic consumption.
- Macroeconomic management was good: some effective stimulus was applied and the political environment has been stable.
- The banking system, chastened somewhat by the disaster of 1997–1998, was in fair shape and continued to lend, although there were initial problems with trade finance.
- The government provided a proper response to the recent crisis by focusing on maintaining market confidence through prompt actions including:
  - establishing a transparent coordination framework among financial, monetary, and fiscal authorities in crisis management;
  - establishing swap lines between Bank Indonesia and other central banks in Asia, so ensuring adequate liquidity in the system;
  - maintaining confidence in the banking sector by providing deposit guarantees;
  - ensuring the availability of funds to support budget financing in 2009; and
  - mitigating the impact of the financial crisis to the poorest segments of society by providing a social safety net and through a price stabilization policy.

## **2. Aggravation of unemployment and underemployment**

Despite macroeconomic success, the problem of unemployment and underemployment, which had plagued Indonesia since the monetary crisis of 1997–1998, worsened as a result of the recession.

**Table 2: First Attempt at an Aggregate Open Economy Income Generation Model for Indonesia: Forecast for 2010. The Recovery from the Impact of the World Economic Crisis 2008–2009**

<b>Multiplier formula:</b>	$dY/d[(1-mx)X + REM + (1-mfp)FPI] = 1/[1 - (1-m)(1-t)c]$			
mx	0.18	Import intensity of exports		
m	0.199	Import intensity before and after price increase for imports		
t	0.15	Domestic tax rate		
c	0.7	Propensity to consume		
mfp	0.3	Import intensity of foreign private investment		
$\Delta Pm/Pm$	0.135	Proportion of change of import prices		
Evaluate right hand:	$1/[1 - (1-m)(1-t)c]$			
With m =	1.91	The multiplier, also defined as $\lambda$ , below		
With m =	0.226	Before price effect		
		After price increase		
EXOG =	$[(1-mx)X + REM + (1-mfp)FPI]$			
Impact calculation:	$Y1 - Y0 = EXOG[\lambda_1 - EXOG]_0 = (EXOG_0 + \Delta EXOG) \lambda_1 - EXOG_0 = (\Delta \lambda / \lambda_0) EXOG_0 + \Delta EXOG \lambda_1$			
	$EXOG_0 = EXOG_0 + \Delta EXOG \lambda_1 - EXOG_0 = EXOG_0(\lambda_1 - \lambda_0) + \Delta EXOG \lambda_1 =$			
	$(\Delta \lambda / \lambda_0) EXOG_0 + \Delta EXOG \lambda_1$			
	Change in VA x multiplier			
$\Delta VA$ in X + other changes	13.8	Evaluate line 24		Total direct impact of recovery from recession
VA in X 2009	95	$(\Delta \lambda / \lambda_0)$	-0.03	
Y0 2009	560	$(\Delta \lambda / \lambda_0) Y0$	-16.59	Reduced Y due to increase of import prices
M non X 2009	75	$[\Delta X(1-mx) + \dots + \dots]$	25.59	Increase of Y due to rise in export VA + others
		$(\Delta \lambda / \lambda_0) Y0 + [\Delta X(\dots)]$	9.00	Total increase of Y
		% of Y0	0.016	

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Table 2 continued

<b>Multiplier formula:</b>	$dY/d[(1-mx)X + REM + (1-mfp)FPI] = 1/[1 - (1-m)(1-t)c]$
where Y = income, VA = value added, M = imports not going into exports	
Change in imports:	
$M1 - M0 = m1Y1 - m0Y0 =$	
$m1(Y0 + \Delta Y) = m0Y0 + m1\Delta Y$	
$(\Delta m/m0) m0Y0 + m1\Delta Y = (\Delta m/m0) M0 + m1\Delta Y$	
Evaluate: $(\Delta m/m0) M0$	10.13 This is what prices would have cost if no income increase
Evaluate: $m1 \Delta Y$	2.03 Increase of imports due to higher Y
Evaluate total	12.16 Total increase of Ms due to price and Y effects

Sources: Prepared by Daniel M. Schydrowsky using the following references: Schydrowsky, D. M. 1980. A Short Macro-Economic Model of the Indonesian Economy. In Gustav F. Papanek, ed. The Indonesian Economy. New York: Praeger; Schydrowsky, D. M. and Martha Rodriguez. 1982. The Vulnerability of Small Semi-Industrialized Economies to Export Shocks: A Simulation Analysis Based on Peruvian Data. In M. Syrquin and S. Teitel, eds. Trade, Stability, Technology, and Equity in Latin America. New York: Academic Press. pp. 125-141.

## Few “real” jobs added since 1997

Because Indonesian growth was less export-dependent than other countries, it was less vulnerable to the worldwide recession. But the slow growth of manufactured exports and the stagnation of labor-intensive manufactured exports since 1997–1998 meant that there was little demand for additional labor. From 1997 to 2008, roughly 22 million were added to the labor force, but only an estimated 5.6 million workers have found real, productive jobs (Table 3).<sup>4</sup>

Of the remaining 16.5 million, as a rough guess some 3.5 million found jobs abroad. Some 3 million were added to the unemployed, many or most from the middle class whose family could support them while looking for a “good” job.<sup>5</sup> Those too poor to survive long without work may be temporarily unemployed but mostly crowded into work- and income-sharing occupations, with close to zero marginal labor productivity, to share in the income without adding much to output.<sup>6</sup>

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<sup>4</sup> “Real jobs” means that they are created in response to labor demand. Workers are needed to increase output. “Work- and income-sharing” jobs are created in response to labor supply, in response to workers who need an income. They join the family farm or retail business and share in the work and income, though they add little or nothing to output or income. Or they join, say, the two others shining shoes or offering *otjek* (motorcycle rides) at an intersection, with the same number of shoes or rides and income divided among three rather than two. There are no statistics that clearly distinguish the two categories. Arbitrarily, we assume that all additions to the manufacturing labor force are in response to labor demand and all added to agriculture, services, or trade are not in real jobs. Both assumptions are likely to be wrong in some cases, but are closer to reality than assuming that agriculture, for instance, suddenly needed 5 million more workers as the result of the recession. Distinguishing between formal and informal sector occupations gives similar results.

<sup>5</sup> Defining discouraged workers as “unemployed” resulted in a spurious increase. Using the old definition to make the numbers comparable gives the lower estimate used here. Roughly half the unemployed are educated, most of them presumably from the middle class.

<sup>6</sup> In Indonesia, as in other countries with excess labor in agriculture and other occupations, employment statistics can be misleading. There is good evidence that there is “surplus labor” in agriculture, in the sense that several million could leave to work elsewhere with little effect on output. Indeed, in 1986–1997 when agriculture grew at 1.7% a year, adding over 20% to output in 11 years, employment increased by only 5%. Most likely, most of those were added in “Other Islands,” while the surplus labor is mostly in Java. There is other evidence from data on surplus labor at harvest time and from microeconomic studies of village economies (Gillian Hart, for example). See also the classical anthropological work of Clifford Geertz who called the phenomenon of work and income sharing “agricultural involution.”



**Table 3: Employment, unemployment, and disguised unemployment** (millions of workers)

<b>Change</b> (million)	<b>1985–1997</b>	<b>1997–2008</b>
Employed in manufacturing and construction <sup>a</sup>	7.5	2.5
Employed in transport, communication, utilities	3.3	3.1
<i>Able to obtain productive work</i> (a)	<u>10.8</u>	<u>5.6</u>
Agriculture	1.7	5.5
Trade and services	12.2	4.5
<i>Added to work- and income-sharing or underemployed</i> (b)	<u>13.9</u>	<u>10.0</u>
Unemployed (c)	2.3	3.1
Migrants—guesstimate (d)	1.3	3.5
Total added to labor force (each period) (a+b+c+d)	28.2	22.2
Added to unemployed, underemployed, migrants 1997–2008 (b+c+d)		16.6
Added to the labor force in 2009 and unlikely to a find job		2.0
Estimated job losses in labor-intensive exports alone		0.4
<b>Estimated added to unemployed and underemployed, 1997–2009</b>		<b>19.0</b>

<sup>a</sup> Includes mining, banking, and real estate.

Source: Authors' calculations from Statistics Indonesia (BPS), Sakernas, various years.

## Job losses and lack of job creation

The effect of the recession is likely to be that even fewer jobs than in the last decade will be created. Most of the 2 million who are joining the labor force every year will be underemployed. The decline in labor-intensive manufactured exports in four major industries (textiles, garments, footwear, and furniture) means that an estimated additional 0.4 million workers are losing their jobs.<sup>7</sup> Other manufactured exports also declined in the first quarter of 2009 and are likely to add to the rolls of the underemployed.

This means that Indonesia is likely to enter 2010 with 15 million workers added since 1997 to those in the country who are not

<sup>7</sup> Based on Table 4. For every \$1 billion in additional exports, roughly 240,000 additional workers were employed. Exports in 2009 were forecast to be down by \$1.6 billion relative to 2008. That would mean a decline of 384,000 in workers employed if the relationship is symmetrical.

productively employed, with little value added to the country's output and national income, without steady and decent jobs and reasonable income, many of them likely to be poor, and others vulnerable to falling into poverty at the slightest setback (Table 3).

### **Why the failure to create jobs since 1997?**

The failure of the Indonesian economy to create new productive jobs since 1997 is primarily due to stagnation in the export of labor-intensive manufactures, because Indonesia is no longer competitive in the world market for these goods.

#### **Decline in labor-intensive manufactured exports**

In the decade before the 1997–1998 crisis, Indonesia's manufactured exports were growing at the strong rate of 30% each year, doubling every 2.5 years (Table 4). In the decade after that crisis, they grew at a slow 8%. What is worse for employment of the unskilled is that labor-intensive exports, which had also grown at 30% before 1997, stagnated at 3% a year since then.

**Table 4: Annual growth in categories of exports, 1985–2008 (%)**

<b>Category</b>	<b>1985–1990</b>	<b>1990–1996</b>	<b>1996–2008</b>
Total exports	6	12	9
Commodity-based exports	13	13	10
Labor-intensive manufactures: textiles, garments, footwear, and furniture	45	17	3

Source: Authors' calculations from Statistics Indonesia (BPS) compiled by the World Bank.

Before 1997, the larger firms in these industries had hired 1.4 million workers. Between then and 2008 they actually reduced their labor force slightly. When one adds jobs in larger firms in other industries, producing primarily for exports, and in smaller firms, an estimated two-thirds of the difference in hiring in manufacturing before and after the 1997–1998 crisis is due to manufactured exports.

#### **Indonesia—A high-cost economy**

A major reason for the failure to create many jobs is that Indonesia is a high-cost economy, which makes it difficult to compete in the world market. The main reasons are as follows.

Infrastructure is expensive, in part due to the costs imposed by multiple islands. This is one of the most neglected features of economic analysis of Indonesia. Interisland transport is the backbone that links activities in different regions, but transporting goods from production sites in Java to the outer islands, or vice versa, is not cheap. The consequence is limited integration in the domestic market, which slows growth in domestic demand.

High costs are also due to poor infrastructure quality. Infrastructure has long been inadequate to support the rapid and efficient shipment of traded goods, except at high cost. But investment in infrastructure has sharply declined since 1997. As a result, poorly maintained and narrow roads mean that trucks can make only two trips a day, when they could do four or five on better roads. This nearly doubles the cost of transport. Ports, especially Jakarta's, are at the limit of their capacity and are therefore costly and inefficient. An erratic power supply has forced private firms either to accept periodic outages, or to invest in their own standby power at substantial cost. Private investors list high-cost infrastructure as the top obstacle to greater investment.

Corruption is another major element in high costs. Indonesia has been ranked as among the most corrupt ever since rankings began. This imposes cost and risks. A corrupt judiciary is a special problem.

Furthermore, the country has a poor investment climate with costly and time-consuming procedures to get permits to invest or expand. Because decisions are often influenced by nationalist sentiments, discretionary regulations are especially worrisome to foreign investors.

In addition, costly labor regulation is a long-time complaint of all firms, especially foreign ones. And while Indonesia has achieved universal primary education well ahead of other large developing countries, it is far weaker in secondary and higher education. Technical and professional personnel are in short supply, and on average are of lower quality and therefore more costly than in India and some other countries.

Also, restrictions on imports (several thousand are listed on the customs website) have proliferated, making it costly, time-consuming, and risky to obtain imported inputs needed to produce exports; and there are few special incentives for exporting. This is a special problem for exporters who need to obtain imported inputs quickly and with no risk of delays if they want to avoid maintaining costly inventories.

Finally, Indonesia's reputation has lagged reality. Foreign investors consistently give it low marks for stability, violence, and political risk that it deserved years ago, but hardly deserves at present. The deterioration in the infrastructure since 1997 is real but so is the improvement in dealing with corruption and in political stability.

### **The end of low labor costs since 1997**

The high costs in all these respects have been compensated for in the past by low-cost labor, but since the 1997–1998 crisis it is no longer acceptable for labor to compensate for them by its own low income and limited labor rights.

First, labor regulations are more effectively enforced by union power, workers' political power, and more sympathetic government officials. Smaller firms are either exempt or find ways to evade the regulations. But since exporters are disproportionately larger and foreign, they find evasion difficult.

Second, minimum wages are more effectively enforced by the same mechanisms, which seem to have pushed up even the wages of some workers not covered by them. In the 8 years of rapid growth of labor-intensive exports (1984–1992), rupiah agricultural wages did not quite double. In the last 8 years, they more than tripled, doubling in just the last 4 years. And as of May–June 2008, there was a sudden doubling of the nominal wage, mysteriously ascribed by Badan Pusat Statistik (BPS or Statistics Indonesia) to a change in base year. The average industrial wage for unskilled workers rose more than five times in the decade after the crisis.

Third, Indonesia has more than a touch of “Dutch disease.” The rapid rise in wages would not have mattered much to exporters or to those competing with imports if the exchange rate had kept pace. But rather than depreciating to match rising wages, the rupiah appreciated after 2001 because

- The world commodity boom benefited Indonesia disproportionately because of its large commodity exports, especially from 2004 to 2008. Commodity exports were \$31 billion in 1997 but \$96 billion in 2008, two-thirds of the rise due to higher prices and one-third to increased quantities.
- Foreign exchange flowed into the country in response to interest rate differentials: investors or speculators could borrow at close to 0% in Japan and invest in Indonesian government bonds with a yield of 8%–10%. As long as the rupiah did not lose value, investors gained a virtually risk-free return of 7%–8%, and with no need for any expenditure on research or due diligence. And since the rupiah, far from losing value, actually gained, their return could be a handsome 15%–18%, almost risk free. Indeed over most of the period, whenever the rupiah declined a bit, various officials, including the governor of the central bank, would assure investors that the decline would be reversed before too long. The rising rupiah also

made investing in stocks and bonds more attractive and those investments further swelled the flow of foreign exchange.

In fact, Indonesia's central bank, unlike those of many other countries in Asia, did not push against the appreciation of the rupiah but tended to encourage it. It used the standard tools of central bankers in market economies not to keep the country's exports and import-competing goods competitive by weakening the rupiah, but to strengthen it. That helped in combating inflation and in servicing the foreign debt of both the public and the private sector. But the "strong rupiah" meant a weak economy, as the exchange rate undermined the competitiveness of both exporters and the large number of industries competing with imports.

From a level of Rp10,200/\$ in 2001 the rate appreciated to as much as Rp8,600/\$, and in the second half of 2009, it was at Rp9,350–Rp10,000/\$. So while the rupiah wage has gone from 7,000 to 21,000, the exchange rate has actually appreciated by 5%–8%, aggravating the cost effect. As labor costs have risen, it has become less attractive for investors to produce in Indonesia or export from Indonesia. The dollar agricultural wage has gone from \$0.70 during the period of rapid export growth, 1988–1992, to \$2.24 in July–October 2009; even after adjusting for the decline in the value of the dollar, it has doubled since the period of rapid export growth to July–October 2009 (Table 5). The industrial wage has also risen rapidly to more than double what it was in the late 1980s in nominal terms, and 50% higher after adjusting for dollar inflation.

Rising Indonesian wages would not matter if wages in other Asian countries had risen comparably. But this is not the case for all countries. The International Labour Organization (ILO) website indicates that from 2006 to 2008, wages in the People's Republic of China (PRC) increased by 55% in dollar terms, but Indonesian wages more than tripled; and that the hourly labor cost in the garment sector is higher than in several competing countries: Indonesia \$0.50, Viet Nam \$0.38, Pakistan \$0.37, and Cambodia \$0.33.

### **High labor costs' effect on manufactured exports**

As a result of high costs, especially for labor-intensive manufactures, Indonesia has lost some of its competitiveness. Exports have slowed and domestic producers have struggled to compete against imports. The recession has aggravated the problem.

The level of wages in dollars and yen has a powerful influence on the rate of growth of manufactured exports.<sup>8</sup> Table 5 shows unskilled

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<sup>8</sup> These averages exclude the period of the Asian financial crisis.

**Table 5: Wages in dollar and yen for unskilled and semiskilled labor in agriculture and industry, 1976–2009**

Period	Daily agricultural wage		Deflated by US CPI (2007=100)		Manufactured exports	Period
	\$	Yen	Agric. wage (\$)	Industrial wage (\$)	Rate of growth (%)	
1976–1979	<u>0.4</u>	<u>100</u>	<u>1.41</u>		46	<u>1976–1979</u>
1981–1982	1.1	247	2.33	32.4	6	1979–1982
1984–1985	1.0	241	1.94	29.4	25	1982–1985
<u>1988–1992</u>	<u>0.7</u>	<u>93</u>	<u>1.15</u>	<u>20.1</u>	<u>40</u>	<u>1985–1992</u>
<u>1995–1996</u>	<u>1.1</u>	<u>112</u>	<u>1.48</u>	<u>23.6</u>	<u>14</u>	<u>1992–1996</u>
1998–2001 <sup>a</sup>	0.7	77	0.81	11.6	7	1996–2001
2004–2007	1.5	165	1.51	24.9	9	2001–2007
2008	1.9	198	1.86	26.3	10	2007–2008
July–Oct 2009	2.2	203	2.18	29.6	–14	Jan–Oct 2008– Jan–Oct 2009

CPI = consumer price index.

a. The period 1998–2001 is excluded from the analysis. It was a time of chaos, rioting, and unrest when buyers refused to source in Indonesia because of turmoil. Factory owners fled and shut factories. However low the wage, exports dropped. Periods in italics and underlined are when agricultural wages deflated by the CPI were below \$1.50. Other periods are when they were above \$1.50.

Notes: Industrial wage is the weekly wage for workers below the level of foreman and technician. The agricultural wages are a consistent estimate covering the same provinces and activities. They therefore differ from some published series.

Source: Calculated by G. Papanek from official government statistics.

workers' wages deflated by the United States consumer price index to take account of declines in the value of the dollar. When wages were low, manufactured exports were increasing at a remarkable rate of 34% a year, doubling in value in roughly 2 years. When dollar and yen wages were high, manufactured export growth averaged only 10% a year.

With the increase in labor costs, with little or no concomitant decline in other high costs, labor-intensive manufactured exports and manufactures competing with imports have declined in competitiveness. As a result, the export of manufactured goods has stagnated and with it, employment in manufacturing.

### **3. Dealing with the recession and with chronic underemployment: Social protection and antipoverty programs<sup>9</sup>**

Over the years, there has been a proliferation of programs to help the poor and to provide some protection during periods of economic downturn, most notably as a response to the 1997–1998 crisis and again during the current recession. They fall broadly into three groups: against structural poverty, breaking the intergenerational poverty chain, and dealing with economic shocks. Of course, these are related and many programs have an impact on all three but their principal purpose varies.

#### **Tackling structural poverty: The National Community Empowerment Program**

##### **Self-targeting, community-driven infrastructure development program**

The National Community Empowerment Program (PNPM) has the largest number of beneficiaries, and is generally considered one of the most effective poverty-reduction programs, for the following reasons:

- It is self-targeting by setting wages low enough and requiring physical labor so only the poor want to participate.
- It can efficiently and honestly administer a large program because most decisions are delegated to a local community committee.
- Funds go directly from the Treasury to the local body.
- Efficiency and honesty are promoted by requiring transparency and publicity for plans and funding, and by several independent monitors.
- The poor and women are given a large, mandated role.

As a result, the program builds local structures at lower cost than the government's public works program.

##### **More than half the benefit of PNPM from a long-term increase in income and employment**

Most employment programs help the poor by providing additional income directly from the program. These benefits last only as long as

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<sup>9</sup> This section summarizes Basri and Papanek (forthcoming).

the program is funded. PNPM, however, builds infrastructure, which can permanently increase economic activity: more than half the PNPM benefits derive from these second-round effects.

### **Community-driven, labor-intensive program as a social safety net**

The PNPM network can provide both temporary and permanent social protection, in several ways. First, by providing off-season employment on a permanent basis, PNPM can be crucial in helping the near poor from falling into poverty during periods when employment is very scarce.

Second, PNPM grant funding can be expanded as and where needed to mitigate the impact of the global crisis. It was used this way to some extent in the recession of 2008, when the program was expanded. It is only beginning to be used to mitigate the impact of local droughts, floods, or crop failures by increasing the regional provision for short-term employment. For PNPM to be fully effective as a social safety net, it will be important to vary the allocation of funds with changes in the economic situation, preferably automatically.

### **PNPM Generasi: Conditional cash transfers to communities for intergenerational poverty**

PNPM Generasi differs from regular PNPM. PNPM emphasizes directly productive investment in infrastructure; PNPM Generasi encourages education and preventive health measures. Both are community driven, with priorities decided by the community. PNPM Generasi funds community action rather than family decisions, providing technical assistance and block grants to communities. But in 2009, it covered just 8.4% of the total poor. The World Bank (2009) argues that it has had a positive impact on junior school enrollment and attendance, and attendance at health facilities.

### **Rice subsidy program (Raskin)**

The rice subsidy program was one of the first poverty programs. The poor were to receive a basic ration of rice at one-fourth to one-third of the market price—a huge subsidy. But it had serious weaknesses.

First, targeting was poor. A World Bank (2008) study concluded that only 21% of the poor benefited. Another study (Sumarto et al. 2008) showed that 83% of the poor benefited but that about one-third of the nonpoor also received benefits.<sup>10</sup> Second, most of the

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<sup>10</sup> The discrepancy between the two findings will be addressed in Basri and Papanek (forthcoming).



beneficiaries received only a fraction of the 10–20 kilograms (kg) (at different periods) that they were supposed to receive. Indeed, in East Indonesia where subsidized rice rations were equally distributed to all in the village or subdistrict, the average amount of subsidized rice received by the poor was more like 4 kg than 10 kg. Finally, on average, the poor paid 25% more per kg than they were supposed to.

As a result, the implicit subsidy was equivalent to less than 4% of income, too little to make much difference. Different studies have different estimates, but all conclude that the targeting was poor, undermining the effectiveness of the program.

## **Breaking the intergenerational poverty chain**

Three programs emphasize long-term human resource investment in addition to PNPM Generasi.

The School Operational Assistance (BOS) is aimed at providing assistance for schools so that student fees can be removed while still maintaining the quality of education. A study by the World Bank concludes that BOS targeting is less effective than direct cash transfers. While the largest group of beneficiaries (38%) were poor or near poor households, over 60% were nonpoor.

The Community Health Guarantee (Jamkesmas) program is targeted at 76.4 million people, including poor and near poor. The World Bank (2008) shows that this program reached 48% of poor households, covering inpatient and outpatient services at community health centers (Puskesmas) and at government hospitals, the revitalization of public health centers (Posyandu), and nutrition improvements. The World Bank (2006) showed that the program has many problems:

- Targeting is problematic.
- There are no incentives for community health centers to improve quality for the poor.
- The program does not enable the poor to utilize nongovernment providers, reducing the poor's access to local health services.
- Local government has no role in planning, implementation, and monitoring.

In 2007, the government began implementing—on a pilot basis—the conditional cash transfer program *Keluarga Harapan* (PKH). Recipients—extremely poor households—have to send their children to school, at least until they graduate from middle schools at about age 15, and ensure that their children and pregnant women have regular checkups. PKH assists families and is planned to be scaled up. In 2015, it is to reach 6.5 million extremely poor households,

up from 0.7 million in 2008. The government has recruited 3,069 social workers, each covering around 250 households. For 2008, this program required some Rp1.3 trillion (\$130 million), a relatively small amount.

## **Dealing with shocks**

### **Direct Cash Transfer Program**

The Direct Cash Transfer (BLT) Program was introduced when fuel subsidies were sharply reduced to compensate the poor for any increase in their costs. It reached approximately 19.1 million households in 2005, giving a flat rate benefit equal to about 19% of the income of the poor, large enough to help but small enough not to reduce the incentive to work. World Bank (2008) data showed no significant difference in working hours between BLT beneficiaries and non-beneficiaries.

### **The credit guarantee program**

The credit guarantee program is to benefit small enterprises (maximum is about \$500). It was launched too recently for any evaluation, but based on experiences, it is unlikely to make a big difference. It poses a dilemma: if the agency guarantees any loan, losses are highly likely because incentives are perverse. Neither the bank nor the borrower has a strong incentive to collect or pay the debt. Or the agency investigates every borrower and supervises repayment, in which case administrative costs become unsustainable. Moreover, government credit programs, in Indonesia as elsewhere, have a poor collection record: borrowers do not expect to pay and believe that government will not foreclose their assets.

## **4. Policies to deal with recession and poverty**

To deal with the recession and the longer-term problems of poverty and underemployment and unemployment, various approaches have been suggested and are being tried in addition to an expansion of the Social Protection or Social Safety Net (SSN) programs.

### **Expanding domestic demand—Not a magic bullet**

A widely touted solution to Asia's recession-induced economic woes has been the substitution of domestic demand for foreign demand. The prescription is that as foreign demand, and therefore exports, declines, countries can stimulate domestic demand especially domestic consumption.

### **Stimulating domestic demand**

Stimulating domestic demand will improve the well-being of the domestic consumer and in a second round, stimulate domestic production. This prescription seems to be the latest “Washington Consensus.” In the 1950s, the magic bullet was import substitution; this gave way to export promotion, to be followed now by consumption–expansion.

If only it were that simple! If every country can increase growth by stimulating domestic consumption, all countries could rapidly grow and quickly join the ranks of the middle-income countries and then of the rich countries. Unfortunately, this is a case of generalizing from one country—the PRC—or a handful of countries of Asia as a whole. The usefulness of this prescription for countries like Indonesia is limited because increased domestic demand and/or consumption quickly spills over into increased imports.

### **The balance-of-payments constraint**

Indonesian import intensity was estimated at 23% before the recession reduced import prices, and 20% after the decline in import prices (Table 2). If one uses 20% then for every \$1 billion of increased demand, Indonesian imports will increase by \$200 million. If Indonesia is to increase its rate of economic growth from the 4% forecast in 2009 to 8% over the longer term, that means an increase in demand of \$17 billion and an annual increase in imports (or a reduction in exports) of \$3.5 billion.

In 2007, Indonesia was running a balance-of-payments surplus of \$10 billion on current account, earning more foreign exchange than it was spending, and had reserves equal to 5 months of imports. Indonesia therefore that year had a margin for expanding demand and absorbing the resulting increase in imports. However in some years, including 2008, there was no significant surplus. Its current account is vulnerable to shifts in sentiment, which affect various financial transactions. Because of the experience of the crisis of 1997–1998 when there was massive capital flight, both Indonesian and foreign investors are extremely skittish about the possibility of a repeat. Therefore, the government and the central bank are worried that any significant decline in foreign exchange reserves may result in panic. They fear that the resulting capital flight would drive the exchange rate to the kind of levels seen in 1997–1998, going from the present Rp9,500/\$ to Rp15,000/\$ or more. So there are severe limits on the extent to which Indonesia can draw down its reserves to increase foreign exchange expenditures for financing increased imports.

It is sometimes argued that if the fiscal stimulus is focused on consumption, the impact on imports is relatively small because imports

are only 8% of consumption. However, this ignores the import of intermediate products that go into production of consumer goods (such as the cotton to produce cloth and the fuel to transport them). Once indirect imports are taken into account (via an input–output table) the import content is about 20%, not 8%. Expanding consumption therefore does not solve the problem of the balance-of-payments constraint for any stimulus package—Indonesia still requires increased exports to pay for the increased demand for imports.

However, concerted stimulus in major Asian economies would substantially release that constraint. Since one country's imports are another's exports, if most countries stimulate the economy, albeit to a different degree, all of them could afford a much larger stimulus than otherwise (see *Increasing Asia-wide growth: Concerted stimulus in major countries*, p. 46).

The argument for stimulating domestic demand is extremely appealing, especially while global demand and trade are weak and investment flows to developing countries have not recovered. And Indonesia clearly has continued scope for some stimulus. But if the economy is to achieve a high rate of growth—needed to put to productive use its large backlog of underemployed—it needs to confront the issues that prevent the economy from growing more rapidly in the long run: the high-cost economy and regulatory uncertainty among them. It is crucial to implement reforms to increase productivity and reduce high costs to make the economy more attractive for investment and job creation (Basri and Rahardja 2009).

In short, Indonesia is not like the PRC, which had reserves equal to 20 months of imports and tight controls over capital flows. The PRC could, if it wanted to, run a balance-of-payments deficit for several years with no serious problems. But Indonesia cannot expand domestic demand significantly without increasing exports in order to pay for the demand that will spill over into imports. Any medium-term program to substantially increase the rate of growth will have to include provision for some increase in export earnings. *The balance of payments imposes a binding constraint to an increase in the rate of Indonesian growth based on expanding consumer demand*, but it is a constraint that accommodates the size of stimulus that is currently contemplated and that will expand demand by only \$6.5 billion (Table 1). Indeed, it might be able to accommodate a somewhat larger stimulus.

### **Expansion of labor-intensive exports for generating productive employment**

Given the need for improving infrastructure, increasing expenditures on investment rather than on consumption would be logical. However, that will have a higher foreign exchange component and Indonesia

will reach its balance-of-payments limit more quickly. Moreover, traditional infrastructure investment does not generate a massive increase in jobs because of its reliance on machinery—and neither does an expansion of consumer demand that results in an increased consumption of durable goods. Construction of small residential houses is more labor intensive. So the pattern of increased demand matters in terms of job creation.

The expansion of exports therefore may not only be dictated by the need to pay for increased imports, but also by the imperative that growth be labor-intensive. A high proportion of any significant increase in labor-intensive production will need to be exported. There is little scope for import substitution in such fields as textiles, garments, furniture, footwear, spices, fruits and vegetables, automobile parts, and electronic and electrical goods. The domestic market will grow only slowly, with population growth and the increase in income.

Indeed, the difference between 5.4 million new jobs in manufacturing in 1985–1997 and only 1.3 million in 1997–2008 is, as already noted, mainly due to a difference in the growth of four labor-intensive and export-oriented industries (textiles, garments, footwear, and furniture). We have employment data only on the medium and large firms, but there is no reason to think that the story is different for smaller firms. For these firms, there is a striking difference between the addition of 1.4 million jobs in the 11 years before the Asian financial crisis and a small loss of jobs in the following 9 years. In the former period, their exports grew at nearly 30% a year in dollar value, while after the crisis, growth was less than 3%.

### **Gaining maximum benefit from economic stimulus: Minimizing impact on imports, maximizing output and employment**

If the stimulus is concentrated in sectors with a low import content and therefore a higher multiplier, it is possible to have a larger stimulus before running up against the balance-of-payments constraint. Consumption usually has a lower import content than investment and the poor consumer uses a lower proportion of imports than the middle class, even after taking account of imported intermediate inputs.

But does the additional demand lead to additional production? In countries that produce their own food and other consumer goods, and where the supply of those goods is elastic, the stimulus has double benefits—more production and employment as well as more consumption—and the balance-of-payments constraint may not be serious. While Indonesia has some idle capacity in manufacturing consumer goods as a result of the recession, additional production of

textiles, garments, shoes, vegetable oil, and so on either requires more imports (cotton) or implies fewer exports (leather for shoes). And in food production, there is little capacity that is idle for lack of demand at current prices. Increased demand for rice, wheat, and sugar results in increased imports or fewer exports (in years when there is a rice surplus).

So a key question is the size of the second-round effects of the stimulus package: To what extent does the stimulus increase production which generates further jobs for low income people whose increased spending produces third-round benefits? Increasing investment in infrastructure can benefit Indonesia's competitiveness in the world market. That benefit can outweigh their higher import content and make the investment worthwhile. Consider the case of roads: lowering transport costs may make domestic production more competitive with imports, as well as more exportable, and may therefore have a very large second-round effect, indirectly boosting exports. This will occur even if roads have a higher import content than consumption.

Labor-intensive, community-driven infrastructure development programs that employ primarily the poor, such as PNPM, are even better for reducing the infrastructure bottleneck as well as creating income through employment. By lowering costs of transport, they facilitate production of higher-value, more labor-intensive goods (such as vegetables instead of rice or cassava). The increased demand that is generated by the program comes primarily from the rural poor. It is therefore overwhelmingly demand for food, cloth, and locally produced goods and services. For these there is idle capacity (haircuts, primary and junior high schooling, *betjak* or bicycle rickshaw rides), and/or their import content is low. Plastic goods are made from stock produced in Indonesia and turned into goods there; cotton cloth requires imported cotton but all the processing can be done in Indonesia in factories with idle capacity. The increased demand therefore generates limited demand for imports.

Similarly, school feeding to benefit mainly poor children can have low import content and, if used as part of a program to stabilize the price of particular goods, can lead to increased production. A small depreciation in the rupiah encourages domestic production and reduces the import content of a wide variety of goods and would, therefore, permit a larger stimulus.

### **The limits of development based on commodity exports**

A major reason for the stagnation of Indonesia's labor-intensive manufactured exports was that the country suffered from "Dutch

disease.” Indonesia was a major beneficiary of the commodity boom of 2004–2008. But the resulting increase in the value of the rupiah reduced the competitiveness of labor-intensive exports. Some analysts downplayed the importance of the exchange rate and the stagnation of labor-intensive exports and import-competing goods. They argued that the country’s comparative advantage was as a commodity exporter. Even if commodity prices declined from their high point, their argument went, they would remain above their historical levels because of the growth of the PRC and other economies. And with some adjustment in policies, Indonesia could compensate for lower prices by greater quantities. A commodity-led strategy, they argued, would generate enough income to fund a large expansion of nontraded goods production, especially residential and other construction, sufficient to provide employment for the growing labor force.

But that argument is a weak one. First, it starts from the premise that Indonesia is a resource-rich economy and could follow in the footsteps of countries like Australia that became wealthy thanks to a commodity-led strategy. But on a per capita basis, Indonesia is not resource rich. Its resource endowment is favorable compared to the PRC or India, but not compared to Malaysia, much less Australia. Current commodity exports (admittedly an imperfect gauge of resource endowment but an indication, nevertheless), show Malaysia at 6 times Indonesia’s per capita commodity exports, Australia at 12 times, and even Thailand at 2 times that of Indonesia. Indonesia can surely expand the quantity of minerals that it exports and gain some benefits in terms of taxes and other income, but for commodity exports to drive the economy would require a wholly unrealistic expansion.

Second, commodity development does not provide much employment: an increase in exports of coal and other minerals of \$10 billion, a 50% increase, would create only 250,000 jobs, equal to what \$1 billion of labor-intensive manufactured exports would create (Table 6). It would also result in some indirect jobs, but since much of the income would go to foreigners or to the wealthy, the indirect benefits would also be limited. Commodity-led growth would still leave millions underemployed and poor, fostering an unequal distribution of income.

Finally, most natural resources are concentrated on some regions of the outer islands, while the bulk of the population and most of the poor and underemployed are on Java and Bali. A commodity-led strategy would lead to grossly unbalanced growth.

**Table 6: Labor-intensive and non-labor-intensive exports**

Sector	Period	Increase in exports (\$ billion)	Increase in quantity (\$ billion at fixed prices)	Increase in employment (1,000)	Employment for every \$ billion of increased exports (1,000)	
					Current	Constant
Coal	1995– 2006	5.0	4.6	58.5	12	13
Other mining	1995– 2006	6.0	1.6	259.0	43	162
Textiles and garments	1990– 1995	3.3	2.8	800.0	242	286
Motorcycles and cars	2000– 2006	4.7	5.0	171.0	36	34
Chemicals and fertilizer	1990– 1996	1.2	1.0	60.0	50	60

Source: Authors' calculations; increase in exports from BPS annual export data; employment from BPS Annual Industrial Surveys.

## 5. Regaining market share: Enhancing Indonesia's competitiveness

### The need and the potential

#### Regaining a share of the world market for labor-intensive manufactured exports

Ultimately, any credible strategy needs to include the truly rapid growth of labor-intensive exports. Some social protection programs, most notably PNPM, will create productive employment; so will a stimulus program for domestic consumption and investment; and more rapid growth of commodity exports will also contribute, especially indirectly. But they are insufficient to reduce the backlog of over 15 million additional unemployed and underemployed, while giving productive employment to the 2 million who join the labor force each year. This is a huge underutilized resource. Shifting them from low- or non-productive jobs to useful employment will result in a huge gain in national income.

Regaining the 0.5% of world market share that Indonesia once had would increase Indonesia's textiles and garment exports by \$3 billion a year, adding roughly 750,000 workers (Table 6) and more as the world market grows. This would reemploy those who have lost



their jobs due to the recession and add some more. Between 1990 and 1993, Indonesia gained nearly a full percentage point in market share. Duplicating that feat would add 6 million productive jobs. But even then, Indonesia would be a small player with 3.5% of the world market. No individual competitor would be massively harmed, making such an achievement eminently feasible.

The same factors that would enable Indonesia to regain its share of the textiles and garment market would also apply to its share of the furniture and shoe markets, where it was once a major competitor. The rapid growth of Indonesian exports in the labor-intensive, simple-technology industries occurred from 1985 to 1992, even though some major competitors entered the world market at the same time.

In 2008, Indonesia also exported some \$36 billion of miscellaneous manufactured goods, up from just \$9 billion in 1996. While some of these required few workers (such as fertilizers, chemicals, and iron and steel) others employed a substantial number of unskilled workers (such as toys, kitchenware, and plastic products). If there are incentives for the export of labor-intensive goods, some of these miscellaneous manufactures will also grow more rapidly.

### **Competing more effectively with imports**

Not only has Indonesia lost market share for labor-intensive exports, some of its manufacturers have also lost the battle with imports, including illegal ones. High labor costs, and high costs more generally, make manufacturers producing for the domestic market vulnerable to competition from imports. Tariffs help but smuggling is a major problem in a country like Indonesia with long coastlines and substantial corruption. The policy changes designed to help exporters, especially a lower currency, would enable domestic producers to compete more effectively with both legal and illegal imports.

### **The potential for agricultural exports and tourism**

There remains considerable potential for expanding agricultural exports. The big success story in this category has been palm oil (from \$1 billion in 1996 to \$15 billion in 2008), but there are real questions on whether it can continue to grow rapidly given environmental concerns. But no such concerns attach to most other products. They have grown from \$5.5 billion to \$14.5 billion over the same period. Among them, fresh fruits, flowers, and some vegetables have big potential from a tiny base. Traditional products, including rubber, spices, and beverages, can also grow and provide jobs. Lastly, Indonesia still has unexploited tourism potential, which is inherently labor

intensive. Bali is a success story, but the rest of Indonesia remains woefully underdeveloped in this respect.

### **Feasible growth**

Successful countries, including Indonesia at times in its past, have expanded labor-intensive exports at 20%–30% a year. Indonesian textiles, garments, shoes, and furniture grew at nearly 30% a year from 1985 to 1997, despite slower growth toward the end of the period. (Even quantities, not just values, grew at nearly 25% a year during this period.) Other commodities that had such high growth rates included exports of shrimp, another labor-intensive product, and miscellaneous manufactured products.

This then poses the question: How can Indonesia regain its ability to compete in the world market?

### **Breaking the major constraint: Achieving competitive costs**

Indonesia can regain competitiveness for labor-intensive exports and for domestic producers competing with imports if it can lower its costs. To achieve that requires making small advances in a range of areas, rather than focusing on a single factor involved in high costs.

### **Taking advantage of reduced risk and uncertainty, good economic performance, and declining competitiveness of others**

Indonesia's ability to regain some of its lost share of the world market is higher currently than it has been in the recent past because of the country's stronger position in two key respects.

First, its image has improved. Historically it has been seen as unstable, with a high risk of political problems and unrest. The successful election and the overwhelming mandate of the president have changed perceptions. Paradoxically, even new terrorist incidents have had some positive elements in terms of Indonesia's successful program to deal with terrorism. Additionally, the fact that Indonesia has weathered the recession better than much of the region has been a strong plus.

Second, labor costs in the PRC—the most formidable competitor in labor-intensive exports—are rising. In 2007 and 2008, PRC yuan wages in coastal regions rose rapidly and new labor-protection measures have also raised labor costs. In addition, the yuan appreciated almost 20% against the dollar and more against other currencies from 2005 to 2008. Wages in dollar terms therefore increased about 60% from 2006 to 2008 (Table 5).

### **Reducing the high cost of infrastructure services**

*Building low-cost, local rural infrastructure—PNPM.* Attention has been focused on the need for major national infrastructure development. But there is considerable potential for increased income and employment from improved village infrastructure. The rural part of the PNPM program for labor-intensive development of village roads, irrigation, drinking water, and so on has shown an average economic rate of return of 70% (Papanek 2007). By allowing motorized transport to reach villages, it facilitates a shift to high-value vegetables from lower-value rice and cassava, for instance. By providing temporary, off-season employment to an estimated 24 million when the program covers the whole country (in 2010), it also makes a significant contribution to reducing underemployment and poverty.

Better village infrastructure also means lower costs for exporters of such agricultural products as cocoa, tea, and spices. Equally important, it increases the potential for developing new agricultural products: flowers, especially orchids; tropical fruits; and some vegetables. Finally, it facilitates reducing Indonesian dependence on imports. If a cold chain is established for exports of fresh fruits or flowers, that can also foster production of animal products that are now imported, such as milk. Irrigation built by PNPM permits double and triple cropping, reducing the years when the country needs to import rice and increasing the years when it can export.

*Improving the national physical infrastructure: Implementation capacity.* There is a well-documented contribution to high costs from poor roads, power outages, and inadequate ports. Well-functioning infrastructure can be instrumental in unlocking the door to prosperity for many regions. It is not only relevant to international competitiveness, it is also crucial to integrating the domestic economy. That integration should have top priority, including development of national roads, ports, interisland transport systems, and competitive freight industries. A reasonably efficient logistics system should be in place to interconnect businesses at different levels of operation in different parts of the country.

Indonesia is lagging way behind competitors in infrastructure, primarily because of limited implementation capacity. This has been aggravated by the anticorruption campaign: officials are afraid to award contracts without innumerable time-consuming safeguards, for fear of being suspected of corruption. Transparent bidding by private investors is one possible solution with respect to some parts of infrastructure. In some countries, bonuses to contractors for early delivery and below-estimate final costs have helped.

*Human and institutional infrastructure.* As the physical infrastructure is high cost, so are some aspects of the human infrastructure.

Universal primary education was a significant achievement of the Suharto years, and in quantitative terms, secondary and tertiary education is at par with other Asian countries. But there are two big differences between Indonesia and countries like India.

First, the great majority of India's secondary schools and universities emphasize memorization and rote learning, as do those in Indonesia. But India has a substantial elite educational system, which caters primarily to upper-income groups. However, it does accommodate many of the brightest from the middle class and even some from poorer families. The Indian institutes of management and of technology are at par with some of the best universities in the world, as is the Delhi School of Economics, and a handful of similar institutions. While these elite universities, and comparable secondary schools, are a small fraction of the whole educational establishment, the total numbers that graduate from these schools are sufficiently great to

- staff all the enterprises that need the technical and managerial competence they impart;
- provide for a large, growing, and dynamic outsourcing sector; and
- produce graduates to export a substantial number to the high-tech corridors in the United States and elsewhere. A large and increasing proportion have returned to India, and have been among the most active entrepreneurs in the high-tech field there.

Indonesia also boasts of some well-established elite universities and there have been substantial improvements at both the university and secondary-school level, but few, if any, would rank with the top international universities. In any case, their number of graduates is quite inadequate for the country's needs. They are handicapped by the tendency of many secondary schools to teach their students not to think independently, and to unquestionably accept authority.

No other Asian country has the same quality and numbers as India's higher education, but the PRC has been aggressively developing its university system. Bangladesh and Pakistan have a much broader base in English-speaking competence, and on a smaller scale, have benefited from similar elite systems of secondary and tertiary schools as India's. Indonesia's secondary and university system is still quite inadequate for the needs of a large country. Weak education raises costs, especially for exporters trying to compete in the world market.

The second big difference is that Indonesia lacks the tradition of entrepreneurship and professional management that is strong in

India. India has families that have operated large international firms for 2 centuries, firms that have had to innovate and become more professional to stay competitive. Other South Asian countries have had 40–50 years of such experience. Indonesia’s businesses ventured into the world market in a large way less than 20-odd years ago. This, too, is a handicap.

Only time will cure some of these problems. But Indonesia also lags behind some competitors in establishing huge, government-supported programs to strengthen education by, for example, massive scholarship programs for foreign studies, and by using temporary arrangements with foreign institutions to upgrade training in Indonesia and, above all, to enforce world-class standards.

### **Improving the investment climate**

A great deal of progress has been made, but Indonesia still ranks near the bottom of many ratings, because other countries have made progress as well. This is one respect where there are cheap, quick gains to be had in reducing costs—if bureaucratic obstacles can be overcome.

### **Long-term changes: Corruption and governance**

Again there has been great progress, but Indonesia still continues to rank near the bottom. Quick gains can come from reducing the discretion of officials that gives them their power to collect “rents.” For instance, one can eliminate the need for permits to employ foreign workers, but impose a tax that increases with their skill and training. That way there is an automatic incentive to use Indonesian workers and to train them if needed, but not an opportunity for bribes to get a work visa.

### **Lowering the effective cost of labor**

After all other steps have been taken, there is no getting around the need to lower the cost of labor if Indonesia is to regain its competitiveness in labor-intensive exports. There are, after all, millions of workers who want jobs in manufacturing, but cannot get them, because Indonesia cannot effectively compete. Other millions are forced to migrate and endure poor conditions to get a job. Four main steps could make a difference.

*Dealing with “Dutch disease”—effective exchange rate management.* In 2008, the dollar at one time traded at Rp12,000 and was above Rp11,000 for 5 months. This rupiah depreciation produced none of the feared catastrophes. There was no panic, and no collapse of the exchange rate. But it slightly lowered the dollar wage cost, despite an increase in the rupiah wage. The rupiah has since appreciated by over

20%, or 15% if one compares multiple months. That translates into an increase in the cost of labor for exporters and those competing with imports by 15%–20%. Bank Indonesia needs to recognize that a strong rupiah has been expensive for Indonesia—it has been a major factor undermining exports as the principal engine for good jobs.

This does not mean that Indonesia should abandon a market-determined exchange rate and return to a fixed or managed one. Nor is it to advocate a massive devaluation. Rather, this is an argument for doing what virtually every other country in Asia already does, namely, stop pushing for a strong domestic currency (and if intervening to stabilize it, stabilize it downward, not upward); and welcome a decline in the value of the rupiah as increasing Indonesian competitiveness, rather than treating it as a catastrophe to be reversed as soon as possible.

But, above all, effective exchange rate management means operating monetary and fiscal policy to benefit the real sectors, to benefit production and employment, and not primarily to benefit those who borrow abroad or who gain from the spread in foreign and Indonesian interest rates. If speculators fear that the rupiah may decline, that will tend to discourage short-term inflows of foreign money and contribute to reversing the inflow of short-term money and, with it, the appreciation of the rupiah.

If the rupiah's depreciation is too great, it will cause problems for companies and banks with a large proportion of dollar-denominated debt (if their income is in rupiah). Depreciation can also worsen their balance sheets. Exporters have no problem because their earnings increase as well, and usually more than their debt service obligations. Because interest rates have been significantly lower outside Indonesia than inside, there is a substantial amount of foreign currency-denominated debt. When the rupiah reached Rp11,500–Rp12,000, it did not seem to create major problems. If problems do arise, government-assisted debt renegotiation may be necessary to deal with them. But the benefits of a gradual depreciation of 10%–20% outweigh these costs.

*Compensate for any significant devaluation by stabilizing the prices of staple foods.* A significant devaluation of the rupiah tends to increase inflation. It automatically protects domestic producers from competition by raising the cost of imported goods. For staple goods consumed by the poor, price increases can be minimized by eliminating tariffs (on rice) or quantitative restrictions on imports. If neither of these measures is possible, temporary subsidies of goods that loom large in the expenditures of the poor, such as soybeans, may be a price worth paying to reverse the decline in labor-intensive manufacturing.

*A grand national pact? Minimum wages and labor regulation.* An attempt in 2009 to impose limits on minimum wage increases failed

in the face of strong opposition from workers. It may be more successful to foster a “grand national pact”—an agreement among workers, employers, and the government—under which workers agree to moderate demands for higher minimum wages and accept a modification of rules on hiring and firing. This would reduce their costs in return for job guarantees by employers and for preference on being covered by the social insurance programs that the government is establishing. Such pacts have worked in other countries. If a national pact cannot be achieved, provincial pacts might spur healthy competition among some provinces to attract investment.

*Training and technology transfer.* Another step that has helped in some countries is to improve labor productivity by a small training fee on exporters, or all firms in an industry.

## **6. Lessons for Asia: How countries differ in terms of the recession’s impact and appropriate policy responses**

### **Applicability and limits of Indonesia’s methodology**

The approach or methodology used in this paper can be applied to any country provided that the objective is similar: to quickly quantify the impact of economic developments outside the country on the country concerned, sacrificing the precision that would be gained from analyzing third- and fourth-round effects in order to produce results relatively quickly and in time to help frame policies to deal with the impact.

Table 1 provided a useful checklist of the major factors that need to be taken into account to include all major first- and second-round effects in the analysis. It should be especially useful in ensuring that two often-overlooked variables are taken into account: the benefits of a recession and second-round effects. We presented a simple macro model to estimate secondary effects (the multiplier), not included in most analyses of the impact of changes in the world market on Indonesia’s economy. Obviously, some factors will be of much greater importance in other countries than Indonesia, and some will be of much less importance.

Our approach is heavily dependent on using the initial impact of the crisis on various variables to forecast the ultimate impact. It therefore depends heavily on up-to-date information, which is difficult to obtain outside the country concerned. Despite extensive efforts, most of the data available from outside the various countries did not cover the first months of the crisis when we did the analysis 6 months later.

The approach we used is therefore most suitable for analysts within a country who can obtain current data not available on the internet.

## **The differential impact of the recession as a result of structural factors**

When using these findings for policy, it will be important to recognize at the outset that Asian countries fall into several categories as the result of structural differences, and that these differences affect policy recommendations in a fundamental way. Table 7 represents a first attempt at distinguishing such structural differences.

### **Trade dependence**

One of the lessons from the recent crisis is the importance of striking a balance between export orientation and the domestic economy. The appropriate balance, of course, differs among countries, largely because of differences in the size of the economy. International trade will have a smaller role in the economy of the larger countries, other things equal. Except in the smallest countries, the domestic economy is important in securing economic stability and boosting economic growth. The crisis again underscored the importance of developing at least a minimal amount of “structure” in the domestic economy, to avoid excessive dependence on trade and great vulnerability to external shocks.

From Table 7, one can conclude that there are at least two groups of countries in Asia with respect to the role of exports or international trade: those where exports exceeded 75% of the gross domestic product (GDP) and those where they were at 45% or below. We would expect that the decline in export earnings as a result of the world recession would hit the high exporters harder than those where exports were of less importance—again, other things equal. Indeed, it was argued earlier that exports at only 29% of GDP in Indonesia were one reason that the impact of the recession on that country was less than on its neighbors.

### **Foreign currency reserves and current account balance: The ability to fund an expansion of domestic demand**

The vulnerability to foreign shocks depends, of course, not only on the importance of trade in national income, but also on the ability of the government to act to counterbalance the impact of changes in the balance of payments. A rough measure is given by the size of the foreign exchange reserves and the size and sign of the current account balance. Here, the PRC is in a category by itself. Its foreign exchange reserves,



**Table 7: Differences among Asian countries relevant to policy for dealing with the 2008–2009 recession** (\$ billion, data for 2007)

Indicator	China, Republic of People's									
	Indonesia	Bangladesh	India	Malaysia	Philippines	Sri Lanka	Thailand	Viet Nam		
Exports of goods and services	127	14	1,425	270	217	10	187	55		
GDP (\$ billion, current)	433	68	3,382	1,045	186	32	246	71		
<b>Exports of goods and services and/or GDP (%)</b>	<b>29</b>	<b>20</b>	<b>42</b>	<b>26</b>	<b>117</b>	<b>31</b>	<b>76</b>	<b>77</b>		
Foreign currency reserves in 2008	52	6	2,000 <sup>a</sup>	247	91	3	111	23		
Imports of goods and services	129	20	1,092	329	183	13	177	69		
Average monthly imports	11	2	91	27	15	1	15	6		
<b>Months of imports covered by reserves</b>	<b>5</b>	<b>4</b>	<b>22</b>	<b>9</b>	<b>6</b>	<b>3</b>	<b>8</b>	<b>4</b>		
Balance on current account	10	1	372	-17	29	-1	14	-7		
<b>Months of imports covered by surplus on current account</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>-1</b>	<b>2</b>	<b>-1</b>	<b>1</b>	<b>-1</b>		

GDP = gross domestic product.

<sup>a</sup> As reported in newspapers in early 2009.

Sources: Asian Development Bank, *Key Indicators for Asia and the Pacific*, recent issues.

adequate to pay for 22 months of imports if the country earned no foreign exchange at all, are more than double those of the next country, India, with reserves sufficient to cover 9 months of imports. In addition, the PRC was running a surplus on the current account adequate to cover 4 more months of imports. As a consequence, the PRC has no practical limits from the balance of payments to the stimulus it can provide for the domestic economy.

At the other end of the spectrum are countries like Bangladesh, Sri Lanka, and Viet Nam whose foreign exchange reserves would cover 3–4 months of imports and with a small positive or negative balance on the current account. How big a stimulus package their economies can afford may depend more on psychology than on economics. A package of 3% of GDP would increase demand by \$2 billion in Bangladesh and would expand imports by \$0.6 billion if the marginal propensity to import were 30%. Its current account surplus would disappear, but its reserves would not need to be touched. But the reserves of these countries are not large enough to cope with much capital flight. Therefore, all these countries can run a modest domestic stimulus package, but its magnitude will be determined more by their guess as to when they would become vulnerable to capital flight. Indonesia is closer to these countries than it is to the PRC in its ability to expand domestic demand.

Among the remaining countries covered in Table 7, India and Thailand are in the best position to follow a prescription of domestic demand expansion–led growth, with reserves equal to 9 months and 8 months, respectively. But India is already running both a large fiscal and current account deficit, and Thailand has a problem of political uncertainty. These countries' scope for stimulus is therefore also limited by political and psychological factors and the resulting risk of capital flight.

In short, all the countries analyzed can follow the current consensus prescription to deal with the recession by expanding domestic demand, but nearly all can do so only to a limited degree before they face a balance-of-payments constraint. The PRC is the major exception. The constraint could be substantially released by concerted Asia-wide stimulus.

### **Increasing Asia-wide growth: Concerted stimulus in major countries**

One country's imports are another's exports. That the current recession has been short is undoubtedly because many major economies have introduced massive stimulus packages. But these are coming to

an end at a time when growth in countries like Indonesia is still quite inadequate to its needs. Given the increase in intra-Asian trade that has taken place in the last decade, a concerted stimulus in all, or at least most of, the major Asian economies would be much more effective than uncoordinated stimulus by a few individual countries.

The PRC could make the greatest contribution to such an effort since it faces no practical constraints. If some of its stimulus is in the form of expansion of consumer demand, not just infrastructure investment, it would absorb some exports of consumer goods from other Asian countries or it would result in a decline in consumer goods exports from the PRC, opening up markets to other countries, primarily in Asia. Using input–output tables and trade data, it would not take long for a rough calculation of what kind of concerted stimulus is possible by intra-Asian cooperation; by cooperation without the participation of Japan or of the PRC; or (the most limited case) by cooperation only within the Association of Southeast Asian Nations (ASEAN). One could also distinguish between stimulus that primarily increases investment or primarily consumption, and whether increased consumption is primarily by the poor or the nonpoor, and so on.

Since this would be a classic win–win situation where everyone benefits from some cooperation, such an approach may have some chance of success. But because of the “free rider” problem and the difficulty of negotiations, an agreement would not be easy.

### **Magnitude of the problem of underemployment and unemployment**

Countries differ also in the seriousness of their unemployment and underemployment problem. The analysis of this problem is very partial for lack of data on the problem of underemployment or disguised unemployment—workers who show up in the data as employed but add little to output (zero or low marginal product of labor) and are not really needed. But it is clear that there are great differences with respect to the labor market, and this has profound implications for policy. For countries like Malaysia, which seem to have been able to productively employ the additions to the labor force, major policy reforms may be only somewhat urgent. However, countries like Indonesia, where an additional 15% of the labor force has been added to the underemployed and unemployed, need to focus their efforts on creating jobs that will turn them from solely consumers into producers as well. Regaining competitiveness in the world market is essential in the mix to achieve this and can require significant policy reform.

## Conclusion

The current global recession has rather surprisingly had little impact on Indonesia. This is fortuitous since the current social protection system is highly fragmented and does not reach all those in need. Coverage of workers in the formal sector is low. The majority of workers in the informal sector are not covered and protection of the poor and vulnerable remains inadequate for the needs of an emerging middle-income country. While the National Social Protection System (SJSN) Law provides an ambitious vision of a future national social security system, there are many outstanding questions regarding the level of benefits provided, scope of coverage, affordability, and fiscal sustainability, as well as the necessary institutional reforms to ensure delivery of services and benefits (World Bank 2009).

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### **Box 1: Philippines: Monitoring poverty and social protection**

Ensuring and maintaining adequate levels of social protection requires an effective monitoring mechanism. The Philippines is perhaps unique in that it has both private and public monitoring systems. The Social Weather System (SWS) is a private nonprofit institution established in 1985 that regularly generates social survey data and uses a self-rating system of information reporting. SWS promotes advocacy through statistics by keeping poverty issues in the public eye.

The SWS has since 1992 provided data on poverty on a quarterly basis and therefore augments the Government's Family Incomes and Expenditures Survey, which is carried out only once every 3 years. In each SWS survey, the household head is asked to point to where he or she thinks the household fares in a "show card," using only the words "poor" and "not poor."

To mid-2009, 86 observation points were provided by the SWS survey. The trend is similar to that from the government: a gradual reduction in poverty since 1992. However, the SWS poverty *levels* are much higher. For 2004–2009, SWS data present poverty as well in excess of 50%, while government figures show a decline in poverty since 1992 and a poverty level below 30% since 2001.

The SWS survey has since 1998 asked questions on food consumption using the same show card. The survey also asks from time to time how many households received economic assistance, and the sources of such assistance. The information gives some insight into the effectiveness of public feeding programs. The June 2006 SWS surveys showed that at a time when 13.9% of households were facing hunger, only 3.0% of the population had used the government-subsidized "Tindahan Natin" stores. Similarly, of the 3.65 million households which had access to free rice in school feeding programs, the survey showed that only 360,000 households had received such rice.

Source: Mahar Mangahas in "The Role of Civil Society in Poverty Monitoring: The Case of the Philippines." [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# Impacts of the economic crisis in East Asia: Findings from qualitative monitoring in five countries<sup>1</sup>

*Carrie Turk and Andrew Mason<sup>2</sup>*

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## Introduction

Effective quantitative monitoring of the poverty and social impacts of the economic crisis calls for frequent labor force and living standards surveys that generate cleaned datasets with minimal time lags. Administrative data can sometimes provide an alternative option for survey-based monitoring where quality is high, collection is frequent, and data are shared. However, statistical systems in the low-income and lower-middle-income countries in East Asia generally do not supply data with the frequency and speed that are necessary for comprehensive monitoring change during times of economic and social turbulence.

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<sup>2</sup> Carrie Turk is a staff at the Social Development Department and Andrew Mason is lead economist for poverty reduction at the World Bank. The findings, interpretations, and conclusions of this paper are the authors' own and should not be attributed to the World Bank, its Executive Board of Directors, or any of its member countries.

The most recent poverty data available are from 2007 (or earlier), while only one or two countries have labor force data available from 2009. In some cases, such as the Philippines, summary statistics from labor force surveys become available relatively quickly, but unit record data that are necessary for analysis are available only after some delay. As a result, monitoring crisis impacts using quantitative data alone in East Asia is likely to provide only a partial understanding of the poverty and social consequences of economic stress as events unfold.

To improve its understanding of the social impacts of the crisis in real time, the World Bank has supplemented efforts to gather and analyze quantitative data with a series of rapid qualitative assessments. Between March and June 2009, it supported such assessments of the impacts of the crisis in five countries in East Asia, namely Cambodia, Lao People's Democratic Republic (Lao PDR), Mongolia, Thailand, and Viet Nam. In both Cambodia and Mongolia, a second round of research was implemented in August 2009, with two more rounds planned in each country before the end of June 2010. Further rounds of research are planned in both the Lao PDR and Thailand, and a series of four research rounds are expected in the Philippines.<sup>3</sup> This work provided an early assessment of the social impacts of the crisis and is now generating a flow of information on the evolution of vulnerability and resilience to economic stress.

Reflecting the diversity in country circumstances, budgets, and economic realities, these assessments have varied in size, scope, and emphasis. Collectively, these assessments have engaged approximately 950 people in the five countries so far. They have involved discussions with a broad range of people, including farmers, herders, traders, owners of microbusinesses, informal sector workers, workers in export-oriented formal sector enterprises, informal artisanal miners, youth, women, enterprise and industrial park managers, social workers, village and community leaders, and nongovernment organization (NGO) personnel. This paper summarizes the main lessons and findings from the five first-round assessments and two second-round assessments.

## **Scope and methodology**

Assessments in each of these countries were designed in-country, in consultation with local stakeholders. The design phase involved the

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<sup>3</sup> In Viet Nam, Oxfam GB and Actionaid are working with a local institute to implement repeated rounds of research.



**Table 1: Focus of rapid assessments in five countries**

	<b>Transmission mechanism explored</b>	<b>Groups covered by research</b>
Cambodia (two rounds complete)	Labor market shocks resulting from falling demand for exports Falling domestic demand for goods and services Falling remittances from domestic and overseas sources	Formal sector workers in export-oriented industries (mostly women) Migrant workers in the informal sector in urban areas (men and women) Remittance-dependent households in rural areas (men and women) Village leaders
Lao People's Democratic Republic	Labor market shocks resulting from falling demand for exports Falling domestic demand for goods and services due to contraction of tourism sector Falling remittances from overseas sources	Formal sector workers in export-oriented industries (mostly women) Migrant workers in the informal sector in urban areas (men and women) Households whose livelihoods are connected to the tourism industry Households in rural areas dependent on remittances from Thailand and returned migrants (men and women) Commune and village leaders
Mongolia (two rounds complete)	Fall in incomes resulting from adverse movements in commodity prices Reduced access to basic services resulting from fiscal crisis Fall in real wages resulting from inflation associated with currency depreciation	Migrants in urban areas in unstable, low-income occupations Herding communities dependent on cashmere farming Informal, artisanal miners Formal sector miners Commune and village leaders and social workers
Thailand	Labor market shocks resulting from falling demand for exports Falling domestic demand for goods and services Falling remittances from domestic and overseas sources	Formal sector workers in export-oriented industries (mostly women) Migrant workers in the informal sector in urban areas (men and women) Remittance-receiving households in rural areas (men and women) Representatives of the business community and nongovernment organization communities
Viet Nam	Labor market shocks resulting from falling demand for exports Falling domestic demand for goods and services Falling domestic remittances	Formal sector workers in export-oriented industries (mostly women) Household enterprises dependent on export markets (men and women) Migrant workers in the informal sector in urban areas (men and women) Remittance-receiving households in rural areas (men and women) Entrepreneurs, industrial zone managers, and commune and village leaders

Source: Authors.

identification of likely mechanisms through which crisis impacts would be transmitted and possible groups that might be affected. Research sites, samples, and questions were chosen to explore these country-level hypotheses about who might be affected through various mechanisms. Transmission mechanisms and vulnerable groups differed across countries and consequently no two assessments have the exactly same design, though many of the research areas overlap across countries. Table 1 lists the focus of the assessments in the five countries, highlighting the transmission mechanisms explored and the groups that were covered in the research.

In all countries, the work was carried out in partnership with local research institutes and sometimes with multiple organizations (as, for example, in Viet Nam). The assessments made use of a range of participatory research techniques that are now commonly used in participatory poverty assessments. These include both group-based exercises (such as ranking techniques, time-trend and/or change analyses, or card-based exercises) and individual interviews. In all countries, there were separate meetings with women and in several countries there were separate meetings with young people. These techniques facilitate an analysis of differences in experiences by various people and groups, and all the assessments have findings that suggest different impacts by sex, age, or both. These techniques are also useful for gathering information about social relations at the community level.

Participants in the assessments were not selected randomly. Both the small size and the sampling process mean that findings are illustrative rather than statistically representative or generalizable. In Cambodia, the qualitative assessments have been designed to coincide with quantitative data collection exercises. Others have been designed to build on earlier or ongoing research exercises in the same sites (Cambodia, Mongolia, and Viet Nam).

Although the heterogeneity in country circumstances means that every assessment was working on a different research outline, overlapping areas were treated with some consistency across countries. Written guidance given to research teams was customized for the country context, but discussions on specific themes were guided by the same core questions. Research teams exploring labor market shocks in export-oriented formal sectors in Viet Nam structured their work around the same set of questions as research teams exploring labor market shocks in export-oriented formal sectors in Cambodia, Lao PDR, and Thailand. Research teams investigating the impacts of falling remittances were all using the same basic set of questions. In all countries, research teams investigated the same set of questions about access to formal and nonformal safety nets as well as the costs and benefits of seeking different forms of support.

The intention of the series of assessments was to provide findings quickly, primarily for country and regional use. The emphasis was not on the production of edited, finished reports that would suit widespread circulation, and several of the reports are not presented as publishable material. The preference to prioritize rapid results rather than publishable results was prompted by the understanding that the crisis is still evolving, that impacts are changing, and that findings may become quickly outdated.

The findings have been used quite extensively, including in a variety of briefings and presentations, both inside and outside the World Bank, but these outputs have generally been prepared after reverting to raw data from focus group transcripts. Country reports will become available on research partners' websites, but readers should approach these reports understanding the tight time limits that were imposed on research teams and the specific instructions to document findings as quickly as possible.

The following section provides a summary of some of the findings from the assessments, organized by theme rather than by country.

## **Findings from the assessments**

This section summarizes some of the main findings and messages from the assessments in five countries. Some caveats to this summary are important to bear in mind. First, these findings are drawn from research with groups that have been pre-identified as likely to be affected by the crisis. This approach to sampling may have two pitfalls. The first is that it may leave out groups that are affected, but were somehow overlooked as the assessment was being designed. The second is that, by excluding groups that are not affected by the crisis, the findings may seem to overstate the importance of the crisis relative to other development challenges. Many of the participants in the research were nonpoor, and so mainstream problems of chronic poverty are not captured systematically in this work, despite their importance in determining a medium-term inclusive development trajectory. And because the findings are not nationally representative, it is not possible to give a clear sense of proportion to the findings as national-level phenomena.<sup>4</sup>

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<sup>4</sup> The World Bank team plans to use some of the findings from this work as the basis of hypotheses to be tested on nationally representative survey data, once appropriate data become available.

The second caveat is that most of these findings were gathered in March–June 2009, and subsequent work in Cambodia and Mongolia suggests that circumstances may change over time, even over short periods. This could be for a number of reasons. Economic fundamentals may still be shifting and impacts may change as a result. Some governments may have intervened with crisis responses that may have influenced impacts. In other instances, and more commonly observed over time in Cambodia and Mongolia, first-round responses that people adopted to cope with the crisis may themselves have initiated a second round of impacts. It is possible that findings may have become outdated fairly quickly as a result.

Third, direct attribution of findings to the economic crisis is problematic in the absence of a counterfactual. This summary links findings to the economic crisis based on respondents' descriptions of the timing with which they have experienced changes and on descriptions of causes and effects that were reported by respondents. It seems relatively safe to attribute some changes to the economic crisis (for example, a reduction in working hours in garment factories). Other changes, however, may be driven by a more complex range of factors (for example, unfavorable movements in the terms of trade for vulnerable households).

Many of the impacts and responses discussed were highly context-specific and defy easy generalization into broad trends. The impact of reduced working hours, for example, was observed to vary according to a number of factors including the following: access to savings and remittances; transferability of occupational skills and ability to find supplementary work in the informal sector; available informal support structures; living costs (especially work-related transport costs) and ability to survive on reduced income; and, sometimes, whether extended families in rural areas had access to agricultural land. Across the five countries, research teams noted a range of vulnerabilities, but also, depending on community and household circumstances, significant resilience and ability to cope.

The findings presented below are organized around main impacts and responses to impacts that were discussed in the five countries.

## **Labor market shocks**

The assessments involved discussions about recent changes in patterns of paid labor in formal and informal sectors. Labor market shocks, primarily in the form of reduced hours of work and earnings, were extremely noteworthy in all countries except the Lao PDR. These shocks generally appeared less in the form of open unemployment and more

in the form of underemployment in East Asian economies. Research teams noted some resilience among both formal and informal sector workers, often related to access to savings, support from rural areas, strength of social networks, and level of occupational mobility.

## **Layoffs and unemployment**

Some enterprises in industrial zones are responding to a reduction in orders by cutting staff. This often occurs through nonrenewal of short-term contracts, nonconfirmation of staff on probation, or bonuses for voluntary resignations. Formal layoffs that may be supported by severance pay arrangements in some countries were not found to be common in East Asia. Across the five countries, nobody interviewed had received severance payments or unemployment benefits. This may have been an issue of sampling as there were secondhand reports of workers receiving severance payments in Thailand.

Though there were some reports of people returning to home villages in rural areas after being laid off, this was by no means the only response. Some had returned, but this largely constituted a temporary return to contribute brief inputs of labor for agricultural work and frequently the stated intention of returnees to home villages was to return to urban areas and seek work (see discussion in the following pages). Even for those who returned, respondents suggested that this would not be an immediate response to job loss; migrants would be likely to spend several months (some people estimated 3–4 months) in the urban area seeking other work before returning to the rural area.

In many instances, laid-off workers remained in urban areas. Particularly in East Asia, those who are laid off reported switching employment to the informal sector. Consequently, underemployment and reduced earnings were more commonly observed impacts of layoffs than open unemployment. In some instances, work in some informal occupations was facing greater competition as a result of the influx of workers previously employed in the formal sector. Some interviewees remained unemployed so as to seek other formal sector work, but these were generally workers able to draw on either savings or remittances, or a combination of both. There were also occasions when some workers were using the termination of employment as an opportunity to return to studies.

Not all sectors were equally hit by falling orders and some enterprises that had seen a slowdown in the first months of 2009 were reporting an upturn in orders. Generally, these assessments focused on workers in sectors that had been identified as vulnerable to a slowdown in the global economy, and this is reflected in the findings. However,

interviews with enterprises and representatives of the business sector indicate a more complicated picture of trends in orders and production, with some sectors enjoying an increase in orders. There was some optimism in both the Lao PDR (for example, printing) and in Viet Nam (for example, pharmaceuticals and motorbike part manufacturers). Within one industrial complex, some enterprises might be laying off staff (for example, car manufacturing), while others might be hiring (motorbike part manufacturing). Laid-off staff workers were not necessarily able to secure work in recruiting firms, however, because their skills are not mobile across occupations. In these instances, actions that increase occupational mobility may reduce periods of unemployment for formal sector workers.

## **Working reduced hours**

Firms are struggling to retain staff and many formal sector workers remain employed on reduced hours. While there have been some layoffs, there are also other enterprise responses to the imperative to reduce labor costs. This is particularly the case where costs of recruitment and retraining will be high, and many enterprises were particularly keen to retain skilled staff. These measures involve a reduction in working hours, including cancellation of overtime, enforcing rotational days off, and reallocating labor to tasks off the production line, such as counting stock, cleaning the factory, or training. Those still employed in these enterprises are often working reduced hours, usually reported as around 70% of regular hours, but sometimes as low as 50%. Workers employed on reduced hours were adopting a range of strategies to cope with the fall in earnings. These strategies observed in countries where hours were being reduced included the following:

- *Supplementing shorter hours in formal sector employment with additional work in the informal sector.* For example, a worker in a garment factory might work 70% of her time in the factory and supplement this with work in a restaurant. Because the work in supplementary occupations may be less well paid, maintaining former earnings often requires longer total working hours than previously. Total hours worked in paid employment may rise as hours worked in the primary job falls. The second round of research in Cambodia indicated that some garment factory workers who had been living on reduced wages for several months were supplementing incomes with commercial sex work.

- *Supplementing shorter hours in formal sector employment with training or higher education.* In Viet Nam, training centers around some industrial parks had adapted both their curricula and hours to accommodate a new market of part-time workers.
- *Supplementing reduced earnings with drawing down savings or with remittances from rural households.* Several of the countries where the assessments have taken place have been growing quite fast for several years and some workers have been able to build up cash or gold savings or to buy assets such as jewelry that they can now sell. Rural families were an important source of support in several countries, sending either money or food to support urban livelihoods.
- *Reducing expenditures, including changing consumption patterns and halting remittances to rural areas.* Many workers reported buying cheaper food (either less-preferred or lower-quality) and either reducing or completely stopping the remittances that they were sending to rural areas. Garment sector workers in Cambodia, for instance, reported that they had previously sent \$20–\$30 a month to families in rural areas but had now either stopped these remittances or reduced them dramatically. This was corroborated by interviews in rural areas. Workers interviewed were concerned that rural families would be unable to buy adequate agricultural inputs for the next crop and that a second round of impacts would include reduced agricultural production.

## **Insecurity in the urban informal sector**

Workers in the urban informal sector are facing particularly high levels of income insecurity. All the assessments included discussions with participants in the urban informal sector. The five-country sample includes:

- home-based seamstresses, porters, and construction workers in Bangkok;
- transport service providers, market traders, and skilled and unskilled construction workers in Cambodia;
- market traders and tradesmen in Ulaanbaatar, and small businesses in provincial towns in Mongolia;
- market traders, transport service providers, restaurant workers, and providers of tourism-related services in the Lao PDR; and

- construction workers, porters, and domestic workers in Viet Nam.

Workers in the informal sector explained that the combination of the 2008 price rises and erratic opportunities for work had made their livelihoods extremely fragile. In all countries with the exception of the Lao PDR (where crisis impacts were generally limited), work had become harder to find for all the informal sector groups interviewed. As examples, construction workers everywhere (again except the Lao PDR) reported reductions in days worked of 50%–70%, depending on the country and skills level. Port workers in Bangkok were working fewer hours a day as porters and having to supplement earnings from port work by collecting rubbish for recycling. Home-based seamstresses in Bangkok reported both a reduction in orders and a reduction in the piece rate. Market traders in Mongolia explained how rising prices for imported products had reduced demand for their merchandise and trading volumes.

Reduced demand for informal sector services, and the reallocation of labor from the formal to the informal sector that results from job losses, is increasing competition for informal sector work. In some cases this was depressing prices for services. For example, in Thailand respondents explained that so many people were now supplementing incomes by gathering plastic water bottles for recycling, and that the price offered for water bottles had dropped. Cyclo drivers in Cambodia complained that the number of cyclos had increased, attracted by the low start-up costs.

Consequences described by respondents often included reduced adult food consumption patterns and lower remittances. Cyclo drivers and unskilled construction workers in Cambodia reported feeling weak from lack of food, following many months of limited earnings. Urban informal sector workers frequently reported having several dependents in rural areas and indicated that income insecurity is transmitted directly to home villages in several countries. Concerns about the impacts of reduced remittances on receiving families were common, particularly with regard to financing post-primary education and agricultural inputs.

## **Pressures on nominal and real wages**

The food and fuel price increases of early 2008 were referred to repeatedly across countries as a cause of growing hardship. Both formal and informal sector workers described an erosion of real wages during



2008 prior to the onset of the global economic crisis as food and fuel prices climbed. In most countries, wages had risen somewhat during the period of rapid inflation, though reportedly by less than the prevailing inflation rate given these groups' consumption patterns. With some exceptions, wages for paid work had largely been stable since September 2008. This was generally as true for the informal sector (both urban and rural) as for the formal sector. Prices of food and fuel had eased in recent months in most countries, but in Mongolia there was considerable and universal concern among all interviewed groups about the welfare implications of continued price increases.

Less commonly, there were also some reports of wage cuts. In Mongolia, several respondents working in the formal sector referred to recent downward pressure on wages. There were complaints that employers were paying below the agreed, contracted amount; contracts were usually agreed at the minimum wage (MNT180,000 a month) but low-income groups interviewed said that often, they received only 80% of the agreed amount. Several low-income workers said that wages actually paid were barely adequate to cover transport costs. Many of the respondents who lived on the furthest city outskirts, that is, at some distance from their work, had retreated from paid work to engage in horticulture or other home-based activities because the margin between transport costs and wages was too small to be worthwhile. Agricultural workers in Cambodia noted a reduction in daily rates over the previous 3 months. Home-based workers in Thailand described a reduction in piece rates for sewing and for making artifacts.

In several countries, there were reports of wages not being paid. This was commonly stated by construction workers, who would carry out work only to find that the contractor had disappeared. But similar situations also applied to home-based workers in Thailand and formal sector workers in Mongolia. In the Lao PDR, migrants who had returned from working in Thailand reported several stories of being, in their words, "cheated." There were many instances of wages being paid late.

## **Migration and remittances**

Discussions about international migration patterns took place in Lao PDR, Thailand, and Viet Nam, and discussions about domestic migration patterns were held in Cambodia, Mongolia, Thailand, and Viet Nam. Research teams found a variety of changes in migration and remittance patterns as a result of the crisis. Findings suggest a range of context-specific behaviors rather than broad trends. In particular,

there was no sense that there was a widespread, long-term return of rural–urban migrants to rural areas and, in some places such as Cambodia, many commented that the reverse was possibly true.

In some instances, workers in urban areas who originated from rural areas were returning home. In Cambodia, Thailand, and Viet Nam there were second-hand reports of laid-off or discouraged workers returning to rural areas and visual evidence in the form of “room to let” signs on advertisement boards. Tentative estimates from provincial administrative sources in Viet Nam suggested that about 25% of those leaving certain rural sites for work had returned in the first quarter of 2009. Researchers in the industrial zones of southern Viet Nam noted that occupancy of rental accommodation was as low as 40% in some areas. One side-effect of this was increased costs for migrants remaining in urban areas as opportunities for room sharing and cost pooling were declining. Respondents indicated that it was generally the least skilled, least educated, least attached to a social network, and older (over 40 years) migrants who tended to have most difficulty coping with the tightening labor market and who were more inclined to return home. The return of migrants was described as having multiple impacts, including:

- *A drop in income that could be dramatic as a proportion of household income (up to 75%) for highly remittance-dependent households.* For these households, consumption had become highly constrained, sometimes impacting the capacity to pay for education-related costs. This is particularly notable in Cambodia. Importantly, households’ ability to cope with unforeseen shocks (such as health care) had diminished since wage-earning migrant family members would typically shoulder these sudden, large costs. For many households, however, remittances were paying for “extras,” such as house construction or durable goods. In Thailand, for example, many households said that they were able to get by for a while without remittances. Resilience was often connected to household ownership of agricultural land.
- *The possibility of long-term impacts of the drop in income.* A reduction in the quality of nutritional intake, an increase in child absenteeism (or dropouts) from school, indebtedness, sale of productive assets, and an inability to invest sufficiently in inputs for the next agricultural crop were all noted as consequences of the cessation of remittance income. These effects may all generate longer-term impacts on livelihoods and well-being.

- *Increased competition for local, day-laboring jobs in rural areas.* Returned workers were adding to the local pool of available day-laborers in rural areas and ability to find work was consequently constrained. Freelance workers, such as carpenters in a rural province in Viet Nam, reported that they could previously find 20 days work per month during the agricultural low season. They could now only find work for 10–15 days per month. In Cambodia, respondents in rural areas noted the competition for agricultural work was tough and that daily rates for agricultural work had fallen. In Mongolia, informal, artisanal miners reported that there was increased competition for work as poorer herding households, unable to cope with the low prices, were transferring to mining. Providers of camel rides noted that more and more camel owners were competing for fewer tourists in rural Mongolia.
- *Reduced purchasing power in the local rural community.* Shopkeepers, food sellers, and builders all noted that there was less money around in their village and that they had suffered a drop in income as a result. An egg seller in rural Viet Nam, for example, said that she was now selling half the number of eggs a day relative to a year ago. This was particularly important for households that were more dependent on off-farm activities, for example in Cambodia, where landlessness is becoming a problem. As one woman in Cambodia said to illustrate her point, “You can see this shop behind us is already closed, together with others in the village. The remaining ones will close soon. People in the village just come and get stuff without paying because they did not have money to pay like before, but they still needed it. They said they would pay soon. The owner ran out of money to buy more stuff and closed the shop ... Loss of jobs is not only outside the village but also in the village ... This place will be awful very soon.”

Many returned migrants were intending to stay only for a short period. Many had returned so that they could live more cheaply while waiting for urban or industrial labor markets to pick up. Several were actively engaged in job search from a distance, with social networks keeping them informed of potential opportunities either in urban areas or in industrial parks.

There were also many low-income workers living in urban areas who explained that a return to rural areas was simply not an option. In many instances, low-income groups in urban areas have moved permanently away from rural areas. Some no longer have agricultural

land (for example, in Cambodia) or other assets necessary to establish livelihoods in rural areas (for example, herds of livestock in Mongolia). In Mongolia, many of the rural–urban migrants are motivated by the need to access either higher education for their children or better medical care than is available in rural areas. A return to rural areas was not seen as a possibility as long as the need to access these services persisted.

In other instances, rural residents were planning to migrate to urban areas, despite knowledge that competition for work was intense. This was particularly the case in Cambodia, where many rural residents have sold much or all of their agricultural land in recent years and have been living off a combination of off-farm activities and remittances from families in urban areas. As income from their off-farm activities declines (a consequence of falling purchasing power in their villages) and as remittances drop, many explained that they were unable to sustain basic consumption. There were many references to the need to encourage more family members to move to urban areas where they could at least provide for their own living expenses. Interviews with key informants in the village noted that the outflow of young people from the village was increasing. There were several reports of female children going to work in Phnom Penh as domestic workers.

Where overseas workers had lost jobs and returned, the income shock might be aggravated by the debt that was incurred to migrate in the first place. In Lao PDR, Thailand, and Viet Nam, research teams explored the possibility that overseas migrants might have returned. In the Lao PDR, interviews with families of migrants in Thailand and with migrants who had returned from Thailand suggested that the crisis had limited impact on migration patterns. Patterns of both legal and illegal migration from the Lao PDR generally appear to be dominated by temporary migration—between a few months to a few years—with decisions to return to the Lao PDR often motivated by factors other than difficulty in securing employment in Thailand. Families in the Lao PDR mentioned minimal hardship as a result of the return of a migrant.

In Thailand and Viet Nam, organized overseas employment mediated by employment agencies entails high upfront costs. Some families have incurred debts to finance a period of overseas employment in anticipation of high returns. These high returns do not materialize if workers are required to work fewer hours or lose their jobs. There were some instances in the research where overseas workers were returning ahead of repaying their debts and were facing considerable hardship.

There were many stories of urban residents or overseas migrants curtailing their remittances to rural areas, and these were confirmed by rural residents. In Cambodia, Thailand, and Viet Nam, a clear story-line of declining remittance flows from urban/industrial workers to rural families emerged. This was validated by interviews both with such workers, who described severe reductions in the remittances they were sending and with the rural families, some of whom were facing hardship as a result of the reduction. In Thailand, respondents reported a reduction in remittances from overseas. These remittance-receiving households were not among the poorest groups themselves nor did they appear close to poverty as a result of the fall in remittances. However, the research team in Thailand noted that a reduction in purchasing power among these groups has consequences for lower-income groups (such as construction workers) who provide goods and services often financed by remittance flows.

There were also stories of remittances and support flowing from rural to urban areas to support a prolonged job search or to supplement reduced incomes. Although most discussion revolved around a flow of remittances from wage-employed or informal-sector workers in urban areas to rural areas, there were a number of instances where remittances might travel in the opposite direction. In both Thailand and Viet Nam, some rural families were supporting migrant family members in urban areas who were facing income cuts. The more recent round of research in Cambodia also observed workers in garment factories, who were living off reduced wages, receiving payments from rural families. In Mongolia, low-income urban households mentioned that they were used to receiving support from rural family members in the form of meat and animal products. This was described as declining in recent months because of hardship in rural areas.

## **Price shocks**

Across the five countries, many participants referred to the food and fuel price rises of 2008 as a source of hardship. Though oil prices have eased from earlier highs, participants made many references to the constraints to mobility presented by high transport costs. Some urban populations explained that overall consumer prices remained high—especially relative to income—despite some reduction in prices of staples. In rural Mongolia, where the currency has depreciated, the combination of a fall in the price of main products (cashmere and meat) and a rise in the price of basic, often imported, foodstuffs (salt, sugar, and flour) has shifted the terms of trade against herders.

Smallholder, rural households remain vulnerable to falling commodity prices. Producers of meat, wool, and cashmere in Mongolia were familiar with the fact that commodity prices fluctuate. They suggested that when prices fluctuated within certain parameters, they were able to cope, or even profit, from price movements. In Mongolia, however, producers were experiencing fluctuations that were unexpected and unplanned for. In Mongolia, many herding households had taken loans on the expectation that cashmere prices would rise in the spring as they had done the previous year. When prices dropped and then recovered only slightly, many households were unable to repay the loans that they had contracted.

A range of factors governs how resilient or vulnerable households might be to commodity price movements. In Mongolia, households with small herds were finding the reduction in price of animal products more difficult to manage than farmers with substantial herds (more than 500 animals). Households that had taken out loans in the expectation of price rises were in a much more vulnerable position than those without debts. Households with multiple income sources (for example, from contracts with livestock companies, or from supplementary activities such as production of dairy goods for sale, wool-spinning, or felt-making) reported more control over when they sold cashmere and so were able to manage price fluctuations more advantageously.

High transport costs constrain mobility and job search and restrict marketing options for more remote farmers. Fuel and transport costs were discussed by participants in a number of contexts. In Mongolia, participants in one focus group debated whether high fuel prices or high prices of basic food prices were more damaging to them and eventually agreed that high fuel costs had caused more problems. Where herders live some considerable distance from towns, high transport costs can restrict their ability to access markets and increase their reliance on intermediaries.

In Cambodia, workers in the urban informal sector described how they were now less able to visit their rural homes to provide support and labor because the combination of higher travel costs and lower incomes made such visits unaffordable. In Viet Nam, migrant construction workers said they would not be able to return to their home province until they had saved enough money for transport. And in Mongolia, some participants in urban focus groups indicated that transport costs from the outskirts of town (where they lived) to the town center (where they worked) were so high that they had given up their jobs and were now growing and selling vegetables instead.

## **Sources of support**

In all five assessments, research teams asked respondents about access to sources of support, both formal (such as cash transfers or social security) and informal (provided through nongovernment mechanisms). With the exception of Mongolia, respondents in the low-income countries had almost no access to formal safety protection mechanisms.

Nearly all groups in the five countries, again with the exception of Mongolia, were unable to access formal safety net or social protection mechanisms. Farmers, paid agricultural workers, formal sector employees (both laid off and working on reduced hours), and informal sector workers described a situation where any assistance they received came from nongovernment sources. This may be in part because formal social assistance mechanisms are targeted at poor groups, while participants in the assessments were often vulnerable to crisis impacts but not poor. In Viet Nam, for example, social assistance mechanisms exist but are sharply targeted at the poor and would not have included the groups included in the research. It may also be that some respondents were technically eligible for certain social assistance provisions, but their high levels of mobility meant that they were either unregistered or unaware of processes to claim benefits.

This raises doubts about the effectiveness of providing crisis-related support through existing safety net programs. If some of the groups that are most affected by the crisis are not accessing such programs, it may mean that additional funding channeled through existing safety nets is an imperfect mechanism to support crisis-affected groups unless some modifications are made. In Thailand, for example, although certain provisions had been put in place to support those disadvantaged by the crisis, nobody who was interviewed reported accessing these benefits.

Mongolia was an exception among the low-income countries in that most respondents were accessing benefits from a cash transfer program. Nearly all households with children that were interviewed were accessing the “child money” program, which makes small monthly and larger quarterly payments to households with children. The few households with children that were not accessing this were highly vulnerable groups of informal, artisanal miners. Many of the low-income households seemed highly dependent on these payments. They described using these funds for basic consumption and for out-of-pocket education payments. They mentioned that the child money payments acted as a guarantee, allowing them to buy food on credit from local shopkeepers. Several households in Mongolia also

mentioned the importance of the pension payments that they were receiving, where there were older household members.

In the absence of government support, crisis-affected people in poor countries fall back on a range of informal sources of support. In the low-income countries studied, there were many examples of support provided by friends, families, local associations or groups, temples, and nongovernment organizations (NGOs). Though none of these mechanisms is sufficient to ensure maintenance of prior income levels, they provide an important and very basic level of support for extremely poor households. Some examples include:

- Job-sharing arrangements among informal sector construction workers in Hanoi, Viet Nam
- Informal savings and credit groups in Cambodia and the Lao PDR
- Provision of food for the food-poor in Cambodia
- Borrowing small loans and buying food on credit in Cambodia, Mongolia, and Viet Nam
- Social networks providing information on jobs among Lao PDR migrants to Thailand and job seekers in Cambodia and Viet Nam
- Food distribution schemes established by the Women's Union in a rural village in Viet Nam
- Community-provided support for funeral expenses in Cambodia
- Provision of physical security ("looking out for each other") among rickshaw drivers and unskilled construction workers in Phnom Penh, Cambodia
- Mobile-phone sharing among construction workers in Viet Nam and food pooling among unskilled construction workers in Cambodia and Viet Nam
- Mutual labor exchange in rural Cambodia
- Provision of microfinance by NGOs in Cambodia.

## **Differences driven by gender and age**

Gender differences in both impacts and coping strategies were noted and were generally related either to gender differences in interactions in the labor market or to gender-defined roles within the household. Age was also an important determinant of impact in the labor market.

Some sectors hit hard by the crisis are those that are dominated by female employment. Most of the garment workers interviewed were women. These women had seen a reduction in income at best and unemployment at worst. Young, single women appeared more resilient to these impacts than those who were married with children.



In Cambodia, where most of the interviewed garment workers were married with two or three children, women expressed high levels of anxiety about providing for basic consumption. Married women were less likely to live in on-site dormitories and explained that transport costs were punitive in the context of reduced earnings.

Many women were working very long hours to maintain income levels. In both Thailand and Viet Nam, the reduction in hours of available work in their main job meant that women were often seeking supplementary work. As this additional work was generally poorly remunerated, long hours were needed in order to earn a reasonable amount. Many women expressed anxiety that children were being left unattended for long hours while mothers worked late into the evening. Sometimes unpaid work of child care was taken over either by elderly household members or by the older children. Women in rural areas that were confronting an income shortfall (resulting from reduced remittances) described the need to intensify farm-based and off-farm work.

Economic stress was understood to be generating tensions and, sometimes, shifting roles in the household. Both men and women made many references to increases in the number of arguments between husbands and wives, sometimes including violence. Much of this was driven by stress over money: *tuktuk* drivers in the Lao PDR said that arguments would be worse if they returned with insufficient earnings or had spent earnings socializing, and Cambodia's garment sector workers made a direct link between reduced income and high levels of tension. According to one participant, "Many families seem to have very frequent arguments and most of the cases relate to income ... Some wives cannot stay in their house because they are afraid of their husbands." Exceptionally, in Mongolia, women reported an improvement in domestic relations because men were working such long hours there was no time for fighting.

Interviewees referred to discrimination in the labor market. Women in Mongolia explained that they were unable to find work because women had to be young (described as being under 30) and attractive to find work. A 43-year-old widow in Mongolia explains:

When I apply for a job, companies say I am already old and offer me a cleaning job. The cleaning job pays 100,000 togrog a month. With 100,000 togrog a month, it is impossible to survive. I have to pay 1,000 togrog a day for transport. Besides, I have to eat at work. Therefore, I do not work. I grow vegetables in the spring and summer times.

Interviews suggested that advertisements often specified both ages and physical characteristics as criteria for the job.

As a general rule, respondents were trying to protect the nutrition and education of children. Normally respondents suggested that food consumption for adults would be cut to protect the nutritional intake of children, although many suggested they were making economies in terms of food quality. Similarly, parents were clearly making efforts to keep children in school, despite economic hardship. Only in rural Cambodia were there references to either switching schools (from private to public) or to increased absenteeism or dropouts from school. In several of the low-income countries, there were reports of children combining labor with education. Though not preventing education, paid work may interfere with the quality of learning outcomes if paid work crowds out necessary homework.

Recent, steep increases to the out-of-pocket costs of education were recorded in Mongolia. Mothers explained that requests by teachers for additional payments and supplies had increased dramatically since the start of the school year. Although Mongolia is experiencing a fiscal crisis, expenditures in basic services have been protected. No teachers were interviewed, but teachers and education service providers may be experiencing an erosion of real wages (due to depreciation of the currency and consequent increase in prices of imported products) that is severe enough to interfere with service provision. The strongly seasonal nature of education expenses in Mongolia was also noted with concern; large payments (particularly for tertiary education) were needed in August when meat prices were low.

Extending time in education is a plausible response to labor market conditions for better-off young people. In Mongolia, students in tertiary education expressed relief at not being unemployed and had aspirations of finding work when their studies were completed. But university students also explained that several classmates had dropped out recently, unable to cover basic living costs while not working.

## **Community-level impacts**

Research teams noted both positive and negative impacts at the community level. In many instances there were indications of social tension, particularly in situations where competition for work was intense. Many mentioned increased crime levels, particularly petty theft. There were also many examples of mutual support, however, and were particularly notable where access to formal social safety nets was extremely limited among groups interviewed.

Tensions associated with competition for scarce work were mentioned in some instances. In Bangkok, port workers pointed to competition from illegal migrants from neighboring countries as posing unfair competition. Lao PDR migrants returning from Thailand said there was little discrimination against them, but stated that migrants from some other countries in the region were treated less well by the local population. As yet, any hostilities had stopped short of physical fights.

An increase in crime was more often reported than a decrease in crime. Some groups or communities reported a reduction in crime. Unskilled construction workers attributed this directly to the crisis; the reduction in work and earnings had meant a reduction in alcohol consumption and alcohol-related crime. In many places, however, the threat of theft was both commonplace and increasing, as indicated by the following quotes from rural Cambodia: “We think that theft is increasing because of hardship in the area ... but we are not afraid of it anymore because we are living in empty houses ... we have nothing for them to steal” and “I have no idea what to do for a living ... maybe I am going to be a thief myself!”

Animal theft was extremely common in some parts of rural Mongolia. In one focus group discussion, everyone present had lost animals to theft, some of them significant numbers (for example, 12 horses in one go). Participants hypothesized that both growing hardship had fueled the increase, but that it had been further facilitated by expanded outreach of mobile phone networks, which allowed thieves to communicate with each other. While rural residents worried about theft of animals and burglaries, urban residents in a low-income area of Bangkok noted the increase in theft of motorbikes and electricity. There were concerns about increasing drug abuse in some research sites, and an observation that becoming a drug dealer was one way of making money as legal employment became less available.

The community is often the only source of support for some of the most vulnerable groups. It was a provider of cash and food loans and sometimes of food handouts. In Viet Nam, women were leaving an extra cup of rice at the point of milling. This was being pooled and used to feed very poor households. The temples provided some support in Cambodia. In urban areas, social capital and social networks are fundamental for both informal and formal workers in times of crisis. Informal arrangements such as job sharing among construction day laborers have emerged as important in spreading the costs of the shrinking labor market. Social networks are reducing the costs of job search and recruitment through information sharing (often effectively cutting out expensive intermediaries) and help in containing the cost of living through joint cooking arrangements that permit economies of scale.

They are also an important source of small loans that are extremely important in smoothing consumption in periods of volatile income.

## **Changes in impacts over time**

In Cambodia and Mongolia, two rounds of research have been conducted with the same, or similar, groups over a 4-month period. In both countries, poorer groups affected by the crisis are experiencing considerable stress. There are repeated references to the accumulation of unserviceable debt and to the sale of productive assets. Less poor groups may be resilient enough to remain above the poverty line, but there is evidence that livelihoods have been weakened and damaged, leaving nonpoor households fairly vulnerable. When the crisis recedes, it is possible that many households will be left with diminished savings, eroded asset bases, and more debt, even if they are not below the poverty line. The turnaround for these families will not be immediate.

Short-term coping strategies of poorer households have longer-term implications, suggesting that removal of the shock will not be enough to restore livelihoods. In Mongolia, poorer herding households sold cashmere at the time when goats are combed, when cashmere prices were low. Some wealthier herders could wait for a recovery in prices because they had other income sources or savings, but this option was not available to poorer herders. Poorer herders had a lower income than usual, because of the low cashmere price, and were able to buy less with this income because of the rise in consumer prices. As a result, the income from cashmere sales ran out earlier than usual, prompting poorer farmers without other options to sell meat to finance basic consumption.

The price of meat has also fallen, partly a seasonal pattern and partly, perhaps, because of oversupply. It is now necessary to sell more animals than usual to finance basic consumption and lumpy education costs. These households will face the next winter with a smaller herd. Even if the cashmere price rises, it will be hard to restore the losses incurred. The following quotations are revealing:

I have a child who is a student. The tuition is now between 750,000 and 1 million togrog. I used to sell 30 sheep at the price of 50,000 togrog to pay his tuition and living costs in Ulaanbaatar. Now tuition costs have gone up and living costs are more expensive in Ulaanbaatar. Probably, I need to sell 100 sheep at the price of 25,000 togrog for my son.

We used to buy a 50-kilogram bag of flour by selling one sheep. But now it is impossible. We have to sell two sheep. The traders must be doing very well.

Cycles of indebtedness appear to be common in rural Cambodia, where several consecutive months of reduced remittances have undermined incomes. The loss of remittance income has had a significant impact on rural households, particularly those with smaller landholdings or limited assets. These households explained that they would normally receive around \$20 a month from family members in factories. Interviews suggested that they had received very little in remittances for several months. With less money circulating, other sources of income, such as local small businesses and off-farm activities, are failing. A focus group discussion in one village describes the situation:

We all still have small plots of land to grow rice for our own consumption. The harvest from this (about 0.5 hectares or less) often provides enough rice for about 4–6 months' consumption at most. The rest of our rice needs are met through remittances from our children who work as garment workers, or income from selling labor or small businesses such as cake selling, motor taxi driving, weaving palm thatches, or making brooms for sale. Unfortunately, demand for our products and services is now lower compared with 3 months ago. It has dropped by about 70% compared with this time last year. We now have no more rice in our house. We started to purchase rice in April 2009. With this substantial decline in our earning ability, we have not enough food to eat and have to forage in our rice fields. Hardship has doubled compared with what we faced during the wet season last year.

The researchers report that three households who had sold their land to set up businesses had now sold either their land or homestead land to pay off their debts. At least two households were reported to have run away from the village because they could not repay their debts. Similar cycles of debt were observed in Mongolia.

For poorer households, investments in human capital may be threatened. This was raised as a concern in all countries, but most particularly in Cambodia and more clearly in the second round of research, where two rounds had taken place. Poorer households commonly reported reducing their food intake, though most said that they were seeking to protect the nutritional intake of children. Where two

rounds of research had taken place, stories of removing children from school, of child labor, and of forgone health expenditures were more common among poorer groups than in the earlier round of research. It is possible that the incidence of child labor was higher because the second round research took place during school holidays. But there were several references (in Cambodia) to girls working away from the village as domestic workers. There were also references to women in the garment industry supplementing reduced incomes with work in massage parlors and karaoke bars, work that brings a range of vulnerabilities and longer-term risks.

Reduced incomes associated with the economic crisis have diminished poorer households' abilities to manage other, more routine shocks. Seasonal fluctuations in prices, drought, pest infestations, annual payments for education, and health expenditures all represent a range of risks that rural households in poor countries commonly encounter. Research teams noted that one affect of the crisis was to leave poorer households more exposed and less able to manage these other risks than they might normally be because they had less income to draw on, fewer assets to sell, and high existing debt that prevented any more borrowing. The interaction between crisis-related shocks and other shocks had the potential to seriously undermine livelihoods.

Less dramatic stories of scaled-back consumption and use of savings are common among more resilient households. Even wealthier households reported cutting out nonessentials and switching to lower-quality foods. Use of savings was commonplace. Although it allows households to avoid a cycle of indebtedness, the erosion of savings may leave these near-poor households less able to take risks and to invest in the future when the economy picks up.

## **List of country reports**

### **Cambodia**

- Cambodia Development Research Institute. 2009. Special report on vulnerable workers survey in Phnom Penh, Kandal, Kompong Speu, Siem Reap, and Battambang. Phnom Penh.
- . 2009. Rapid assessment of the impacts of the economic crisis on Cambodian households and vulnerable workers' income, consumption and coping strategies. Second round. Phnom Penh.
- Sovannarith, So. 2009. Informal risk management/safety net practices: Experiences of the poor and vulnerable workers. Phnom Penh.

Vuthy, Send and Kem Sothorn. 2009. Rapid assessment of the impacts of the economic crisis on Cambodian households: Focus group discussions with vulnerable workers and rural households. Phnom Penh.

## **Lao People's Democratic Republic**

Indochina Research. 2009. Transcripts of focus group discussions and in-depth interviews. Vientiane.

## **Mongolia**

Global Reach Center. 2009. A final report for study on the crisis implications for household livelihood. Ulaanbaatar.  
———. 2009. Second round research on monitoring the impacts of the economic crisis in Mongolia. Ulaanbaatar.

## **Thailand**

Chantavanich, Supang, Mya Than, Samarn Laodumrongchai, and Artit Wong-a-thitikul. 2009. Final report of rapid assessment on the impacts of the economic downturn on workers in Thailand. Bangkok.

## **Viet Nam**

Dinh Thi Thu Phuong. 2009. Rapid assessment on the social impacts of economic crisis in Vietnam: Case studies on day laborers in “mobile labor markets” in Hanoi. Hanoi.  
Nguyen Ngoc Anh. 2009. Rapid assessment of the economic crisis impacts on enterprises located in industrial parks near Hanoi. Hanoi.  
Nguyen Tam Giang. 2009. A rapid assessment on the social impacts of the economic crisis on two craft villages. Hanoi.  
Vietnamese Academy of Social Sciences. 2009. Report on initial results of quick survey of global financial–economic crisis impact on enterprises and employees in Thanh Hoa, Nghe An, Hai Phong, Ho Chi Minh, Binh Duong and Dong Nai, Vietnam. Hanoi.  
World Bank, Oxfam GB, and CAF (VASS). 2009. Rapid assessment on social impacts of economic crisis in Viet Nam. Hanoi.

## **Box 2: Bangladesh**

Many countries were not affected by the 1997–1998 Asian financial crisis due to their limited financial and trade ties with the global economy. Bangladesh was one of them. However, since then the country has become increasingly integrated into the global economy, such that trade and remittances came to provide avenues for transmitting the recent global economic shocks.

Exports are the main transmission channel. The readymade garments sector directly employs around 3 million workers and indirectly many more. Exports, particularly of woven and knitted garments, have fluctuated since November 2008, although ready-made garments seemed to be protected from a severe downturn since they cater to the low end of the market. Major commodity exports of frozen shrimp, leather, and jute products, which employ at least 1 million workers, have also been affected. The impact of reduced demand for exports would have been higher without the sharp fall in import prices of fuel, fertilizer, and raw materials.

Remittances from workers abroad have become increasingly important and rose from only 3% of GDP in 1995 to 10% of GDP. In 2008, nearly 6 million people were employed abroad and remittances in 2008/09 were equivalent to \$9.7 billion. Remittance flows, while showing considerable variability, have not been greatly affected since much of it emanates from the Gulf states, which have been less affected than industrialized countries by the recession. Increased use of banking channels may also have helped maintain remittance levels.

The muted impact on ready-made garment exports, generally high levels of remittances, as well as strong agriculture growth, moderated the impact of the global downturn. Though slower than in the three previous years, growth still came in at about 6% in 2008/09.

The Government of Bangladesh provided two stimulus packages. Its April 2009 package was worth \$500 million and included credit, subsidies for power and agriculture production, and funding for a social safety net. Its second package of \$725 million was announced in June 2009, with incentives for the ready-made garments and textiles industry, rescheduling of loans, and a proposed export development fund for importing machinery for manufacturing-export plants.

Source: Nazneen Ahmed and Mustafa K. Mujeri in “Social Impacts of Global Economic Slowdown: The Case of Bangladesh.” [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)



# Social impact of commodity price volatility in Papua New Guinea

*Dominic Patrick Mellor*<sup>1</sup>

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## Introduction

Papua New Guinea is a Pacific island, with a population of 6.5 million. It is endowed with natural resources, exporting crude oil, metals, and agricultural commodities. Minerals constitute 77% of total exports, agriculture 17%, forestry 5%, and marine resources 1%. The main agricultural exports are palm oil, coffee, cocoa, copra, and copra oil. Cash crops are an important source of income at the national and household levels, while renewable-resource sectors are an important source of income for rural villages, which account for 81% of the population.

In the past couple of years, commodity prices have been on a roller coaster. Oil prices soared to an all-time peak of \$147 a barrel in July 2008, before slumping to below \$33 in December 2009. The price has since recovered to around \$70. Papua New Guinea's agricultural exports were also affected, causing a significant terms-of-trade deterioration.

Despite some adverse effects from the global financial crisis, Papua New Guinea's economy is performing well. So, although the local currency export price index dropped by 32% in the last quarter of 2008, factors such as a large liquefied natural gas project and the country's insulation from global financial markets helped buffer the impact of the crisis. In addition, earlier prudent fiscal policy during the commodity boom resulted in increased savings, accumulation of foreign exchange reserves, and public debt reduction. The real gross domestic product growth estimate for 2009 should be a healthy 4.5% compared

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<sup>1</sup> Dominic Patrick Mellor is a country economist at the Papua New Guinea Resident Mission of the Asian Development Bank (ADB). The views expressed in this paper are those of the author. However, he is extremely grateful for the substantial comments provided by M. Bourke (Australian National University, Canberra), A. Batten and T. Sampson (Harvard University). The author is also thankful to P. Hettinger (Bank of Papua New Guinea), D. Lucius, Y. Niimi, and C. Sugden (ADB) for reviewing draft papers, as well as for the excellent research support provided by C. Boin (University of Papua New Guinea, Port Moresby) and S. Yeung (University of New South Wales, Sydney).

to a 0.4% contraction in the other Pacific island economies, excluding Timor-Leste (ADB 2009).

Country analysis of the crisis impact is mainly at the macroeconomic level, with a focus on the formal economy. However, because the cash economy employs only around one fifth of the population, and the rural majority produce for their own consumption with some cash crops for income, a decline in commodity prices directly affects rural income. Lower government revenues may also impair basic service delivery. These have significant social implications.

Still, the government's response in the post-crisis 2009 budget was significant, as it provided for a more expansionary fiscal stance. But there are concerns over the size and rate of expenditure: the fiscal stimulus of over 6.0% of gross domestic product (well above the 4% average for the Group of 20 countries) was funded from savings accumulated during the commodity price boom. There may be limitations in the public sector's absorptive capacity and the quality of some recent, large-scale expenditure initiatives is open to question.

Public social protection programs to assist the vulnerable are largely nonexistent, partly due to absence of administrative capacity to identify the poor, maintain records, and implement programs. (For instance, no household budget survey has been carried out since the mid-1970s.) Some government-mandated programs provide protection for workers in the formal sector, but these have little impact on those in the informal sector.

Social protection is therefore largely provided by traditional coping mechanisms, grounded in strong ethnic group links. Such customary obligations for group members provide a limited safety net, and partly mitigate the common social and economic risks. However, this traditional social system is becoming increasingly stretched with increased mobility and urban drift.

## **Two analytical approaches**

The social impact of commodity price volatility is explored through an income analysis and a substitution analysis.

The income analysis is applied to various terms-of-trade shocks: kina devaluation in 1994; depressed commodity prices during 2001–2003; high commodity prices during 2007–2008; and the global financial crisis. This analysis may shed light on vulnerabilities of different groups to future crises. Distinct population groups rely on different cash crops for income. Examining the impact of these shocks on income and expenditures gives an indication of the net welfare

impact. Household-specific consumption baskets across different cash crop regions are constructed. Detailed regional price data are then used to assess the impact of external shocks on the cost of living.

Income analysis does not, however, account for substitution effects of price changes between imported and domestic market goods. A substitution analysis is therefore applied that involves the application of vector autoregression econometric techniques to detailed consumer price data across different regions. The utilization of this extremely disaggregated data enables one to empirically test the extent to which imported inflation passes through to prices of imported and domestic market goods. A case study of sweet potato substitution for rice is also considered.

Previous analysis on this subject is limited due to data constraints. There are, however, a relatively large amount of data that this study attempts to better utilize. These data include (i) quarterly consumer price index (CPI) at the item level by region, 1977 to 2009; (ii) 1996 Household Income and Expenditure Survey (HIES) data; (iii) Mapping Agricultural Systems of Papua New Guinea Project (MASP); (iv) agricultural commodity export data from selected *Quarterly Economic Bulletins (QEB)*; and (v) district “disadvantage indexes” from the *Papua New Guinea Rural Development Handbook*.

## Income analysis

### Cash crop income by region

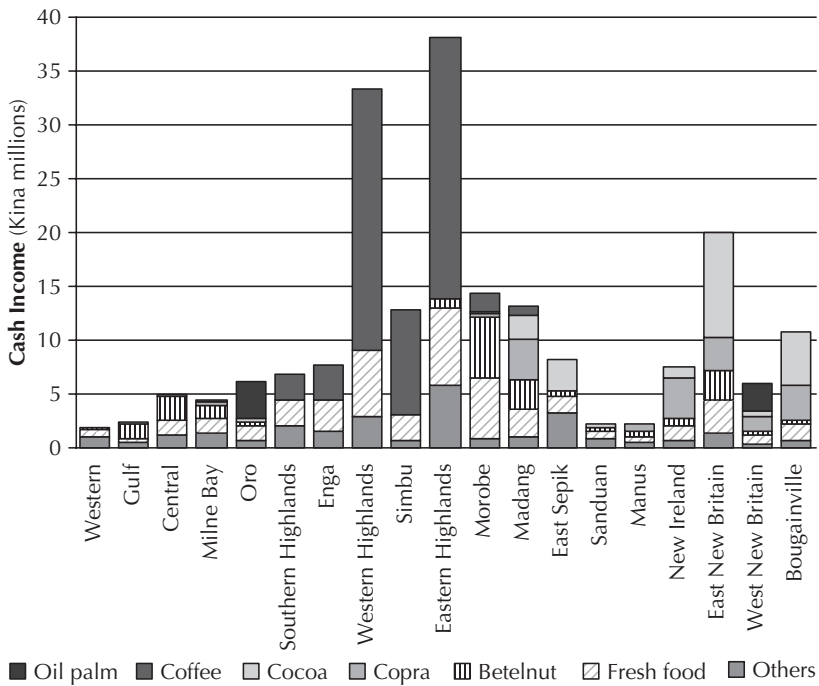
Agricultural activities—hence incomes—vary widely (Figure 1).<sup>2</sup> The analysis groups provinces under three cash crop regions: (i) coffee—Western Highlands, Eastern Highlands, and Simbu; (ii) palm oil—Oro and West New Britain; and (iii) cocoa and copra—Madang and East New Britain. (Bougainville was excluded as no recent household survey data were available.)

This analysis included 316 households (180 coffee, 95 cocoa/copra, and 41 palm oil). An expenditure price index was calculated for each household by weighting item-level CPI data at the regional level. An income index was calculated using price data, weighted by export crop income sources for each province. The net household

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<sup>2</sup> Although the MASP database is for the 1990–1995 period, the broad patterns remain valid. It provides the only reliable estimates of the value of commodities sold in the informal economy (Bourke and Harwood 2009, p. 234).

**Figure 1: Annual cash income of the rural population across provinces, 1990–1995**



Source: MASP

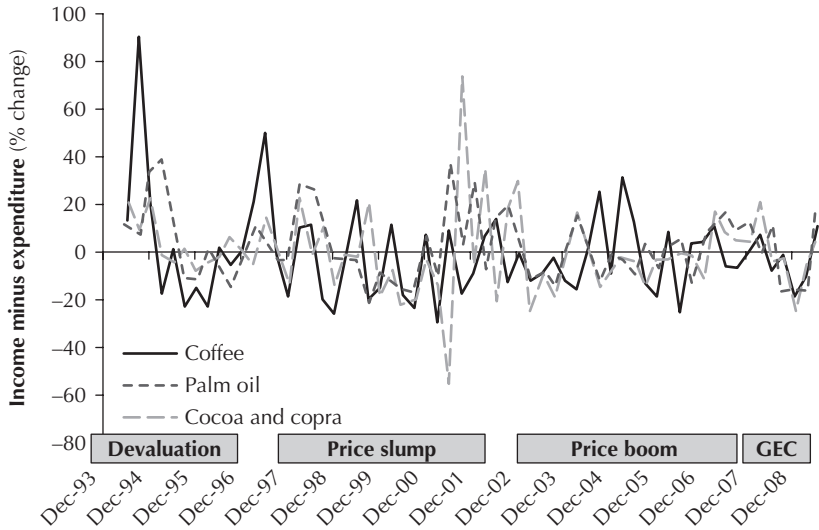
impact is the change in income index less the change in the expenditure price index. For example, if during a specific period the income index increases by 5% while the expenditure price index increases by 10%, the net real income impact is -5%.

The calculated income indexes are based only on export crops and do not take into account produce grown for own consumption and sale in local markets. The latter may have less volatile prices, which would dampen income movements. This would probably not alter relative income changes across regions, but may potentially dampen the size of the income effects analyzed in this section.

Figure 2 depicts how real incomes have changed between 1994 and mid-2009. Figure 3 illustrates the cumulative change in real incomes over the same period. The graphs are followed by subsections that contain income analysis of the three main cash crop regions during the various terms-of-trade shocks listed in the previous section.

The size of the income effects calculated is large in some instances. There may potentially be upward bias, in absolute terms, because the calculated income effects do not allow for substitution effects.

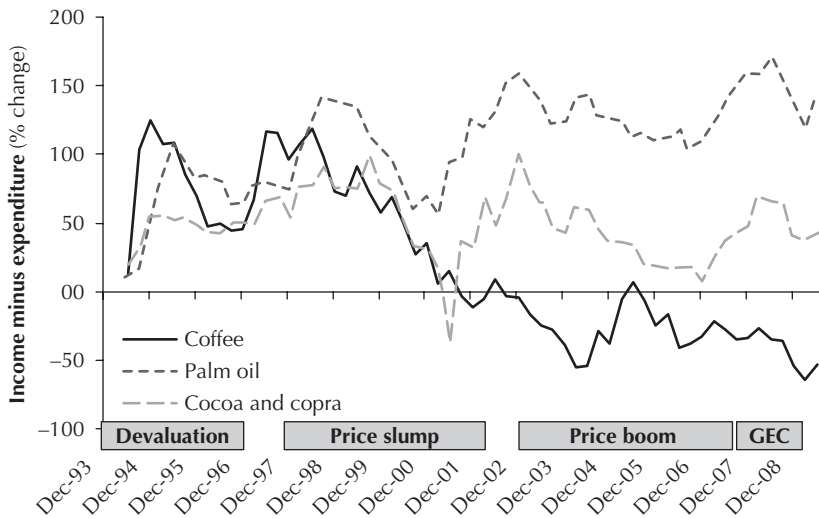
**Figure 2: Change in real income across cash crop regions, 1994 to mid-2009 (%)**



GEC = global economic crisis.

Sources: Computed using CPI, MAS<sub>P</sub> 1996 HIES, and QEB data.

**Figure 3: Cumulative change in real income across cash crop regions, 1994 to mid-2009**



GEC = global economic crisis.

Sources: Computed using CPI, MAS<sub>P</sub> 1996 HIES, and QEB data.

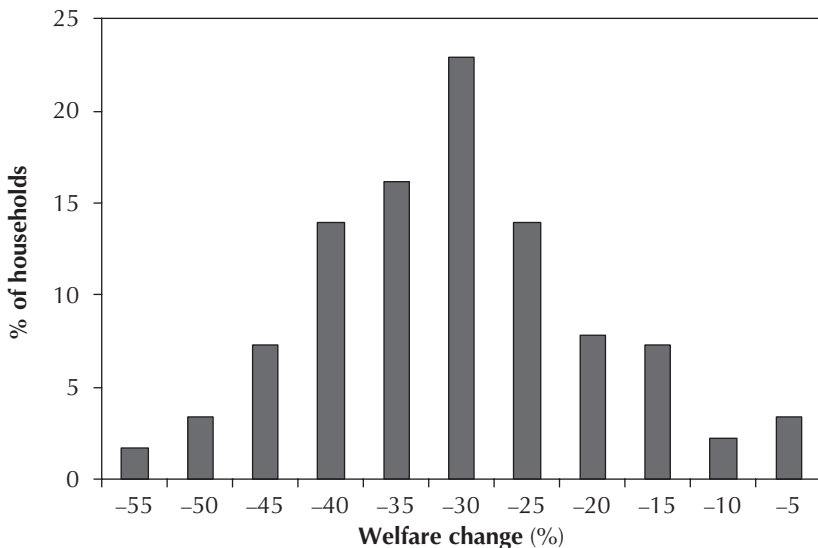
## Kina devaluation in 1994

In September 1994, the Papua New Guinea kina was devalued by 12.0%, and was allowed to float in October that year. Prior to this, the central bank had adopted a fixed exchange rate regime, but it was unsustainable because of poor fiscal management. The currency devaluation and subsequent depreciation resulted in sharp increases in import prices. It also increased local currency cash crop incomes, which are denominated in United States (US) dollars. The net effect of these price changes on households depended on the composition of expenditure and the main sources of income.

Initially, the currency devaluation raised kina income levels of rural communities across all regions. However, the depreciation eventually passed through to higher imported inflation, mitigating the initial positive income effect. The net income impact was positive in the palm oil, and cocoa/copra regions. The coffee region declined due to lower international prices.

Effects of the currency devaluation across households varied widely. For example, in the coffee region, the net income decline among 5.0% of households was up to 50%. (Figure 4). In the cocoa

**Figure 4: Welfare distribution of coffee grower households during kina devaluation**



Source: Computed using CPI, MASP, 1996 HIES, and QEB data.

and/or copra growing region, although the overall net welfare impact across all households was +31%, there was still a negative impact in 4.5% of households.

## **Low commodity prices during 2001–2003**

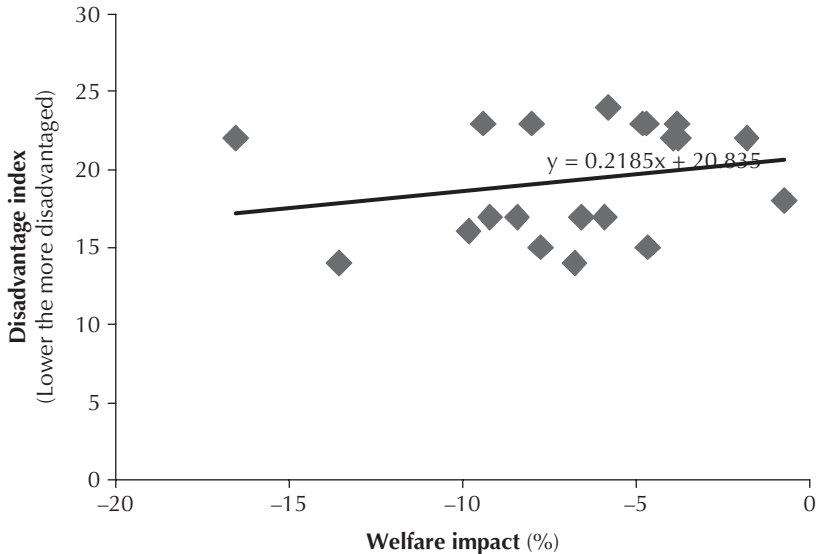
From 2001 to 2003, prices of export commodities were depressed. Lower commodity prices reduced income across all regions during 2000 and early 2001. Recoveries in the international price of palm oil and coffee, and a sharp kina depreciation boosted the incomes of rural households within these regions, and raised net income between the latter half of 2001 and 2002. In contrast, international coffee prices remained depressed, which offset any export competitive gains from a weak kina. The impact of households within the same region varies. Despite the recovery in cocoa prices during 2002, the net income of many households in the cocoa/copra regions deteriorated sharply. A total of 27% of households experienced a decline of up to 50%.

## **High commodity prices during 2007–2008**

In 2007 and 2008, commodity prices increased steeply. Higher export commodity prices boosted rural income but also increased the cost of imported food items. The strong kina, due to large fiscal and current account surpluses, helped mitigate the impact of steep increases in imported prices. However, higher fuel prices also affected the cost of goods, through higher transport costs. This would have more severely affected remote households, which spend a greater proportion of their income on transport.

Income gains from higher commodity prices more than offset the higher cost of living in the palm oil and cocoa/copra regions. The coffee region, on average, was slightly worse off. This was mainly because the increase in coffee prices was relatively small, and most kina income gains were offset by the appreciating kina. On average, the cost of living for coffee households increased by 18.7% over the 15 months to end-June 2008, compared to 15.0% in the palm oil region and only 11.4% in the cocoa/copra region. The net welfare impact across households varied widely. Those that experienced the greatest loss spent a greater proportion of their income on public transport, kerosene, and rice.

**Figure 5: Correlation between disadvantage index and welfare of coffee region districts during high commodity prices, 2007–2008**



Source: Computed using CPI, MASP, 1996 HIES, QEB data, and disadvantage indexes.

There is some correlation between a household’s “disadvantage-ness” and welfare (Figure 5).<sup>3</sup> Households in more remote and disadvantaged districts of the Highlands were more likely to be adversely affected by the higher prices for imported commodities. Analysis of the consumption composition of these households show that typically, a greater proportion of their income was spent on transport, kerosene, and staple food items.

## Global financial crisis

The crisis did not significantly affect the price of coffee and cocoa. However, kina prices of palm oil and copra declined steeply in late

<sup>3</sup> Provinces within Papua New Guinea consist of districts. The 2001 *Papua New Guinea Rural Development Handbook* created a framework for comparing districts by ranking five parameters—land potential, agricultural pressure, access to services, income from agriculture, and child malnutrition. These create a “disadvantage index,” which ranks districts from the most disadvantaged to the least disadvantaged. The coffee cash crop region contains households from 20 districts, including 4 seriously disadvantaged, 5 moderately disadvantaged, 1 slightly disadvantaged, and 10 not disadvantaged.



2008 and early 2009. Despite reduced revenues, the Government maintained an expansionary fiscal policy stance. This led to a widening deficit, which put downward pressure on the kina in late 2008. The depreciation would have helped soften the impact on kina incomes of lower international commodity prices, but also contributed to inflation. All cash crop regions suffered a net income loss during this period, with palm oil regions suffering the most. Over one quarter of palm oil households experienced welfare losses of over 50%. Remote palm oil smallholders with limited alternative income would have been particularly vulnerable.

The following observations may be drawn from the income analysis:

- Papua New Guinea exports a diverse range of mineral and agricultural commodities. Hence, at macroeconomic level, the economy is less vulnerable to commodity-specific terms-of-trade shocks. However, some subregional groups may be vulnerable. For example, smallholder households in palm oil regions may have come under greater economic stress during the crisis.
- Vulnerability of households to adverse terms-of-trade shocks depends on the diversity of alternative cash crop income sources in the region. Dependence on a single cash crop makes these communities more vulnerable to price changes.
- Variation may exist in the welfare impact of households within any particular cash crop region. Thus, households within the community may still be at risk even if the region overall is not significantly affected. Remote communities with limited access to services and markets tend to be more vulnerable to terms-of-trade shocks because a greater proportion of their income is spent on transport.

This analysis does not capture any substitution effects from relative price changes. For instance, sharp increases in rice may lead to growing greater quantities of sweet potato. The next section empirically tests these substitution effects.

## **Substitution analysis**

### **Import dependent or self-sufficient?**

Papua New Guinea is often regarded as an import dependent country and the population is thought to live mainly on imported rice. This is

reinforced by the weights in the national CPI, estimated to have an import component of 70%. This would suggest that citizens are very vulnerable to imported inflation.

Most Papua New Guineans are, however, self-sufficient in food production. Urban populations are more likely to be vulnerable to import price shocks. Imported rice provides an estimated 9% of food energy, and wheat-based foods a further 5%. Locally grown staples provide an estimated 68%, with sweet potato by far the most important of those crops (Bourke and Harwood 2009). The CPI weights are based on a household survey conducted in 1977 of a sample of urban dwellers whose consumption patterns would be very different from the majority rural population.

The vulnerability of households to adverse price shocks also depends on the domestic market supply response in their locality. An adverse terms-of-trade shock resulting from sharp declines in export commodity prices will place downward pressure on the kina. This will raise the cost of imported goods and increase inflation. In the short term, the price of domestically marketed food crops will rise (income effect) but prices may eventually ease due to a production response (substitution effect). The following analysis sets out to empirically quantify the extent to which relative prices between imported and domestic market goods change in response to a shock.

## Methodology

Port Moresby, Goroka, Lae, and Madang were examined because detailed quarterly CPI data are available from 1977 to the present. Four price indexes were constructed: imported goods, imported staple goods, domestic market goods, and domestic staple goods. The imported price indexes include foreign goods, and domestic goods that have a high import component (e.g., soft drinks and beer). Unit root tests were performed to ensure stationarity of all variables.<sup>4</sup>

To control for the change in exchange rate regime in 1994, models were regressed over the whole time series (121 observations), and the period after the fourth quarter of 1994 (59 observations). The exchange rate was more volatile after the float, when the most significant terms-of-trade shocks occurred.

An ordinary least squares (OLS) model was used to estimate the degree of exchange rate pass-through to imported and domestic

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<sup>4</sup> Augmented Dickey-Fuller tests and the Phillips-Perron test give the same results.

goods, and the subset of staple goods for each urban center. The model is similar to the one used by Sampson et al. (2006).

$$\Delta INF_t = \sum_{i=1}^3 \gamma_i D_{i,t} + \gamma_4 VAT + \beta_1(L)\Delta XR_t + \beta_2(L)\prod_t^F + \varepsilon_t \quad (1)$$

INF measures inflation,  $D_{i,t}$  are quarterly dummy variables, VAT is a dummy for the introduction of value added tax in the third quarter of 1999, XR is the percentage change in the exchange rate,<sup>5</sup> and  $\prod$  is foreign inflation.<sup>6</sup>

The OLS model specification was used to estimate the degree of second-round pass-through from increases in prices of imports across each urban center.

$$\Delta DOM_t = \sum_{i=1}^3 \gamma_i D_{i,t} + \beta_1(L)\Delta IMP_t + \varepsilon_t \quad (2)$$

DOM and IMP are measures of inflation of domestic and imported goods, respectively.

A vector autoregression (VAR) framework was adopted to test the relationship between exchange rate movements and inflation of imported and domestic goods

$$\Delta XR_t = \sum_{i=1}^n \alpha_{1i} \Delta IMP_{t-1} + \sum_{i=1}^n \alpha_{2i} \Delta DOM_{t-i} + \varepsilon_{XR_t} \quad (3)$$

$$\Delta IMP_t = \sum_{i=1}^n \alpha_{3i} \Delta XR_{t-1} + \sum_{i=1}^n \alpha_{4i} \Delta DOM_{t-i} + \varepsilon_{IMP_t} \quad (4)$$

$$\Delta DOM_t = \sum_{i=1}^n \alpha_{5i} \Delta XR_{t-1} + \sum_{i=1}^n \alpha_{6i} \Delta IMP_{t-i} + \varepsilon_{DOM_t} \quad (5)$$

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<sup>5</sup> The exchange rate is measured as a weighted average of currencies against Papua New Guinea's major trade partners.

<sup>6</sup> Foreign inflation is measured as a weighted average against foreign inflation in Papua New Guinea's major trade partners.

**Table 1: Estimation results of exchange rate pass-through to imported prices<sup>a</sup>**

Estimation period: Q1 1979 to Q2 2009 (122 observations)								
Dependent variable:	Port Moresby		Goroka		Lae		Madang	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
Exchange rate	-0.037	0.280	-0.026	0.371	0.006	0.865	-0.011	0.746
Exchange rate (-1)	-0.135	<b>0.000</b>	-0.150	<b>0.000</b>	-0.167	<b>0.000</b>	-0.187	<b>0.000</b>
Exchange rate (-2)	-0.091	<b>0.010</b>	-0.058	<b>0.054</b>	-0.065	<b>0.055</b>	-0.061	<b>0.090</b>
Exchange rate (-3)	-0.086	<b>0.020</b>	-0.131	<b>0.000</b>	-0.060	<b>0.097</b>	-0.122	<b>0.002</b>
Exchange rate (-4)	-0.055	<b>0.141</b>	-0.019	<b>0.541</b>	-0.098	<b>0.008</b>	-0.027	0.486
Long-run pass-through	40.5%		38.5%		38.4%		40.8%	

coef. = coefficient.

<sup>a</sup> Bold p-values are significant at the 10% level. Foreign inflation lags and dummy variables are excluded from the table.

Notes: Standard deviations are in parentheses. \* = significant at 10%; \*\* = significant at 5%; \*\*\* = Significant at 1%.

Source: Author's calculations.

The exchange rate (XR) is set as exogenous, as it is determined largely from external factors.

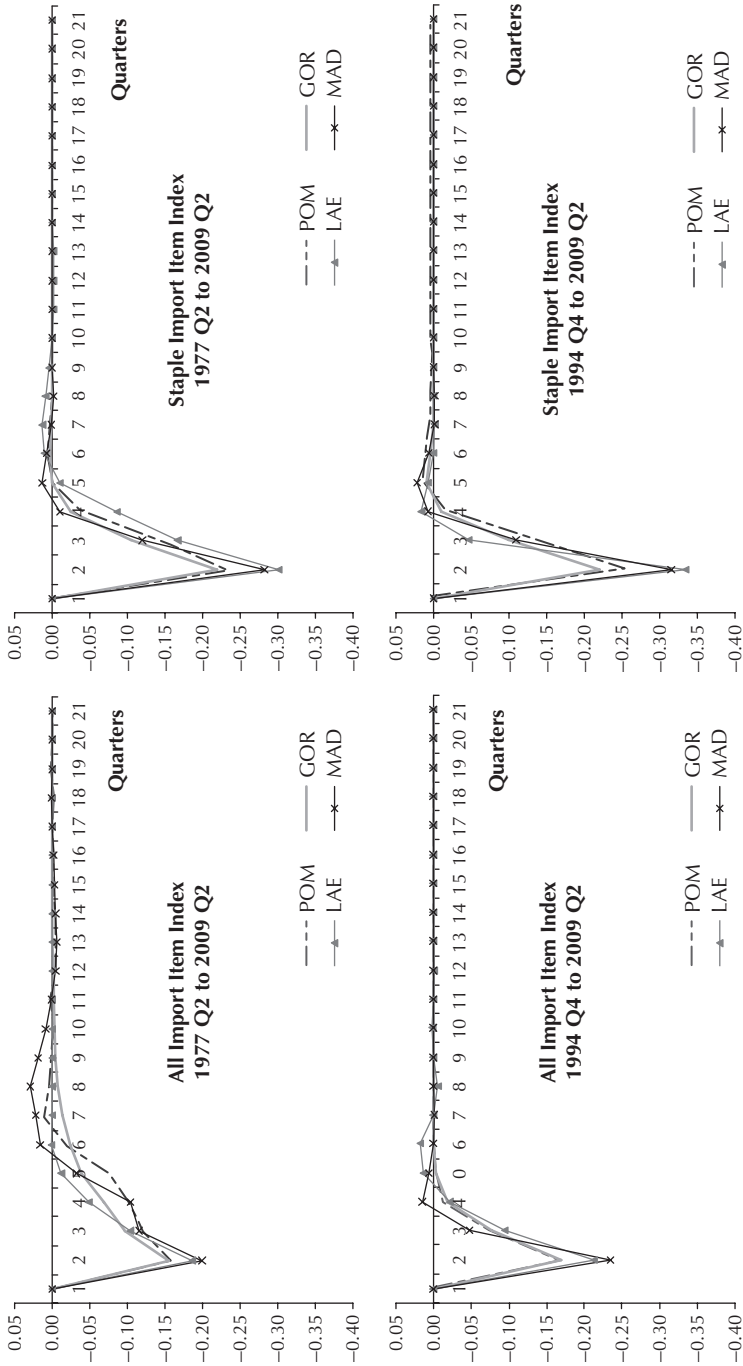
For each VAR specification, the Akaike's Information Criterion (AIC), Schwarz's Bayesian Information Criterion (SBIC), and the Hannan and Quinn Information Criterion (HQIC) are used to determine the minimum lag length required for error terms to be normally distributed and independent.

The VAR results are used to calculate the impulse response function (IRF), which illustrates the complete time profile of the effect of a standard deviation shock to the exchange rate on both the contemporaneous and future values of imported and domestic prices. IRF captures the direct and feedback effects caused by the endogeneity of the variables over time. IRFs are generated for each urban center over two sample periods.

## Results

Table 1 presents the results of the OLS estimation of Equation 1. The long-run pass-through is calculated as a cumulative sum of the estimated coefficients of exchange rate variants, regardless of significance level.

**Figure 6: Impulse reaction function: Standard deviation shock to exchange rate**



GOR = Goroka, LAE = Lae, MAD = Madang, POM = Port Moresby.  
 Source: Author's calculations.

The timing and magnitude of exchange rate pass-through to import prices are similar across all centers. Exchange rate movements have significant effects between one and four quarters. The estimated long-run pass-through is between 28% and 40% across all centers. Pass-through to imported staple items tends to be larger, varying between 40% and 50%. The dynamic VAR results depicted in Figure 6 reinforce the findings from the static OLS. Thus households that spend a large proportion of income on imported staples may be more vulnerable to the first-round pass-through effects of an exchange rate depreciation. Across all urban centers, the pass-through has been larger since the kina was floated.

The results from OLS models (1) and (2) suggest that exchange rate movements are not significant in determining changes in prices of domestic goods. Figure 7 plots the IRFs of prices of imported and domestic goods to a standard deviation shock in the exchange rate. There is some degree of pass-through to domestic prices, but the pass-through to imported prices is significantly larger in all centers. The impact on domestic staple market goods is found to be smaller.

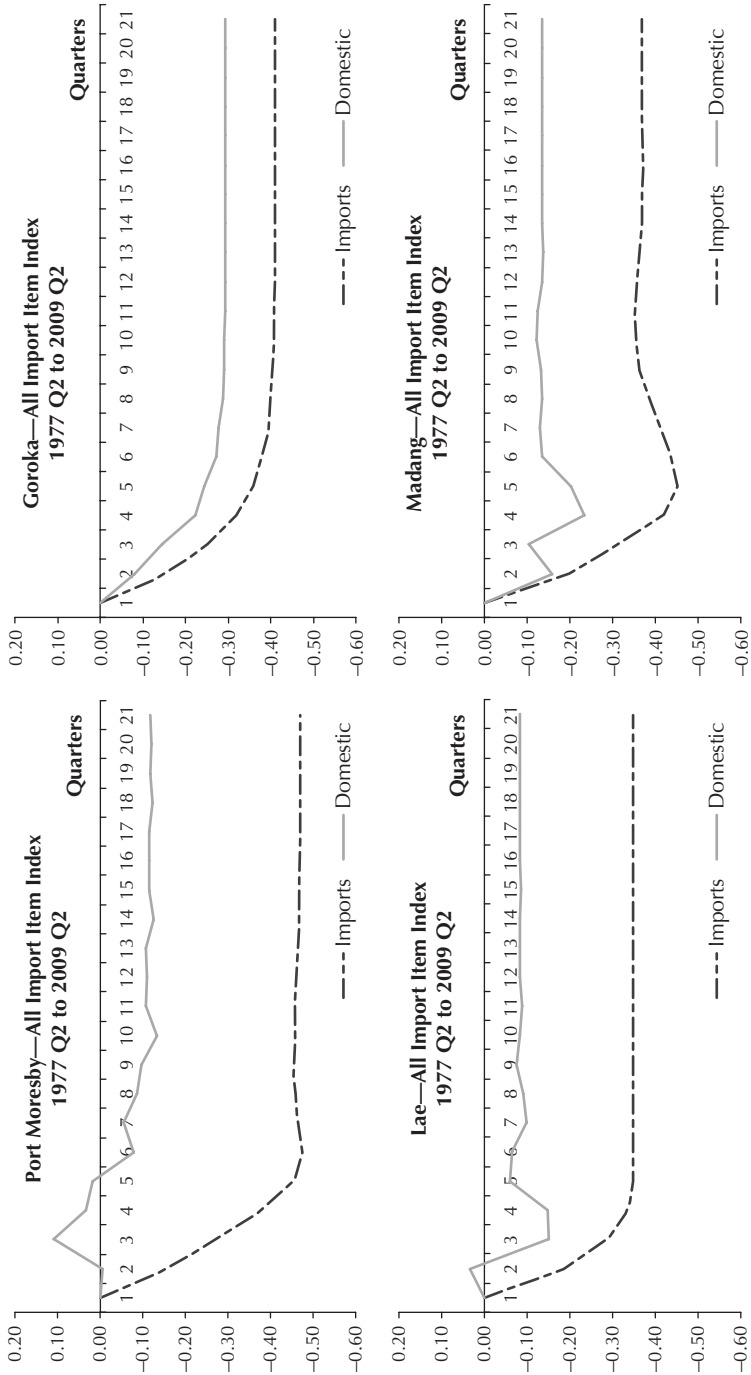
An implication of the low pass-through to domestic prices is that households that do not consume very many imported goods would tend to be much less sensitive to the inflationary effects of exchange rate depreciations than previously thought. This suggests that many Papua New Guineans may actually be fairly resilient to imported price shocks.

The magnitude and timing of pass-through to the domestic market are quite low across all centers, but there is some slight variation. In Lae and Madang, there appears to be an initial increase in domestic produce prices that would potentially incentivize increased production. These are both provincial towns with fast-growing urban populations with no access to land, and rely increasingly on formal sector wage employment. The increasing dependence of these populations on staple foods acquired through formal market systems creates demand that encourages producers in surrounding areas to increase production.

Sharp depreciations in the kina since it was floated have led to increased local production and an improved capacity for major urban centers to feed themselves. The weaker kina has increased the price of imports, which in turn has increased the demand for cheaper locally grown food. This has helped spur local production. The substitution effect is a possible explanation for the weaker second-round pass-through of exchange rate shocks to domestic prices.

The supply-side response is lower in Goroka. Most people have access to land and viable subsistence agricultural options. This reduces

**Figure 7: Cumulative impulse reaction function: Standard deviation shock to exchange rate**



Source: Author's calculations.

the incentive to grow more domestic market crops in response to import price shocks. Households would instead increase subsistence agricultural production. This would potentially reduce the excess supply of fresh produce for the formal market. In such an event, the growing settlement populations around provincial towns, who have no access to land to engage in subsistence agriculture, would be most vulnerable. These people would be affected by increased prices for import goods and higher prices for domestic market goods due to supply shortages.

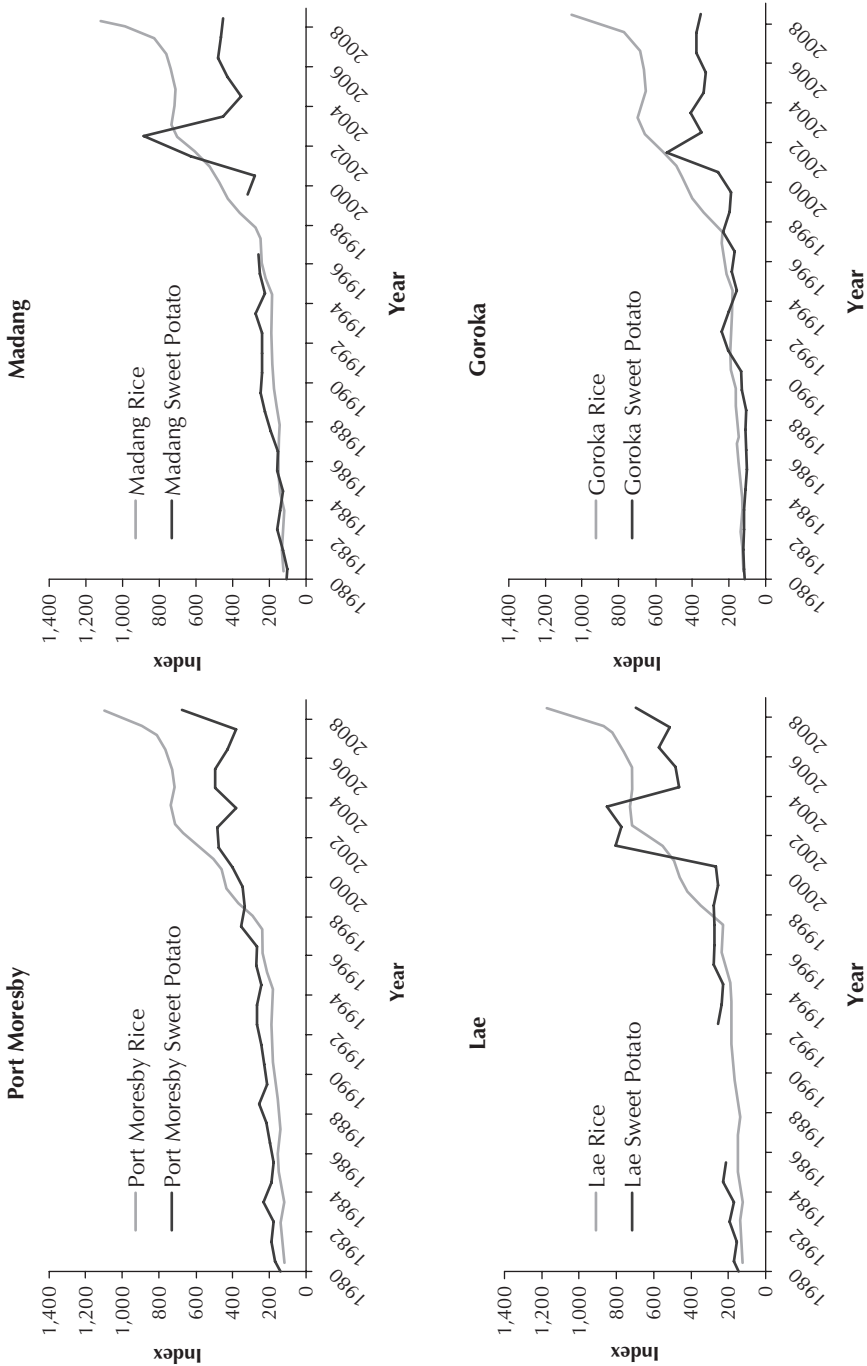
Interestingly in Port Moresby, the largest urban center in the country, the IRF does not provide strong evidence of an initial increase in prices of domestic goods that would incentivize increased production. On the contrary, prices initially fall and overall pass-through is very low. One possible explanation is that Port Moresby is a relatively wealthy urban center with two highly delinked consumer markets: one group of very high-income consumers (expatriates and wealthy Papua New Guineans) that buy mainly imported goods from the formal sector; and another group of lower-income households that buy mainly locally produced goods. If the first group tends to have a high propensity to consume imported goods from the formal sector, regardless of relative price changes between imported and domestic goods, even if the price of imported goods increases, there would be little extra demand for domestic goods and, subsequently, no reason for a domestic supply response.

## **Case study of rice and sweet potato**

Variations in regional domestic supply-side responses can be illustrated by an examination of movements in the price of rice and sweet potato from 1979 to 2008. Rice is an imported staple good, while sweet potato is the traditional staple food. The devaluation of the kina in 1994 and subsequent adverse terms-of-trade shocks passed through to rapid increases in import prices. Steep rises in the price of rice between 1995 and 2008 were seen in all regions. Prices of fresh foods also increased over this period, but not as rapidly due to increases in supply. Locally grown staple foods such as sweet potato are now more competitively priced against imported rice than they were before 1994 (Figure 8).



**Figure 8: Average price of rice and sweet potato across different regions**



Source: National Statistical Office of Papua New Guinea.

Definitive conclusions cannot be drawn on the degree of supply-side responsiveness of domestically marketed goods to increases in the price of imported goods. However, the results point toward the following:

- Exchange rate pass-through to higher prices of imported goods is strong and similar across all major urban centers. The pass-through effect is higher for imported staple goods. Thus, low-income households that spend a greater proportion of their income on imported staple goods may be more vulnerable.
- Second-round pass-through to domestic market goods has been significantly lower than imported goods, especially fresh produce staples, since the kina was floated. It seems that competitively priced domestic goods have, to some degree, created incentives for local production. This strong supply-side response has allowed households to substitute locally grown goods for imported staples.
- The timing and degree of second-round pass-through to domestic prices vary across urban centers. There is some evidence of domestic good supply response in Lae and Madang, which are urban areas that have growing populations with no access to land, and which rely mainly on formal sector wage employment. Higher reliance on staple foods may create strong incentives for local producers to meet demand shortages. The supply-side response appears weaker in Goroka, where the majority of the population has access to land and the option of subsistence farming. If this is true, the settlement populations around these types of rural provincial towns that do not have direct access to land to engage in subsistence agriculture would be particularly vulnerable. The delinked nature of the Port Moresby consumer market may explain why there is little evidence of domestic supply response to imported price shocks there.

## **Conclusions**

This socioeconomic analysis suggests that, although Papua New Guinea has proven fairly resilient to the global financial crisis at the macroeconomic level, subregional population groups may be vulnerable to terms-of-trade shocks. Vulnerability depends on the diversity of alternative income sources, remoteness, and accessibility to services and markets.

There is a high degree of pass-through from exchange rate shocks to imported staple foods across all urban centers. Therefore, low-income households that spend a greater proportion of income on staple foods are particularly vulnerable to imported inflation. There is some evidence that the second-round pass-through to domestic goods is lower in urban centers that have large populations with little access to land and that rely mainly on formal sector wage employment. This may be because high demand for staple foods spurs strong supply-side responses to import price shocks. This would indicate that landless settlement population groups around rural provincial towns may be less resilient to adverse price shocks.

Since public social protection programs to assist the poor and vulnerable to cope with risks are nonexistent, the Government should consider more carefully targeted support for subpopulation groups when they are confronted with severe terms-of-trade shocks. Although traditional social systems have proven effective in providing some support, these are experiencing increasing stress, largely due to urban drift.

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### **Box 3: Uzbekistan**

The global crisis affected Uzbekistan through two major channels: trade and remittances. The prices of major commodity exports such as cotton, copper, and uranium fell sharply, while export volumes of automobiles, textiles, and fruits and vegetables fell as a result of slower external demand. The decline in export revenues was, though, partly mitigated by higher export prices of gas and by increased gas exports to the Russian Federation.

Remittances from workers abroad, primarily in the Russian Federation, had increased from about \$1.3 billion (6.1% of gross domestic product [GDP]) in 2005 to \$3.0 billion (14.0% of GDP) in 2008. They then fell, however, on the loss of jobs in the host country and by the depreciation of the Russian currency.

To counteract the impact of the crisis, the Government of Uzbekistan responded at the end of 2008 by providing a \$1.35 billion (3.9% of GDP) anti-crisis package for 2009–2012. The package has four major components. First, it supports investment activity through fiscal and monetary measures, including reduced corporate taxes, increased banking liquidity, and expanded credit to private entrepreneurs. It also lifts prohibitions against short-term external loans.

The second component was directed at exporters and includes tax privileges for exporters of finished textile products; temporary reduction in amortization payments; reduced bank lending rates; and caps on price increases of gas, electricity, and water.

The third component focuses on developing private entrepreneurship by lowering taxes for small industrial enterprises and sharply reducing fees for setting up a business. The final component looks to improve educational facilities, accelerate infrastructure construction in rural areas, and upgrade road and rail links.

Source: Jhanna Fattakova in “Global Financial Crisis: Challenges for Employment, Modernization, and Sustainable Growth in Uzbekistan.” [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# Assessing social outcomes through the Millennium Development Goals<sup>1</sup>

*Shiladitya Chatterjee and Raj Kumar<sup>2</sup>*

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## Relevance of Millennium Development Goals for measuring poverty and social outcomes

The Millennium Development Goals (MDGs) represent a major advance in how poverty is measured, as they assess the multidimensionality of poverty in a more holistic sense than previously. MDGs can also be considered as a set of entitlements, as governments are required to meet certain targets by certain dates. In addition, the MDGs represent a global consensus on measuring the many dimensions of poverty. MDGs also provide standardized methods of measuring poverty among countries and social progress within a country over time. However, the MDGs also have several weaknesses, as now discussed.

### Aggregative nature

MDGs are at a highly aggregate level. They do not provide decentralized information by subnational administrative categories, such as states or provinces; by gender; by disadvantaged population groups, such as indigenous peoples, minorities, or backward castes (the latter critical in South Asia); nor by rural and urban categories. Some have argued that MDG indicators should be disaggregated by income groups, as the overall aggregative MDG index for a country does not indicate the true MDG outcomes achieved by poorer groups. On the other hand, many countries have adopted the MDGs in their own planning system and have produced their own MDG indicators, many of them with a wide variety of disaggregation, while some countries have added indicators that specifically describe their poverty and deprivation

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<sup>1</sup> Inputs from Haishan Fu, Syed Nuruzzaman, Clovis Freire, and Romana Domingo are acknowledged with thanks.

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problems. These country-specific MDG data are often, however, not comparable within the developing Asian region.

## **Multiple indicators—Comparison issues**

The manifold nature of the MDG indicators makes them somewhat difficult to compare in totality. Attempts have been made to summarize the MDG data to enable some comparison of performance among countries (such as by estimating the percentage of indicators in which each country is “off track” and comparing this across countries); and making assessments within a region of the MDG indicators that are the worst performing (by estimating the percentage of countries that are “off track” in that indicator and comparing across indicators).

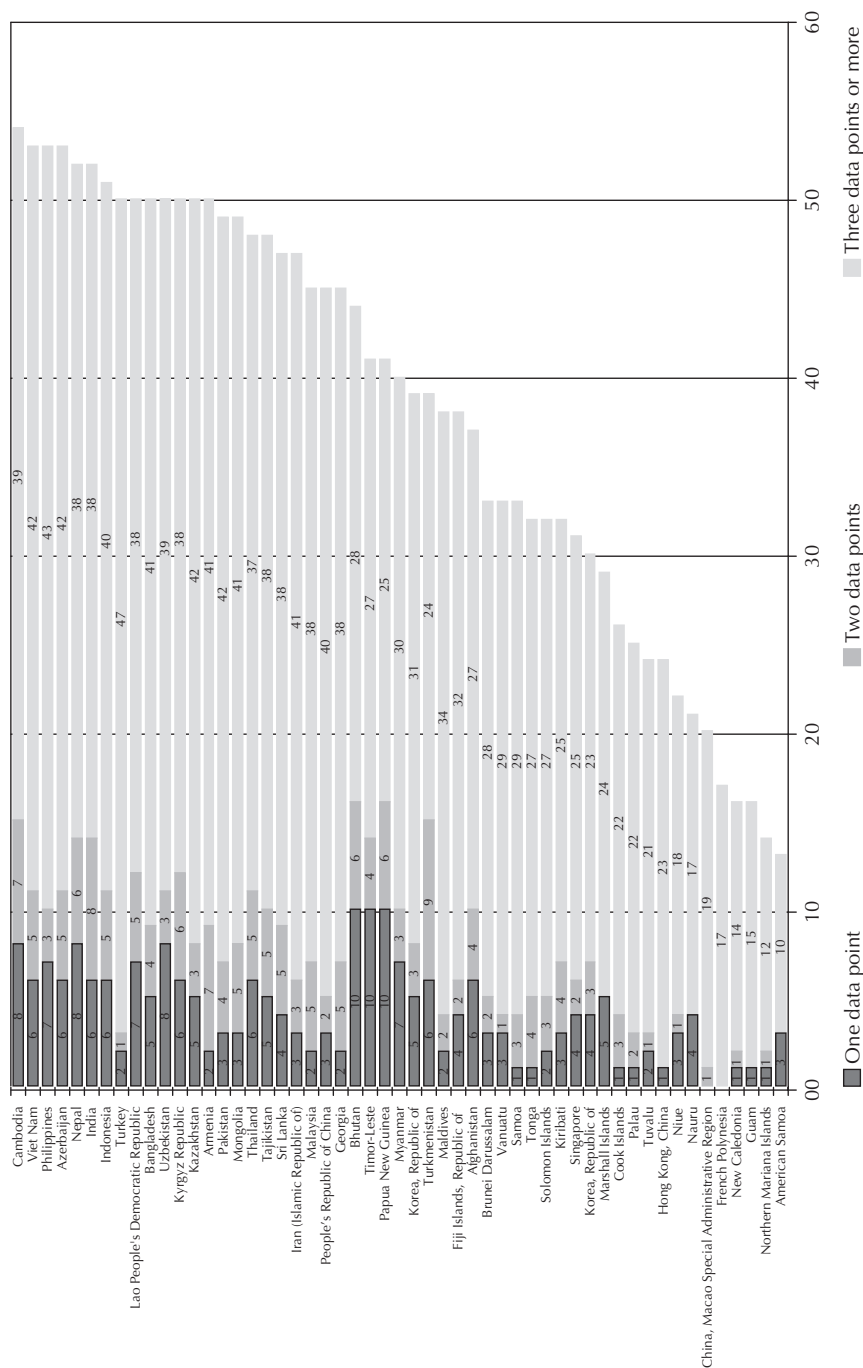
But such measures are approximates and have several deficiencies. The more scientific way to proceed may be to try and develop composite indexes based on strong associations between groups of indicators and then developing a single indicator out of these. However, while comparison will become feasible, such composite indicators will lose information and there will be great subjectivity and arbitrariness involved in the choice of weights and methods of aggregating, reducing their value.

## **Data gaps and delays in estimates**

Major problems for reporting MDGs are variations and gaps in data among subregions within developing Asia (Figure 1). Especially in the Pacific subregion, MDG data remain patchy. Another issue is that, in many cases, observations are very few, causing problems in assessing progress. For example, earlier estimates on maternal mortality ratios have been withdrawn as unreliable, leaving only the 2005 estimates. In the case of HIV/AIDS, the estimates prepared other than for 2001 and 2007 employed nonstandard methodology and so are not comparable. As of August 2009, half the countries in the region still had data on fewer than two thirds of the indicators.

Poorer countries suffer most from a lack of data on MDG indicators. Furthermore, data gathering is often fragmented among different ministries and agencies. To be useful for policy making, a considerable degree of tailoring, localizing, and disaggregation is necessary. Data collection is often supported by donors in poorer countries, but as their commitment is not always sustained, surveys often end up as one-time efforts, making time-series comparisons difficult. There are also problems of capacity at statistical offices for both data collection and analysis. A concerted effort to improve MDG datasets is being

**Figure 1: Data gaps in indicators for the Millennium Development Goals**



Source: UNESCAP calculations, 2009.

made by the Asian Development Bank–United Nations Economic and Social Commission for Asia and the Pacific–United Nations Development Programme (ADB–UNESCAP–UNDP) partnership on the MDGs (see Box).

An associated problem is the long delay in making the estimates available. Thus, latest estimates available generally relate to 2006 for most MDG indicators. When economic volatility is experienced—such as in the current global economic crisis—the latest estimates may be considerably out of line with expected trends. This generally 2–3 year lag in estimation makes policy formulation based on MDG data very difficult.

**Statistical capacity building supported  
by the ADB-UNESCAP-UNDP Regional Partnership**

The regional partnership envisages regional and subregional level support under its new phase of activities in 2009–2012 to increase and improve availability of Millennium Development Goals (MDG) data and to strengthen the capacity of national statistical systems to produce them. Specifically the outputs and activities planned are:

- Conducting diagnostic needs assessment in countries with the greatest needs on the use of existing vital statistics and the quality of vital registration systems and the production of disaggregated MDG-related data using population and housing censuses.
- Thereafter preparing a draft regional action plan to optimize delivery of support and organizing a multistakeholder regional forum on vital statistics and quality of vital registration systems to finalize the action plan and obtain indications of support from governments, donor and partner agencies.
- Activities under the action plan would be delivered through regional and subregional/national workshops on the production of disaggregated MDG-related data using population and housing censuses and data analysis. An expert group meeting on strategy and good practices for promoting effective use of MDG-related data for policy analysis and advocacy would also be organized. Finally, a handbook on good practices for use of MDG-related data would be prepared and disseminated.

Source: Authors.



In some cases, it may be possible to prepare such estimates on the basis of proxies. For example, good proxies of rural poverty may be available from wage rates of agricultural laborers if such statistics are available more frequently as they are in India and Indonesia. Quicker estimates of social indicators such as for education, health, and water supply and sanitation may be available—at least as far as public services are involved—from administrative data sources if these can be collected systematically. Yet such data, routinely collected by governments, are not always properly used in national statistics. They can, though, be made available with less time lag, rendering costly surveys unnecessary—and the ADB has begun a program of collecting such data. However, they are difficult to compare among countries, which is one of the main international objectives for gathering MDG data. Thus, although current MDG data sources report data after considerable delays, cheaper and quicker alternatives are available and need to be explored.

## **Recent projections on the Millennium Development Goals**

Asia and the Pacific has made impressive progress in achieving the MDGs in several areas. It is an early achiever in reducing gender disparities in primary and tertiary education, stopping the spread of HIV/AIDS and the incidence and increase of death rates associated with tuberculosis, reducing consumption of ozone-depleting substances, and halving the proportion of people without access to safe drinking water in rural areas. Moreover, it is on track to achieve other two important targets: ensuring universal access of children to primary school and halving the proportion of people living below the \$1-a-day poverty line. However, progress has been slow in other areas, such as improving maternal health, reducing hunger, ensuring that children complete a full course of primary education, reducing child mortality, ensuring access to clean water in urban areas and basic sanitation everywhere, and reducing carbon dioxide emissions (where, in fact, all subregions show a regressive performance).

The assessment of regional progress invariably masks great disparities at all levels, and the People's Republic of China (PRC) and India, for example, may disturb regional comparisons because of their size. Large differences in progress also exist among countries. The latest progress for all indicators and countries is summarized in Table 1.

**Table 1: Countries on and off track for selected Millennium Development Development Goals**

Goal	1		2			3			4		6			7						
	\$1.25/day poverty	Underweight children	Primary enrollment	Reaching grade 5	Primary completion	Gender primary	Gender secondary	Gender tertiary	Under-5 mortality	Infant mortality	HIV prevalence	TB incidence	TB prevalence	Forest cover	Protected area	CO <sub>2</sub> emissions	CFC consumption	Water, total	Sanitation, total	
<b>East and North-East Asia</b> China, People's Republic of Republic of Korea Hong Kong, China Macao, China Mongolia Republic of Korea	R	E	E	E	E	E	E	E	S	S	R	R	R	R	E	S	S	R	E	
	E	E	E	E	E	E	E	E	S	S	O	E	E	E	E	R	E	E	R	E
	E	E							R	R	O	O	E	E	O	E	E	E	E	R
			R									E	E	E						
	S	O	S						O	S	O	E	E	E	R	R	R			
			E	E	E	E	E	S	S	S	O	O	R		R	R	R			
	E	O	O	S	E	E	E	E	O	S	E	E	E	E	R	E	O	E	E	O
	S	S	E	E	O	E	O	S	S	S	E	R	E	E	R	E	E	E	E	O
	S	S	S	S	E	E	S	O	O	O	R	E	E	E	R	E	R	E	E	O
	E	E	E	R	E	E	E	E	S	S	R	E	E	E	R	E	R	E	E	R
<b>South-East Asia</b> Brunei Darussalam Cambodia Indonesia Lao People's Democratic Republic Malaysia Myanmar Philippines Singapore	S	S	R	R	R	E	E	E	O	S	O	E	E	R	E	E	E	E	E	
	S	S	R	R	R	E	E	E	O	S	O	E	E	R	E	R	E	E	E	
	S	S	R	R	R	E	E	E	O	S	O	E	E	R	E	R	E	E	E	
	S	S	R	R	R	E	E	E	O	S	O	E	E	R	E	R	E	E	E	
	S	S	R	R	R	E	E	E	O	S	O	E	E	R	E	R	E	E	E	
	S	S	R	R	R	E	E	E	O	S	O	E	E	R	E	R	E	E	E	
	S	S	R	R	R	E	E	E	O	S	O	E	E	R	E	R	E	E	E	

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Table 1 continued

Goal	1		2			3			4		6			7					
	\$1.25/day poverty	Underweight children	Primary enrollment	Reaching grade 5	Primary completion	Gender primary	Gender secondary	Gender tertiary	Under-5 mortality	Infant mortality	HIV prevalence	TB incidence	TB prevalence	Forest cover	Protected area	CO <sub>2</sub> emissions	CFC consumption	Water, total	Sanitation, total
Thailand	E	E	E	E	E	E	E	E	E	E	E	E	E	R	E	R	E	E	E
Timor-Leste	R	R	O	O	O	O	O	O	S	S	O	O	E	R	E	E	S	S	S
Viet Nam	E	E	O	O	O	O	O	O	E	E	R	E	E	E	E	R	E	E	E
<b>South and South-West Asia</b>	S	S	O	S	S	E	O	S	S	S	E	E	E	R	E	E	S	S	S
Afghanistan	S	S				S	R	S	S	S	O	E	O	R	O	R	E	S	R
Bangladesh							E	S	O	O	E	E	E	R	E	R	E	S	S
Bhutan			S	S	S	E	O	R	S	S	O	E	E	E	E	E	E	R	R
India	S	S	O	S	S	E	O	S	S	S	E	O	E	E	E	R	E	E	S
Iran, Islamic Republic of	E	O	S			E	O	E	O	S	R	E	E	O	E	R	E	O	R
Maldives	O	O	E			E	E		E	E	O	E	E	O	R	R	E	R	S
Nepal	S	S	S	S	S	E	O	S	O	O	O	E	E	O	R	E	E	E	S
Pakistan	E	R	S			O	O	O	S	S	O	O	E	R	E	R	E	S	O
Sri Lanka	S	O	E			E	E		S	S	O	O	E	R	E	R	E	O	E
Turkey	R	E	S			E	S	S	E	E	E	E	E	E	E	R	E	E	S
<b>North and Central Asia</b>	R	E	E	E	E	E	E	E	S	S	R	R	R	R	E	S	S	R	E
Armenia	O	R	S	E	E	E	E	E	O	O	O	E	E	R	E	R	E	E	S
Azerbaijan	E	S	E	E	E	E	E	O	O	O	R	E	E	O	E	R	E	S	R

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Table 1 continued

Goal	1		2			3			4		6			7					
	\$1.25/day poverty	Underweight children	Primary enrollment	Reaching grade 5	Primary completion	Gender primary	Gender secondary	Gender tertiary	Under-5 mortality	Infant mortality	HIV prevalence	TB incidence	TB prevalence	Forest cover	Protected area	CO <sub>2</sub> emissions	CFC consumption	Water, total	Sanitation, total
Georgia	R	O	O	E	R	E	E	E	S	S	O	E	E	O	E	R	E	E	R
Kazakhstan	S	E	E	E	E	E	E	S	S	S		R	R	R	E	R	E	S	R
Kyrgyz Republic	R	E	R	E	O	E	E	S	S	S	O	E	E	O	E	R	E	E	S
Russian Federation	E			R	R	E	E	S	S	S	R	E	E	O	E	R	E	E	R
Tajikistan	E	E	E	E	O	E	R	S	S	S	R	R	R	O	E	R	E	S	E
Turkmenistan	E	S							S	S	R	E	R	O	O	R	R	E	E
Uzbekistan	R	E	O	E	E	E	R	S	S	S	O	R	R	E	E	E	E	R	O
<b>Pacific</b>					R	R	R	R	S	S	R	E	E	R	E	R	R		
American Samoa									S	S		E	E	R	O				
Cook Islands			R		R	E	E		S	S		R	R	E	E	R	E	S	E
Fiji Islands			R	R	R	E	E		S	S	O	E	E	E	E	R	E	R	S
French Polynesia												E	E	O	E	R		E	R
Guam												E	E	O	E			E	R
Kiribati			E		E	E	E		S	S		E	E	O	E	E		O	S
Marshall Islands			R		R	E	E		S	S		E	E	O	O	R	E	R	O
Micronesia, Federated States of						E	E		S	S		E	E	O	O	R	E	E	R
Nauru			R		R	E	E		R	R		E	E	O	O	R	E	E	R

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Table 1 continued

Goal	1		2			3			4		6			7					
	\$1.25/day poverty	Underweight children	Primary enrollment	Reaching grade 5	Primary completion	Gender primary	Gender secondary	Gender tertiary	Under-5 mortality	Infant mortality	HIV prevalence	TB incidence	TB prevalence	Forest cover	Protected area	CO <sub>2</sub> emissions	CFC consumption	Water, total	Sanitation, total
New Caledonia					E	E	E				E	E	O	O	R	R	E	E	E
Niue					E	E	E				E	E	R	O	R	E	E	E	E
Northern Mariana Islands					E	E	E		S	S	E	E	R	O				R	E
Palau						R			S	S	R	O	E	E	E	R	E	R	E
Papua New Guinea					E	E	E		S	S		E	E	R	E	R	E	R	S
Samoa			E		E	E	E		S	S		E	E	E	R	E	E	R	S
Solomon Islands					E	O			S	S		E	E	E	R	E	E	R	S
Tonga					E	E	E		S	S		E	E	R	E	E	E	R	E
Tuvalu					E	E	E		S	S		E	E	O	O			E	E
Vanuatu			R		O	O			S	S		E	E	O	O	E	E	R	R
<b>Asia and the Pacific</b>	O	S	O	S	S	E	O	E	S	S	E	E	E	R	E	E	S		
<b>Asia and the Pacific (excluding PRC and India )</b>	O	S	S	S	S	E	E	E	S	S	R	E	E	R	E	O	S		

CFC = chlorofluorocarbon; CO<sub>2</sub> = carbon dioxide; TB = tuberculosis.

Notes: E = early achiever, O = on track, S = slow, R = regressing or no progress.

On- and off-track ratings for achievement of 2015 targets are based on trends of progress since 1990. Ratings are provided by UNESCAP, based on the United Nations MDG Database for MDG indicators (posted 15 July 2009).

Sources: ADB, UNESCAP, and UNDP 2010.

## **Economic slowdown and its impact on the Millennium Development Goals**

Even without the economic slowdown, most countries were going to miss several MDG targets. The slowdown has made achieving the MDGs more elusive.

The slowdown will affect countries' performance in several ways. With growth slowing, the region's biggest success—decline in income poverty—will flatten and in some countries even revert. Lack of decent work and income opportunities will be further compounded by declining remittances, especially from urban workers to their families in rural areas. The loss of jobs, declining income, and shrinking transfers will prevent rural families from rising out of poverty or push urban (and rural) vulnerable groups into poverty.

In 2008, with results from new global purchasing power parity data from 2005 becoming available, the World Bank revised the international poverty line for extreme deprivation from \$1 a day to \$1.25. Based on ADB estimates (Bauer et al. 2008), the proportion of people living in absolute poverty—equivalent to the new \$1.25-a-day extreme poverty line—has declined from 52.3% (1.4 billion people) of the region's population in 1990 to 27% (903 million people) in 2005, and it is estimated to have declined further to about 20% in 2009. In addition an estimated 1.8 billion people (54% of the population) still struggle at the margins, on less than \$2 a day (Bauer et al. 2008). These people remain extremely vulnerable to falling back into poverty through any kind of economic shock, including from environmental sources.

Without the crisis progress in poverty reduction would have been higher of course. ADB analysis suggests that the adverse impact of the economic downturn may lead to an additional 80 million extreme poor—people earning less than \$1.25 a day—in the region in 2010, compared with a “without crisis” scenario under which the high growth rates of 2007 continued (Bauer et al. 2008). UNESCAP assuming various mean income growth rates and changes in income distribution, estimates an impact of the crisis on poverty of 32 million (\$1.25) and 40 million (\$2.00) (Table 2), in 2010. ADB estimates that the projected gross domestic product (GDP) decline in the region may lead to an additional 71 million vulnerable people—those living under \$2 a day—in 2009 and 108 million more in 2010 (ADB 2009).

The slowdown in growth will also affect the non-income MDGs. With less income available, poorer households will postpone less urgent needs as part of coping mechanisms. This may involve pulling

**Table 2: Estimates of the number of people trapped in poverty in Asia and the Pacific owing to the global economic crisis, various scenarios** (millions of people)

Income distribution	Slow mean income growth		Average mean income growth		Fast mean income growth	
	2009	2010	2009	2010	2009	2010
<b>No change</b>						
\$1.25 a day	7.7	12.2	14.8	23.4	20.4	32.0
\$2 a day	9.3	14.6	18.2	28.5	25.7	39.9
<b>Change</b>						
\$1.25 a day	7.5	11.9	14.5	22.9	20.4	31.7
\$2 a day	9.0	14.3	17.8	28.0	25.2	39.7

Source: UNESCAP staff calculations.

children out of school and giving less attention to health care. In addition to the fall in demand for basic services, publicly funded basic services may also experience budget cuts for health, education, and other social and municipal services.

While calculating growth-MDG elasticities may be problematic, as social behavior is not a direct function of income alone, one can construct such elasticities to predict changes in nonincome-MDG outcomes. Using the elasticities as calculated from previous crisis observations (Table 3), one can see that changes in growth will have significant impacts on nutrition and the health MDGs outcomes, and affect minimally the education outcomes<sup>3</sup> (Table 4). However, anecdotal reports and fields studies show that education—especially of migrant workers children—has been more affected than health outcomes by this crisis.

The above results indicate that the region will be only marginally affected by the economic slowdown in case of infant and under-5 mortality, and primary completion rates. A more significant impact is

<sup>3</sup> The method employed is to simulate changes based on these elasticities to the predicted 2008 values of the MDG indicators, which are estimated using a simple least squares trend line fitted to observed indicator values. The delays are calculated by fitting new trend lines to the earlier values and the changed 2008 values and calculating the difference between original and new achievement dates. The period of delay is affected both by the change in the 2008 indicator value as a result of fall in growth as well as the general speed of improvement of the regional values observed in the past.

**Table 3: Impact of a 1% increase in per capita GDP on selected indicators for the Millennium Development Goals**

<b>Indicator</b>	<b>Elasticity</b>
Population undernourished	-0.483
Infant mortality rate (0–1 year) per 1,000 live births	-0.462
Under-5 mortality rate per 1,000 live births	-0.430
Maternal mortality ratio per 100,000 live births	-0.304
Gender parity index in primary enrollment	0.023
Primary completion rate	0.049
Net enrollment ratio in primary education	0.054
Gender parity index in tertiary enrollment	0.109

Sources: ADB, UNESCO and UNDP 2008.

**Table 4: Impact of economic slowdown on Millennium Development Goals**

	<b>Achievement status</b>	<b>Delay in achievement (months)</b>
<b>Infant mortality rate</b>	Slow	–
1% growth reduction	Slow	1
2% growth reduction	Slow	2.5
3% growth reduction	Slow	4
<b>Under-5 mortality rate</b>	Slow	–
1% growth reduction	Slow	1
2% growth reduction	Slow	2
3% growth reduction	Slow	3
<b>Gender parity index in primary enrollment</b>	Early achiever	–
1% growth reduction	Early achiever	0
2% growth reduction	Early achiever	0
3% growth reduction	Early achiever	0
<b>Primary completion rate</b>	Slow	–
1% growth reduction	Slow	0
2% growth reduction	Slow	0.8
3% growth reduction	Slow	1
<b>Gender parity index in tertiary enrollment</b>	Early achiever	–
1% growth reduction	Early achiever	0
2% growth reduction	Early achiever	1
3% growth reduction	Early achiever	1
<b>Undernourished population</b>	Slow	–
1% growth reduction	Slow	1.5
2% growth reduction	Slow	3
3% growth reduction	Slow	4.5
<b>Underweight children under 5</b>	Slow	–
1% growth reduction	Slow	3
2% growth reduction	Slow	7
3% growth reduction	Slow	10

– = no data.

Source: Authors' estimates.



expected on hunger (undernutrition), especially of children under 5. The impact on primary enrollment and gender equality in education is likely to be small though the impact will be greater the longer the slowdown persists.

## **Conclusions**

Although the MDG indicators can effectively assess progress in poverty reduction in the holistic sense, a major limitation is their data gaps for some indicators, particularly in the Pacific. Much more attention to this issue is necessary.

An assessment of progress on the MDGs indicates mixed results. Asia and the Pacific is on track to achieve universal access of children to primary school and halve the proportion of people living below the poverty line of \$1.25 a day and is an early achiever in reducing gender disparities in primary and tertiary education, reducing the spread of HIV/AIDS and the incidence and increase of death rates associated with tuberculosis, reducing consumption of ozone-depleting substances, and halving the proportion of people without access to safe drinking water in rural areas. In the other areas, particularly primary education completion, hunger, and sanitation, the MDGs are unlikely to be achieved. Moreover, there are country and subregional variations. Least satisfactory performers are LDCs and Pacific island economies.

If the current crisis is prolonged, achievement of the MDGs could be significantly delayed, unless stimulus packages and social spending are geared to supporting poverty and social sector goals. With only 5 years remaining for the MDGs to be achieved, much stronger efforts appear needed.

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#### **Box 4: Projecting the poverty impact of the recession**

Timely assessment of the economic and social impacts of an economic recession is critical for the formulation and implementation of effective policy responses. Fortunately, a simple methodology of ex ante impact assessment, which involves only two steps, is available. The first step gauges how the crisis affects national and household incomes. A straightforward approach is to use gross domestic product (GDP) growth projections with and without the recession in lieu of actual changes in GDP growth. The latest GDP growth projections for 2009 and 2010 represent the income scenarios with the crisis. Basic GDP projections for 2009 and 2010 that were released just prior to the onset of the crisis are used to approximate the income scenario without the crisis. The difference between the baseline and the latest projections are used as a proxy for the income shock due to the crisis. The second step is to generate income effects on poverty using the concept of elasticity of income with respect to poverty.

Using this methodology and publicly available World Bank data for 21 developing countries in Asia, the recession is estimated to prevent a total of 64 million people from emerging out of poverty under the purchasing power parity (PPP) \$1.25-a-day poverty line during 2009–2010. Of these, nearly 18 million are from India and 9 million from the People's Republic of China (PRC). Under the PPP \$2-a-day poverty line, the recession was estimated to prevent 72 million Asians from emerging from poverty during the same period. Of these, 17 million are from India and almost 14 million from the PRC.

These projections do not, though, include medium- and longer-term impacts, nor do they shed any light on the distribution of the adverse effects of the recession, neither of which policy makers can ignore.

Source: Guanhua Wan and Ruth Francisco in "How is the global recession impacting on poverty and social spending? An ex ante assessment methodology with applications to developing Asia." [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# The impact of the global economic slowdown on value chain labor markets in Asia

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## Introduction

In 2009, Asia experienced the world's most serious recession since the 1930s. The recession has affected the region in various ways, the most serious impact being on trade through value chains (ADB 2009). The effects on Asia's labor markets, workers, and their families have been far-reaching. Retrenchments have been widespread in many export-oriented manufacturing industries across the region, and working hours and wages have fallen. In response, millions of workers are migrating back to rural areas or shifting to informal and vulnerable employment (or a combination of the two).

A primary concern is the impact on household poverty, in particular for those workers and households that have risen just above the poverty line in recent years, thanks to enhanced market integration and new formal employment opportunities. These workers and households are now very vulnerable to falling back into poverty as a result of the crisis. Therefore, the crisis has significant implications for labor market and social protection policies.

This paper discusses the impact of the global economic slowdown on value chain labor markets in the industries and specific geographic areas across the Asian region where the slowdown has had a significant impact. Through analyzing value chains, it makes an initial attempt to assess the impact of the crisis on enterprises, their workers, and local governments' service provision.

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## **Literature review and concept development**

### **Conceptualizing global value chains and labor markets in Asia**

#### **Uneven falls in global trade and global value chains**

One of the features of the current economic slowdown has been the fall in world trade, at a rate unmatched in the postwar period. The International Monetary Fund (IMF) predicted that world output would fall by 0.5% in 2009 (IMF 2009). In comparison, the World Trade Organization (WTO) predicted that the volume of trade would fall by as much as 9% in 2009 (WTO 2009). These global figures, however, hide regional and sector variations. The Philippines' electronics industry experienced a 20%–30% contraction in 2009 (Lopez 2009). Viet Nam's footwear industry saw a 10% slowdown in the first 7 months of 2009 (Nguyen 2009) and the export value of Indonesia's furniture industry dropped by 35% in the first quarter of 2009 (Tambunan and Sugarda 2009). Furthermore in March 2009, WTO warned that the prospects for Asian export trade were especially bad, particularly for automobiles, electronics, and other consumer durables. These sectors are highly integrated into the region's global value chains (GVCs) and are susceptible to changes in the economic cycle.

GVCs cut across national borders. Small steps in the production process are carried out in different countries, with components and part-finished items crossing borders multiple times during the production process. Every time components cross a border, they are included in trade figures. However, the falls in trade figures relative to output cannot simply be explained by multiple counting. Trade through GVCs is also affected by access to credit, which in normal times acts to smooth trade. GVCs can be considered a channel for the rapid transmission of financial shocks, in particular through a negative international "cascade effect" as the denial of credit to importers in one country leads to credit problems for sellers in others, reducing their access to credit, and affecting in turn their ability to import and furthering the cascade (Escaith and Gonguet 2009, Milberg and Winkler 2009).

#### **Theories of GVC development and governance**

Since much of Asia's production is organized through GVCs crossing national borders, and because of the rapid transition of financial shocks through GVCs, one might expect a disproportionate fall in trade during an economic slowdown caused by a banking crisis (Escaith and

Gonguet 2009, Milberg and Winkler 2009, and Yi 2009). However, this does not explain why some chains are affected more than others. To some extent, the explanation is the relative long-run income elasticities of goods produced, causing variation in falls in demand. Another reason could be the power relations between different organizations in the value chain.

Value chain academics have developed a number of useful typologies for understanding differences between value chains. The simplest distinction is between buyer-led chains (as in high-fashion consumer goods, such as garments) and producer-led chains (where levels of mechanization and capital investment are high, such as auto parts). A second approach is Gereffi et al.'s (2005) typology of GVC governance. This seeks to understand industrial organization, the power relations between actors, and therefore suppliers' scope for capturing more value from the chain. The theory suggests that there are three important variables which contribute to how a value chain is governed and develops. These are: *complexity of transactions*, *ability to codify information* (e.g., design variables, quality, and labor standards), and *capabilities of the supply base*. The theory generates five types of governance relationships that can occur in GVCs—hierarchy, captive, relational, modular, and market—which range from high to low levels of explicit coordination and power asymmetry (Figure 1).

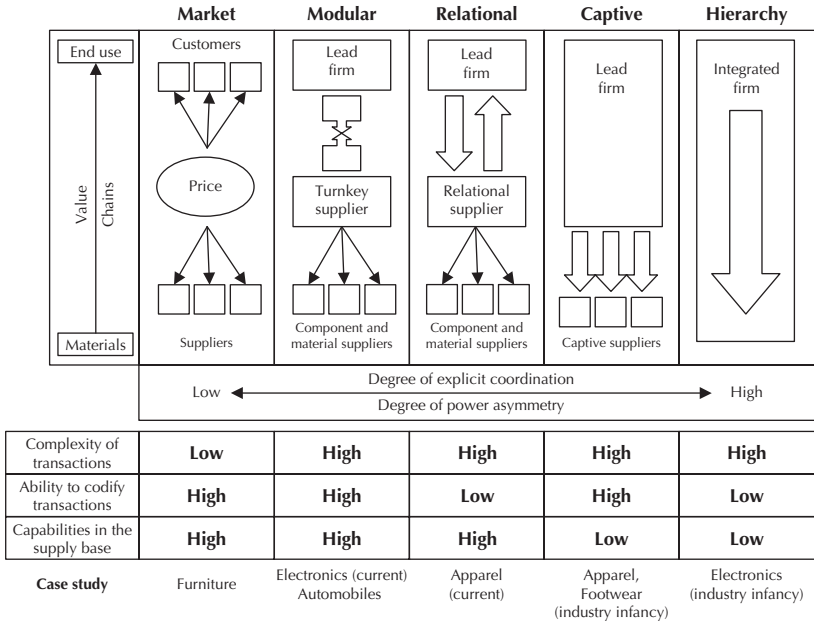
These five categorizations are a useful heuristic way to think through the uneven impacts of the downturn on different sectors' and countries' labor markets. In theory, the more value chains reflect the market-based form, the more flexibility suppliers will have to find new buyers and protect themselves from falls in demand from overseas clients. The flipside is that in such value chains, buyers are also free to walk away from suppliers. In captive and relational forms of value chain governance, a supplier may be locked into relationships with lead firms in value chains and therefore more subject to the vagaries of the slowdown in consumer markets, if their buyers are adversely affected.

The following illustrates how governance structures evolve over time, and sheds light on changes in GVCs.

*Apparel industry—from captive to relational.* Asia has been the epicenter of export-oriented apparel production from the latter part of the 20th century. Gereffi et al. argue that the key to its success has been increases in supplier competence, and that this has been the main driver behind the shift from captive to relational value chains in the apparel industry.

*Electronics—from hierarchy to modular and beyond.* For most of the 20th century, the electronics industry has been dominated by large, vertically integrated firms. As the civilian industry in the 1980s began

**Figure 1: Typology of value chain governance**



The small line arrows represent exchange based on price while the larger block arrows represent thicker flows of information.

Source: Adapted from Gereffi et al. (2005).

to grow rapidly with the personal computer, a range of other value chain functions were “outsourced.” This drove a significant share of the world’s production capacity into a handful of huge, globally operating contract manufacturers. Such manufacturers introduced a high degree of modularity into value chains.

**Linkages between global value chains and labor markets**

The relations between developed world companies and their Asian suppliers in GVCs have huge implications for workers’ jobs, wages, and skills throughout Asia. Since the late 1990s, there have been vigorous debates over whether the growth of value chains has led to sustainable and healthy growth contributing to increased welfare for all, or whether the types of jobs created and the competition between countries have led to a “race to the bottom” as countries compete to make their labor markets flexible to attract foreign direct investment. The Western media have stereotyped production jobs in GVCs as sweatshop jobs due to the many incidences of poor labor standards found in factories in Asia.

Furthermore, GVC labor markets are highly gendered. The International Labour Organization predicts that women will be disproportionately hit by the slowdown, with a 5.7% rise in unemployed women in 2009, compared with a 4.9% rise for men. Furthermore, while women’s work is valued less than men’s work, women’s wages often contribute to the support of dependents and household incomes (Reuters 2009). Thus as women are pushed out of the formal labor market, there can be wider consequences for household incomes. Industrial production is regionalized and geographically concentrated in industrial clusters, meaning that many workers in GVCs are either internal or international migrants. Taken together, it is reasonable to assume that the most vulnerable workers across all value chain sectors will be migrants, workers employed through agencies on temporary contracts, and women.

### **How enterprises and labor markets may respond to the slowdown**

In times of crisis, value chain labor markets are likely to be affected in different ways and to a varied extent. It is important to understand how firms in different sectors respond to a contraction in income. The key questions are: How are labor markets adjusting? What groups are most vulnerable to changes in labor markets through increased unemployment and reduced wages?

As analysis conducted by the Asian Development Bank shows (ADB 2009), unemployment is on the rise across much of Asia (Table 1). Aggregate figures, however, can mask significant changes in the labor market, such as the movement of workers from manufacturing to the services or informal sectors.

**Table 1: Unemployment across Asia (%)**

<b>Economy</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
China, People’s Republic of	4.0	4.2	4.3
Hong Kong, China	4.0	3.3	5.1
Indonesia	9.8	8.5	8.1
Malaysia	3.2	3.3	4.0
Philippines	7.4	8.0	7.5
Thailand	1.6	1.7	2.1
Viet Nam	4.6	4.6	n.a.

n.a. = data not available.

Source: Adapted from ADB (2009).



Aggregate figures also hide underemployment, where workers' hours have been cut. This is significant as GVC enterprises are likely to reduce workers' hours and reduce workers' wages in response to a drop in trade. This can have profound consequences for the most vulnerable workers. In many countries across Asia, statutory minimum wages often fall behind the cost of living, meaning that workers are unable to provide for the basic needs of themselves and their families. (Standard industrial wages are often higher than the minimum wage, though they too regularly fall short of a living wage). Workers who do not earn a living wage, either through their normal hours or overtime hours, can be forced into a cycle of poverty.

In extreme cases, GVC enterprises are likely to retrench workers, pushing the most vulnerable workers—such as migrant workers, temporary workers, and women—into the informal economy. As the crisis deepens and more workers are retrenched, these demand-side factors can be influenced further by supply-side factors such as migrant workers moving home, thus reducing the labor market. As retrenched migrant workers move away from industrial regions, this hampers efforts to recover as demand renews. Enterprises may discover that there are short-term labor shortages, because workers have moved away.

## **Policy implications**

Any response to the downturn must simultaneously protect jobs, but also continue a process of industrial upgrading. The implication is that, where industrial upgrading has occurred and enterprises can capture more value from the chain, there is greater flexibility to respond to shocks. As many value chain jobs are low-quality jobs, governments may consider the slowdown an opportunity to shift away from low-value sectors to sectors where more value can be captured. This may be a risky strategy. “Vertical specialization” is the outcome of a complex interrelationship between a wide array of factors including a country's economic history, workers' skill sets, place in the GVC, as well as a country's economic development strategy. There is considerable path-dependency in a country's economic development, which may constrain governments from adopting a new economic development strategy as a response to the downturn.

The literature indicates that there are a number of policy implications for Asian economies attempting to respond to the downturn, including a need:

- To provide fiscal stimulus in the short term in order to support aggregate demand

- To address the issue of protectionism where GVCs cross multiple borders
- To ensure that enterprises have sufficient trade credit to continue exporting in the downturn
- To switch from a focus on export markets to expand domestic markets for manufactured goods
- To expand intraregional trade in finished goods
- To enhance social security safety nets, especially for vulnerable workers.

In the short term, Keynesian fiscal stimulus programs can help support aggregate demand. In November 2008, the Government of the People's Republic of China (PRC) announced a \$586 billion stimulus to be spent by 2010 on a range of national infrastructure and social welfare projects. This huge stimulus was estimated at 7% of GDP.

Policy makers and governments are likely to experience political pressure to protect domestic industries during an economic downturn. A traditional response has been to impose tariff and nontariff barriers. One implication of the growth of GVCs is that traditional forms of protectionism, such as tariff barriers, are more likely to have negative impacts because countries' economies are increasingly interlinked.

Conventional wisdom suggests that Asian export markets will not recover until the economies of their customers' markets have recovered. Milberg and Winkler (2009) suggest that other economies in Asia have to follow suit and find other nonexport sources of demand, or diversify trade patterns to focus more on trade with other Asian economies. In the long term, the crisis may reinforce existing trends as consumer demand for value chain consumer goods shifts from the United States and Europe toward Asia.

Along with supporting production through stimulus programs and encouraging intraregional trade, Asian countries should ensure that social protection programs protect the most vulnerable workers and households from the effects of the downturn.

## **Analysis of field data**

This paper analyzes the findings of a series of individual country field studies conducted in August 2009 to understand the varied impacts of the slowdown on value chain labor markets across a variety of industries and countries.<sup>2</sup>

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<sup>2</sup> For a fuller analysis, see a longer version of this paper at [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp#labor](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp#labor)

**Table 2: Sectors by global value chain typology**

Country	Sector	Study area	Author <sup>a</sup>	Categorization according to Gereffi typology	
Viet Nam	Footwear	Ho Chi Minh City	Hao Nguyen	Captive	Low flexibility
PRC	Toys	Pearl River delta (Shenzen)	Xiulan Zhang	Relational	↓
PRC	Electronics	Pearl River delta (Shenzen)	Xiulan Zhang	Modular	
Philippines	Electronics	Cavite	Malou Lopez	Modular	High flexibility
PRC	Furniture	Pearl River delta (Shenzen)	Xiulan Zhang	Market	
Indonesia	Furniture	Cirebon, Jepara, Solo (West and Central Java)	Ardha Sugarda and Tulus Tambunan	Market	

PRC = People's Republic of China.

<sup>a</sup> See references at end of this paper.

## Value chain typologies

To make meaningful comparisons between sectors and regions and to draw out the key lessons for policy makers across the region, this paper has categorized the country value chains according to the typology created by Gereffi et al. (2005) in Table 2.

**Footwear industry, Viet Nam—Captive.** This value chain resembles the apparel value chain in its infancy. Vietnamese manufacturers tend to specialize in the assembly of footwear, with raw materials and accessories imported from abroad. The high degree of power asymmetry between buyer brands and manufacturers suggests that this value chain can be characterized as a captive value chain.

**Toys and textiles, PRC.** It is difficult to characterize these industries according to Gereffi typology. The toy sector is characterized by some factories making specialist goods for brand name customers (likely to be in relational or captive value chains), as well as factories making cheaper generic toys (likely to be in market-based value chains).

**Electronics—Modular.** As Gereffi et al. (2005) suggest, this industry globally is in a process of transition from a hierarchy and captive-type value chain to a modular value chain, as large, turnkey suppliers introduce a high degree of modularity into value chain governance.

**Furniture—Market.** The Indonesia's furniture industry is a traditional hereditary business dominated by small enterprises, with a tendency to operate in clusters and having a sophisticated multi-layered culture of subcontracting.

## **Enterprise-level survey analysis**

All sectors have felt the dramatic impact of the global economic downturn. In 2009, the Vietnamese Leather and Footwear Association (LEFASO) estimated that the industry declined by approximately 10% in the first 7 months of the year. The Semiconductor and Electronics Industries in the Philippines (SEIPI), a trade association, estimates that electronics contracted by between 20% and 30% in 2009. In Indonesia, the Association of Indonesian Furniture and Handicraft Manufacturers (ASMINDO) estimates that the export value of the furniture industry fell by 35% in Q1 2009.

The data from the enterprise-level surveys conducted in these countries support the view that the slowdown has affected all sectors, but that the impacts have varied among sectors. Among companies in the PRC textile industry, 56% reported shrinking demand from the end of Q2 2008. In the PRC electronics and toy industries, demand fell in 67% of enterprises surveyed, and in the furniture industry (in the PRC and Indonesia) and the footwear industry (Viet Nam) demand fell in over 90% of enterprises. This suggests that the effects of the economic downturn have been widespread in all sectors, with the majority of enterprises suffering in every industry. The fall in demand is reflected in the proportion of companies that have registered a drop in revenues.

Across all sectors, enterprises have responded to the downturn by adjusting their labor forces (either by reducing wages, working hours and the number of shifts, or by laying off workers). In textiles, electronics, and toys, 100% of enterprises surveyed had made adjustments to their labor force after July 2008. In footwear, this proportion was 96% and in furniture, 70%.

Despite these falls, 89% of businesses in toys and 75% in electronics are expecting an increase in orders in the next 6 months (again, relative to August 2009). Furniture and footwear were the most pessimistic, with 39% of the former and 32% of the latter expecting a decrease or no change in orders in the next 6 months.

## Impact on jobs

Several firms have reported employing additional employees since the beginning of the crisis. Table 3 shows the proportion of companies in the various sectors that have cut jobs, recruited new workers, or not made any labor force adjustments.

**Table 3: Proportion of companies in survey making employment changes, end Q2 2008–July 2009 (%)**

	<b>Job losses</b>	<b>New jobs</b>	<b>No change</b>	<b>Total</b>
Footwear	68	4	28	100
Electronics	32	48	20	100
Textiles	28	28	44	100
Furniture	54	2	43	100
Toys	60	40	0	100

Source: ADB value chain labor market survey (August 2009).

Although a significant proportion of companies in electronics, toys, and textiles have recruited workers, it appears that there has been a net loss of jobs. In terms of the number of jobs lost, footwear and electronics were by far the hardest hit with enterprises shedding an average of 191 and 141 jobs, respectively, during the period.

In theory, social regulations such as severance pay requirements act as a buffer for laid-off workers and a disincentive to businesses to lay off workers. The PRC, Indonesia, the Philippines, Thailand, and Viet Nam have severance pay legislation. Severance pay requirements are in general tilted toward job protection, meaning that the obligations on enterprises are burdensome and this can play against job creation. The World Bank (2009) suggest that failure to remit severance pay during the 1997–1998 Asian crisis was a problem with many companies, especially small and medium-sized enterprises failing to fulfill their legal obligations.

## Working hours and wages

There is a general trend of declining average working hours and declining average earnings among all the industries surveyed. The two industries that appear to be worst off are footwear (exclusively in

Viet Nam) and furniture (in the PRC and Indonesia) (Table 4). In view of the number of job losses in the electronics sector, one might expect a similar pattern in labor adjustments. However, this does not seem to be the case, with enterprises only reporting small changes in working hours for temporary and permanent workers.

**Table 4: Decline in working hours and earnings, end Q2 2008–July 2009 (%)**

<b>Industry</b>	<b>Working hours (permanent)</b>	<b>Working hours (temporary)</b>	<b>Earnings (permanent)</b>	<b>Earnings (temporary)</b>
Electronics	3.70	0.22	1.54	2.17
Footwear	23.13	26.67	11.02	22.05
Furniture	12.91	20.00	15.50	20.89
Textiles	2.67	1.25	1.25	2.50
Toys	0.56	-2.50 <sup>a</sup>	0.78	2.50
<b>Overall average</b>	<b>10.88</b>	<b>12.06</b>	<b>8.69</b>	<b>12.75</b>

<sup>a</sup> Indicates an increase.

Source: ADB value chain labor market survey (August 2009).

The data show that enterprises in the furniture and footwear industries have, on average, reduced temporary workers' working hours more than permanent workers'. The reverse is true for enterprises in the toy, textile, and electronics industries. The furniture industry is a market-type value chain, the electronics sector is a captive-type value chain, but both are labor-intensive industries that might be expected to be hit hard by the downturn and as a result reduce hours for temporary workers.

The evidence suggests that real wages for temporary and permanent workers have fallen because of the crisis, with wages in furniture and footwear being hit hardest. In terms of earnings, enterprises report having reduced the earnings of temporary workers more than those of permanent workers.

## **Worker-level survey analysis**

Key to understanding the impact of the downturn at worker level is to understand who is most vulnerable and how their income and expenditure have been impacted.

## **Impact across the formal and informal sectors**

Evidence from workers supports the trends of falling working hours and average weekly wages outlined in the previous section. The extent to which they have fallen, however, varies between industries. Furniture and footwear seem to be the hardest hit in terms of a reduction in working hours, whereas toys and furniture were the worst affected in terms of a reduction in weekly wages. Interestingly, however, the informal sector appears to have been least affected in terms of a reduction in wages, and actually saw an increase in average weekly working hours, suggesting that jobs are being lost in the formal sector, and so an increasing number of workers are turning to the informal sector for work. The limited fall in wages could be explained by the small scope for further reductions.

## **Impact on migrant workers**

Data were available on migrant workers for the PRC and Viet Nam, and give very strong evidence to suggest that migration and reduced working hours are correlated. The average reduction in working hours for migrant workers is 18.4% compared to just 8.0% for nonmigrant workers. There is no correlation between migration and wage reduction. However, the average fall in wages for migrant workers within the sample was higher than for nonmigrant workers—24.3% compared to 22.4%.

## **Impact on workers by job type and skills level**

Analysis by job type and skills level showed the following trends:

- Nonproduction staff (managers and support staff) are more likely to have been made unemployed since the end of Q2 2008 than production staff.
- Production staff are more likely to have had their hours reduced than nonproduction staff.
- Nonproduction staff have seen their wages fall more than production staff.
- Skilled workers are more likely to have been made unemployed than unskilled workers.
- Unskilled workers were more likely to have had their hours reduced than skilled workers.
- Skilled workers have seen their wages fall more than unskilled workers.

According to the worker-level analysis, 76.2% of nonproduction staff interviewed had been made unemployed compared to just 58.3% of production staff. Nonproduction staff in the sample were more likely to have had their working hours reduced than production staff, at 66.2% versus 43.7%. This suggests a strategy of companies seeking to cut their fixed costs through job cuts for higher earners and salaried staff such as managers, professionals, and support staff. At the same time, companies are also reducing their variable costs, but through cutting the hours for production staff rather than cutting jobs.

Within the sample of production workers across all the sectors surveyed, skilled workers are more likely to have been laid off than unskilled workers: 61.2% versus 50.9%. In addition, skilled workers are less likely to have had their hours cut than unskilled workers: 61.3% versus 79.1%. It seems counterintuitive that factories would cut skilled workers and reduce the hours of nonskilled; Indonesia's and Viet Nam's field studies suggested that managers were keen to retain skilled workers because they were viewed as a scarce resource. Skilled workers, however, are likely to cost more and be engaged in nonproduction roles.

## **Remittances**

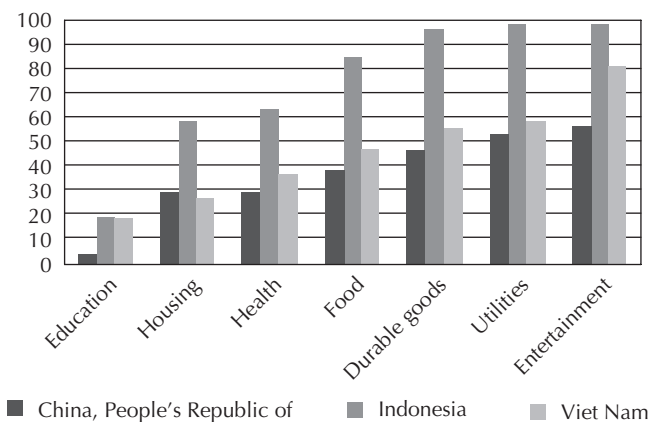
There is considerable variation among declines in workers' remittances across sectors caused by adjustments in the labor market. The worst affected industry was footwear, where 51% of workers said that they had been forced to reduce remittances. A smaller proportion of workers in the informal sector (26.9%) said that they had reduced remittances.

## **Household-level survey analysis**

The global economic slowdown has also had serious negative effects on households and living conditions. Of the households surveyed, 95.5% claimed that overall household income had fallen from the end of Q2 2008 through July 2009.

In response, there had been a reduction in the household budget for both essential and nonessential items: entertainment, utilities, and durable goods seemed to be the areas hardest hit. The change in spending priorities for households varied by country. In the PRC and Indonesia, entertainment, utilities, and durable goods expenditure were most often cut. Education was the household expenditure least likely to be reduced in those two countries (Figure 2). In Viet Nam, expenditure on food was most often cut (80.3% of households). Health care spending was the least likely to be cut.



**Figure 2: Proportion of households having cut their expenditure, PRC, Indonesia, and Viet Nam (%)**

PRC = People's Republic of China.

Source: ADB value chain labor market survey (August 2009).

A higher proportion of Indonesia's households surveyed reduced expenditure compared to both the PRC's and Viet Nam's households. In Indonesia, 97.8% of households said that they had cut spending on utilities and on entertainment, and 95.7% on durable goods. In the PRC, however, the equivalent figures were 56.5% (utilities), 52.8% (entertainment), and 46.1% (durable goods). This suggests that the impact on Indonesian households has perhaps been greater than the impact on PRC households.

## Conclusions and policy recommendations

### Conclusions

All sectors have been impacted by the downturn. The impacts have been varied across the different value chain export sectors:

- In furniture (the PRC and Indonesia) and footwear (Viet Nam), demand has fallen in over 90% of enterprises.
- In electronics and toys (the PRC), demand has fallen in 67% of enterprises.
- In textiles (the PRC), 56% of companies claimed that demand has fallen.

Enterprises across sectors and different tiers have responded to the downturn by reducing workers' hours and retrenching workers:

- In textiles, electronics, and toys, 100% of enterprises surveyed said that they had made adjustments to their labor force since July 2008.
- In footwear, the proportion was 96%.
- In furniture, the proportion was 70%.

In terms of the average number of jobs lost in each enterprise, however, footwear and electronics were by far the hardest hit. There was a general trend of declining average working hours and declining average earnings among all industries surveyed. The two industries that appear to be worst off are footwear (exclusively in Viet Nam) and furniture (the PRC and Indonesia).

Taken together, it seems that the Viet Nam's footwear industry has been hardest hit in terms of the fall in demand, job losses, and reduction in working hours. This is consistent with what one might expect, considering that the Viet Nam's footwear industry is a captive value chain. Viet Nam's footwear industry is in its early stages of development, according to Gereffi's typology. Captive value chains are more likely to transmit shocks experienced by a fall in demand for products in the destination countries. Furthermore, the industry is typified by a large number of relatively unskilled jobs.

Gereffi's typology may be useful in explaining the dynamics of the downturn of Indonesia's furniture industry, which has been particularly badly hit. In such a market value chain, buyers are free to desert suppliers and source cheaper products elsewhere. The Gereffi typology is less helpful in explaining the performance of the toy and textile sectors in the PRC.

Table 5 is based on the total sample of workers and suggests the workers most vulnerable to the negative effects of the downturn, categorized by job losses and reductions in hours, wages, and remittances.

Across all sectors, temporary and migrant workers were the most vulnerable to retrenchment and changes in their wages and working hours. Furthermore, migrant workers were far more likely to have their hours reduced than nonmigrants. Vulnerability manifests itself through changes in workers and households' expenditure on basic necessities such as food and nutrition, and utilities and transport, as well as discretionary expenditure on entertainment and consumer durables.

**Table 5: Workers most vulnerable to the downturn**

	<b>Job losses</b>	<b>Reduced hours</b>	<b>Reduced wages</b>	<b>Reduced remittances</b>
Gender	Male	Female	Female	Male
Age	Under 25	Over 26	Over 26	Over 26
Migrants	Migrants	Migrants	Migrants and nonmigrants	Migrants
Production and/or Nonproduction	Nonproduction	Production	Production	Production
Skilled and/or Unskilled	Skilled	Unskilled	Unskilled	Unskilled
Temporary and/or Permanent	Permanent	Temporary	Temporary	Temporary

Source: Authors.

## **Policy recommendations**

Across all countries there are clear steps that governments can take to protect the most vulnerable workers from the impacts of the slowdown. Due to the way value chains cross international borders, governments are unlikely to resort to tariff barriers to protect their national industries from the onslaught of the downturn. However, governments can provide stimulus for domestic industries, increasing domestic demand for goods produced in value chains. Over the long term, value chain industries will have to shift end-product markets away from the United States and Europe towards Asia and to promote intraregional trade for finished goods.

In the short term, governments should also monitor the availability of trade finance for exporting enterprises to ensure that they have sufficient access to trade credit. Governments may need to provide alternative sources of trade finance for enterprises that are struggling to access finance from traditional sources.

### **Ensure social protection for the most vulnerable workers**

There is clear evidence that in some countries, notably the PRC and Viet Nam, the social protection system is not integrated for vulnerable migrant workers. These governments should aim to ensure that migrant workers have access to social protection systems. In Viet Nam, for example, migrant workers have no access to social protection, and

their children are not permitted to go to public school. The rising cost of living has put Viet Nam's migrant workers under significant strain. This could be eased by changes in government regulations allowing migrant workers the same access to social protection systems across the country that they would receive in their home region.

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# Global meltdown and informality: An economy-wide analysis for India—Policy research brief<sup>1</sup>

Anushree Sinha<sup>2</sup>

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## Introduction

Policy making needs to take into account the fact that the restructuring of the global economy, together with wide-ranging economic reforms, is increasing the size of the informal economy worldwide. Liberalization policies adopted during the late 1980s and early 1990s have created incentives to cut costs by firms in the corporate sector. Many authors, including Stallings and Peres (2000), Carr and Chen (2002), Harriss-White (2003), Kundu and Sarangi (2007), and Kundu (2009), have described the rapid expansion of the informal economy. Such work confounded expectations that informalization would be phased out in the growth process of developing countries. On the contrary, there is concern that the informal economy is to be a permanent feature during the development process in such countries.

A very important concern is that the employment dimension of the informal economy is very large. At present, informal employment is estimated to be 35%–85% of the nonagricultural workforce in Asia, and 40%–97% in Latin America and the Caribbean, according to the International Institute for Labour Studies informality database, as reported in a recent World Trade Organization–International Labour Organization (WTO–ILO) (2009) report. Further, the report states that countries with large informal economies are more than three times as likely to incur adverse effects of a crisis as those with lower rates of informality. It stands to reason that informality is not only a matter of concern in terms of social equity, but is also important for better designing policy paths for improved economic efficiency.

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It is important to recognize and distinguish that during opening up and globalization, an economy faces competition as competitive prices fall, whereas during a global slowdown, an economy faces contraction as global demand shrinks. Both essentially lead to a situation where firms are driven to be more cost effective but, in the latter case, the process of cost cutting becomes more pressing. With world recession, sectors that are more globally linked (which could also be informal sectors such as garments or recycling of products) shrink fast, spurring them to take the option of retrenching workers within a relatively short period or depressing wages whenever possible.

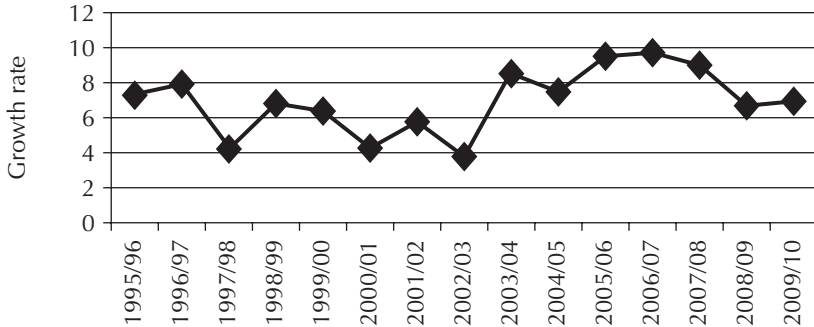
In such a situation, the impacts on workers are mainly threefold. First, formal workers tend to lose jobs as demand for such labor with the corresponding wages and benefits falls. Second, laid-off workers, and ongoing rural–urban migration together with reverse migration, lead to an increased supply of labor looking for jobs. Lastly, as most of the additional labor force is unable to join the formal workforce due to recession and other barriers (such as low skills, lack of credit, weak bargaining power), the informal workforce expands, which entails underemployment and lower labor productivity. Also, the wage fall is channeled both through demand-side factors (falling prices) and supply-side factors (rising labor supply).

## **India's situation**

In the current global recessionary episode, India's gross domestic product growth decelerated from 9.8% in 2007/2008 to 6.7% in 2008/2009. The latest *World Economic Outlook Update* (IMF 2010) projects India's economy to grow by 7.7% in 2010. In comparison to the high average growth of 8.8% recorded during the 5-year period 2003/2004–2007/2008, growth in 2009/2010 still points to persistence of the slowdown (Figure 1). This situation has made many firms in the corporate sector rather nervous. Such firms tend to retrench workers rather promptly to cut costs whenever possible. Lapses in labor market norms have come out into the open as more workers face income losses. Informal workers constitute a large share of the Indian workforce, and most survive on low wages. An assessment by the National Commission for Enterprises in the Unorganised Sector (NCEUS 2007) puts 92.4% of the total labor force in India as informal workers in 2004/2005.

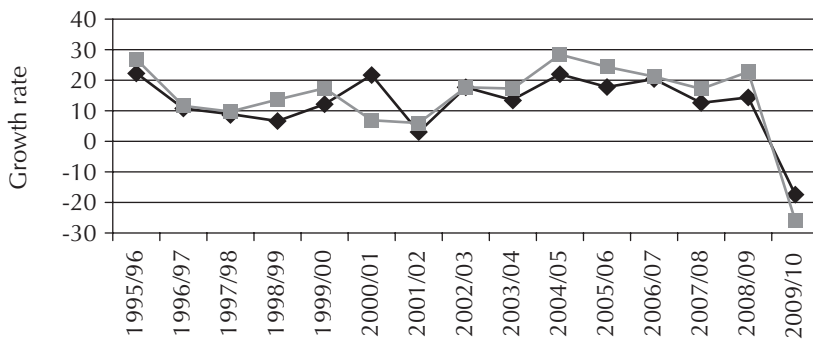
The lower global demand has resulted in exports falling by 17% and imports by as much as 26% during April–September 2009 (Figure 2). It is reasonable to expect that as exports decline, the sectors that have higher exports face strong contraction pressure.

**Figure 1: GDP growth, India, 1995/96–2009/10 (%)**



Sources: *Handbook of Statistics on Indian Economy 2008–2009*, Reserve Bank of India; and Central Statistical Organisation press release, 30 November 2009, for Q1 and Q2 2009/10.

**Figure 2: Growth of exports and imports, India, 1995/96–2009/10 (%)**



Sources: *Handbook of Statistics on Indian Economy 2008–2009*, Reserve Bank of India; and Ministry of Commerce and Industry press release, 1 January 2010.

We present here an analysis for India, using a computable general equilibrium (CGE) model and provide some suggestions for policy consideration. CGE models provide a useful approach to analyze the interaction between formal and informal sectors in response to policy reforms and external shocks. Gibson and Kelley (1994); Bautista, Lofgren, and Thomas (1998); Savard and Adjovi (1997); Sinha (1999); Sinha and Adam (2000); and Paquet and Savard (2009) have used such models for examining the impact of a slowdown on the informal economy. In their conventional usage, CGE models are flexible price models and are used to examine the impact of relative price changes on resource allocations (of goods and factors) across a range of economic agents.



The impact of the global slowdown on the Indian informal economy and workers is examined using a CGE model developed in 2006 and augmented in 2009—see Sinha and Adam (2006) and Sinha (2009). This model presents a practical approach to examine the inter-relationship across sectors of production, workers, and their incomes, and various types of demand (such as private household consumption, investment demand, and exports) including the formal and informal components, in response to external shocks. The CGE structure is relatively well suited for managing various features of informality in an economywide framework.

The CGE model used is structured so that: (i) it has production market distinctions by formal and informal subsectors, where informal production is characterized by relatively higher labor intensity, reflecting scarcity of capital by informal firms; (ii) household income flows are distinguished by types of wages and capital accruing from formal and informal economic activities; (iii) it has labor market segmentation, where regular wages have downward rigidity but casual wages have no such binding; and (iv) informal production sectors do not pay direct tax to the government, unlike their formal counterparts (though indirect taxes are paid by such firms on their input consumption, etc.).

The following two scenarios are used in the 2009 version of this CGE model:

1. Exports made to fall by 8% by reducing world demand, reflected by world price declines under nominal wage rigidity.
2. As scenario 1 but with real wages fixed and nominal wages made flexible.

The purpose of this exercise is twofold: first, to project the composition of the formal and informal sectors, as well as their relative shares; and second, to find out what would happen to the informal workers and to the poor who mostly participate as informal workers.

## **Main results**

The findings from the two scenarios on employment in Table 1 show that a decline in demand for regular labor is reflected in an increase in the supply of informal labor. At the aggregate, employment falls in the formal sector but picks up in the informal sector under recessionary pressures.

**Table 1: Growth of employment by labor type (%)**

	Scenario 1		Scenario 2		Scenario 1	Scenario 2
	CL	RL	CL	RL		
Subtotal: Informal	0.51	0	0.32	0	0.50	0.3
Subtotal: Formal	0.02	-2.21	-0.54	-1.20	-1.60	-1.0
Grand total	0.47	-2.21	0.26	-1.20	0	0
Unemployment	0	0.93	0	0.50	0.93	0.50
Employment	0.93	0	0.50	0	0.93	0.50
Grand total (millions)	198.99	40.10	198.14	40.94	239.08	239.08
Unemployment rate	0	0.02	0	0.01	0	0

CL = casual labor, RL = regular labor.

Source: Authors.

The scenario findings show that the lowering of world prices leads to a fall in exports, which percolates down to the domestic economy and domestic prices. The factor which results in greater expansion in the informal economy, namely wage rigidity, also causes informal casual wages to decline. Formal firms tend to replace formal workers with informal workers, or formal processes with informal ones, when faced with competition. This ultimately slows the economy and generates lower demand as well as lower revenue. The lower demand impacts the entire economy and the formal sector very adversely.

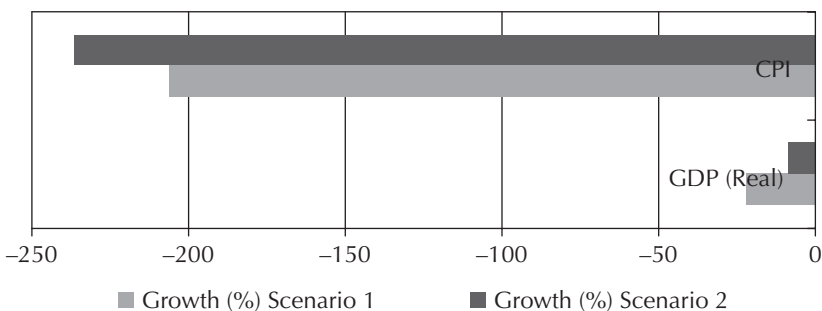
Formal workers enjoy higher real wages in scenario 1, but unemployment also goes up (Table 1). In scenario 2 where real regular wages are fixed, nominal wages of regular workers fall but casual wages do not fall as much (Table 2). The alternative scenarios show that with more flexible wages (i.e., with real wage rigidity instead of nominal wage rigidity), retrenchment is less and informalization of formal workers is slower.

Figure 3 highlights the fact that higher informality has an increasingly adverse impact on overall prices and gross domestic product. So, the concern should be how to reduce informalization. One would then think that the need of the hour is to ensure that the preconditions are in place to encourage formalization of the labor market.

**Table 2: Growth of wages and output (%)**

	<b>Scenario 1</b>	<b>Scenario 2</b>
Nominal wages (regular)	0.0	-2.37
Real wages (regular)	2.1	0
Nominal wages (casual)	-4.22	-3.92
Real wages (casual)	-2.2	-1.58
Total output	-0.31	-0.13
<b>Total</b>	<b>-8.12</b>	<b>-7.66</b>

Source: Sinha 2009.

**Figure 3: Growth of key variables under two scenarios (%)**

CPI = consumer price index, GDP = gross domestic product.

Source: Author.

## Policy suggestions

Globalization is an important, but not the only, cause of rapid expansion of the informal economy in developing countries. In some sense, globalization is acting as a catalyst in expanding the informal economy when other preexisting conditions are reinforcing such a situation. When workers have low bargaining power, low or no education or skills, or lack credit, collateral, or assets, etc., they end up as informal workers. When markets face shocks as recently experienced, the situation gets more worrisome as this tends to buttress a situation of low average wages. Low average productivity undermines the inclusive growth agenda.

Lower productivity is often attributed to lower skills. At present, there are targeted policy interventions in India to scale up the educational base and skills development (see, for example, MoL&E 2009).

A recent report by NCEUS (2009) recommends expanding training for informal workers by active participation of different types of stakeholders—government departments, trainers, private training providers, nongovernmental organizations, and employers. Training is intended to provide a solid grounding to the growth process, as well as support the spread of growth benefits to a wider cross-section of workers.

Skills upgrading is important, but needs to be supported by an appropriate educational framework. Medium- to long-term policy interventions are necessary, targeting school education for all children. Revisiting the education programs, such as the Sarva Shiksha Abhiyan, is critical. The monitoring and enforcement conditionalities of Sarva Shiksha Abhiyan have been ineffective and weak. To make the right impact, incentive (and disincentive) measures could help attain education for all. The need is to build efficient conditional cash transfer programs that target cash transfers to poor households, mainly women, conditional on enrolling children. Good examples from other countries, such as Progreso/Oportunidades (Mexico) and Bolsa Escola (Brazil), may be studied carefully by policy makers. Regulatory bodies having private–public partners to monitor the schools and conditional cash transfers are vital.

The flanking policies need to ensure proper school infrastructure and teachers as well as private–public partners to monitor community needs and complaints. Households that belong to higher-income categories and cannot claim a conditional cash transfer need to be identified as well. Such households should be eligible to certain direct tax benefits if their children of ages 6–16 years are enrolled in school. On the other hand, substantial fines as a progressive percentage of income should be imposed on such households when their children are not enrolled in school.

Again, lapses in skills and education are not the only factors causing informality and lower income. Highly skilled workers could join the casual labor force if faced with job loss. Informalization causes substantial losses to productivity and growth, as we have seen from the model findings. So, an equally urgent policy intervention is creating an environment for generation of quality jobs that can provide decent wages to labor market participants.

Undoubtedly, labor policy reforms would go a long way to addressing better job creation, but such regulation needs to be considered within a broader institutional and policy framework. Such regulation should, primarily, lead to basic benefit plans that cover formal workers being extended to cover casual and informal workers as well. On one level, the need is for a time-bound program to tackle basic education and skills advancement. On another level, efforts are needed to

develop market linkages as well as better access to credit, licenses, ports, transport, etc., as time-bound policy programs.

An assortment of wide-ranging and multifaceted policy reforms is necessary to improve labor market outcomes. This would definitely require labor law reforms and institutional reforms for efficient and improved governance. Specifically, policies need to address “decent” wages and social security for workers, the removal of high administrative barriers, and severe market regulations; they also need to improve access to finance to facilitate the creation of good jobs. In the consideration of policy packages for sustained job creation, investment climate reforms naturally need high priority. The reform measures need to be informed by necessary grassroots information. Finally, social audits need to be built in.

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### **Box 5: Thailand's automotive industry**

The Thai automobile and parts industry is one of the country's most celebrated success stories. Car production shot up from 160,280 in 1989 to 1,576,000 in 2006, while car exports jumped from 14,000 units in 1996 to 838,000 in 2008. The global recession, however, hit production from about the last quarter of 2008. Whereas 124,000 units were produced in October 2008, only 53,000 units were in April 2009, the lowest volume since the 1997–1998 Asian financial crisis.

The 41 automotive industry enterprises (makers and suppliers) included in a survey conducted in mid-2009 reported reducing employment by 23% between June 2008 and June 2009. Over 60% of retrenched workers were temporary workers. Reduction in working hours was also an important coping mechanism for enterprises. Prior to the recession, most enterprises ran two working shifts (16 hours) plus overtime so that workers could legally work 8 normal hours (at approximately \$5.5 an hour) and 3–4 hours of overtime for 5.5 to 6 days a week. The recession reduced work inputs to 8 hours a day for a 5-day week with some operating only 3 days a week. Workers included in the survey reported a nearly 41% decline in real income. Unsurprisingly, half the workers interviewed cut their spending on food, utilities, transport, and communications. Approximately a third requested financial assistance from friends.

The Thai automobile industry is clustered in Bangkok and in Rayong and Chonburi provinces, but workers are drawn from all parts of the country, in particular the much less developed Northeastern region. About 90% of surveyed workers used to send remittances back to relatives in rural areas, averaging about \$100 a month. The recession, however, sharply reduced the number of working days, which led to reduction in remittance amounts in about three quarters of the interviewed workers.

The experience of Thailand's automobile industry shows that, while open unemployment may be low, a reduction in working hours may still have a substantial impact on workers' income. Further, the survey underscores the fact that global recessions may have pronounced regional impacts (as a result of industrial clustering) and secondary impacts (generated by a decline in urban–rural remittances).

Source: Archanun Kohpaiboon et al. in "Global Recession and Labor Market Adjustment: Evidence from the Thai Automotive Industry." [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# **The social impact of the global recession on Cambodia: How the crisis impacts on poverty**

*Kimsun Tong*<sup>1</sup>

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## **Introduction**

The global financial crisis became all too apparent in September 2008 with the failure of several large financial firms based in the United States (US). It has spread to many countries across the globe, including developing countries such as Cambodia.

With financial and technical support from the Overseas Development Institute (ODI) and the World Bank, the Cambodia Development Research Institute (CDRI) has conducted an assessment of the impact of the crisis at various levels in Cambodia: macro (Jalilian et al. 2009); sector (agriculture, garments, tourism, and construction) (Jalilian et al. 2009); household (Tong et al. forthcoming); and individual (Tong et al. 2009). This paper highlights the key findings, and examines the public sector response.

The impact of the downturn on Cambodia's economy is severe, mainly due to the contraction in garments, tourism, and construction. The most severe effect is on the garment industry, with 18% of the total of 352,000 workers (many of whom are women) having been laid off between September 2008 and May 2009 because of a considerable fall in exports. According to the National Institute of Statistics, this sector employs 4% of the total workforce and accounted for 38% of total employment in manufacturing in 2007.

The number of tourist arrivals in the first half of 2009 amounted to 1,086,518—roughly the same as in the first 6 months of 2008, and an increase of 12% relative to January–June 2007. However, tourism experienced a contraction (at an average of 3.9%) for 6 consecutive months from October 2008 to March 2009. As a result, many hotels recorded

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<sup>1</sup> Kimsun Tong is a research fellow at the Cambodia Development Research Institute. The views presented here are those of the author and do not necessarily represent the views of the Cambodia Development Resource Institute.



low occupancy rates, and some luxury hotels have temporarily closed. Hotel staff are taking unpaid leave or are being temporarily laid off.

Construction activity is also set to decrease severely as foreign investors in real estate either scale back or suspend large projects due to credit crunches at home. Most people working in these sectors are vulnerable to poverty. When they lose their jobs, work less, or have less income, they are likely to fall into poverty.

## **The impacts of the crisis on poverty**

The poverty headcount was estimated in 2007 at 35% in rural areas, compared with 0.8% in Phnom Penh and 22% in other urban areas (World Bank 2009). The country's overall rural poverty line was equivalent to \$0.58 in 2007 (World Bank 2009). Based on the international poverty line at purchasing power parity, about 40.2% of the Cambodian population of 13.8 million lived below \$1.25 and 68.2% below \$2 in 2004 (Bauer et al. 2008). Since poverty in Cambodia is heavily rural and most rural activities are based on agriculture, it is important to consider the effects of the crisis on the rural economy and agriculture.

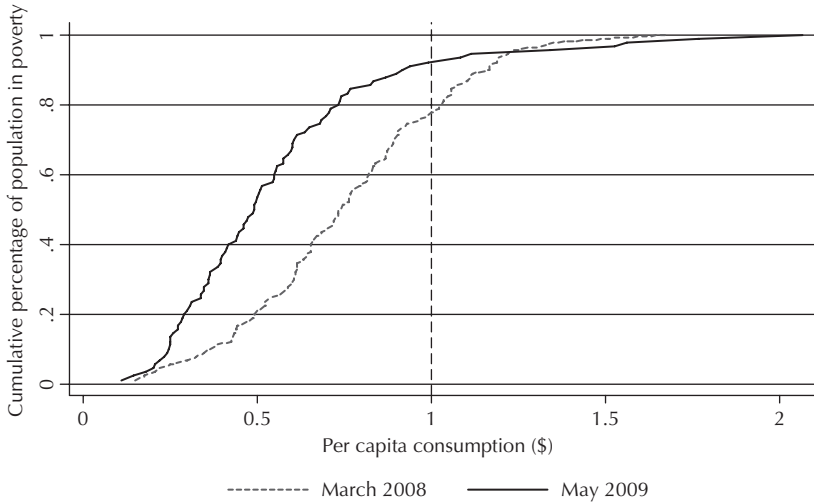
Agriculture accounted for an estimated 27% of GDP in 2007, and about 59% of the population is also estimated to rely on this sector for their livelihood. Over the past decade, agriculture is estimated to have been growing at an annual rate of 4.6% compared to 13.1% in hotels and restaurants (a proxy indicator for tourism); 25.4% in textiles, clothing, and footwear (a proxy indicator for garments); 13.9% in construction; and 9.1% for the total economy. Offsetting the declines in the rest of the economy, agriculture is forecast to grow significantly in volume relative to last year and is unlikely to be much affected by the crisis (Jalilian et al. 2009).

Ninety-household panel data collected by CDRI in nine villages in rural Cambodia in March 2008 and May 2009 revealed that both per capita income and per capita consumption shrank significantly during the period, by around 30% and 23%, respectively. While there was no significant change in residential or agricultural land-holding size, the value of non-land assets fell by 38% over the same period, of which durable assets and livestock declined by 30% and 45%, respectively. As a result, poverty incidence has increased in 2009, using the poverty line of \$1<sup>2</sup> (World Bank 2009) (Figure 1). However, the sample size

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<sup>2</sup> The 2007 rural poverty line was about KR2,006, equivalent to \$0.49 at the exchange rate of KR4,063/\$1.

**Figure 1: Poverty incidence curve,  
March 2008 to May 2009**



Source: CDRI surveys of 90 households in nine villages, March 2008 and May 2009.

is small and cannot be taken to be representative of rural areas in Cambodia.

For urban areas, a quarterly survey of daily earnings by vulnerable workers in Phnom Penh and two other provinces conducted by CDRI since 2000 reveals that, among the 10 groups of vulnerable workers surveyed, the crisis hit garment workers the hardest, because the garment sector relies heavily on US and European Union (EU) demand.<sup>3</sup> More precisely, the real daily earnings of garment workers fell by 17% between February–May 2007 and February–May 2009. This largely reflects a fixed wage rate, a decline in working hours, and high inflation. Despite this fall in earnings, real daily consumption increased by 14% during the same period, mainly due to a 21% decrease in real daily savings. Obviously, garment workers' daily consumption cannot be sustained if both real daily earnings and savings continue to decline.

The survey also reveals that average monthly nominal remittances among garment workers amounted to \$18.40 in May 2009, down

<sup>3</sup> The 10 groups are cyclo drivers, garment workers, motorcycle taxi drivers, porters, rice field workers, scavengers, skilled construction workers, small vegetable traders, unskilled construction workers, and waiters and/or waitresses.

from \$24.40 in February 2009, a decrease of 32%. This steep fall has put great pressure on their relatives' livelihoods.

Focus group discussions held in May 2009 in Siem Reap province—Cambodia's tourist hub—confirmed that tourism workers, particularly hotel and restaurant workers, have been affected by a decline in tourist arrivals. Consequently, some staff have been encouraged to take unpaid leave or have been temporarily laid off, which means that they have to engage in informal jobs such as taxi drivers or part-time English teachers. This kind of labor mobility has led taxi drivers and small traders to work even harder amid low demand.

## **Coping mechanisms of the poor and vulnerable**

The 90-household panel data show that about 35% and 40%, respectively, of survey households were hit by shocks, particularly idiosyncratic shocks, in 2008 and 2009. The affected households reported that they had spent an average of \$158 per household to cope with these shocks. More than 80% of the affected households have adapted to shocks by adopting active household strategies involved in making use of physical, financial, and human assets available to the household, including putting further household members into the labor force, working longer hours, selling assets, using savings, borrowing, and migrating (Table 1). However, there was no clear evidence that selling non-land assets, land, and livestock was used in response to the crisis.

**Table 1: Use of strategies by affected households**

	<b>Households (%)</b>	
	<b>March 2008</b>	<b>May 2009</b>
Adaptive strategies <sup>a</sup>	3.13	5.56
Active strategies	81.25	94.41
Social network strategies <sup>b</sup>	2.50	13.80

<sup>a</sup> Household responses to shock by changing consumption pattern.

<sup>b</sup> Consisting of assistance from friends, family, and nongovernment and government organizations.

Source: CDRI surveys of 90 households in nine rural villages, March 2008 and May 2009.

**Table 2: Per capita real consumption by quintile, 2008 (\$)**

Quintile of total consumption	Total consumption			Food			Nonfood			% change Mar-Sep		
	Mar	Sep	Total	Mar	Sep	Total	Mar	Sep	Total	Food	Nonfood	Total
1 (lowest)	0.53	0.48	0.42	0.38	0.11	0.10	0.42	0.38	0.11	0.10	-8.99	-9.04
2	0.71	0.64	0.55	0.49	0.16	0.14	0.55	0.49	0.16	0.14	-10.09	-10.45
3	0.85	0.76	0.65	0.58	0.20	0.18	0.65	0.58	0.20	0.18	-10.88	-10.41
4	1.07	0.92	0.76	0.68	0.31	0.24	0.76	0.68	0.31	0.24	-10.79	-13.68
5 (highest)	1.86	1.51	0.98	0.85	0.88	0.66	0.98	0.85	0.88	0.66	-13.21	-18.94
All	0.97	0.86	0.67	0.60	0.33	0.26	0.67	0.60	0.33	0.26	-11.16	-11.38

Source: CDRI survey data in nine rural villages, March and September 2008.

A different dataset collected in March and September 2008 covered 1,003 households in the same nine rural villages and shed more light on households' risk-coping mechanisms during food price increases. As shown in Table 2, consumption of nonfood items dropped by 20% from March to September 2008 while food items declined by only 11% (a period during which inflation reached a three-decade high of 26%, in May). Although food consumption fell in absolute terms, its proportion in total household expenditure remains unchanged, suggesting that households were restricting consumption of nonfood items to preserve food consumption.

Although different case studies yield different conclusions, they share a common message—rural households in Cambodia are likely to cope with the impact of negative shocks by themselves, adapting their activities and consumption carefully, and using informal community safety nets (which, though, are likely to weaken during hard times).

## **Government policy responses**

To respond to the global economic downturn, the Government of Cambodia introduced a stimulus policy package that includes:

- Increasing budget expenditure to offset the decline in private investment (to promote economic activity).
- Suspending the monthly turnover tax of 1% on garment factory expenditures.
- Announcing a 10% reduction in export management fees and other costs.
- Setting up the Agriculture Support and Development Fund for the private sector, especially small and medium enterprises, by providing low-interest, short-term credit to farmers in order to increase agricultural productivity and food security.
- Establishing the Prime Minister's Special Fund to provide short-term vocational training to workers who lose their jobs. Up to July 2009, 40,140 laid-off and unemployed workers attended the short-term vocational training courses given by the Ministry of Works and Vocational Training. Of these, 30,720 (76.5%) were trained in agriculture and 9,420 (23.5%) in industry and mechanics.
- Negotiating with the World Bank to finance approximately \$13 million for various programs associated with the social safety net system.

However, it is unlikely that poor and vulnerable groups in either rural or urban areas have felt any impact from these measures.

## **Recommendations for the short- and medium-term**

The role that policy makers, donors, and nongovernment organizations take may well determine the outcome of the impact of the crisis on growth and poverty in Cambodia. The impact is likely to be severe for poor and vulnerable groups. Because of their economic and social status, they are likely to be among the first to suffer from any sort of shock, either due to loss of job and income or diminished purchasing power due to price increases. Given the prevalence of these groups in Cambodia, it is particularly important to emphasize the policies that are needed. In some countries, when faced with increased hardship, the poor are assisted (directly or indirectly) by their governments, donors, and nongovernment organizations. This support may come in kind or in the form of, for example, price subsidies, food rations, food coupons, work-for-food, and school meals.

The crisis does not just result in high variability in living standards, but the lack of means to cope with risk is a cause of persistent poverty. Therefore, both *ex ante* and *ex post* risk-coping strategies, such as promoting credit and savings as insurance, as well as a credible social safety net, could play a very important role in protecting the poor and vulnerable groups against risk. In addition, informal social insurance should be strengthened as, to some extent, poor and vulnerable groups could use their local social capital to protect consumption from income fluctuations.

## **Conclusions**

The impact of the global economic downturn on poverty and vulnerable groups is severe in both rural and urban areas. The immediate impact appears to be hitting the poor through employment and remittances, and is likely to worsen over the medium term due to weak formal *ex ante* and *ex post* risk-coping strategies, informal social insurance, and the lack of public response. The Government of Cambodia should promote insurance for the poor by setting up a regulatory framework for a microfinance institution and by providing credibility to the social safety net system.

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# Women facing the economic crisis— The garment sector in Cambodia

*Sukti Dasgupta and David Williams*<sup>1</sup>

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## Introduction

Cambodia's impressive economic growth in recent years has been driven in large part by the country's garment sector.<sup>2</sup> Owing to a favorable international trade environment in the 1990s, the country's openness to foreign investment, and its abundance of low wage, low-skilled labor, the garment industry quickly developed into the country's single biggest export earner and formal employer, generating revenues in excess of \$2 billion per year and providing employment for thousands of workers. Some 90% of these workers are young women from Cambodia's rural provinces—areas characterized by high poverty rates and scarce employment opportunities. For most, the decision to migrate is thus one of economic necessity rather than choice: poverty and a lack of wage employment act as a push factor from the villages, while the prospect of a regular formal wage and a new and more independent lifestyle act as a pull factor to the factories in and around the capital. Although the sector's share in total employment remains small (about 4% of the labor force), garment workers are of critical importance to both the urban and rural economies. Despite their relatively low incomes, the vast majority remit a significant portion of their salaries home to their families, thus affirming the industry's role as an economic lifeline for rural livelihoods across the country.

However, at the same time, the recent global economic downturn has highlighted the acute vulnerability of the garment sector to external shocks, and also the shortcomings of its low-skill, export-led model of growth. In 2009, it is likely Cambodia's economy contracted more

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<sup>1</sup> Sukti Dasgupta and David Williams are staff of the International Labour Organization (ILO), Bangkok. They are grateful to Kang Chandrarat, Liv Dannet, Tuomo Poutiainen, and Anne Ziebarth for valuable contributions and suggestions. This paper does not necessarily reflect the views of the ILO.

<sup>2</sup> GDP growth has remained consistently above 6% over the last 10 years, with several consecutive years of double-digit growth in 2004–2007.



than that of any ASEAN country. Recent government estimates suggest growth was a nominal 1%, down from 10.2% in 2007 (Dyer and Sovan 2009). The garment sector and its majority female workforce have without doubt been among those worst affected. Sharp declines in the United States (US) and the European Union (EU) consumer demand beginning in late 2008 forced more than 100 factories to close,<sup>3</sup> with many more having to reduce staff, suspend production, and cut hours. Although some of those who have lost jobs at this time would have since found new employment—both within the sector and outside—a large number would have either returned home to their villages or remained essentially jobless or underemployed in the informal economy.

An economic and labor market rapid assessment conducted for the International Labour Organization (ILO) in early 2009 provided worrying indications of the possible extent of the slump in Cambodia, and particularly, the extent to which garment manufacturing would be impacted (Chandrarat, K. et al. 2009). After shedding 27,000 jobs in 2009, industry representatives recently estimated that this figure was now close to 70,000 (although the official government figure is 62,000).<sup>4</sup> In addition, many garment factories have resorted to a range of other measures in a bid to ride out the economic downturn, including work suspensions, bans on overtime, and reduced working hours. All of these have had an acute financial impact on the sector's predominantly female workforce, the majority of which have few savings and large financial obligations to families outside the city. Because of this, the economic downturn can be seen not just as impacting the urban economy, but also the part of the rural one that is dependent on the incomes of garment factory workers.

This paper examines the impact of the global economic downturn on the garment sector and its workers in Cambodia, emerging patterns in labor market, and coping mechanisms of workers—with the objective of analyzing the gender impact of the crisis. It uses both primary and secondary data. While the secondary data originates from a range of academic and professional sources, the primary research component is drawn from initial rounds of a survey undertaken by the ILO and the Cambodia Institute for Development Study to track the experiences of employed and recently unemployed garment sector workers over a period of 6 months. The data and insights presented in this paper reflect the first phase of this research.

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<sup>3</sup> Ministry of Labour figures for 2009, cited in Phnom Penh Post, 17 February 2010.

<sup>4</sup> Estimates of the Garment Manufacturers Association in Cambodia (GMAC), June 2009.

## **Background and origins of the garment sector**

Despite rapid recent urbanization, much of Cambodia's 13.4 million population remains rural-based and employed in agriculture. Agriculture generates 32% of gross domestic product (GDP) and absorbs more than half of the country's labor force (UNDP 2009). Although economic growth for much of the last decade has been impressive (above 10% per year during 2004–2007) and per capita incomes have more than doubled since 1997, poverty still afflicts nearly a third of the population, while income inequality, particularly between rural and urban areas, is on the rise.

Cambodia is also a post-conflict nation, having only secured total peace in 1998 after nearly 3 decades of war. Nevertheless, the new political environment that emerged after 1993 (after a United Nations-backed election), coupled with a wave of donor-backed privatization and market reforms allowed for an influx of foreign investors and the emergence of a fledgling garment sector. Aside from its abundance of low-wage labor, the principal attraction to the country at this time was its preferential trade access to the US market (Cambodia was excluded from quota restrictions faced by neighbors Thailand, Indonesia, and the People's Republic of China [PRC]). This gave the country a considerable competitive advantage in the early years, something that helped spur the subsequent rapid growth and expansion of the industry, later helping it become Cambodia's single biggest export earner and manufacturing employer.

In 1998, the Government of the United States began negotiations with Cambodia to establish quotas for garment exports. The agreement that followed allowed annually rising quota levels in exchange for Cambodia adopting sound labor policies and demonstrating continuous progress in labor conditions. Accordingly, to support the country to conform with these conditions, the ILO's Better Factories Cambodia (BFC) Programme was initiated—its principal role being to monitor labor conditions and provide services to improve working conditions and management in the sector. To date, Cambodia remains the only country globally in which such a program has been made mandatory.

Following the establishment of the BFC program, the industry also established a formal employers' organization, the Garment Manufacturers Association in Cambodia (GMAC), ostensibly to lobby the Ministry of Commerce for the interests and concerns of its members. Later, this role was expanded to include wider national issues like trade policy and global (garment) industry competitiveness. As the industry grew in importance in the early years of this decade, so too did the influence of GMAC.

Against this backdrop, with an abundance of cheap—predominantly female—labor at hand, the garment sector fast evolved into Cambodia's most important economic sector after agriculture. Most garment workers come from Cambodia's rural provinces, where poverty is widespread and gainful employment scarce. Provinces near the capital (such as Kampong Cham, Kandal, and Prey Veng) are typically key labor senders, however, significant numbers of workers also come from further afield, particularly the north and northwest. For many, the decision to migrate is one of economic necessity and rural migrants send money to support families back home. In a country with so few formal employment opportunities, particularly for the low-skilled, the prospect of a (relatively) stable job in an industry with a set minimum wage and considerable overtime potential has proven to be a significant attraction for many young women from the countryside.<sup>5</sup>

Exports from the garment sector grew from next to nothing in 1994 to \$1.9 billion in 2004—the bulk of these revenues coming from sales in the US and the EU. Today, garments make up almost 90% of Cambodia's exports and some 16% of GDP. At its peak (pre-October 2008), the industry employed about 350,000 workers, nearly 90% of whom were women. The vast majority of factories are foreign-owned, with East Asian, ethnic Chinese interests the predominant group.<sup>6</sup>

Until 2004, Cambodia's garment industry flourished with the preferential treatment accorded under the Multi-Fiber Agreement (MFA)—a system of mostly bilateral quotas established in the 1970s to protect the textile industries of least developed countries from more developed, lower-cost competitors. With the phasing out of this agreement in late 2004, Cambodia's quota allocation to developed markets was lifted, exposing it to greater competition from neighboring countries with more integrated and efficient textile operations (ADB 2006). Despite this, the sector continued to grow—albeit at a slower rate—until the most recent economic downturn.<sup>7</sup>

In sum, it is clear that the garment sector has played an immensely important role in the social and economic development of post-war

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<sup>5</sup> In recent months, calls have intensified for a revision to the current minimum wage, from \$50 per month to a “living wage” closer to \$100 per month.

<sup>6</sup> According to Ministry of Commerce figures, there were 262 registered garment factories in Cambodia as of May 2009.

<sup>7</sup> According to the Economic Institute of Cambodia (2006), this growth continued for three main reasons: (i) the US and the EU imposed safeguards to restrain PRC's exports, which benefited Cambodia's garment manufacturers; (ii) Cambodia's factories maintained good labor compliance; and (iii) trade facilitation reforms reduced the time and cost of export and import shipments.

Cambodia. Moreover, although the nature of the employment created has been overwhelmingly low skilled and low income, the industry has nevertheless been instrumental in both enhancing women's participation in the formal economy and in facilitating and sustaining vital economic linkages between a fast-growing urban sector and a more modestly developing rural one.

## **Challenges to garment sector growth**

Despite its impressive growth, the garment sector faces manifold challenges. To date, it retains only a limited share of the potential value-added possible in this type of manufacturing. Most factories in the country continue to work at the basic “cut-make-trim” (CMT) stage of the value chain—the stage with the lowest level of economic value-added. Moreover, in the absence of a domestic textiles industry as in the PRC and Thailand, for example, Cambodia's factories still have to import nearly all the raw materials used in production—a severe drag on both lead times and cost competitiveness. The sector also relies heavily on foreign direct investment (FDI) for its growth, the downside of this being that a significant proportion of the profits generated are repatriated abroad rather than retained (and potentially re-invested) in the country.

Cambodia also has infrastructure deficits, which drive up costs of production and erode the competitiveness of its garment and manufacturing industries. In Vietnam, for example, per unit electricity costs are typically less than half of that in Cambodia.<sup>8</sup> Similarly, transport costs in Cambodia are also high—a product largely of its poor road network and costly shipping fees. Challenges have also arisen as a result of recent changes in the external trade environment. Following the removal of various international trade safeguards beginning in 2005, Cambodia no longer has preferential access to the US market relative to regional competitors like Viet Nam and the PRC. As a result, Cambodia has also lost one of the key motivating factors that lured garment manufacturers to the country in the first place, and for more than 10 years, compelled them to stay (ODI 2009: 4).

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<sup>8</sup> World Bank figures, cited in Higgins (2009) “Managing through the crisis—strengthening key sectors for Cambodia's future growth, development and poverty reduction: infrastructure and energy to support Cambodia's manufacturing base.” Presentation made at 2009 Cambodia Outlook Conference. Available at: [www.scribd.com/doc/20421726/Cambodia-Outlook-Brief-No-5](http://www.scribd.com/doc/20421726/Cambodia-Outlook-Brief-No-5)

Productivity is another oft-cited constraint to Cambodia's regional competitiveness in garment production. Per unit labor costs are among the lowest in Asia (only Bangladesh is lower) but so is overall productivity. This contrasts with the PRC, which has relatively higher labor costs (which vary from \$0.55 to over \$1 per hour, compared with \$0.33 in Cambodia)<sup>9</sup> but 10% to 25% higher productivity levels (Natsuda et al. 2009: 19). On top of this, it has also been argued that during the recent global downturn, Cambodia has also lost out to countries with comparable levels of productivity, like Bangladesh. Bangladesh has benefited, observers say, in its ability to produce large volumes of output for lower costs per unit (ILO 2009). Noting that garment exporters in Cambodia are subject to rigorous monitoring of compliance with labor standards, which offers buyers a protection against reputational risk, some in Cambodia accuse international buyers of shunning ethical purchasing decisions in favor of cost-only considerations.

However, efforts have been made by government as well as industry and workers' associations to tackle some of these challenges. Indeed, skill development is on top of the agenda for the garment sector and training initiatives are currently underway. While challenges remain on the industrial relations issue, all sides have shown a clear preference for improved relations and better dialogue in recent months.<sup>10</sup>

## **Impact of the economic crisis on garment manufacturing**

As noted earlier, Cambodia's garment industry has fared particularly badly amid the recent global economic downturn. As this figure taken from a rapid assessment of the crisis impact shows, the garment sector was most vulnerable to the crisis (Chandrarot et al. 2009).

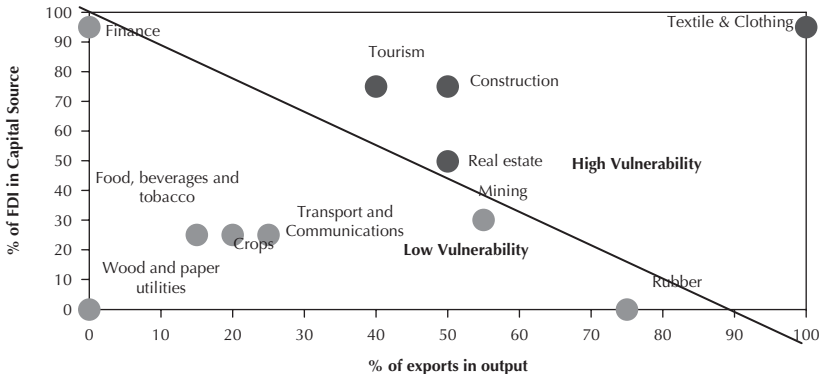
As US and EU retail sales plummeted during the last quarter of 2008 and into 2009, many factories in the country were faced with collapsing orders and new pressures from buyers for shorter lead-times (between order and delivery) and increased credit terms (i.e., from 40 days to 3 months). Against this backdrop, the industry has lost a significant number of its exporting factories (and, in all likelihood, many more of the unregistered and unmonitored subcontracting ones), with many more forced into a range of rationalization measures, from overtime cuts to temporary suspensions and mass layoffs.

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<sup>9</sup> See Jassin O'Rourke, cited in [www.emergingtextiles.com/?q=art&s=080523-apparel-labor-cost&r=free](http://www.emergingtextiles.com/?q=art&s=080523-apparel-labor-cost&r=free)

<sup>10</sup> For example such sentiments were echoed in the forum in December 2009 on "Global Economic Crisis and Cambodian Industrial Relations: Challenges and Way Forward."

**Figure 1: Sector vulnerability**



Source: Chandrarat et al. (2009).

Given the strong dependence of the garment sector on the US market, it is little surprise the recent trajectory of its exports have followed a similar path to that of US retail sales. Such is the extent of Cambodia’s reliance on the American market that during the recent downturn, as Nelmes (2009) shows, the fate of the garment sector and its workers has been inherently tied to the spending habits of the US consumer. Year-on-year export values in 2009 showed average monthly declines of more than 20%, with the sharpest falls coming in the first quarter (Figure 2).

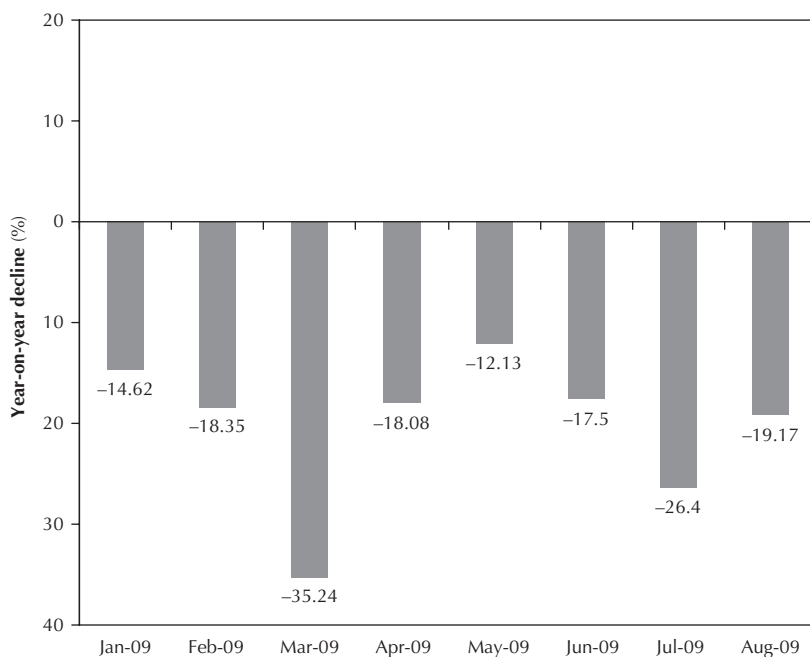
The labor market impacts of these export declines have been severe, and are likely to continue beyond the immediate “crisis” phase (Figure 3). And, while most analysts agree that garment production will remain a key driver of Cambodia’s economy for several years to come (there are few signs of economic diversification as yet), many also expect a period of post-crisis restructuring, with the likely result being a notable downsizing of the industry and its workforce in the coming years.

## The gender impact of the crisis

Women make up approximately half of Cambodia’s labor force, and are as such a major contributor to the national economy<sup>11</sup> not least because they dominate the country’s largest formal sector—garment manufacturing. Beyond this, women also play a key role as household

<sup>11</sup> According to the Ministry of Women’s Affairs (MOWA), women made up 49.4% of the labor force in 2004.

**Figure 2: Garment Sector Exports, annualised rate of decline**

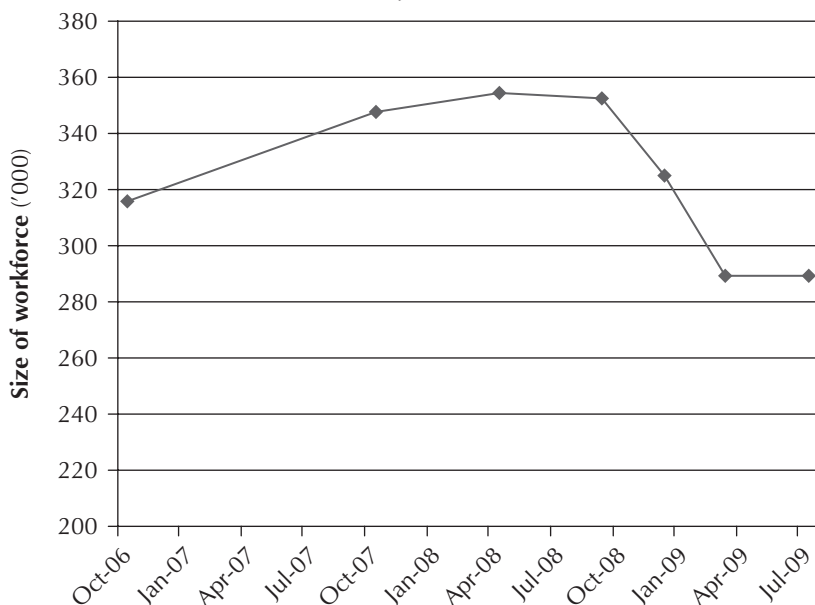


Source: Ministry of Commerce, cited in *Phnom Penh Post* (various dates).

heads (responsible for domestic duties), particularly in rural areas. When housework such as washing, cooking, cleaning, and taking care of children is included, research has shown that women in Cambodia tend to work more hours per day than their male counterparts (ILO 2007: 38).

However, there are a number of factors that continue to constrain women's economic empowerment in Cambodia. As the NSDP 2006–2010 notes, gender disparities are widespread in the country, and a root cause of poverty. One of the most critical is women's unequal access to education, particularly in the rural areas. Thirty six percent of women are illiterate as compared to 15% of men (UNIFEM et al. 2004). Although recent years have seen notable improvements in literacy and school enrollment among girls in Cambodia, particularly at the primary school level (where female participation is now higher than for males), the situation remains the opposite in the secondary and post-secondary systems, where males still greatly outnumber—and outperform females (ILO 2007: 45). Furthermore, women often fall foul of prevailing social ideals and attitudes about power

**Figure 3: Growth and decline of garment sector workforce, 2006–2009**



Source: ILO's *Better Factories Cambodia*, Ministry of Commerce (various dates).

and gender relations, many of which serve to undermine their ability to claim the equal rights granted to them under the Cambodian Constitution (CDRI 1999). The large numbers of women in the labor force notwithstanding, the strong identification with men as breadwinners and women as household managers and carers continues to prevail. Likewise are the moral codes that determine “proper” behaviour and conduct of women, known as the *Chba’p*, which are still taught in schools today.<sup>12</sup> In a MoWA survey in 2005, 22.5% of women reported being subjected to domestic violence (MOWA 2005). Prior to the growth of the garment sector, the only option for low skilled women’s employment was in agriculture, often as unpaid family labor, and the informal sector.

In this scenario, the garment sector provided a formal sector employment opportunity for lesser educated, lower-skilled women in Cambodia—and as the garment sector grew, so did women’s share in formal employment, which rose from 28% in 1998 to 40% in 2004.

<sup>12</sup> See, for example, Ledgerwood (1996), and more recent references to such in UNIFEM et al. (2004) and Kraynanski (2007).



However, on the whole, women are still both underrepresented in paid (formal) employment and generally lower paid than men (ILO 2007).

However, traditional perceptions about the role of women in society and the workplace are changing. Over the last 15 years, women have increasingly been seen as not only as household managers but also legitimate income earners. Much of this has been precisely due to the growth of the garment sector, which alongside tourism has helped to create employment opportunities for hundreds of thousands of women whose prior job prospects would have scarcely extended beyond farming or the informal economy. Having instead found themselves as the economic drivers of the country's most important sectors, not to mention often in their own households, women in Cambodia have begun to see their social status change. Corresponding with this has been a rise in female-led decision making at the household level and a growing commitment among families to keeping girls in school for longer.<sup>13</sup>

However, these changes have been neither fast nor comprehensive. It will take many years of continuous improvement in educational access and opportunity for girls to reverse the structural imbalances that now prevent women from realizing the same employment potential as men. Moreover, the garment sector alone is in no way a panacea to expanding women's employment opportunities in Cambodia. Although it has no doubt helped elevate the incomes and living standards of hundreds of thousands of women who may otherwise have swelled the ranks of the absolute poor, most factory workers are still relatively poor, and few have the opportunity to advance their career, either in the garment industry or outside. Changing these conditions is a critical long-term challenge for policy makers in Cambodia, and one that has become all the more pertinent in light of the country's fast growing labor force and the compounding loss of female employment during the global economic downturn.

Furthermore, the heavy reliance on the garment sector proved very costly for women as the sector was most vulnerable to the economic crisis. Cambodia's women workers have therefore borne a disproportionate burden of the crisis impacts, which are likely to be exacerbated due to the pre-existing limitations faced by women in Cambodia's labor force. These factors force women into a position of

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<sup>13</sup> It must be noted here that not keeping young girls in school does not necessarily or always reflect traditional or culturally based predispositions, but often a combination of more practical constraints like transport (to school) and safety issues (i.e., girls travelling to and from school alone). This has been highlighted in a number of recent gender assessments, including USAID (2006).

particular vulnerability to economic shocks, characterized by a range of hardships including low earning capacity, poor access to safety nets and social protection, inadequate savings, and debt. It is therefore little surprise that it is these women who are among those least able to cope.

Concerns have also been raised about the exposure of female factory workers to various forms of risky employment, exploitation, unsafe migration, and trafficking as a result of income loss and retrenchment. Research over the past decade, for example, has revealed long-standing, often cyclical, labor flows between the garment sector and various forms of sex work—both direct and indirect.<sup>14</sup> In light of the current downturn, such flows have received renewed attention, with both widespread speculation and some empirical evidence suggesting that a number of newly unemployed women –up to one fifth, according to one United Nations agency—have ended up in high-risk jobs in the so-called “entertainment sector.”<sup>15</sup> The implications for these workers, especially with regard to safety issues like workplace abuse (including exploitation and trafficking) and health issues like HIV and AIDS exposure, are thus potentially very severe, and should not be neglected in the wider debates about the downturn and its affect on women’s employment in Cambodia.

## **Understanding the impact of the crisis: A tracking survey of garment workers**

To understand the impact of the crisis on the garment sector in Cambodia, and particularly its workforce, the ILO, supported by the United Nations Development Programme, is currently undertaking a 6-month tracking survey of 2,000 factory workers, both employed and recently unemployed. The objective of the survey, which is being carried out by Cambodia Institute of Development Studies, is to develop a fuller picture of how workers have been impacted by the crisis, how workplace conditions have changed, and what new hardships

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<sup>14</sup> See for example, Nasigaya (2002).

<sup>15</sup> Moreover, such movement could be voluntary or through growing hardships (including retrenchment) in the garment sector. However, these studies have so far tended only to reveal correlation rather than causality, i.e., increasing numbers of women formerly employed in the garment sector entering direct and indirect sex work during the period of the economic crisis. See, for example, UNIAP (2009).

and coping mechanisms have become prevalent.<sup>16</sup> The study, which is based on a purposive but random sampling methodology, probes workers on the impact of their situation on their families, their future plans (for employment, training, migration, and the like), and seeks comparisons among those that have found new jobs between this work and their previous factory jobs. It employs the use of detailed, tailor-made questionnaires and surveying techniques (for employed and unemployed workers) to identify, question, and track workers over a 6-month period. It consists of one benchmarking survey being conducted between September and December 2009, and two follow-up tracking exercises at 3-month intervals after the benchmarking survey. It covers a sample of workers from 199 factories in and around Phnom Penh, and includes both exporting and non-exporting factories.<sup>17</sup>

## **Preliminary findings**

The results presented in this paper are based on the early findings of this exercise.<sup>18</sup> The quantitative figures presented here pertain to the 434 questionnaires in the database, supplemented with qualitative data from the 1,239 completed interviews. The data represents workers from 140 factories in and around Phnom Penh. Therefore, while not conclusive, these findings will give us some signs of what is happening to workers during the current economic downturn, and how they are responding to the new conditions they are facing.

### **1. Profile of garment workers**

Of the sample, 81% are female and 19% are male. The vast majority are internal migrants from the provinces (95%). More than two-thirds

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<sup>16</sup> In this survey, “employed” refers to workers currently employed in the garment sector, and “unemployed” refers to workers who had been retrenched from the sector since 01 January 2009.

<sup>17</sup> In order to export, factories must register with the Ministry of Commerce (MOC). The study defines exporting factories as those listed in the MOC registry, and non-exporting factories as those not listed. Non-exporting factories often are subcontracted by exporting factories.

<sup>18</sup> As of 14 October 2009, the survey team had interviewed 1,239 workers (or 62% of total sample size of 2,000 workers, of which 1,083 were employed and 156 were unemployed). Of this number, 434 questionnaires (or 22% of the total sample, comprising 279 employed and 155 unemployed) have been checked, validated, and entered into the team’s database.

are single, most are household income earners, but less than a sixth are household heads. The majority of workers do not have children, but they are typically still obliged to support families of three to five, including parents, grandparents, and siblings. In terms of education, the majority have completed primary school, but very few have progressed beyond the 9th grade, or undertaken any form of job-based training. Years of experience in the sector vary, but the median duration is 2–3 years. Short contracts appear to be commonplace, with a third of workers having worked at their current factory under a year. Average earnings vary between \$70 and \$100 per month, including overtime and bonuses. Working hours vary, but are typically between 48 and 60 hours per week.

## **2. Employed workers**

Of the workers, 34% have seen a fall in their income since 2008—by an average of \$16 per month. On a typical income of \$80 per month, this represents about a 20% decrease. Most often, this is due to reduced overtime (47% of respondents); other reasons include shorter work weeks, work suspensions, compulsory unpaid leave, reductions in bonuses, and reductions in regular work weeks. Fifty-two percent say they now have insufficient incomes to send money home to family. More than one-third of workers say it is now more difficult to ask for time off from their employer, and 39% say workplace health and safety conditions have deteriorated since 2008.

Most workers have cut back on basic spending during the economic downturn. Common ways to achieve this include reducing food intake, travelling around less, and downsizing or increasing the number of workers sharing a room. Compared with 2008, an average of 10% fewer workers say that they have enough money this year for food, health care, transport, and remittances. Twenty percent of workers say their family has sent another member to find work—most commonly this is a young female sibling—most seek work in the garment sector.

## **3. Unemployed workers**

The majority were terminated due to factory closure or slowdown in production. Almost all had employment contracts, but most were terminated before the end of their contract. Seven out of 10 workers say they were not given advance notice of their retrenchment. For those who did receive notice, it was usually less than 1 week (7 days). Fifty-five percent were retrenched after June 2009—an indication perhaps that those retrenched before this time are either re-employed (in the

informal economy, for example) or no longer in Phnom Penh. Fifty-four percent received severance pay from their employer. Forty-eight percent say they have borrowed money to cope with income loss: from family, friends, and to a lesser extent, money lenders.

Although almost half say they were able to save money from their previous jobs, more than 50% say they have now used up these savings. Among the workers' families, 20% have sent additional family members to find work; the profile of this worker is the same as for the employed workers (a young female sibling seeking work in the garment sector predominantly). Less than 10% of the unemployed have found new jobs, and most of these are in "stop-gap" types of work, typically in the informal economy. Some 80% are still looking for work, while 7.7% have now given up. Only 2.5% are currently in training. Training providers vary from private shops to public and private institutions, while the cost varies from free (for a part-time government course) to \$200 (or a six-month full-time private course). The majority of workers would consider retraining, both for the garment sector and other occupations. However, most say they would need financial support and flexible course times to enable them to do so. Job-searching strategies are mostly informal; two-thirds of job seekers are searching for work through friends. Just 2.4% have looked for vacancies in the newspaper.

## **Conclusions**

In little more than a decade, garment manufacturing in Cambodia grew from less than a handful of factories employing hundreds to a more than \$2 billion-a-year industry with about 350,000-strong workforce. Although the management and capital used to drive this growth have been overwhelmingly foreign, this impressive growth story could not have been achieved without the contribution of its production workforce—overwhelmingly low-skilled women from the country's rural provinces. As the importance of this sector to Cambodia's economy has grown, so too has the role of women in the national labor market. Indeed, as well as fuelling at least partial rebalancing of Cambodia's economy away from agriculture and toward light manufacturing, the rapid growth of the garment sector in recent years has also driven a resurgence in women's role as both income earners and decision makers in the household, though a lot more remains to be achieved. Owing to the garment sector's success, formal income-earning opportunities have been created for hundreds of women whose prospects prior to this would have scarcely extended beyond farming or the informal economy.

Although total employment in garment manufacturing remains small, the economic expectations placed on these workers are often very high. Most garment workers remit a significant portion of their monthly salaries to their families in the provinces, meaning that the total numbers supported by the industry are far greater than merely those it directly employs (perhaps 10% of the population, according to rough estimates). At the same time, owing to the foreign-owned, externally reliant nature of the garment industry, these workers are highly vulnerable to the vagaries of international demand and economic shocks. This is none more evident than in the current economic downturn, which despite having its origins from thousands of miles away in the US, has hit Cambodia through its FDI and export channels. Garment factories and their workers continue to bear the brunt of the impact—with closures, suspensions, and layoffs affecting tens of thousands of already vulnerable women and families, with few or non-existent coping mechanisms.

Preliminary results gained from the ILO–CIDS tracking study indicate significant loss of income among garment workers and difficulties in coping with the current economic downturn. These trends are all the more acute given the dearth of “alternative” work for unskilled women and the profound lack of social protection mechanisms in the country. Despite the hardships many women face upon retrenchment in the capital, few workers see their options at home (i.e., in the provinces) as any better. Indeed, as it has been noted, a major motivating factor in many women’s decision to migrate to factories in the city in the first place is the lack of income-generating opportunities at home. This situation has not changed today, and although the traditional “safety net” of the family is still an ostensible option for many women displaced by the crisis, this study has reaffirmed earlier research findings in identifying return migration as a last resort. That said, given the generally low level of savings factory workers have upon retrenchment, this study has found many workers to be already close to this last resort. There is also a tendency to preserve this saving by spending less on food, travel, and others. The lack of alternative employment opportunities also makes these women vulnerable to potentially exploitative work or situations as they seek to tide over a difficult situation.

It is interesting to note that to cope with income loss of workers in the factories, a significant proportion (around one-fifth) of households have sent another family member into the workforce to find extra income. In almost all cases, this worker is also a young female, typically a sister of the same age and educational profile of their relative(s) in the garment sector. Moreover, like their relative(s), most set their sights on garment factory work, despite the obvious

slowdown in the sector. The comparatively low entry requirements (i.e., for education, skills, language competencies, and others) and the fact that most new workers have contacts in the sector, often helps this job search. Consequently, many of the women surveyed feel that the prospects of employment in a garment factory are notably higher than in other occupations.

But where is the garment sector heading is a critical question in this context. While it is a largely formal sector maintaining basic labor standards, it is currently established as a low-productivity, low value-added sector. As the current economic downturn exposes the structural imbalances in this sector, changes will need to be made if long-term growth is to be sustained. Industry analysts have noted that Cambodia's garment sector may need to move up the value chain while continuing to maintain compliance.

The current policy responses to the crisis in Cambodia include some concessions to the garment sector. On much-needed social protection, the current emphasis is on employment generation through public works projects. These are likely to benefit men more unless the projects are carefully designed to appeal to women workers.

One of the most critical challenges for decent work for female garment workers, both employed and unemployed, is skills development. Access to marketable job-based skills to improve employability both within and outside the garment industry is needed. Moreover, before adulthood, the continuation of formal schooling among young girls, particularly in the types of households the current factory workforce come from, is another crucial challenge that needs to be overcome if women are to enhance their career prospects, overcome gender inequalities, and better insulate themselves from economic shocks. As it stands, women in the garment sector are overwhelmingly low skilled and low educated, with few opportunities either for career progression within the sector or alternative employment outside it. Of course, part of this relates to the general absence of wider (formal) employment opportunities in Cambodia, particularly for women. However, education and skills are still the surest way to create and safeguard opportunities for work, and to empower women both socially economically so that they can claim the rights and entitlements granted to them in Cambodia's Constitution and enable them to move out of the "no skills – few options" trap. Indeed, this is one area the government and the industry are focusing on and progress is being made, albeit slowly.

As this tracking study is completed through 2010, the picture of how workers and their families are responding and adjusting to the economic downturn (and its subsequent recovery) will no doubt become clearer, and with it, policy recommendations more accurately derived.

The specificities of the findings reported here based on a small sub-sample may also change once the full baseline is completed. However, the preliminary results presented in this paper do outline several clear facts that appear difficult to dispute: namely, that in Cambodia's crisis, it is women workers that are bearing much of the brunt of the impacts, owing as it is to their predominance in the hardest hit economic sector—garment manufacturing. Moreover, with typically little education or skills, and with the country lacking both diversified employment and basic social protection, it is these workers who constitute some of the most vulnerable and least able to cope with the negative impacts of economic shocks.

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### **Box 6: Impact on women: Field studies**

During the 1997–1998 Asian financial crisis, women were disproportionately affected, and young, poorly educated women in urban areas the most hit. Mindful of earlier events, the Asian Development Bank commissioned field studies on different export industries in the People's Republic of China, Indonesia, Philippines, Malaysia, Thailand, and Viet Nam in mid-2009.

Declines in demand for major exports from end-2007 were seen in all the countries. In response, retrenchment and reduced work hours were commonplace, although there were important cross-country gender differences: in Viet Nam, women formed the minority of retrenched workers (since they were perceived to be more productive than men); in Indonesia, women were the first to lose their jobs (since they were usually involved in aspects of the production process perceived as less critical). Of the enterprises laying off workers, almost a third laid off all their female workers.

Regardless of industrial sector, status of employment, and sex of worker, respondents reported income declines. Automotive workers in Thailand reported income declines of about 40%, and electronics workers in the Philippines, falls of about 40–50%. In Viet Nam, women reported a larger fall in income of 24.2% versus 21.3%. All workers reported reductions in spending, with education the last item to be reduced. Nearly 80% of Thai female automotive workers reported reducing remittances to rural areas.

The downturn forced women and men to seek alternative livelihoods. In Viet Nam, working in restaurants and shops was widely reported while in Indonesia, retrenched female workers reported becoming domestic workers or looking to work abroad for the first time. The recession also triggered negative social impacts, such as increased family conflict.

The recession underscores a lesson of the earlier crisis—a gender-responsive approach to designing, monitoring, and evaluating economic rescue packages is needed. Countries need to continue to collect and analyze gender-disaggregated data on the hardest-hit sectors to determine differential gender impacts on workers and their families and to provide voice and visibility to women that are affected. In particular, investing in gender-responsive social services—which respond to women's roles as economic agents as well as providers of care for the well-being of families—is needed.

Source: Samantha Hung in "Lesson Not Learned? Gender, Employment, and Social Protection in Asia's Crisis-Affected Export Sectors." [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# **No cushion to fall back on: The impact of the global recession on women in the informal economy in four Asian countries**

*Zoe Horn*<sup>1</sup>

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## **Introduction**

The current global recession has hit hard, and few economic actors have been insulated from the shocks. There is significant concern that this downturn could gravely afflict developing countries, effectively destroying the economic progress of recent years. The size and significance of the informal economy<sup>2</sup> in Asia make it a critical point of investigation for understanding the impact of the recession on the real economy in emerging countries of the region. Available figures suggest that the contribution of the informal economy to gross domestic product (GDP) is 41% for Asia, and in South and Southeast Asia informal employment accounts for the greatest regional participation of informal workers outside Sub-Saharan Africa (ILO 2002).

During crises, many retrenched workers and formal wage earners engage in informal activities to compensate for declining wages and purchasing power—this is particularly critical in the absence of formal social protection. This paper interrogates the notion of the informal economy as a “cushion” for its formal counterpart during economic downturns, and suggests that the more pressing issue is the reality that

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<sup>1</sup> Zoe Horn is project coordinator for Women in Informal Employment: Globalizing and Organizing (WIEGO).

<sup>2</sup> The “informal economy” is a somewhat contested concept. In this paper, the informal economy has a broad definition, and includes both enterprises that are not legally regulated as well as employment relationships that are not legally regulated or protected. As such, the informal economy comprises of all forms of “informal employment”—that is, employment without labor or social protection—both inside and outside informal enterprises, including both self-employment in small unregistered enterprises and wage employment in unprotected jobs.

informal workers, lacking social and economic protections by definition, have no “cushion” of their own to fall back on.

While the informal economy may provide some relief from the shocks of the crisis, this informal safety net is illusory. Employment in the informal economy may rise during economic crises (Lee 1998, Tokman 1992), but this does not necessarily mean that traditional informal workers or new entrants are thriving. In reality, global economic downturn threatens to erode the fragile economic and social position of these workers, who often have slim margins for survival in the best of times. These effects tend to be particularly severe for informally employed women, who are overrepresented among low-end segments of the informal economy.

This paper specifically addresses findings on the impacts of the economic crisis on nonagricultural informal workers in four Asian countries—India, Indonesia, Pakistan, and Thailand—and within three informal nonagricultural occupational sectors—construction work, home-based work, and waste picking. The paper discusses the specific transmission channels of the crisis to the selected informal sectors, as well as the additional strain of deteriorating working conditions and increased competition from new entrants in the informal economy. The gender-specific consequences of the crisis are discussed in terms of the structure and composition of the informal sector, but also as a function of the household and individual level impacts of the crisis, related to shifting responsibility in paid and unpaid work within families.

Critically, the crisis is further undermining the already precarious economic and social positions of many informal workers and their families, and driving them further into impoverishment. Resolving this situation demands immediate and thoughtful intervention by local, national, and international actors positioned to provide assistance, a topic this chapter turns to in its conclusion.

## **Research sample and methodology**

This chapter is based on findings from India, Indonesia, Pakistan, and Thailand—countries included in an ongoing, global study on the impacts of the crisis on informal workers (Horn 2009). The study is being conducted by the Inclusive Cities project and coordinated by Women in Informal Employment: Globalizing and Organizing (WIEGO), in order to investigate the real, on-the-ground effects of the crisis on the informal economy and workers across Africa, Asia, and Latin America. Expanded research in Asia was made possible by funding from the Asian Development Bank. This funding extended the

study’s research among home-based workers and widened the scope of investigation to include construction workers.

Research included in this chapter was conducted by local and regional partners, specifically member-based organizations of informal workers and technical support organizations that work directly with the working poor. Table 1 depicts the global study’s partners in Asia, the sector of their work, and the locale where they conducted their research.

**Table 1: Study participation by sector and locale**

<b>Sector</b>	<b>Partner</b>	<b>Country/City</b>
Construction work	Self-Employed Women’s Association	Ahmedabad, India
Home-based work	Homenet South-East Asia (Homenet Thailand and Homenet Indonesia); Homenet South Asia (Homenet Pakistan)	Hat Yai and Bangkok, Thailand; Malang, Indonesia; Kasur and Sialkot, Pakistan
Waste picking	Kagad Kach Patra Kashtakari Panchayat (KKPKP)	Pune, India

Source: Horn (2009).

Data were gathered through focus group discussions, one-on-one interviews with workers, and key informant interviews with staff from member-based organizations and organizers of informal workers. A total of 10 focus groups were conducted in Asia, four of which were conducted specifically for this chapter. Research was conducted between July and September 2009. This chapter includes data from 136 informal workers across three occupational sectors: 102 home-based workers, 22 waste pickers, and 12 construction workers. In all sectors, the majority of participants were women, who represented 91% of the total number of interviewees.

## **Gender and the Asian informal economy**

The informal economy is heterogeneous and complex. Employment in the informal economy includes all remunerative work—both self-employment and wage employment—that is not recognized, regulated, or protected by existing legal or regulatory frameworks and nonremunerative work undertaken in an income-producing enterprise (ILO 2002). In global value chains, production, distribution, and

employment can fall at different points on a continuum between pure “formal” relations (i.e., regulated and protected) at one pole and pure “informal” relations (i.e., unregulated and unprotected) at the other, with many intermediate categories in between. Workers can also move across the formal-informal continuum or operate simultaneously at different points along it, or both (Chen 2007).

Women tend to be overrepresented in the informal economy in Asia, as they are worldwide. The informal economy in most countries has a higher proportion of women workers than men workers (UN 2000). In India and Indonesia, informal employment accounts for 9 out of every 10 women working outside agriculture, and more than half of economically active women are informally employed in Pakistan and Thailand (Table 2).

**Table 2: Share of nonagricultural workforce, female and male, in the informal economy and women’s share of the informal economy (%)**

Country	Share of nonagricultural labor force that is in the informal economy		Women’s share of the informal economy in the nonagricultural labor force
	Women	Men	
India	91	23	70
Indonesia	88	43	69
Pakistan	61	64	n.a.
Thailand	54	47	49

n.a. = data not available.

Sources: Data for India, Indonesia, and Thailand are from UN (2000), chart 5.13, p. 13. Data for Pakistan are from Khan et al. (2001).

There is a significant overlap between being a woman, working in the informal sector, and being poor (Chen 2001). Compared to the male informal workforce, women in the informal sector are more likely to be own-account workers (i.e., self-employed working by themselves) and subcontract workers, and are less likely to be employers or paid employees of informal enterprises. These gender-based differences in employment status within the informal economy have implications for relative social and economic vulnerability during crisis, as will be discussed in the next pages.

## **Transmission channels of the global recession to selected informal sectors**

The effects of the economic downturn on urban informal sectors in Asia are occurring both in parallel and as a consequence of the effects of the crisis in the formal economy. Informal sectors are being hit by many of the same forces affecting the formal economy: shrinking consumption, dropping demand, and price instability. In addition, although informal markets have some inherent flexibility, their resilience is now being tested to the limit by the impacts of the crisis. Findings suggest that more and more informal workers are competing for fewer customers and for fewer and smaller contracts. This reality is particularly grim given the unemployment projections by the International Labour Organization, which estimates that the number of formally unemployed people across South and Southeast Asia will have risen by 10 million between 2007 and the end of 2009 (ILO 2009a).

### **Home-based workers**

Over the past few decades, much of the informalization and feminization of the labor forces in Asia's developing countries (Charmes 2001) has been related to the growth of home-based work. Official statistics on home-based work in most countries are extremely limited, and there are few figures on the exact gender composition of this work in various countries. However, most evidence suggests that this work is a disproportionately critical source of income for women,<sup>3</sup> who account for 50%–75% of home-based workers where statistics are available (ILO 2002). Home-based workers include the self-employed who are engaged in family businesses or own-account operations, as well as paid workers working under subcontracting arrangements, both of whom are included in the findings of this paper.

Specific production activities for home-based workers interviewed for this paper in Indonesia, Pakistan, and Thailand are included in Table 3. Subcontracted workers are more likely to be involved in exported-oriented work, while self-employed workers are most likely to sell their goods locally.

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<sup>3</sup> For a review of this evidence, see Chen et al. (1999).



**Table 3: Home-based work activity, employment structure, and market for products**

Country	Employment structure/ Product	Export market	Domestic market	Local market
Indonesia	Subcontracted			
	Badminton rackets/ shuttlecocks		✓	✓
	Shoes	✓	✓	
Thailand	Subcontracted			
	Car accessories	✓	✓	
	Garments	✓	✓	
	Leather work	✓	✓	✓
	Self-employed			
	Food processing Garment			✓ ✓
Pakistan	Subcontracted			
	Soccer balls	✓	✓	✓
	Self-employed Reed mats	✓	✓	✓

Source: Author.

Decreased demand within critical global and regional markets during the global economic crisis has serious consequences for *subcontracted* home-based workers. Asia's tightly integrated supply chain transmitted the external demand shock rapidly—between September 2008 and February 2009, exports fell at an annualized rate of about 70% in emerging Asia (IMF 2009). Lower demand has resulted in lower volumes of contracts: 60% of subcontracted participants reported that they had received smaller and more infrequent contracts from middlemen in the previous 6 months. Nearly half subcontracted home-based workers reported working fewer hours each day (49%) and fewer days per week (44%) than they did 6 months earlier. This in turn had affected their incomes: 64% of them reported that their incomes had fallen in the previous 6 months.

Declining income among customers in local markets significantly affected the *self-employed* home-based workers: 84% of these workers reported decreased demand over the previous 6 months, while 75% reported that the volume of their trade had decreased in this period. However, lower demand or volume of sales did not translate into decreased work hours among the self-employed. Unlike subcontracted home-based workers, they do not depend on middlemen to provide them with work orders. Rather, self-employed workers often worked longer hours to maintain their profit margins. Thirty-four percent

were working more hours each day, while their days of work each week remained largely stable. Nevertheless, a huge proportion (84%) of self-employed home-based workers reported that their monthly incomes had fallen during the first half of 2009.

Both self-employed and subcontracted home-based workers reported increased numbers of workers in their sectors: 34% and 36% of respondents, respectively. According to respondents, women are turning to home-based work in much greater numbers than men, which is consistent with the precrisis gender composition of the sector. Yet not all those seeking such work are finding it. A self-employed home-based worker in Thailand reported, "About 20 women who were laid off from the factories, including a woman with a newborn baby, came to ask me for piece work, but I have no work to give them."<sup>4</sup>

Subcontracted home-based workers, most of whom are women, are particularly vulnerable. In conditions of excess labor supply, piece rates (the normal form of payment for these workers) can be driven very low and thus workers' share in the value chain falls further, even though many such workers are highly skilled. Among subcontracted workers included in this study, nearly 50% reported that the piece rate they receive had fallen in the previous 6 months.

## **Waste pickers**

The recession in industrialized countries has reduced demand for exports from key manufacturing countries, particularly the People's Republic of China, and weakened the market for the recyclables used in the production or packaging of export goods. This began to influence international pricing dynamics as early as October 2008. In the global study (Horn 2009),<sup>5</sup> waste pickers experienced the sharpest decline in demand and selling prices among the sectors investigated. Table 4 depicts the price changes reported by waste pickers in Pune, India, between January and June 2009. The table reveals that the reported prices for waste materials had, on average, dropped by 5%–7% from early to mid-2009, but the prices of plastic milk bags and cardboard had dropped by as much as 20% and 16%, respectively.

During crises, economic stress is often shifted down the chain, and losses are transferred disproportionately to informal waste pickers, who typically occupy the bottom rung of local and global supply

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<sup>4</sup> Interview with a female home-based worker, 16 June 2009, Bangkok, Thailand.

<sup>5</sup> The global study included waste pickers from Bogotá, Colombia, and Santiago, Chile.

**Table 4: Price changes for different categories of waste materials reported by waste pickers, January–June 2009 (%)**

<b>Material</b>	<b>Pune, India (Infosys)</b>	<b>Pune, India (University)</b>
Cardboard	-7	-16
Office paper	-1	-12
Scrap paper	-2	-4
Newspaper	-4	0
Glass	0	0
Plastic		
Blow-molded	-4	-10
Injection	-13	-2
PET	-7	-11
Ferrous metal	-17	+7
Aluminum	-13	+9
Plastic bags	0	-12
Milk bags—plastic	-20	-12
<b>Average change</b>	<b>-7</b>	<b>-5</b>

PET = Polyethylene terephthalate.

Source: Horn (2009).

chains. Waste pickers in India's cities receive as little as 5% of the price that industry pays for recyclables, while middlemen pocket the rest (Medina 2005). In addition, in many Asian countries, a clear majority of street and dump pickers are often women and children, while men are more likely to be involved in the processing and selling of recovered materials, and are more likely to be middlemen and managers (Furedy 1990.) The relatively low position of women in waste industry supply chains typically makes them even more dependent during hard times—previous studies have also concluded that women are often paid less for the waste materials they sell, and receive less by way of advances or loans from middlemen (for example, see Muller and Scheinberg 2003).

As suggested by Furedy, women can improve their earnings when they are involved in strong cooperative organizations that intervene with intermediaries and traders (Furedy 1990.) In the global study, the waste pickers in Pune, India, while all women, reported less dramatic price declines than both their male and female counterparts in Latin America. The Pune waste pickers were involved in highly organized waste-recycling schemes, with half selling waste through their

own cooperative.<sup>6</sup> Whether being organized buffered them from the more dramatic price declines reported from other countries remains an empirical question that needs further investigation; however, study results seem to suggest that there was some mitigating effect.

Still, 77% of the waste pickers in Pune reported a decline in income over the previous 6 months. Being organized and having their own cooperative did not buffer Pune waste pickers from the decline in waste availability. Participants reported that reduced consumption locally, due to tough economic times, was leaving less waste for pickers to collect. Waste pickers collecting from an information technology park noted that local firms, as a cost-saving measure in response to the recession, had reduced their use of newspapers and print paper—two very valuable waste materials. The cooperative scrap store where these workers sold their material registered an almost 50% drop in the total volume of material they brought for sale.

## **Construction workers**

Economic downturn and the high cost of building materials in Ahmedabad, India, have curbed construction and development locally. Half the construction workers interviewed for this study indicated that their volume of work had fallen. Six months earlier, they often had 10–15 days of work a month, but now had only 5–6. This was the case among men who worked in skilled labor, such as masonry, plumbing, and tile work, as well as women who generally provided unskilled labor, such as hauling cement or staining and sanding. Daily earnings, however, have fallen disproportionately. In February 2009, unskilled workers received 100–150 rupees a day for their labor, but at the time of their interviews in August 2009 were receiving Rs70–Rs80 per day. Skilled workers did not report a decline in daily earnings; they received Rs200–250 a day both in February and August 2009.

Increased competition within the informal economy has also hurt workers. Self-Employed Women's Association (SEWA) estimates that, in Ahmedabad City, India, the decline of key industries such as diamond polishing due to the economic crisis has increased the number of informal workers and recently retrenched formal workers seeking work in the construction sector by almost 25% (SEWA 2009). Many of

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<sup>6</sup> Pune waste pickers who collect waste from Infosys sell their material to a cooperative scrap store run by their own organization, KKPKP. Those who service Pune University Campus are under a formal contract between KKPKP and the University, and earn a salary, apart from the money they receive through sale of scrap. Scrap is usually accumulated for a week and then sold collectively by the group and the profits are shared equally after deducting expenses.

these new entrants are competing for work in unskilled construction work, as the barriers to entry are lower. Both men and women are taking up construction work, but women will likely be disproportionately affected, both those who were already doing unskilled construction work and those who are seeking unskilled construction jobs.

New male entrants in construction possess a physical advantage and a time advantage: with fewer household duties, they are generally able to arrive earlier at the recruitment corners (*kadiya naka*) where most construction workers gather each day to compete for construction jobs. Additionally, new female construction workers are less likely to have the skills to compete for skilled construction jobs, traditionally the preserve of men, and are forced to compete for unskilled construction jobs, thus becoming further concentrated in this lower-paying work.

In sum, research indicates that informal workers are affected by the economic crisis in many of the same ways as formal workers, suffering directly and indirectly from declining demand, shrinking consumption, and volatile prices. Moreover, informal workers face increased competition as more people enter the informal economy and as more jobs are informalized.

Women are suffering disproportionately. The impacts and competition are strongest in the poorest-paying and lowest barrier-to-entry informal sectors and subsectors, where women are already overrepresented. Evidence of this increasing economic stress and uncertainty at the bottom of the global economic pyramid in India, Indonesia, Pakistan, and Thailand suggests that the informal economy is hardly a “cushion” during economic downturn, least of all for women.

## **The increasing vulnerability of informal workers and their families**

Vulnerability—the probability that a shock will result in a decline in well-being (Mehrotra and Biggeri 2002)—is being increased by the economic crisis, particularly for women workers and children in households dependent on income from the informal economy. Vulnerability is largely a function of a household’s assets, which are their endowments of physical and human capital. The foundation of these assets is the stability and diversity of household income. The size and composition of households and lack of diversification of family or household income sources reported by participants highlight the importance of informal workers’ income to their households.

Fewer than one-third (27%) of female respondents but over half (58%) of male respondents reported that they were the primary

income earner in their household. Table 5 reveals that there was an average of two income earners in respondents' households; many of them worked in the same informal sector as the respondent. The average household size reported by informal workers in the four Asian countries was six.

Between two-thirds and three-quarters (71%) of respondents reported that they supported children, and among these households, the average number of children was between two and three. There is evidence that the income-earning burden within these households may be intensifying as a result of the crisis: 18% of respondents reported that a household member had become unemployed during the previous 6 months, and 41% reported that the income of one or more household members had fallen significantly over the same period.

**Table 5: Household profiles**

<b>Sector</b>	<b>Average no. of earners in household</b>	<b>Average household size</b>	<b>% of households with children</b>	<b>Average no. of children among households with children</b>
Construction workers	2.2	4.0	50	1.8
Home-based workers	2.7	6.3	75	2.4
Waste pickers	1.9	5.0	64	2.6
<b>All</b>	<b>2.5</b>	<b>5.9</b>	<b>71</b>	<b>2.4</b>

Source: Horn (2009) (updated).

Evidence from earlier economic crises suggests that it is generally up to women to balance the household budget and maintain their families' living standards during a crisis (Moser 1996.) Many working poor women spend all their incomes on household expenditures. This situation is particularly challenging for women during the current crisis—incomes are stretched especially thin since food and fuel prices have remained high since the food and fuel crisis of early 2008.<sup>7</sup> In the

<sup>7</sup> While the origin of these increases precedes the economic crisis, it is important to note that the residual impacts of the food and fuel crises of 2008 are compounding the effects of the economic crisis for many workers. In Indonesia, for example, prices rose by 15%–25% for sugar, rice, and eggs, 50% for gasoline, and 40% for public transport over the 12 months to July 2009.

global study, female respondents expressed particular concern about the vulnerability of their children, who do not understand why household expenditures have to change. This highlights the fact that the crisis has heightened the role of women as gatekeepers in the inter-generational transfer of poverty.

Food, typically allocated a large share of the household budget among the poor, is being restricted. Both the quantity and quality of food is affected—fewer meals are being served, while “luxury” items such as milk and meat are being cut. While respondents reported having difficulty in paying for school fees, few respondents reported removing their children from school altogether. Limited dropout rates arguably reflect the efforts of families, in difficult circumstances, to protect what is perhaps the most important type of investment they can make, namely, their children. Medical expenditure is generally considered a luxury at the best of times. Nevertheless, some home-based workers in Pakistan reported forgoing prescription medicines for cheaper and less effective treatments, such as home remedies for common injuries to their hands. They feared this would impact their long-term earnings, because their fingers are the tools of their trade.

In an effort to keep up with rising expenses, some workers resorted to borrowing in the informal credit market from neighborhood storekeepers or local moneylenders. Some waste pickers borrowed from scrap-shop owners, while home-based workers in Thailand reported borrowing from moneylenders to pay the debts piling up from other moneylenders. In these informal credit markets, workers were being charged upwards of 30% a month. These interest payments increase financial pressure on informal workers and reduce their earnings over the long term.

Decreased household income is forcing many women—including those already informally employed—to devote more and more of their time to paid work. Women were strongly driven to continue working for the well-being of their families, and their children in particular. Findings from past crises, as well as evidence from the current economic downturn, suggest that women are struggling harder to feed their families, while still having to provide unpaid care and domestic chores (ILO 2009b).

For example, in the study more than a quarter (27%) of female home-based workers reported that they were the primary earner in their household, while they carried out child-care duties alongside their home-based production. They also did a disproportionate amount of domestic work, such as preparing family meals, cleaning the house, washing clothes, and providing hospitality to guests.

Decreased incomes have meant that some women cannot afford the few conveniences that would lighten their load. A woman in Thailand reported that she could no longer buy prepared meals for her family, which had saved her time and energy in the past. This meant she now had to take more time from her income-generation activities to cook.

It is clear that falling incomes, increased uncertainty, and household strain are already taking a toll on the mental health of informal workers, particularly women. According to respondents, their emotional resources were running low, and they reported feeling depressed and exhausted. Much of the depression was linked to feelings of failure and disappointment in providing for their children. Workers were also sensitive to rising levels of insecurity and depression among their family members, which increased their sense of guilt. A number of women reported feeling so overburdened that they dreamed of fleeing their homes—only the thought of their children kept them from doing so.

## **Conclusions and policy implications**

Global recession undermines the precarious livelihoods of the traditional informal workforce and the ability of new entrants to find shelter in the informal economy (Grant 2006). Contrary to a common assumption, there is no cushion in, much less a cushion for, the informal economy. There are only an increasing number of firms and individuals competing for ever-decreasing slices of a shrinking pie.

Consequently, this crisis demands immediate and thoughtful public intervention in support of informal workers and their families. Informal workers represent a large and significant share of workers in Asia, especially in developing countries, so providing social and economic protection for these workers alongside that given to their formal counterparts is critical in normal times, but particularly so during crises. In addition, efforts to support the informal economy must include specific measures to support the most vulnerable informal workers—women and children. An effective crisis-response strategy for informal workers must be informed by the short-, medium-, and long-term view.

Emergency relief measures are essential. Cash transfer programs targeted at specific informal sectors must be accompanied by the accelerated dispersal and suspended conditionality of existing cash transfer programs to allow use of funds for supporting livelihoods. Expanded public works earmarked for employment among the poor



and vulnerable men and women are another key intervention, such as the National Rural Employment Guarantee Act in India, passed in 2005, which guarantees employment to adult members of every rural household in India for at least 100 days in every financial year. Similar schemes could be implemented on a short-term emergency basis, targeted at specific sectors of informal workers and the working poor in hard-hit areas. In the long term, social protection for informal sector workers and their dependents is also critical through specially designed social insurance schemes, through social assistance and through the extension and reform of formal sector social insurance.

Governments must also consider sector-specific rescue plans, to be developed in consultation with informal occupational groups. Specific bailouts or rescue plans would help informal workers maintain existing employment opportunities during the crisis or secure new employment opportunities once it has ended. This does not necessarily require additional spending but reallocation of spending and adjustment of policies. Table 6 provides recommendations that should be implemented in sector-specific rescue plans. Breaking the crippling cycle of personal and household debt, aggravated by the crisis, is a priority. At the heart of this issue is the creation of access to low-interest loans and a focus on job creation for women, including incentives and skills development for girls and women in order to facilitate stable and secure employment.

**Table 6: Sector-specific recommendations**

<b>Construction workers</b>	<b>Home-based workers</b>	<b>Waste pickers</b>
Promotion and/or enforcement of minimum wages for different kinds of construction activities	Promotion and/or enforcement of minimum wages for subcontracted workers	Domestic price regulations
Enforcement of basic safety standards at work sites	Access to low interest business loans for self-employed home-based workers	Provisions of storage and sorting facilities, tools, equipment (i.e., sacks, rakes, transport vehicles)
Compensation to workers for on-site accidents	Creation of formal government liaisons, to enhance information and visibility	Incorporation of waste pickers into solid waste management systems
Health and life insurance, (in light of the physically demanding and often dangerous work)	Technical and marketing assistance to self-employed workers	Investment in research, development, and dissemination of sector-specific technologies
Specialized skills training, particularly for women	Provision of child-care facilities and support for education among workers' children, particularly girls	Education and training courses concerning new waste processing methods: e-waste, composting, bio-methanation, etc.

Source: Based on Horn 2009.

Finally, in both the short and medium term, the barriers to informal activities should be reduced under the principle of “do no harm.” Laws, rules, and regulations prohibiting or undermining the livelihoods of informal workers, particularly women and working mothers, should be suspended, at least temporarily. Informal workers who have no income-earning alternatives must be permitted to make a living and support their families through the crisis. For home-based workers, this could involve suspension of policy biases that favor formal firms and workers over informal firms and workers in access to government contracts for such items as school uniforms and hospital linens. For construction workers and informal waste pickers, this could include cessation of harassment by authorities.

The global economic crisis should also be seen as a global opportunity—to rethink economic models and policies to include the informal economy. The crisis presents an opportunity for governments and other actors to institute long-term, meaningful policy reform toward the informal economy. It also presents an opportunity to think differently about the informal workforce and to reframe the mainstreaming—or “formalization”—process as one aimed at increasing earnings and reducing risks for the working poor, not simply registration and taxation of informal enterprises. The foundation for this new thinking must be an understanding that the working poor in the informal economy need to be *visible* in economic statistics and policies, have a *voice* in economic decision-making, and be seen as having *validity*, or legitimacy, as economic agents and targets of economic policies.

Informally, employed women can play a particularly important role as agents of change in this respect. Women tend to be the least visible and most vulnerable in the informal economy, and yet are often the most powerful economic and social agents in their households and communities—their mobilization and leadership will be critical to improving the lives of many workers and their families across Asia. For this reason, it is critical that greater gender-specific monitoring in the informal economy become a priority both for governments and for economic and international institutions in the future.

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### **Box 7: Pakistan**

Unlike many countries in Asia, Pakistan's economic fundamentals were relatively poor before the global recession. The economy had grown by a respectable 6.8% in 2006/07 but decelerated to 4.1% the next year. Although many commodity prices, especially those for fuel oil, shot up in 2007, the government chose not to pass on the higher cost to consumers which, however, led to a large fiscal deficit. So, when the global recession hit, the country was unable to provide a fiscal stimulus package unlike many other Asian countries.

The recession had threatened to affect Pakistan through reduced export earnings and remittances. Exports for 2008/09 declined by 6% relative to the previous year, with textiles (typically accounting for more than half of export receipts) losing 5% of earnings. Remittances have played a key role in the economy in recent years, but, contrary to initial fears, they grew by 21% in 2009, possibly because many remittances come from the United Arab Emirates (UAE), Saudi Arabia, and other Gulf states, which were relatively immune to the global recession. Remittances from the UAE, for example, grew by 54%. Surprisingly, although the United States (US) and the United Kingdom (UK) are both major sources of Pakistani remittances and were both hit hard by the global recession, remittances from the US declined by only 1.5% while remittances from the UK rose by 31.9%.

The new government, which assumed office in February 2008, made large cuts to public sector spending—revising down the Public Sector Development Plan for FY2008/09 by 41%, for example, and education and health allocations by 29% and 25%, respectively. Nor did it spare the power and water sectors.

The global recession therefore has had both short- and long-term impacts. Slower economic growth suggests increased poverty levels of up to 6% in the next couple of years. In response, the government introduced the Benazir Income Support Programme to augment the income of the poorest of the poor. This gives the poor monthly cash support of PR1,000 (approximately \$12), subject to certain criteria.

Source: Idress Khawaja in "Social Impact of the Global Recession on Pakistan." [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# Gender and social protection in Asia: What does the crisis change?

Nicola Jones and Rebecca Holmes, with Hannah Marsden, Shreya Mitra, and David Walker<sup>1</sup>

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## Introduction

Failure to take into account the gender dimensions of the crisis may make national responses less than effective; worse, they may aggravate the working and living conditions of certain groups of workers and deepen economic and social inequalities (Dejardin and Owens 2009).

The effects of the current global economic crisis are highly gendered: emerging evidence suggests that women's position in the labor market in the region, especially in export industries, has specific consequences both for the differential impacts of the crisis and the coping mechanisms available at household and individual levels (Dejardin and Owens 2009). Women's income is likely to be reduced, because they hold most temporary, casual, seasonal, contracted, and low-skilled jobs in the informal sector, which have been particularly affected by the crisis. Reduced consumption of food and services also has specific gender dimensions. Moreover, along with the recent food price crisis, the economic crisis is likely to precipitate higher infant mortality and more girls being pulled out of school (Hossain et al. 2009).

Some researchers suggest that the protracted nature of this crisis is giving countries more *time*, compared with the Asian financial crisis of 1997–1998, to put together effective policies. In addition, most countries in the region now have more *space* to adopt supportive fiscal

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and monetary policies, and already have in place social protection and safety net programs, which were a significant part of the response to the previous crisis and have become integrated into broader social and economic policy for the poor across Asia more generally (Jones and Marsden 2009).

Surprisingly, however, debates on social protection have been relatively gender blind, even though there is evidence that the 1997–1998 crisis had gendered impacts and that investing in women and girls has multiplier effects in terms of productivity, efficiency, and sustained economic growth. Evidence on the gendered impacts of the current crisis is increasing, although much of it remains fragmented and small scale. Drawing on this, and on evidence from the previous crisis and the recent food price crisis, this paper discusses emerging impacts of the current crisis in Bangladesh, India, Indonesia, and Viet Nam, to argue that policy responses must consider the differential priorities and needs of women, men, girls, and boys, and not undermine policies and plans that promote gender equality and women’s empowerment.

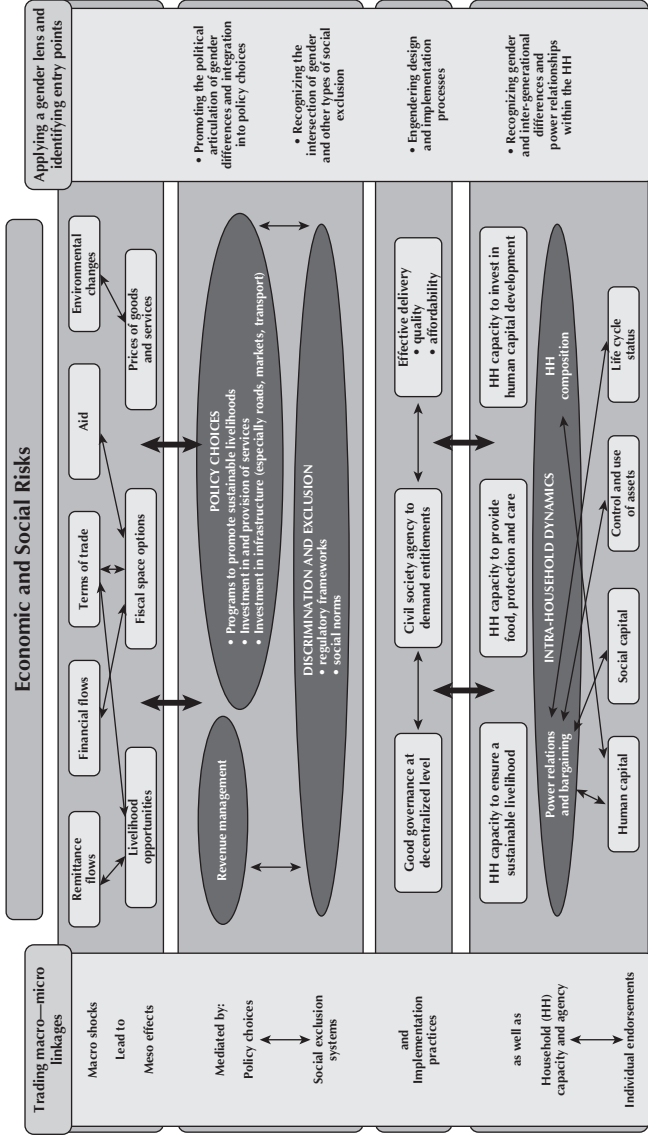
## **Social protection: Incorporating gendered economic and social risks**

To date, social protection approaches have focused more on economic risk and vulnerability, such as income and consumption shocks and stresses, and have paid limited attention to social risks, such as gender inequality, social discrimination, unequal distribution of resources and power at intra-household level, and limited citizenship, which are often as important in pushing households into poverty and keeping them there (CPRC 2008).

Devereux and Sabates-Wheeler (2004) define social protection as encompassing a subset of interventions addressing risk, vulnerability, and chronic poverty, carried out formally by the state or private sector or informally through community or inter- and intra-household networks. Interventions fall under four headings: *protective* (providing relief), *preventive* (averting deprivation), *promotive* (enhancing incomes and capabilities), and *transformative* (addressing concerns of social equity and exclusion). The “political” or “transformative” view extends social protection to arenas such as equity; empowerment; and economic, social, and cultural rights, rather than confining its scope to economic risks, which translates to narrow responses based on targeted income and consumption transfers.

Figure 1 demonstrates how both economic and social risks can be reinforced or mediated from the macro to micro level through policy

**Figure 1: Impact pathways of vulnerability to economic and social risks**



HH = household.

Source: Holmes and Jones 2009.



interventions, discriminatory practices embedded in institutions and/or community, household, and individual capacity and agency. Both economic and social risks are influenced by gender dynamics; opportunities to enhance the integration of gender at each level are highly context-specific and depend on the balance between government, nongovernment, and informal mechanisms within a country as well as the profile of the government agencies responsible for the design and implementation of formal mechanisms (Holmes and Jones 2009).

Economic and social risks are intertwined—understanding this is critical in social protection design and implementation. A number of initiatives have addressed gendered risks, to varying degrees, but this has often been uneven and informed by narrow understandings of gender relations. The role that gender plays in social protection effectiveness not only influences the type of risk tackled but also shapes program impacts at community and household levels.

## **Crisis impact pathways in Asia**

We explore impact pathways of the crisis in our four countries from macro to meso and micro levels. Gender-disaggregated data are limited, and therefore we aim to provide highlights of emerging impacts through a gender lens. We focus on four areas: employment, consumption and expenditure, remittance flows, and sociocultural vulnerabilities.

### **Employment**

Rising unemployment and income declines have differential impacts on women and men as a result of their different positioning in the labor market and the job opportunities available to them.

Prior to the crisis, women in Bangladesh, Indonesia, and Viet Nam already faced significantly higher unemployment levels than men (UNDP 2008). Moreover, many employed women are concentrated in unskilled or semiskilled, labor-intensive, export-oriented industries, which have been among the worst hit by the crisis. In India, 500,000 formal sector workers were laid off in the last quarter of 2008 alone (World Bank 2009), largely from sectors with high exposure to the global market (ILO 2009a). In Viet Nam, merchandise export sectors, in which women are disproportionately concentrated, have faced a decline of 31.5% over the past year (Nguanbanchong 2009).

Furthermore, evidence from past crises underscores the fact that women find it harder to regain employment after retrenchment, owing

to lower skill levels. As a result, they increasingly turn to informal sector and risky occupations, in some cases commercial sex work (Hopkins 2006). Women are already highly concentrated in informal employment, and one of the concerns now is that displaced workers from the formal economy could crowd out women's economic activities or increase competition within the informal sector, further reducing the low remuneration that many informal workers face (SEWA 2009). There is also growing evidence of an "added worker" effect: households are coping by sending an additional family member—often a young female—into paid employment. Women appear to find alternative work more quickly than men, as they are more willing to accept lower-paying and informal work (Dejardin and Owens 2009), but this often has the aggregate effect of driving wage rates down.

## **Consumption and expenditure**

There is a growing body of evidence that women in particular, but also girls, have been disproportionately affected by the food and financial crises in terms of quantity and quality of food consumption (Holmes and Jones 2009). Poor diet, coupled with unequal allocation of household resources, is likely to have significant longer-term implications on nutritional status, with women facing higher risks during pregnancy and childbirth and children experiencing lower immunity and thus higher risk of mortality. In Bangladesh, Sulaiman et al. (2009) find greater prevalence of wasting among girls and reduced weight among women as a result of increased food prices. Similar gendered effects have been documented in Indonesia (Hossain et al. 2009).

Although the evidence is still very limited, declining incomes affect households' abilities to invest in education and health care, and allocations appear to be gendered. Bangladesh has seen widespread school dropouts, higher for girls than boys, especially among children from female-headed households (Matin et al. 2009), and increasing child labor (Hossain et al. 2009). In India, families of children who remain in school are incurring increasing indebtedness to cover education fees (SEWA 2009). In Indonesia, household assets, especially those owned by women, are being sold so as to maintain investments in children's education (Hossain et al. 2009).

As in 1997, declining incomes have resulted in reductions in health care expenditure also, with specific gendered effects (Jones and Marsden 2009). Hossain et al. (2009) find that priority is being given to the health care needs of men and children over those of women. In Viet Nam, there is concern about women's health because of the increase in fees for medical services (*Thanh Nien News*, 6 August 2009).

In the footwear and leather industry, retrenched women workers have reduced health care expenditure by approximately 38% (Hao 2009). Families are now also relying on women to increasingly carry out unpaid care work, resulting in heavier time burdens for them (Sirimanne 2009).

## **Remittance flows**

There are strong fears that, as a result of falling demand for migrant labor, remittance flows will decrease. Figures for Bangladesh show a decline in remittances of 8.7% in the first quarter of 2009, which is expected to result in reduced incomes for female-headed households (WFP 2009). Similar effects are being felt in India and Viet Nam (Nguanbanchong 2009). For example, retrenched workers in the footwear and leather industry in Viet Nam have had to cut remittance payments by almost 55% (Hao 2009).

Migrant workers, especially recent migrants, are likely to be increasingly vulnerable and more likely to accept harsh employment conditions in the crisis context in order to maintain employment and avoid having to return home (ILO 2009b). Given that many female migrants (such as those from Indonesia) are employed as domestic workers, and often isolated from support networks, they are particularly vulnerable to forced labor (ILO 2009b). Reports suggest that Bangladeshi men and women migrating to the Middle East may face bonded labor as a result of fraud by recruitment agents (IRIN 2009). This is likely to be exacerbated in a context of rising poverty and fewer alternative income generation sources.

## **Social risks**

There is some evidence to suggest that heightened gender-specific social risks are often an integral part of the micro-level experience of macroeconomic shocks. The 1997–1998 crisis, for example, resulted in gendered patterns of emotional ill-health, including increased prevalence of gender-based violence, heightened care-work burdens, and women resorting to riskier sources of income generation (Dejardin and Owens 2009, Jones and Marsden 2009).

More recently, Hossain et al. (2009) highlight increased tensions between husbands and wives in Bangladesh and Indonesia, especially as women seek to negotiate greater food allocations for their children. In India, household-level frustration and tensions have increased, resulting in intrahousehold violence and increased addictive behaviors (SEWA 2009). In some cases, men have abandoned their families,

unable to cope with the lack of employment. Quality and quantity of time for care work are also falling: in India's informal sector, children are increasingly accompanying their mothers so as to give the family a competitive edge, such as in the recycling industry (SEWA 2009).

Growing poverty in the context of the ongoing crisis is making people, especially women, more vulnerable to labor and sex trafficking (UNODC 2009). In many contexts, women lack adequate protection or recognition under the law and have inadequate access to health care and education, poor employment prospects, few opportunities to own property, and high levels of social isolation, making them easier targets for harassment, violence, and human trafficking. Girls from poor regions who are out of school are likely to face strong pressure to find employment and therefore may be particularly susceptible to exploitation and trafficking.

## **Social protection responses**

A major question now facing the region is the extent to which existing social protection policy frameworks and programs are adequate to cushion the poor and vulnerable from the worst impacts of the crisis. Despite important initiatives in recent years, Asian social protection systems are relatively underdeveloped. It is now critical to take measures to stave off short-term impacts but also to start building for the longer term, so as to be better prepared in the future. Here, we provide a brief review of existing social protection policies and programs using a gender lens to assess the extent to which they are likely to address the key sources of vulnerability outlined above.

### **Social assistance**

Prior to the current crisis, Bangladesh, India, and Viet Nam already had pensions, as well as widow and disability allowances. Indonesia has a cash transfer program, targeting economically active households, which integrates gender considerations to some extent targeting mothers, pregnant women, and those with children under 15, and including prenatal and reproductive health care as program conditions.

In Bangladesh, the Chars Livelihoods Programme and the Bangladesh Rural Advancement Committee's Challenging the Frontiers of Poverty Reduction (CFPR) asset-transfer programs target extremely poor households, especially women. Evaluations show that these programs have had positive impacts on household asset accumulation

and women's labor force participation. Intra-household dynamics and individual-level capacity building have been integrated into program design to an extent (including training components that raise awareness about women's rights, dowry practices, and early marriage). However, there is little wider evidence as yet of sustainable impacts on gender equality: in the case of the Chars Livelihoods Programme, a recent report suggests that, after program support had ended, some women even reported decreased economic decision making (Conroy 2009). Furthermore, there has been scant explicit attention to women's control over assets produced or access to markets, given the often limited mobility they face at community level (Holmes et al. 2009).

In terms of public works programs, India's National Rural Employment Guarantee Scheme (NREGS) was reaching 49.4 million households in May 2009. NREGS guarantees 100 days of employment to poor rural households in an effort to reduce poverty and stimulate local economic growth and productivity through rural infrastructure. While NREGS is addressing spatial poverty and social exclusion relatively well, there are ongoing concerns about underpayment of wages in some states and, more broadly, concerns that NREGS is exacerbating gendered labor market discrimination (especially wage differentials) through high productivity norms and piece-rate payments based on outturn by men (Gupta 2009).

School scholarships and education fee waivers are found in all four countries, and many include specific provisions for gender equity, with relatively high impact at primary school level. For instance, research shows that Indonesia's government scholarship program (specifying equal access for girls) helped avoid serious impacts on female education during the 1997–1998 crisis (Cameron 2000).

## **Social insurance**

Social insurance is a progressive means of financing against shocks, with the objective of universal coverage regardless of income or social status. Although relatively new in the four countries, governments are increasingly investing in such schemes as part of broader national commitments to equitable growth. India has recently introduced a health card system for families below the poverty line—an important advance, as health shocks are one of the leading causes of poverty, with women's assets often the first to be depleted to cover catastrophic health care costs (Quisumbing et al. 2009). However, program design focuses on the household rather than individuals: cards are in the name of the household head so problems are being encountered

when husbands are involved in out-of-state migrant labor (Dr. Suparna Pachauri, National Institute of Health and Family Welfare New Delhi, personal communication, 2008).

Viet Nam's significant social health insurance program was introduced in 1992, and by 2006 had 30.5 million members (over one-third of the population), 11.2 million of them poor (Giang 2007). However, health care facility utilization rates remain significantly lower among the poor, owing to income opportunity costs, transport fees, unofficial hospital fees, and discrimination by hospital staff (Giang 2007). Meanwhile, international evidence suggests that women often face additional barriers in accessing affordable health care (Sen and Östlin 2007), although no gender analysis or gender-disaggregated data on the Viet Nam program are available.

## **Social welfare services**

Services for marginalized groups are normally targeted at those who have experienced illness, death of a family breadwinner or caregiver, accidents, or natural disaster; those who suffer from a disability, familial or extra-familial violence, or family breakdown; or those who are war veterans or refugees. There is a dearth of good evidence on coverage and budgets invested in social welfare services designed to protect women and children from violence, abuse and neglect in the region, although some information is available that suggests underinvestment in such services in the field of child protection (ADB 2005). Moreover, government agencies assigned to address these issues are among the most marginalized.

## **Social equity measures**

In recent years, there has been increasing momentum around gender-sensitive social equity reforms within the region. In Viet Nam, the 2007 Gender Equality Law and Domestic Violence Prevention Law constituted major milestones, but interviews with representatives of government and nongovernment agencies in Hanoi, in October 2009 suggest that implementation has been very limited to date. In India, gender budgeting has been institutionalized within the federal budget by the Ministry for Women and Children, but the methodology has been criticized for inflating gender-related expenditure and being unevenly applied (CBGA 2009). And in Bangladesh, as mentioned above, some asset transfer programs include specific awareness-raising components on women's rights, dowry practices, and early marriage.

## Crisis-related social protection

Governments in all four countries have undertaken a range of measures to respond to the crisis, including substantial fiscal stimulus packages. However, overall investment in social protection interventions has been relatively limited, and interventions have paid scant attention to gendered experiences of poverty and vulnerability. Moreover, monitoring initiatives suggest that many poor households are continuing to rely on informal social protection mechanisms, including borrowing from family and friends (Nguyen et al. 2009), reverse rural-to-urban remittances to help workers following layoffs (Trung 2009), and financial and in-kind support from community groups—although these mechanisms are coming under increasing stress (Hossain et al. 2009).

In India, an immediate policy intervention was the decision to ban food exports: this had immediate beneficial impacts domestically but negative knock-on effects for neighboring countries, such as Bangladesh and Nepal. Existing food security and social assistance programs, including the Public Distribution System, NREGS, and the national midday meal scheme in primary schools are reported (anecdotally) to have buffered poor households from rising prices (Holmes et al. 2009).

In Bangladesh, responses have been more significant, in part because the country was especially hard hit by the food crisis. The Chars Livelihoods Programme and the CFPR program made some design modifications, including a food-indexed cash stipend (CFPR) and a “sunset-claused” food allowance targeting women and children if rice prices remain above a certain floor-to-ceiling price range, in part to prevent increased distress sales of assets.<sup>2</sup> In September 2008, the Government of Bangladesh introduced a new public works scheme modeled on India’s NREGS, now estimated to be reaching 10 million beneficiaries, 28% of them women (BRAC 2009). Most participants report improved food consumption (quantity, quality, or both) and reduced need to resort to distress sales of assets and distress migration. Women in particular have assessed the program positively, as they typically lack the option of migration (BRAC 2009).

In Viet Nam, economic stabilization measures are widely seen to have played an important role in staving off more serious crisis impacts, but social protection responses have been relatively limited. Interviews in 2009 suggest that interventions have been largely one-time and

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<sup>2</sup> Penny Davies (Department for International Development, United Kingdom), Bangladesh, personal communication, June 2008.

ad hoc. Subsidies for employers to prevent layoffs and smooth social insurance payments have been provided, although these seem to be unevenly implemented (Hao 2009). A one-time bonus for poor families was provided during the Tet holidays, and various short-term exemptions on personal income taxes have been made (Nguanbanchong 2009). However, the government's flagship National Targeted Poverty Reduction Program had not seen an increase in budget in response to the crisis. Indeed, interviews suggest that the focus of policy debate has been on crisis effects on industrial parks and rural-to-urban migration rather than on rural poverty.

In Indonesia, the response has also been quite limited, although the country already enjoys a comparatively robust social protection infrastructure, having established a range of new programs in response to the 1997 crisis (Jones and Marsden 2009). Measures to date have included tax breaks for individuals and companies, waiving of import duties and taxes, infrastructure spending, diesel and food subsidies, and rural development (Nguanbanchong 2009). Expenditure on the pilot conditional cash transfer program has apparently been maintained but no additional funding or scale-up has been introduced in response to the crisis (Bloom 2009).

## **Conclusions and policy implications**

Overall, the global economic crisis is contributing to growing poverty and vulnerabilities in South and Southeast Asia, the patterning of which is likely to be gendered, given the nature of the transmission channels. While there are initial indications that the situation has started to stabilize in Europe and Asia, impacts with regard to poverty and vulnerability in both the developed and developing world are likely to reverberate for some time yet. Indeed, the World Bank (2009) warns that, "if left unchecked, the effects of the financial crisis will reverse progress in gender equality and women's empowerment, increase current poverty and imperil future development."

Current social protection systems in our four countries are limited in terms of coverage and the range of risks against which they protect people (mainly economic). They have not been significantly increased in the wake of the crisis and have paid limited or no attention to gendered vulnerabilities.

Clearly, in the current economic landscape, finding the fiscal and policy space to invest in social protection is more challenging, especially following high levels of expenditure on general fiscal stimulus packages in late 2008 and early 2009. Nevertheless, there is some



indication of the political will among governments and development partners in Asia to address these lacunae. This needs to be harnessed to ensure that poor and vulnerable populations, irrespective of gender, have adequate support to help them weather the economic downturn.

We conclude by focusing on five key policy strategies.

*Investing in gender-aware monitoring and learning.* It is critical that the development of appropriate interventions is informed by gender-sensitive vulnerability monitoring, as our knowledge base is still very limited and fragmented. We know very little about crisis effects on rural women, as the impact pathways are more indirect and likely to have more of a lag effect. We know very little about the intra-household dynamics of coping mechanisms or about whose savings and assets are being eroded first, with what short- and longer-term impacts. We also know relatively little about impacts on informal sector workers, although evidence from past crises suggests that conditions often deteriorate markedly, especially for women, as the sector is used as a buffer for workers retrenched from the formal sector. These knowledge gaps are further compounded by a relative dearth of gender-disaggregated data on poverty and vulnerability in the region to serve as a baseline. In some contexts, the problem lies in data collection; in others, the problem is more one of inadequate reporting and analysis of gender statistics.

*Promoting better program coverage and coordination.* Although policy attention to social protection has increased significantly in recent years, many existing mechanisms are relatively small in scale compared with the proportion of households living in poverty, especially as these numbers are increasing as a result of the crisis. Governments and development partners alike must use the crisis context as an opportunity to strengthen existing programs. This should include enforcing gender-responsive program design features (especially provision of child care services and targeting individuals rather than households) and reviewing and restructuring programs that reinforce rather than address gender inequalities. Efforts to enhance coordination across programs will be equally important to promote complementarities in tackling the complex array of economic and social risks that families and individuals typically face.

*Investing in more creative approaches to public works programs.* Gender analyses of public works initiatives highlight a range of shortcomings in program design, including inadequate attention to gender barriers to participation such as lack of adequate and affordable child care services, high opportunity costs owing to women's greater time

poverty, and sociocultural norms of “appropriate work” for women (Antonopoulos 2009). To address these, more creative approaches could be promoted, especially regarding the conceptualization of community assets developed using public works labor (McCord 2009). Women’s greater labor force participation could be fostered by investing more in “employment-intensive public investment programmes” (Dejardin and Owens 2009), which could incorporate social services, such as auxiliary health care, care for the elderly, child care, early childhood development activities, and youth development activities and environmental protection components (McCord 2009).

*Committing to gender-responsive budgeting.* In order to adequately track the gendered effects of social protection program interventions, it is critical to apply gender-responsive budgeting tools to monitor fiscal stimulus package design and evaluations, as well as to map gender-specific needs to budget outlays. In this regard, it will be key to consider social sector spending in its entirety to identify possible tensions and trade-offs between investment in universal programs compared with more tailored interventions (Jones and Marsden 2009). Indeed, the crisis offers an opportunity to—as Evans (2009) puts it—“build back better” and—according to Sirimanne (2009)—to practice “smart economics” and reduce discrimination against women.

*Promoting women’s voice and collective action.* Finally, in order to promote gender-responsive social protection to address both short- and longer-term crisis effects, it is critical that women are represented adequately in policy dialogue and contribute to discussions around program design. Political economy analysis from the 1997–1998 crisis suggests that civil society actors played a significant role in pushing for greater investments in social protection responses (Jones and Marsden 2009). This is an area that has been under-researched in the current context, but it is similarly important now to pay adequate attention to local and regional civil society initiatives and that governments and development partners provide support to strengthen the voices of poor men and women alike.

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# The impact of the global slowdown on the People's Republic of China's rural migrants: Empirical evidence from a 12-city survey

*Xiulan Zhang and Steve Lin*<sup>1</sup>

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## Introduction

### Internal migration and poverty reduction

In developing countries, migrant workers play a key role in the development of the national economy. They change the employment structure, improve the efficiency of labor utilization, and expand the scope of rural development. From a development and poverty reduction perspective, the People's Republic of China (PRC) today is arguably the world's most dramatic success story in achieving sustained economic development since the introduction of sweeping reforms in 1978. As a consequence of economic growth, the PRC has experienced dramatic progress in reducing poverty.

The number of rural poor in absolute terms has been cut from roughly 250 million in 1978 to 14.8 million in 2007 reducing the incidence of rural poverty from 30.7% to only 1.6%. The number of people living below the international poverty standard of \$1 per day has fallen by at least 450 million since 1978, in a period when the country's

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population rose from 962.6 million to 1,321.3 million, a decline that has driven improvements in global poverty figures.

During the process of rural poverty reduction, the PRC has been experiencing an extremely rapid expansion of urban-based production of goods and services. This has involved a dramatic shift in the livelihoods of many people from agricultural production in rural areas to work in urban areas. According to the PRC's National Bureau of Statistics, 225.4 million nominally "rural" people were looking for work in urban areas in 2008. Between 1982 and 2008, the proportion of the PRC's population reported to be registered urban residents increased from 21.1% to 45.6%. The latest projections are that this proportion will rise to 47% in 2010 and 55% in 2020.<sup>2</sup>

This rapid expansion of the urban workforce has been important for the PRC's development. Researchers in the PRC have estimated that labor migration from rural to urban areas contributed 16% to total gross domestic product (GDP) growth between 1978 and 1997 (Cai 2001). It has also contributed to a fall in the prevalence of rural poverty. Each migrant worker's remittances help his or her family escape poverty (NBS and MOLSS 2001). Beyond the possibility of escaping poverty, which remittances have provided to the rural poor, their experience has also increased the human capital of migrant workers (Huang and Zhao 2005). In addition, migrants who maintain links with their rural homes are likely to transfer investment, human capital, and information to their home areas, thus contributing to rural economic development (Laczko 2005).

## **Impact of the global economic slowdown on the poor**

The world is currently in the grips of the most serious economic crisis since the 1930s. The demand for commodities and services has decreased rapidly, leading to a rise in unemployment. For developing countries, this development has significant implications for progress in reducing poverty and achieving the Millennium Development Goals. Starting in 2008, many discussions have focused on the impact of the economic slowdown on the poor. But there has been very little research into the effect the current economic crisis is having on the poor from the micro data.

In the PRC, according to official figures, at least 20 million migrant workers have returned to rural areas after losing their urban

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<sup>2</sup> <http://news.qq.com/a/20090917/001949.htm>

jobs—eclipsing unemployment figures in other countries. Since they are concentrated in precisely those low-skill, export-driven, and manual labor-intensive sectors that have been hardest hit, the downturn has led to massive displacement of the PRC's migrant workforce. As elsewhere on the planet, governments, scholars, and media in the PRC have extensively discussed the social impact of the current crisis with little empirical data about the levels and mechanisms of impacts on poverty.

## **Unique characteristics of internal migration in the People's Republic of China**

Two unusual characteristics of the PRC's rapid migration and urbanization are that it is taking place in a context of relatively equitable access to land in rural areas and that it has been accompanied by major investments in job-creating rural construction projects. There are very few landless rural workers, a situation that has provided an important safety net for families wishing to move to urban areas. It has enabled them to seek alternative sources of income and eventually to establish a new residence, while retaining a rural base. To manage the urbanization process, the government has adopted a two-pronged approach to migration and urbanization. One prong is to launch "new rural development" initiatives and guarantee that rural residents are provided with at least a minimum level of services (education, health, and so on). The other prong is to create more job opportunities in the cities.

The initial aim of this paper is to empirically assess the impact of the current global economic slowdown on migrant workers and their families. Second, the paper discusses the potential long-term effects of the slowdown on the migrants themselves and on their children. Third, the paper illustrates the roles of formal and informal coping mechanisms and makes policy recommendations on how to mitigate the impacts of the downturn on the PRC's migrant workers.

## **Methodology**

### **Data sources**

During February and March 2009, we conducted a rapid assessment in urban areas of three major labor-importing provinces (Zhejiang, Shanghai, and Guangdong) as well as rural areas of Henan (a major labor-exporting province). The assessment included in-depth interviews with local government officials and migrant workers.



Then, from April to June 2009, we conducted a large sample questionnaire survey in 12 cities in the PRC. The survey was intended to give us a more accurate understanding of the impact of the global economic slowdown on the PRC's migrant workers and how they coped with the challenges they faced. The cities chosen for this study included major migrant-importing cities in northwestern PRC (Lanzhou), southwestern PRC (Chongqing), and central PRC (Chenzhou in Hunan Province, Zhengzhou in Henan Province). Cities were also chosen from the Pearl River delta areas (Shenzhen and Dongguan in Guangzhou Province), the Changjiang delta areas (Kunshan in Jiangsu Province, Wenzhou and Quzhou in Zhejiang Province), Beijing and Tianjin metropolitan areas (Beijing, Tianjin), and Xuzhou City (a coastal city in Anhui Province).

This migrant sample includes both “formal” and “informal” employees. In this paper, “informal” employment includes informal employment in formal firms, informal employment in informal firms, family services, odd jobs, and the self-employed (including professionals).

We conducted face-to-face interviews with 8,051 migrant workers and obtained valid information from 7,879 of them. Among the 7,879 respondents, 45%, or 3,550 migrants, had no signed formal contracts (working in the informal sector), and 55%, or 4,329, had signed formal contracts and were working in the formal sector.

## **Sample characteristics**

Table 1 describes the sociodemographic characteristics of the migrants surveyed. Again, we break the sample into formal and informal employees.

The total sample contains 63.1% males: 60.8% of the formal employees are males, while 65.92% of the informal employees are males.

Nearly 75% of the respondents were aged 18–40. Formal employees are younger: 78% were aged 18–40 and more than a quarter were in the 21–25 age range. More than half of those surveyed were married. However, 43.5% of formal employees have never been married, but only 39.18% of informal employees have never been married. The percentage of married survey participants who were informally employed is higher (56.2%) than among those who were formally employed (52.3%).

Middle school graduates account for more than 40% of the sample, followed by high school graduates (17.81%). Around 12% of the respondents have received professional or occupational school education and 16% even have some college or higher educational attainment.

**Table 1: Sociodemographic characteristics of the sample**

<b>Variable</b>	<b>Total (%)</b>	<b>Formal (%)</b>	<b>Informal (%)</b>
<b>Sex</b>			
Male	63.10	60.80	65.92
Female	36.90	39.20	34.08
<b>Age</b>			
<18	1.98	1.64	2.39
18–20w	13.24	14.00	12.31
21–25	24.09	26.43	21.24
26–30	14.62	14.85	14.34
31–35	10.70	10.63	10.79
36–40	12.24	12.01	12.51
41–45	10.60	9.52	11.92
46–50	5.85	5.43	6.37
51–55	3.44	2.59	4.48
>55	3.25	2.91	3.66
<b>Marital status</b>			
Never married	41.55	43.50	39.18
Married	54.06	52.30	56.20
Divorced/Widowed/ Others	4.39	4.20	4.62
<b>Educational level</b>			
Years of schooling (years)	9.30	9.72	8.79
Less than middle school	16.91	13.14	21.49
Middle school	44.62	43.13	46.45
High school	17.81	18.27	17.24
Occupational school	4.57	5.50	3.44
Professional school	7.11	9.17	4.59
College and above	8.99	10.79	6.79

Source: Migrant worker survey conducted by the authors in 2009.

A total of 17% of those surveyed had less than middle school education, 43.73% of those sampled with formal employment had high school or higher education, while only 32.06% of informal employees had high school or higher education.

Survey participants with jobs in the formal sector had an average of 9.72 years of schooling, while participants with jobs and informal

employees were less educated with, on average, 8.79 years of formal education. Overall, workers had 9.3 years of formal education.

## **Primary impacts of the global economic downturn**

This chapter looks into the direct impact of the global economic downturn on the PRC's migrant workers, including its effects on employment, and on income and living conditions.

### **Impact on employment**

We looked at the effects of the global economic slowdown on job seekers, on the time spent finding a job, and on the experiences of the unemployed. Among migrant workers surveyed, 49.2% felt that the global financial crisis had a significant impact on their ability to find a job. The impact was even larger on the young and on the more educated. We asked respondents about the extent to which the slowdown had negatively affected their job search: 21.8% felt that it had a large impact while 27.4% felt the impact was significant. Therefore, nearly half those surveyed felt that the impact on their job search had been large or significant.

Informal employees, younger migrants, people with more education, and those who had worked in several cities felt it had become more difficult to find a job because of the slowdown.

Single and married workers, working in Beijing or Tianjin municipalities, in state-owned, collectively owned, privately owned businesses, or in public service organizations, or those engaged in personal or public services, felt that the crisis had less of an impact on their ability to find a job. The longer they had worked in cities, the less impacted they felt, perhaps due to their larger networks and social capital there.

Personal work experience, such as being a government official or a Communist Party member, or having had previous business or migrant experience, or having spent time in the army, had not reduced the difficulty of finding a job.

We asked respondents if they had experienced any periods of unemployment since the second half of 2008: 19.23% said that they had. From July 2008 to June 2009, the average total days of unemployment were 58.2 days, or almost 2 months.

On 2 February 2009, the associate director of the Office of China's Rural Work Committee, Chen Xiwen, said that the global financial

crisis had resulted in 20 million unemployed migrant workers returning to rural areas. This represents 15.3% of all PRC migrant workers.

The central Government has issued five policies to address migrant unemployment and the problem of rural surplus labor, as follows:<sup>3</sup>

- Encourage enterprises in the cities and coastal areas not to lay off workers.
- All levels of governments should provide skills training to jobless migrant workers.
- Public infrastructure projects should hire as many migrant workers as they can. For migrants who have returned to their rural homes, local governments should provide public works projects in rural infrastructure.
- Encourage migrant workers to return to their rural homes to start their own business.
- Ensure land rights of migrant workers—ensuring, even when there are no local jobs available for returned jobless migrant workers, that they still have allocated land to cultivate and that they can maintain their basic livelihood in rural areas.

## **Impact on income and living conditions**

We asked respondents whether the global economic slowdown had any impact on their income: 19.2% said the impact had been very large, 27.3% said it had been significant, 32.9% said it had been moderate, and 20.6% said it had no impact at all.

The effect on incomes was greater for the informally employed, males, young migrants, and the more educated working in the Pearl River delta areas, as well as those who had migrated and worked in several cities.

The income impact was lower on formally employed workers; on migrants working in Beijing and Tianjin municipalities and the Changjiang delta areas; in state-, collectively, or privately owned firms; in public service organizations; in retail or restaurants; in personal services; and in the public service sector. Again, we found that personal work experience had not helped migrant workers during the crisis in terms of its impact on their incomes: 50.22% of those surveyed felt that their daily living situation had deteriorated over the period May 2007 to May 2008; 94.77% of respondents attributed this decline in the quality of their lives to the global economic slowdown.

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<sup>3</sup> <http://hi.baidu.com/%CB%AB%D0%C2%CA%C0%BC%CD/blog/item/b54a4bd086bb5688a1ec9c4a.html>

## Secondary impacts of the global economic downturn

### Reduced social insurance payments or coverage

Table 2 presents the impact of the global financial crisis on the insurance coverage of the PRC's migrant workers, in terms of actions taken by employers and by employees.

**Table 2: Impact on insurance coverage for migrant workers**

<b>Insurance coverage</b>	<b>Total (%)</b>	<b>Formal (%)</b>	<b>Informal (%)</b>
<b>Employers</b>			
Stopped paying pension plan premiums	3.85	3.65	4.18
Asked employees to drop out of pension schemes	1.41	1.03	3.04
Stopped pension program coverage	1.69	1.38	3.05
Stopped all social insurance coverage	2.31	1.93	3.98
<b>Migrant workers</b>			
Stopped paying pension premiums	4.38	3.76	6.87
Dropped out of pension schemes	4.44	3.61	7.87
Was afraid to ask employers to enroll them into the pension scheme	18.77	18.45	19.17

Source: Migrant worker survey conducted by the authors in 2009.

Because of job shortages, some employers have taken advantage of the situation to reduce benefits, lower salaries, and stop providing insurance for their workers. The study found that 3.85% of employers stopped paying insurance premiums for their workers. In addition, 1.41% of employers even asked their employees to completely drop out of the program. Informal workers' insurance coverage was affected even more during the crisis: 4.18% of employers stopped paying workers' insurance premiums, 3.04% of employers asked them to completely drop out of the pension scheme, 3.05% of employers cancelled pension coverage for their workers, and 3.98% of employers cancelled all insurance such as health care and unemployment.

To cope with reduced income and uncertainty in the job market, 3.76% of formal workers and 6.87% of informal workers stopped

paying their pension premiums, 3.61% of formal workers and 7.87% of informal workers cancelled their pension plan, and 18.45% of formal workers and 19.17% of the informal workers said that they wanted to participate in the pension plan but were afraid to mention it to their employers for fear of losing their job.

A total of 21.07% of formal workers reported that they had pension coverage, and 5.04% of informal workers. The average pension coverage for both formal and informal workers was 13.85%. The global slowdown resulted in 29.7% of migrant workers with a pension plan dropping out of it—15.8% for workers with a formal pension plan but as high as 68.5% for informal workers. This change was due to employers wanting to cut costs and migrant workers wanting to save expenses.

## Migrant households' limited options to cope with the crisis in the cities

We asked what strategies migrant families have used to cope with the impact of the crisis. Table 3 presents the results.

**Table 3: Family-coping strategies**

<b>Family livelihood</b>	<b>Total (%)</b>	<b>Formal (%)</b>	<b>Informal (%)</b>
Reduced food quality	35.65	31.65	40.50
Sent preschool children back to rural homes	16.30	14.64	18.33
Transferred school children to rural schools	11.79	10.84	12.97
Reduced extra-curricular (fees for after school activities) expenses	18.59	17.23	20.20
A spouse went back to the rural home	12.86	12.56	13.21
Moved to a cheaper place	38.88	36.52	41.66
Sold assets	5.54	5.22	5.90
Did not to seek health care when sick	30.35	27.08	34.22
Reduced expenses on clothing, Internet access, and entertainment	58.69	57.58	60.09

Source: Migrant worker survey conducted by the authors in 2009.

The most common approaches families use to cope with the impact of the slowdown were:

- Reducing “unnecessary” or “nonessential” expenses, such as clothing, internet use, and entertainment: 57.58% of formal worker families and 60.09% of informal worker families adopted this approach.
- Cutting expenses on rent and food: 36.52% of formal worker families and 41.66% of informal worker families rented a cheaper place to live, 31.65% of formal worker families and 40.5% of informal worker families reduced the quality of food they consumed.
- Trimming health care costs: 27.08% of formal worker families and 34.22% of informal worker families did not seek health care when they felt ill or got sick.
- Decreasing money spent on children: 17.23% of formal worker families and 20.20% of informal worker families reduced their extracurricular expenses.
- Sending children back to rural homes: 14.64% of formal worker families and 18.33% of informal worker families sent their preschool children back to their rural homes; 10.84% of formal worker families and 12.97% of informal worker families transferred their school-aged children to rural schools.
- Couple split: 10.84% of formal worker families and 12.97% of informal worker families sent one spouse back to their rural home.
- Sold assets: While most migrants have limited assets, 5.22% of formal worker families and 5.90% of informal worker families sold assets.

## Reduced remittances to rural areas

Table 4 presents the changes in remittances over the period May 2007 to May 2008 of the global economic slowdown.

**Table 4: Changes in remittances (CNY)**

Variable	Total	Formal	Informal
Annual income at home	7,334	7,663	6,940
Annual income in the city	17,946	18,133	17,717
Remittances last year	4,481	4,547	4,400
Remittances before the crisis	6,188	5,940	6,442

Source: Migrant worker survey conducted by the authors in 2009.

On average, migrants earned CNY7,334 a year in rural areas, but CNY17,946 a year in cities, even during the downturn—or still more than twice the income that they could earn in rural areas. Before the crisis, migrant workers remitted CNY6,188 to their rural homes; during the crisis, there was a 27.6% decrease in remittances, to CNY4,481. Formal workers remitted less than informal workers, and their decrease in remittances was also smaller, at 23.5% against 31.7% for informal workers.

## **Coping with shocks from the global economic slowdown**

### **Formal social protection programs for migrant workers**

Unemployment insurance benefits have not reached migrant workers as expected. Many respondents said that they were unable to obtain unemployment benefits because of complicated registration procedures. Only 2.46% of the unemployed actually received benefits and the benefit levels were very low; 7.34% of those unemployed received job training, while 5.63% were given employment information by local governments. Less than 5% received cash or in-kind assistance, or obtained loans.

**Table 5: Formal social protection programs for migrant workers**

<b>Strategy</b>	<b>Total (%)</b>	<b>Formal (%)</b>	<b>Informal (%)</b>
Received unemployment insurance	2.46	4.29	1.17
Received job training	7.34	9.93	4.21
Received employment information	5.63	5.98	5.20
Received loans	4.06	4.35	3.71
Received cash or in-kind assistance	4.83	4.13	5.68

Source: Migrant worker survey conducted by the authors in 2009.

Many officials told the study team that they had a large surplus in their unemployment insurance funds, so they were redesigning their policies to allocate funds to severely affected enterprises in order to support their survival during the economic crisis. However, in talking to local cadres and managers of the enterprises, they also indicated that it was very difficult to tell which enterprises had been hardest hit.



The solution was to allocate unemployment insurance surplus funds equally to all enterprises. This represents a paradox for the migrants' unemployment insurance scheme, since migrant workers are covered by unemployment insurance when they are employed, but do not benefit from unemployment insurance when they are unemployed. This finding indicates that the unemployment insurance scheme needs to be improved.

## Individual and family coping strategies

Table 6 shows that 58.57% of formally employed workers and 63.69% of informally employed workers relied on their savings to cope with the impact of unemployment due to the slowdown. It also shows that 21.43% of formal and 14.97% of informal workers went back to rural areas. Around 12% of workers borrowed from others to sustain themselves during unemployment. Informal workers were more likely to be able to continue living in cities while unemployed. Table 6 presents the various coping strategies.

**Table 6: Strategies for coping with unemployment**

<b>Coping strategies</b>	<b>Total (%)</b>	<b>Formal (%)</b>	<b>Informal (%)</b>
Relied on savings	61.28	58.57	63.69
Relied on accumulated self-paid pension premiums	0.67	1.07	0.32
Borrowed from others	12.63	11.79	13.38
Went back to rural areas	18.01	21.43	14.97
Other	7.41	7.14	7.64

Source: Migrant worker survey conducted by the authors in 2009.

Table 7 shows that nearly 20% of migrant workers have savings that will sustain them for up to 6 months without employment in the cities. The limited savings of migrant workers indicates that policies to encourage the creation of employment and provide temporary assistance are important for this group of people. This means that if the economic downturn is of limited duration, a large proportion of migrants can survive in the cities; otherwise, they might have to return to their rural areas.

**Table 7: Unemployed migrants' savings in a city**

<b>Period of sustenance offered by savings</b>	<b>Total (%)</b>	<b>Formal (%)</b>	<b>Informal (%)</b>
Less than 3 months	60.53	58.81	61.73
3–6 months	17.84	18.50	17.38
6 months to 1 year	11.82	11.87	11.79
1–2 years	5.09	5.76	4.62
2 or more years	4.73	5.06	4.50

Source: Migrant worker survey conducted by the authors in 2009.

## **Conclusions and recommendations**

The global economic crisis has had a profound impact on unemployment, income, and remittances. However, the rural development strategy, as well as landholding and agricultural production systems, have helped cushion the worst of the crisis. There have been no major incidents of social unrest, which was very much a concern for central and local governments at the beginning of 2009. This paper finds that the two-pronged strategy adopted by the Government of the People's Republic of China has been successful in helping migrants survive the downturn.

The intergenerational impacts on children sent back to rural areas, of poorer nutrition for children, and of reduced investment in children's education are hard to assess at this time. To decrease costs, many migrant workers chose not to seek medical care when they or their family members were sick. Many households were forced to reduce the nutritional quality of their food and educational spending on children as coping strategies. Many families sent their children back to the countryside or one spouse returned to his or her rural area. The long-term impact is currently difficult to gauge, but many children have had to accept a lower quality of education in rural areas and live separately from their parents. This is especially difficult for preschool children, who miss their parents' care.

Personal experience has not helped migrant workers avoid the impact of the global economic slowdown on employment, income, and living conditions. Migrants from poorer households have far fewer resources to mitigate the impact, so the likelihood of a forced move back to rural areas is much greater than for nonpoor households. The inequality between poor and nonpoor rural households is expected to widen because the nonpoor can cope more effectively with the crisis.

It is crucial to ensure long-term investment in social insurance for migrants. During the slowdown, many local governments issued policies permitting employers to delay social insurance payments for employees. However, some employers took advantage of this to completely cancel their employees' social insurance coverage. In addition, very few employees can obtain the unemployment benefits to which they are entitled even if they are enrolled in the program.

Returned migrants can be an opportunity for rural economic development. The government has introduced policies to support migrants who return home to start businesses in rural areas.<sup>4</sup> Many local governments also consider returning migrants a great human resource for local economic development.<sup>5</sup> There have also been case reports of returned migrants starting their own businesses. In our field visits to migrant recruitment areas in Henan Province, local government representatives were in fact happy that young, well-educated, and experienced migrants were returning home, arguing that they provided much-needed human resources for rural development. However, whether the returned migrants can really contribute to rural development and how much they can contribute are still unanswered questions, because of a dearth of credible evidence.

Finally, a reduction in remittances and the interruption of the migration process were negative impacts on rural poverty stemming from the downturn.

Based on our findings from the survey and field visits, we make the following recommendations:

- Urban policies should be adjusted to help sustain the migration process, maintain insurance coverage, and support childhood education.
- Rural policy should enhance the fiscal policy environment to support returning migrants and encourage local business growth.
- Educational assistance should be extended to migrant children to ensure school attendance. In addition, cash and in-kind support, as well as reduced fees for preschool children, should be provided.
- Cash transfers and the temporary relief program that provides assistance to urban residents with emergency needs should be immediately extended to migrants, allowing them to sustain their consumption levels and stimulate demand for local goods.

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<sup>4</sup> [www.china.com.cn/policy/txt/2008-12/28/content\\_17023162.htm](http://www.china.com.cn/policy/txt/2008-12/28/content_17023162.htm)

<sup>5</sup> Field visits by the authors in February, April, June, and August 2009.

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**Box 7: The Philippines' electronics sector**

The electronics industry generates the bulk of receipts from the country's external trade and accounts for 60%–70% of total export earnings. After several years of rapid growth, exports declined by 5% in 2008. By November 2008 exports were 17% less than in the same period in the previous year.

Over 100 electronics companies and 60,000 workers were affected by the global recession from October 2008 to June 2009. Government sources indicate that 35,000 workers were subjected to flexible working arrangements while another 15,000 were laid off. Various surveys and discussions in Cavite, near Manila, where many of the companies are clustered, that were held in mid-2009, indicate that the recession had a substantial impact on income and expenditure patterns of electronics workers. They also show that the recession adversely impacted support service providers such as tricycle drivers, food stall and newspaper vendors, and boarding house landlords. Nearly all support service providers reported a 20%–50% reduction in customers and a 30% decline in revenues.

Approximately half the laid-off employees reported receiving severance pay. Other assistance provided by companies included training, notably on entrepreneurship and counseling, and job search assistance. In contrast, support service providers had to adjust to the recession by relying on their own resources and that of the extended family. The surveys indicate that many respondents sold assets to cope with their income decline. Being in the informal sector however allowed them to freely change business practices such as stocking up on more merchandise, working longer hours or moving to another locale. A significant number of respondents also reported engaging in additional work activities.

The surveys highlight the fact that economic recessions may have a particularly pronounced effect on specific regions of a country. Further, the actual number of people affected can be substantially greater than that reported in official unemployment data if secondary impacts are also considered.

Source: M. Lopez in "The Economic Impact of the Global Economic Slowdown on Gender and Value Chain Labor Markets in Asia." [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# Urban–rural and rural–urban transmission mechanisms in Indonesia in the crisis

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## Introduction

This paper focuses on the transmission mechanisms in the context of the global crisis, between urban and rural areas in Indonesia. In this rapid analysis, we look into the changes in the components of the total income of rural households, including remittances, to observe the back-and-forth transmission mechanisms.

We built this rapid analysis on a panel dataset of rural households in Indonesia from two provinces (Central Java and South Sulawesi) in 2007 and 2009. Originally, with the cooperation of the International Food Policy Research Institute (IFPRI) in 2007, the Japan International Cooperation Agency (JICA) conducted village- and household-level surveys, covering 98 villages in seven Indonesian provinces (Lampung, Central Java, East Java, West Nusa Tenggara, South Sulawesi, North Sulawesi, and South Kalimantan) and more than 2,000 households. This 2007 survey was designed to overlap with villages in the 1994–1995 National Farmer’s Panel (PATANAS) survey conducted by the Indonesian Center for Agriculture Socio-Economics and Policy Institute (ICASEPS) to build household panel data. In June 2009, we selected the provinces of Central Java and South Sulawesi to conduct a quick survey on the effects of the financial crisis, by revisiting 50 households in each province. Central Java was selected for its proximity to Jakarta. South Sulawesi was selected for its variety of rural-based production activities.

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For agricultural export data, we use the official statistics from Statistics Indonesia (Badan Pusat Statistik [BPS]). Monthly export data on total value and quantity for disaggregated commodity categories are available. To construct measures of export shocks, we took the monthly average of price (per kilogram, constructed from values and quantity) in the first quarter of 2007 and 2009, and used the changes in percentage terms.

## Total income

Among the 100 sample households in our data, 39 experienced a decrease of total income per capita from 2007 to 2009 while 61 households experienced an increase. Those households with decreasing income were found more in Central Java (28 households) than in South Sulawesi (11 households) (Table 1). The 61 sample households that experienced increases in total income were found more in South Sulawesi (39 households) than in Central Java (22 households).

**Table 1: Number of households by province and change of total household income, 2007 and 2009**

	All samples	Central Java	South Sulawesi
Households with decreased total income	39	28	11
Households with increased total income	61	22	39
Total	100	50	50

Sources: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

The sample households, on average, experienced falls in the ratio of agricultural income<sup>2</sup> to total income (from 40.7% to 32.6%), from 2007 to 2009. They also experienced drops in the ratio of nonagricultural employment income (from 21.5% to 10.8% of total income). On the other hand, the sample households, on average, experienced increases in the ratio of self-employment income to total income (from 32.9% to 49.8%) and remittances (from 1.7% to 3.4%) (Table 2).

<sup>2</sup> The appendix describes the empirical method used for analyzing agricultural income.

**Table 2: Income from different sources, 2007 and 2009 (rupiah)**

	All samples		Central Java		South Sulawesi	
	2007	2009	2007	2009	2007	2009
Agricultural income	517,367 (40.7)	909,823 (32.6)	603,473 (31.6)	404,808 (12.0)	431,262 (68.4)	1,425,145 (64.6)
Agricultural employment income	40,217 (3.2)	94,902 (3.4)	48,479 (2.5)	58,619 (1.7)	31,955 (5.1)	131,925 (6.0)
Nonagricultural employment income	273,031 (21.5)	300,978 (10.8)	464,865 (24.3)	451,529 (13.4)	81,196 (12.9)	147,355 (6.7)
Self-employment income	418,303 (32.9)	1,389,266 (49.8)	775,378 (40.6)	2,369,643 (70.4)	61,229 (9.7)	388,880 (17.6)
Remittances	21,700 (1.7)	95,502 (3.4)	18,987 (1.0)	79,632 (2.4)	24,414 (3.9)	111,695 (5.1)
Average household income	1,270,618	2,790,470	1,911,181	3,364,230	630,055	2,205,000

Notes: 2009 income level was adjusted to 2007 level. Figures in parentheses are percentage shares of average household income per capita.

Sources: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

In the following sections, we look in greater detail at the changes in agricultural income, nonagricultural employment income, self-employment income, and remittances to shed light on the back-and-forth transmission mechanism between urban and rural areas in the context of the crisis.

## Agricultural income

Agricultural income in this section is defined as crop revenue from the sold harvest minus the adjusted total production cost. The ratio of agricultural income to total income changed greatly between 2007 and 2009. The households that in 2007 relied on agricultural income more than average experienced a 36% reduction in its ratio to total income. In contrast, those in 2007 relying on agricultural income less than average, saw a 167% increase in its ratio to total income (Table 3). These results suggest that agricultural market conditions in some selected commodities directly affect agricultural incomes of rural farm households.



**Table 3: Change in ratio of agricultural income, 2009 relative to 2007 (%)**

	<b>All samples</b>	<b>Central Java</b>	<b>South Sulawesi</b>
Overall	65	42	90
Ratio of income from agriculture in 2007			
More than average	-36	-53	-29
Less than average	167	85	366

Sources: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

We may also find many negative income data for 2009 because some farmers had not harvested their crops at the time of the survey. In these cases, June 2009 survey data capture only the large input spending, and future potential crop revenue will be recorded in the subsequent survey round. We do not have the same problem for 2007 since we take the average of annual production (3 months = 0.25 \* annual profit). This issue potentially creates a biased result since time frames are not identical for 2009 and 2007. To correct this problem, we adjusted total production cost in 2009 with a crop harvest index—which takes the value of 1.0 if the crop is harvested, 0.5 if it is partly harvested, and 0.0 if it is not harvested—and aggregated all crops. This proportionality factor is multiplied by the total cost incurred up to the date concerned.

With these adjusted numbers, in this subsection we estimate the impact of changes in export prices of major commodities to agricultural income changes, controlling for actual exposures. The explanatory variable is the percentage of average export price of selected commodities between the first semester of 2007 and 2009, interacted with dummy variables that indicate whether the household produces the commodities.

Table 4 summarizes estimation results on changes in agricultural income. Columns 1 and 2 report results in the 2007–June 2009 panel. We used province or village dummies to control region-specific effects over time. Taking the difference between the 2 years wipes out household and local fixed unobservables, so the results are robust to correlations between the fixed unobservables and crop choices.

We make the following observations. First, our results indicate that rice farmers are exposed to price volatility in export markets. Similarly, cabbage and coffee producers experienced significant changes in agricultural income attributed to the export market price changes.

**Table 4: Effect of price change on agricultural income**

<b>Dependent:</b>		
<b>Change in agricultural income (2007–2009 panel)</b>		
Rice	51,400,000*** (2.58)	37,900,000* (1.65)
Corn	250,000,000 (1.36)	244,000,000 (1.16)
Cassava	–15,500,000 (1.58)	–22,800,000 (1.29)
Cabbage	27,000,000*** (10.61)	19,700,000 (1.19)
Shallot	–12,000,000 (1.32)	–12,400,000 (1.20)
Tobacco	–8,417,301*** (4.13)	–8,068,897*** (3.09)
Coffee	37,200,000*** (2.80)	20,400,000 (1.44)
Cacao	924,626.7 (1.15)	1,193,657 (1.02)
South Sulawesi	–1,030,827 (0.82)	
Central Java	omitted	
Province dummies	yes (above)	
Village dummies		yes
R squared	0.3256	0.3377
Number of observations	98	98

Notes: Significant at \* = 10%, \*\* = 5%, and \*\*\* = 1%. Numbers in parentheses are absolute t values using robust standard errors with village clusters. Other commodities are omitted to define benchmark case. Percentage change of the average export price from the first quarter in 2007 to 2009 was used for each commodity as the shock variable. The indicator on whether the particular commodity is produced in 2009 defines the window to the shock (households producing more than one commodity are exposed to multiple shocks from export markets).

Sources: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

Second, we find negative and significant effects on tobacco producers in the 2007–June 2009 panel. This suggests that in these markets, price elasticity in the export demand is rather large, so an increase (decrease) in price reduces (increases) the quantity demanded to offset the price effect. For these commodities, the quantity effect seems

larger than the price effect. In any case, however, we may conclude that tobacco farmers are exposed to export market fluctuations.

In sum, we found that agricultural export market conditions in some selected commodities (rice, cabbage, tobacco, and coffee) affected agricultural incomes among rural households. Farmers producing these commodities are vulnerable to price changes caused by the recent fall in international trade.

## **Income from nonagricultural employment**

The ratio of nonagricultural employment income to total income increased from 2007 to 2009 (a 57% increase for all samples). Households relying on nonagricultural income more than average in 2007 experienced a 6% drop in the ratio. However, households relying on nonagricultural income less than average in 2007 experienced a 104% increase in the ratio (Table 5). This contrasting tendency is clearer in the case of South Sulawesi. It is difficult to conclude if non-agricultural employment activities were negatively affected or positively affected by the economic downturn. This is partly because the level of earning in nonagricultural income itself remains fairly constant (Table 2), because of the fluctuations in other income components, its relative importance in total income changes due to reasons exogenous to nonagricultural employment.

**Table 5: Change in ratio of nonagricultural employment income to total income, 2009 relative to 2007 (%)**

	<b>All samples</b>	<b>Central Java</b>	<b>South Sulawesi</b>
Overall	57	29	92
Ratio of income from nonagriculture in 2007			
More than average	-6	7	-35
Less than average	104	56	145

Sources: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

## Income from self-employment activity

The ratio of self-employment income to total income increased between 2007 and 2009 (a 12% increase for all samples). Households relying on self-employment income more than average in 2007 experienced an 8% drop in the ratio. However, households relying on self-employment income less than average in 2007 experienced a 19% increase in the ratio. This contrast is clearer in South Sulawesi, where the latter group of households experienced 68% reduction. In Central Java, households relying on self-employment activity less than average in 2007 increased the ratio of self-employment income by 32%, perhaps as part of a coping strategy (Table 6).

**Table 6: Change in ratio of self-employment income to total income, 2009 relative to 2007 (%)**

	All samples	Central Java	South Sulawesi
Overall	12	18	6
Ratio of income from self-employment in 2007			
More than average	-8	1	-68
Less than average	19	32	12

Sources: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

## Remittances

In our data, around 14% of households received remittances. The majority of remittances were sent from domestic migrants to their families, including parents and siblings (Table 7). Table 8 shows that from 2007 to 2009, the purpose of receiving remittances shifted from purchase of daily goods to child support (including education) and medication. In Table 9, we stratify households into those with and without return migrants. Return migrants are those household members who were out of the house in 2007 but returned to the house before June 2009. Return migrants are a clear indication of migrants losing their job, although many migrants continue to stay in urban areas without notifying the household whether they have a job or not.

Households with return migrants in June 2009 experienced a drop in the ratio of remittances between 2007 and 2009 (a 43% drop in the ratio of remittances to total income). In the case of Central Java, households both with and without return migrants saw their ratio of remittances to total income decrease. However, in South Sulawesi, households with return migrants experienced a 49% decrease in this ratio; those without return migrants experienced a 29% increase in this ratio, perhaps as part of a coping strategy.

**Table 7: Residence location of migrants sending remittances**

	Freq.	%
Within village	8	18.6
Within subdistrict	5	11.63
Within district	5	11.63
Within province	8	18.6
Within country	13	30.23
Abroad	4	9.3
Total	43	100

Freq. = frequency.

Source: Financial Crisis Monitoring Survey, June 2009, JICA.

**Table 8: Purpose of receiving remittances (%)**

	2007	2009
Child support (including education)	23.81	37.21
Medical	9.52	11.63
To buy daily goods	23.81	2.33
No specific reason	42.86	48.84
Total	100	100

Source: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

**Table 9: Change in ratio of remittances to total income, 2009 relative to 2007 (%)**

	All samples	Central Java	South Sulawesi
Overall	-2	-20	18
Without return migrants	4	-19	29
With return migrants	-43	-33	-49

Source: Empirical Study of Growth and Poverty Reduction in Indonesian Farms, April 2007, JICA; Financial Crisis Monitoring Survey, June 2009, JICA.

## Possible impact on children's school attendance

Focusing on child health, in Central Java, the number of absent days from school during the previous 3 months due to illness was 2.17 days in the case of income-decreasing households and 1.45 days

in income-increasing households. In South Sulawesi, the equivalent figures were 2.17 days in remittance-decreasing households and 0.16 days in remittance-increasing households. This suggests that decreases in household income or remittances are associated with a negative impact on children’s school attendance and illness, though causes are unclear.

## Conclusions

This paper has focused on the transmission mechanisms of the global crisis between urban and rural areas in Indonesia. First, in terms of urban-to-rural transmission, we saw that the volume of remittances going to rural households decreased as migrants lost their jobs in urban areas. Second, in terms of rural-to-urban transmission, many rural households were negatively affected by a decrease in demand for, and hence price of, agricultural products. These rural households may have requested more remittances as a coping strategy.

In the time frame of our analysis, a decrease in total income in Central Java was triggered by a decrease in agricultural income combined with a decrease in remittances (urban-to-rural transmission), leading to an increase in self-employment as a coping strategy. In South Sulawesi, a decrease in agricultural income was partly offset by an increase in remittances as a coping strategy (rural-to-urban transmission).

Over a longer time frame, when labor market conditions in urban areas may reduce the earnings of migrants, the level of remittances may decrease.

## Appendix: Conceptual framework for the analysis of agricultural income

We define  $\Delta P^m = P_{t+1}^m - P_t^m$  where  $P_{t+1}^m (P_t^m)$  is the commodity  $m$ ’s average monthly export price in 2007 (2009), January–June. Thus,  $\Delta P^m$  captures export price changes from 2007 to 2009. Export price is computed from the ratio of value (in rupiah, converted using exchange rates) to quantity (kilograms). In the analysis, we use percentage changes in the price.

Agricultural profit is defined by activities: different crop farming ( $a = 1,2,3,4$ ). Let  $\pi_t^a$  be the profit from agricultural activity  $a$ .

Crop/commodity is denoted by  $k = 1,2,3,\dots,K$ . Define an indicator  $V_k$  that takes the value of one if crop/commodity  $k$  is produced (or

in production stage) and zero otherwise (this is constructed from the 2009 surveys). The adjusted crop profit is defined as

$$\pi_{t+1}^1 = \sum_k p_k q_k v_k - sC$$

Note that  $\pi^1 < 0$  depending on production  $q_k$  (including those sold, stored, and consumed), and  $s$  is the proportion of crops harvested to the total number of crops planted.  $C$  is the total cost that has been incurred in the past 3 months for farming. By definition, revenue is reported only if crops have been harvested.

In agricultural production, it is most likely that costs are incurred first, followed by harvesting. Therefore, it is necessary to adjust costs to have a reasonable measure of crop profit being comparable to the 2007 figure (annual average). For example, a household has three crops planted, and one of them was harvested, one partially harvested, and one not harvested yet, then  $s = 1.5$ . In the second round, we know the percentage of the produce harvested (e.g., 70%), so we can directly use this number to adjust costs. Therefore, combining these, we can adjust the costs to compute a reasonable measure of farm (crop) profit.

Most likely, we do not have the problem of negative profit in 2007 since we take the average of annual production. To make the 2007 figure comparable with the 3-month profit, we multiply the 2007 annual profit by one quarter. Then we take the difference between 2009 and 2007:  $\Delta\pi^1 = \pi_{t+1}^{1*} - \pi_t^1$ . Due to often observed negative profits, we decided not to take percentage changes, but use differences (changes). Finally, we aggregate all crop profits.

In the analysis, we focus on agricultural income. We estimate the following crop equations:

$$\Delta\pi^1 = \beta_0 + \sum_k \Delta EX_k c_k \beta_k^1 + \varepsilon \quad (1)$$

where  $EX_k$  is  $\Delta P_k$  percentage change of price for crop  $k$  that the household actually produced.

In this formula, we capture the impacts of export price changes relevant to own production, but differentiate parameters that capture the impacts by crops. For example, households producing more than one crop are exposed to multiple risks from export markets.

Note that we are not controlling production changes in Equation (1). That is, it is possible that, while price increases in the export market (implying an increase in foreign demand), production can fall for other reasons (e.g., crop failure).

# The global financial crisis and agricultural development: Viet Nam

*Dang Kim Son, Vu Trong Binh, and Hoang Vu Quang<sup>1</sup>*

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## **Economic impact of the crisis**

Originating from financial and real estate shocks in the United States (US) from mid-2007, the economic crisis hit the world economy in 2008. Global, regional, and national economic growth fell. While the global recession affected Asia mainly via the urban, export-related sectors, this paper shows that Viet Nam has several substantial transmission channels to the rural economy, too.

## **Economic growth and trade**

Since early 2008, economic shocks have had deleterious impacts on Viet Nam's population, especially those living in rural areas. In spite of the increase in prices of agricultural products, prices of many other goods went up even faster, engendering hardships among the population and causing problems for the industry. The measures taken to rein in inflation worked to a large degree, but caused many problems for small and medium-sized enterprises in terms of access to foreign exchange and high interest rates, leading to income and employment losses in rural areas. After a growth of 8% and above in the 2 previous years, 2008 saw only 6.2% expansion (IMF 2008).

High consumer price inflation (Table 1) in 2008 showed many unusual aspects, such as a dramatic rise in the first half of the year, and then a large drop in the second (the opposite of previous years). Also, the food price index grew faster than general price indexes.

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**Table 1: Selected macroeconomic indicators, 2005–2008**

	2005	2006	2007	2008
GDP growth (%)	8.8	8.2	8.4	6.2
Inflation <sup>a</sup> (%)	8.4	6.6	12.6	22.9
Export (\$ billion)	32.4	39.8	48.5	62.6
Import (\$ billion)	36.7	44.8	62.7	80.7
Unemployment (%)	5.31	4.82	4.64	4.65

<sup>a</sup> Calculated by December's consumer price index compared to that of the previous year.

Source: General Statistics Office, Viet Nam.

As a relatively open economy with exports equivalent to more than half of gross domestic product (GDP), Viet Nam—like many other countries—was affected by the impact of the crisis via trade, and not directly through international financial markets. In 2008, despite the global economic downturn, prices of many commodities were still high, particularly at the beginning of the year, leading to booming exports (partly from rural areas and agriculture). Conversely, a heavier trade deficit was recorded due to increased imports by 28.3%.

## Employment

According to official figures, unemployment stayed largely unchanged at 4.7% in 2008. However, the economy began faltering in late 2008 and was really hit in early 2009. Although official statistics on unemployment across the country have not been released, selected updated data in 2009 show reduced employment in labor-intensive exporting enterprises such as footwear, garments, aquaculture-product processing, fiber and wood processing, and in handicraft villages. However, the formal labor market is relatively small compared to the informal sector. While unemployment in the export sector came as a result of the crisis, total unemployment changed little; underemployment however, remained high.

Many export-oriented firms have said that their sales fell, and orders nose-dived. A representative of a company managing the Thang Long industrial park (northwest of Hanoi) says that among 67 enterprises there, most had to slow production and only one or two high-technology factories expanded output. As a result, labor was retrenched and working hours reduced. This affected both women and men. In addition, daily workers in the cities found it harder to get jobs. Consequently, many migrant workers in handicraft clusters and industrial zones seem to have returned to their hometowns.

However, a large part of Viet Nam's labor in the export sector is in the rural areas, especially in food processing, aquaculture, and handicrafts. Rural employment was therefore also affected by the crisis. Interviews with communal leaders and enterprise owners in the handicraft village of Bat Trang (a porcelain and pottery village on the outskirts of Hanoi) and Ha Thai (famous for lacquer paintings) indicate that 70%–80% of these villages' sales come from international markets. A sharp fall in orders since late 2008 has put these villages in a perilous situation.

## **Impact of the crisis on agriculture and rural areas**

### **Growth**

In 2008, agriculture enjoyed fairly high growth due to increases in exports and output. Agricultural subsector output rose by 4.1% relative to 2007. The livestock subsector was hit because of an extremely cold spell, epidemics in mid-2008, and increase in input prices (feed-stuffs, etc.), but growth still came in at around 6%, higher than that of cultivation (5.4%) and services (2.8%).

In aquaculture, however, farmers and processing enterprises were hit by weak exports. Enterprises' inventories were high, but banks asked for their loans to be repaid before they approved new loans. Many small-scale rubber-growing and catfish-raising households had difficulties in paying back loans, and faced a shortage of working capital. Many small and medium-sized enterprises and handicraft villages faced serious obstacles because of unsold products and delayed contracts.

According to the Viet Nam Chamber of Commerce and Industry in Can Tho, profits of enterprises in the Mekong River delta—the biggest agricultural production zone in the country—have been hit in the downturn, especially those from exports. This has produced a domino effect on related services.

### **Agriculture, forestry, and aquaculture trade**

The period 2005–2007 saw rural exports boom, and brought a major shift in the composition of value added in agriculture, with aquaculture becoming a major export product. Yet 2008 brought a rapid reversal, because while other agricultural prices in world markets remained high, exports of aquaculture products faced a crisis of excess that led to, among other products, tumbling catfish prices.

In 2008, many export commodities in Viet Nam saw a decrease in volume, but their exports (by value) followed a rising trajectory, as in 2007. Total exports of agricultural products (including forestry and aquaculture) in 2008 were estimated at about \$16 billion, a 28.4% gain from 2007. Exports (by value) of many key commodities like rubber, coffee, tea, and rice jumped, but their volume declined. The underlying reason was that the international prices of these commodities were relatively high. For example, exports of coffee went up by 29% by value, but their volume went down by 20%. The same trends were seen for tea and rice.

In terms of imports, 2008 was marked by a sudden rise in some imported commodities, including fertilizers and animal feed. Despite a fall in the volume of imported fertilizers of 19%, their value rose by 51%.

## **Impact on exports**

Turbulence in financial and credit markets spread to other markets, including that for agricultural commodities. From mid-2008, prices of agricultural commodities in international markets decreased dramatically. Agricultural exports were hit after September 2008 when export value and volumes of most agricultural products were lower than in previous months.

However, thanks to the global price increase for agricultural commodities before the crisis, the value of exports of agricultural products of Viet Nam in 2008 remained relatively high. Total exports of agricultural, forestry, and aquaculture products in 2008 were \$16,012 million, up by 28.4% relative to the previous year. This comprised \$8,572 million (up by 39.3%) for agriculture, \$3,004 million (up by 17.2%) for forestry, and \$4,436 million (up by 18.2%) for aquaculture.

The picture became brighter in 2009, especially at the end of the year. Agricultural commodity exports in August 2009 were \$1.35 billion, for an estimated total of \$10.2 billion for agriculture, forestry, and aquaculture products for the first 8 months of 2009.

The US is the largest buyer of Viet Nam's agricultural products, ranking first for cashew and wooden products, second for coffee and aquaculture products, and fifth for tea. The European Union (EU) is usually first for coffee, pepper, and rattan products; second for rubber and wood; and third for aquaculture products. Japan comes first for aquaculture products, and third for wooden furniture. The People's Republic of China (PRC) is the biggest importer of Viet Nam's rubber, much of which is to be used for the manufacturing of tires to be sold to the US and EU.

In 2008, the PRC—a large customer of Vietnamese tea—suddenly stopped importing tea, leaving a large quantity of tea unsold. Relative to 2007, export volumes to the PRC in 2008 went down by around 23,000 tons.

## **Reasons for the fall in agricultural exports**

There are several major reasons for reduced global demand for agricultural products from Viet Nam.

First, many products go to developed economies such as the US, EU, and Japan. As their economies stuttered, consumers cut spending; at the same time, over the longer term, customers are becoming more demanding in terms of quality. This is particularly so because—apart from rice—a large part of food exports are processed goods, which are used in middle- or upper-class US or European customers' cuisine.

Second, global credit constraints have pressured imports. Many countries' banking systems had liquidity problems, thus lending and importers' credit guarantees have contracted. In spite of their relatively good health, many banks had to cut down their lending and importers' guarantees because of deteriorating confidence. The crisis also brought with it increasing financial problems of global traders on the one hand, and Viet Nam's food processing firms on the other. This caused many firms in Viet Nam to reduce production, or even to close.

Third, many financial investment funds cut their speculative investments in agricultural products. Their investments were concentrated in industrial crops such as coffee, rubber, pepper, and cashew. When the crisis hit, these funds were compelled to withdraw their capital from agriculture and switch their investments to the money market, leading to a decrease in demand in forward markets, in turn causing a sudden fall in prices.

Fourth, exports fell because of exchange rate fluctuations. On the one hand, the trade of the majority of exporting countries, including Viet Nam, is in US dollars. Therefore, a fall in agricultural products in US dollar terms has a negative impact on export values. On the other hand, major exporting countries of key products such as rice, coffee, and pepper, which compete directly with Viet Nam, like Brazil, Colombia, India, Malaysia, and Thailand, devalued their currencies against the dollar by 13%–33%, whereas the dong devalued by only 5%, from June to November 2008.

Apart from agriculture, the economic crisis also dramatically affected small-scale industry (handicrafts). A high proportion of small-scale establishments reduced or even ceased production in rural villages.

As a result of falling demand and despite globally increasing agricultural commodity prices, farmers cut their output. Particularly affected were small-scale farms in the Mekong River delta producing rice, small-scale rubber growers, and catfish and shrimp farmers.

## **Impact on imports**

On the other side of the statement, the crisis also caused prices of agricultural inputs to tumble, notably fertilizers from the Russian Federation. Imports from agricultural products (including forestry and aquaculture) and materials in 2008 were estimated at \$10.71 billion, 44.4% up from 2007. Trade in such products in 2008 showed a surplus of \$5,874 million, an increase of 7.8% from 2007.

Viet Nam is facing increasing competition from imported agriculture products from neighboring countries, at a time when it has been fulfilling commitments to open its market to international products. In the absence of effective management tools (such as technical barriers to trade and quarantine measures) mass import of agricultural products (such as livestock and fruit) will make life harder for farmers.

## **Investment**

Agricultural investment in recent years has been small and haphazard. According to the General Statistics Office, in the last 5 years, the total investment for agricultural development reached more than \$7.06 billion, or 8.7% of the state's total investment. However, that amount met only 17% of the demand for capital.

Little foreign direct investment (FDI) has been injected into agriculture, due to investors' lack of financial resources, a situation exacerbated by banks' global policies of tightening lending conditions. FDI flows into agriculture amounted to only \$1.9 billion, or only 6.33% of the total. Domestically, investors have been hoarding capital, hesitant to expand production while waiting for a change in the market. Such investment declines will impact on jobs and incomes of rural employees working in nonagriculture sectors in cities and industrial zones.

Field research (IPSARD 2008) found that 42.3% of villages studied reported a reduction in farming investment with a reduction of 21% (April 2009 compared to April 2008). More than 54% of lowland villages and 75% of midland villages reported that, as a consequence of reduced investments, agricultural outputs would fall by 21%–23%. The reduced investment is much less in the mountainous areas, where only 26% of the surveyed villages reported reduced investments (in handicrafts). This means that handicrafts exports must have been less affected than agricultural and food-processing exports.

## **Impact of the crisis on vulnerable groups**

The changes in global agricultural demand reduced the chances of returning urban migrants of finding agricultural work in their villages in mountainous and poor areas of Viet Nam. This factor was further aggravated by the fact that, because of the crisis, better-off people in rural areas reduced their spending (and food product demand) or invested less in agriculture. Different from the Asian crisis of 1997–1998, this crisis led to decreased investment in production, farming, and small and medium-sized enterprises, especially small industry in lowland and midland villages. As a result, unemployment in rural areas increased, leading to further poverty. IPSARD (2008) showed that the number of villages that reported having poor households increased (April 2008–April 2009) in all provinces, especially in mountainous areas.

## **Unemployment among migrant laborers**

Under the impact of the crisis, a number of enterprises stopped or reduced production (due to fewer or no orders) and workers have lost their jobs. The number of laid-off workers in official labor markets in the cities, especially seasonal laborers, was high. According to the Ministry of Labor, Invalids and Social Affairs (MoLISA), 80,000 workers were fired in 2008. Some of them moved back to the countryside, while others settled in other cities or in areas in the same urban area, hoping to find new jobs.

The rate of urban to rural back-migrating workers is relatively high. A four-province survey carried out by IPSARD in 2009 found that, in the first 4 months of 2009 alone, 17.2% of migrant workers in the four provinces went home. Between January and August 2009, 21.7% of laid-off workers went back to their hometown.

The rate of laid-off workers differed among provinces (An Giang: 29.3%, Lang Son: 21.3%, Binh Thuan: 18.7%, and Nam Dinh: 15.1%)<sup>2</sup> and among villages in terms of terrain. Midland and mountainous villages have the highest rate of export laborers that were laid off, in comparison with lowland and coastal provinces. Among lowland and mountainous areas, Nam Dinh had the highest rate of laid-off immigrant laborers at 22.5%; the mountainous province of Lang Son also had a high rate of 21.1%. In terms of village terrain, the rate of laid-off workers was 25.5% in midland villages and 25.1% in mountainous

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<sup>2</sup> Representative province of Mekong River Delta; Northwest mountainous region (disadvantaged region with ethnic population); Central Coast; and Red River Delta, respectively.

areas, which is higher than the rate in lowland villages (23.8%). This inverted labor flow from urban to rural areas, despite very low incomes there, put more pressure on the agriculture labor market when the sector was already facing economic difficulties.

## **Poverty and increase in cost of living**

While annual statistical figures for 2007–2008 showed declining poverty rates, the incidence of poverty picked up again in 2009. This is despite the fact that, with the global food price spike in 2008 and given that 60.2% of Viet Nam's poor households sell food, one would have expected a decline in poverty. In effect, while some households had an opportunity to get out of poverty, thanks to higher food prices, a large group remained in poverty and got actually deeper into misery when the economic crisis hit—particularly the 59.3%<sup>3</sup> of poor households that rely on buying foodstuffs that increased in price. Furthermore, the crisis forced poor households to further cut their spending. As a result of the crisis, 68.4% of the (poor) village population in the four provinces surveyed saw a reduced expenditure on fish and meat in their households, with an average reduction of 18.5%.

The Institute of Science, Labor and Social Welfare estimated that the crisis has resulted in 400,000 people losing their jobs in 2009, most of whom are low-skilled workers in the processing and assembling sectors on a low income. Without timely intervention and support solutions, these people will increase the number of poor in the urban (and through back-migration, rural) areas.

With the rising food prices and other price increases, at the end of 2008, MoLISA substantially raised the threshold for minimum survival requirements to D300,000 in rural areas and D390,000 in urban areas (from D200,000 and D260,000, respectively). Adjusting to this new poverty threshold, it is estimated that as a result of the food price rise and the economic crisis, by 2009, the number of people under the poverty line increased from 19.3 million at the end of 2008 (12.1% of the population) to 20.3 million at the end of 2009 (15.7% of the population).

## **Gender implications of the crisis**

According to official statistics, women account for 50.8% of the population and more than 49% of workers. The female participation rate

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<sup>3</sup> Estimated from 2006 Vietnam Household Living Standards Survey; 39.8% of poor households were badly affected by the crisis.

in economic activities is relatively high at 83%. Women account for a large proportion of workers in sectors with low-skill requirements such as agriculture, forestry, aquaculture, textiles and garments, and leather and shoes. These sectors were the hardest hit by the crisis. As a result, the crisis showed a substantial gender dimension through reduced labor opportunities, shrinking incomes for women, and increasing poverty in female-headed families.

According to MoLISA, in 2008, 25% of the 67,000 laid-off workers were women. This increased to 31% of the 107,200 retrenched workers in the first 6 months of 2009. This figure does not, however, reflect the full impact on women, since many women work in small-scale establishments without permanent contracts, and are therefore not covered by the official data. In addition, women workers are often found in jobs with lower social protection. As a result of the crisis, their jobs sometimes became even less secure and protected.

## **Government policies and recommendations**

The government's main crisis-response plank in 2009 was to stop and then reverse the economic decline. Accordingly, it focused on promoting production and exports, and boosting investment and consumption demand. It has also taken steps to ensure social welfare, such as the resolution of 27 December 2008 to support rapid and sustainable poverty reduction in 62 poor provinces. However, it is doubtful that these measures are sufficient to provide new jobs in rural areas for the back-migrating urban poor or to substitute for the villagers' income losses, mainly because of the decline in demand for agricultural and food-processing goods.

A solid agriculture sector and burgeoning rural economic development are vital for maintaining social stability and generating economic growth during economic downturns. To develop agriculture (including forestry and aquaculture), the government may wish to consider issuing policies that can help create driving forces for farmers and social investment in business development. This is not only a socio-political response, but also a long-term economic solution.

The government should increase public investment in the rural sector and tailor investment to agriculture, forestry, and aquaculture development. Major infrastructure areas to be targeted include irrigation, rural transport, and marketing development.

Furthermore, the government should further stimulate demand to increase consumption of agricultural, forestry, and aquaculture products. This will have a large impact on national economic growth and job creation, with minimal funding needs. It will also help narrow the



income gap between rural and urban employees (and households), thereby helping ensure political stability and social fairness.

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# **Impact of the global recession on international labor migration and remittances: Implications for poverty reduction and development in Nepal, Philippines, Tajikistan, and Uzbekistan**

*Andrea Riestler*<sup>1</sup>

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## **Introduction**

Migrants and their families usually regard migration as a livelihood strategy and remittances provide important resources to finance everyday life. To assess the impact of the global financial and economic crisis on external migration, return migration, remittances, and the consequent effects on poverty and development, the German Federal Ministry for Economic Cooperation and Development has commissioned a series of country studies. The first four country studies represent broad regional variety and were carried out in March 2009 (Mali, Nepal, the Philippines, and Uzbekistan); studies on Albania, Armenia, and Tajikistan, all of them countries highly dependent on labor migration, followed in September 2009.

In this paper, the results of the studies on the impact of the crisis on migration from Nepal, the Philippines, Tajikistan, and Uzbekistan are compared. The results show that the effects of the crisis on countries of origin are different according to the country's respective migration history and profile. For example, while there has been a mass return to the Central Asian Republics and a subsequent decline in remittances, Nepal and the Philippines have seen no major disruption of migration and remittance flows.

The paper also briefly discusses policy recommendations for action. Rebalancing local and regional job markets is essential in the long run, while short-term measures including social transfers are

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necessary to cope with poverty in the wake of a crisis-induced return and loss of remittances.

## **Existing development issues and challenges<sup>2</sup>**

In all four countries, migration plays a major role: approximately 8 million Filipinos, 1.6 million Nepalese, and 800,000 Tajiks are working abroad. Estimations for Uzbekistan, where migration is a recent phenomenon and its documentation not yet well developed, range from 250,000 to 6 million migrants (ICG 2010); a mean value of 2.5 million to 3 million Uzbek migrants is most likely. This means that 5%–11% of the entire population of these countries have emigrated (Philippines: 5.5%, Nepal: 5.9%, Tajikistan: 11%, Uzbekistan: 8.9%–10.7%).

However, the socioeconomic and gender profile of migration varies greatly between these countries. Tajik and Uzbek migrants are made up mostly of young men working in the construction sector in Kazakhstan and the Russian Federation. A total of 20% of Uzbek migrants but only 6% of Tajik migrants are women, who mostly work in the services industry or in petty trade.

Apart from approximately 250,000 Nepalese who, for historical reasons, are employed in India's public sector (mainly the army and police), it is generally poorer Nepalese migrants (men and women equally) who move to neighboring India (Seddon 2005). As they have no visa requirements, they are not registered anywhere; their employment is mostly irregular on plantations, in manufacturing, in construction, or in services. Those Nepalese migrants who can afford to migrate regularly usually go to Malaysia (39%), Qatar (27%), Saudi Arabia (19%), or the United Arab Emirates (10%). Of those Nepalese migrants going to the Gulf States, most work as semi- or unskilled workers in construction; only 5% of them are women, who work as domestic helpers.

The well-known and institutionally well-established Philippine emigration system has led to a very broad range of destination countries for overseas Filipino workers (OFWs): about 9.3% go to North America and 9.2% to Europe, but the overwhelming majority (78.1%) remain in Asia (including the Gulf States, to which approximately 30% of OFWs migrate). Men and women are equally represented in Philippine migration, and both have established themselves in

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<sup>2</sup> If not indicated otherwise, all data in this paper are taken from GTZ (2009).

special professional niches: women in domestic work and health care, men in seafaring.

That migration has become an important livelihood strategy in all four countries is reflected in the enormous amounts of remittances sent back home annually by migrants: in 2008, \$18 billion to the Philippines, a minimum of \$3 billion to Uzbekistan (according to data from the Russian Federation central bank), \$2.5 billion to Tajikistan, and \$1.6 billion to Nepal. This is the equivalent of 45% of gross domestic product (GDP) for Tajikistan, 15% for Nepal, approximately 15% for Uzbekistan, and 11.6% for the Philippines. Although remittances are a major source of income to poor households, thereby contributing to poverty reduction, they also have their downside: in Tajikistan, for example, remittances are linked to an appreciation of the local currency, which in turn decreased competitiveness of Tajik exports. The International Crisis Group (2010) reports that imports to Tajikistan more than tripled between 2005 and 2008.

The global financial and economic crisis has resulted in job losses everywhere and was therefore expected to cause massive return migration. However, the analysis of the real extent of return migration in the wake of the crisis is difficult to assess. Solid data are lacking for several reasons:

- Much migration is taking place in an undocumented manner, i.e., without a work permit, visa, or other travel documents, or is becoming irregular over time, i.e., through visa over-staying.
- Return is generally not registered; migrants are usually free to go home whenever they want to without telling the administration in the country of destination and generally have no incentive to register in the country of origin.
- Even if national support programs for returning migrants are in place in the country of origin, not everyone can claim benefits and therefore many do not apply for these programs.
- Most important, it is hard to distinguish between seasonal and permanent return, as will be discussed in the following sections.

The best data for our country studies were from the Philippines. This is unsurprising as the country has the most elaborate system of labor migration management of the four countries. But even there, the above problems of registration remain.

## **Crisis transmission channels and impact on the poor and vulnerable**

### **Crisis and return**

In general, migrants do not come from the poorest part of the population. Migration initially engenders high costs—you need time, money, and information to obtain a visa, travel tickets, accommodation abroad, etc.—and therefore it is not usually feasible for the really poor. Several studies have also shown wealth differentials between migrants moving between countries within their region and those who move intercontinentally: wealthier people can afford to move further away. Therefore, as a rule of thumb, the poorer the persons and their families are, the shorter is their migration distance. Thus, when discussing the effects of the crisis on international migrants and their families, we are generally not talking about the poorest part of the population. However, the economic potential of migrants to accumulate human and financial capital abroad to invest back home makes them important actors in poverty reduction. This is why we will concentrate on international migration in this paper and leave out the question of rural–urban migration.

Return migration due to the crisis is particularly high, both where migrants work in recession-sensitive industries, for example, construction, financial services, or tourism; and where migrants depend on one or few countries of destination. In this case, if immigration and recruitment policies of the respective main destination countries have tightened, migrants face layoff or will not be able to renew their work permits like they used to.

Although return migration on a large scale seems the logical consequence of the crisis, the situation in countries of origin is by no means clear cut. For, although anecdotal evidence of mass return all over the world reported by the media has influenced our perception to a degree that any other scenario now seems hard to believe, the information we gathered in our study on the effects of the crisis presents a more nuanced picture.

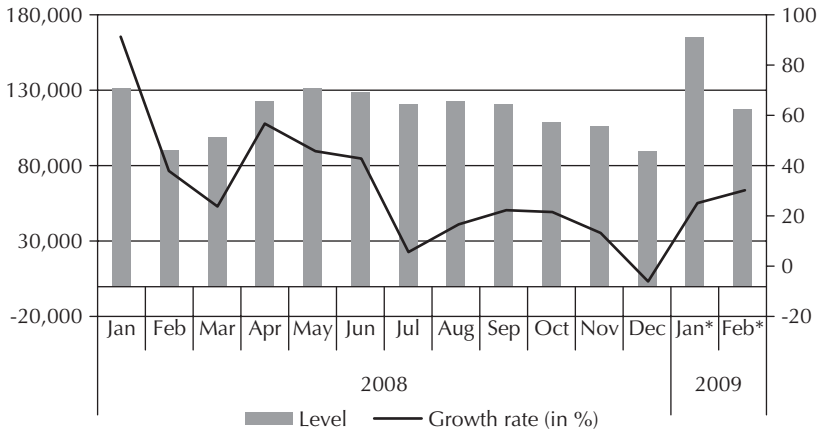
We did, indeed, find clear signs of massive return migration to the Central Asian Republics. As most Tajik and Uzbek migrants were working in the construction sector in the Russian Federation and Kazakhstan, they were hardest hit by job losses stemming from the crisis. In the wake of the crisis, these two destination countries halved their immigration quotas by the end of 2008. Against this, convincing anecdotal reports, both countries claim that migrant workers from Tajikistan and Uzbekistan can still find work, because they are often willing to work for less money than the locals, and they also work

without documents (ICG 2010). It is estimated that 65% of all Central Asian migrants working in the Russian Federation have no legal status and that in Kazakhstan, the proportion might even be higher (UNDP 2008). Thus, the result of the cut quotas is not necessarily a decrease in overall migration, but a decrease in regular migration, increasing the problems of documentation as described above. This in turn results in decreasing social protection of migrants who, if without official documents, have no access to health services or insurance and cannot claim their workers' rights.

In Nepal, however, the situation is mixed: data on return are particularly hard to obtain and official data do not adequately represent the full extent of crisis-induced return. According to the Association of Nepal Foreign Employment Agencies, between June 2008 and March 2009, only 3,000 Nepalese migrant workers returned, mainly from Dubai, Macao, Malaysia, and Qatar. This number includes only regular migrants who were eligible to and did claim social benefits. As returning migrants are ineligible for social benefits if they stayed abroad for more than a year, many of them have been excluded from public support as will be elaborated on later. Foreign recruitment from Nepal has clearly dwindled in 2008/09: the amount of new placements abroad has shrunk by 30%. Malaysia for example, the second most important destination country for Nepalese migrants after India, has frozen the issuance of work permits to migrant workers in the manufacturing and services sectors, and introduced "nationals first" employment policies (Punzalan 2009). However, anecdotal evidence strongly suggests that Nepalese migrants from the Gulf States and Malaysia have not returned in large numbers. They prefer to stay on and work irregularly, because they fear they might not be able to return once they leave.

Finally, in the Philippines, neither mass return nor reduction in foreign recruitment was observed. Between October 2008 and March 2009, approximately 6,500 returning migrants sought assistance from the help fund of the Philippine Overseas Employment Administration (POEA). This fund has about \$8 million at its disposal. In anticipation of mass return, the Philippines has also established help desks for returning migrants in their provinces of origin. But it would seem that demand for skilled workers in domestic and health care jobs has not been severely affected, so that deployment figures of the POEA are still growing (albeit less strongly than in recent years). According to the Department of Labor and Employment (DOLE), despite the crisis, overall deployment of OFWs rose by 14.7% in 2008 relative to 2007, although Q4 2008 showed declining figures (Figure 1). In Q1 2009, deployments increased by more than 25% relative to the same period of the previous year (DOLE 2009).

**Figure 1: Total global deployment of OFWs,  
January 2008 to February 2009**



OFW = overseas Filipino workers.

Source: Department of Labor and Employment, [www.dole.gov.ph](http://www.dole.gov.ph) (accessed 7 January 2010).

## Crisis and remittances

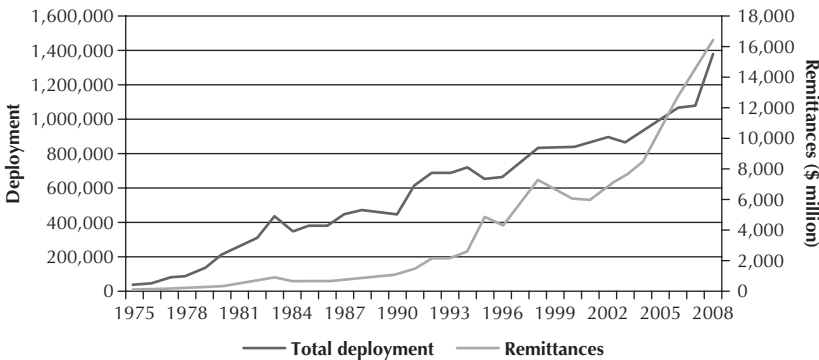
Worldwide remittances reached \$328 billion in 2008 (World Bank 2009), or nearly three times as high as worldwide official development assistance of \$120 billion. Remittances to Asia have more than doubled since 2002. They play an important role in poverty reduction and a World Bank study shows a positive correlation between remittances and poverty reduction: a 10% increase in the share of remittances in a country's GDP can lead to a 1.2% decline in poverty (Adams and Page 2005). Remittances are, primarily, a contribution to household income of families that are, according to local standards, already better off. But via consumption of local goods or investment in education, health, and businesses, possibly resulting in job creation, larger parts of society will benefit from the inflow of remittances.

Remittances are generally reduced by job losses of migrants abroad and devaluation of currencies in countries of destination (such as the United States or the Russian Federation); on the other hand, demand for cheap migrant labor and, subsequently, migrants' employment usually remains high. Additionally, there are currently incentives to remit more. Studies show that remittances are countercyclical: in times of crisis, family members generally appeal to their relatives abroad who are then likely to remit more than before, even if that means cutting down their own expenditure (Orozco 2009). Currency

devaluations in countries of origin can also increase the value of remittances, which provides a good opportunity to invest. Therefore, global remittances generally remain resilient in comparison to other financial flows such as foreign direct investment or portfolio flows. Currently, the World Bank estimates a 7.3% worldwide decrease of remittances in 2009.

However, the pattern of remittance flows roughly follows that of return migration, although lagging slightly behind: the extent of the return movement determines the decline in remittances. The Central Asian Republics experienced a sharp decline in remittance flows from the Russian Federation: for example, remittances to Uzbekistan and Tajikistan shrank by approximately 30% in Q1 and Q2 2009, relative to the same period in 2008. In contrast, the Philippines in January–June 2009 experienced another rise in remittances of 2.9% relative to the same period the previous year. Nevertheless, the Philippines’ data indicate a clear slowdown of remittance growth from rates of more than 10% annually during the last decade. Figure 2 depicts the strong correlation of foreign deployment and remittances in the Philippines until 2008.

**Figure 2: Annual deployment of OFWs and OFW remittances, 1975–2008**



Source: Remittances: Bangko Sentral ng Pilipinas, [www.bsp.gov.ph](http://www.bsp.gov.ph); Deployment data: Philippine Overseas Employment Agency, [www.poea.gov.ph](http://www.poea.gov.ph)

Between January and March 2009, remittances to Nepal even rose by 28% relative to the same period in the previous year. This astonishing rise could be explained either by migrants getting ready to return home and transferring savings back home before their return, or to the significant appreciation of the US dollar between 2008 and



2009, which led to a larger transfer of savings to Nepal and investment in real estate in Kathmandu by Nepalese abroad. One should also bear in mind that collection of remittance data has improved considerably in the last couple of years, and this has also contributed to rising volumes (Reinke 2007).

## **Coping mechanisms**

Migrants are using different strategies to cope with the effects of the crisis, depending on their personal situation in their countries of origin and destination, and on their families' dependence on remittances (World Bank 2009).

In general, the following strategies are used: migrants either stay where they are, deplete their savings, and start looking for jobs in other economic sectors or the shadow economy; or they return to their country of origin and take part in reintegration and requalification programs. Despite retrenchment and unemployment, most migrants avoid returning to their home countries for fear of a worsening economic situation there and not being able to leave again (Fix et al. 2009). Some observers assume that the crisis will bring migrants to seek citizenship of their country of destination (ICG 2010), which would facilitate not only their working conditions but also facilitate circular migration between country of origin and destination. Given the difficult economic situation in countries of origin and destination, migrants have to rely on solidarity and social cohesion of their families and social networks. Social security or transfer payments are usually restricted to those returning migrants who were deployed via official placement agencies, which is why many migrants have no access to public support.

In the Philippines, migration as a livelihood strategy is so deeply entrenched that migrants who have lost their jobs and returned home usually hope to leave again as soon as possible. This is not surprising given the fact that the country does not provide sufficient job opportunities for them: unemployment is already high at 7.4%, with much hidden unemployment (according to the census of 2008). Alternatives such as self-employment are rather unpopular among OFWs. Instead, returnees often take a loan of P50,000 (about \$1,000) offered by the Overseas Workers' Welfare Association, to bridge the period before finding new employment abroad. As there will be no further government support measures in connection with the economic and financial crisis, families are the principal social support for returning Filipino migrants.

Uzbek migration is a relatively new phenomenon. Faced with rapid labor population growth of 3% and unemployment rates of up to 35%,

Uzbeks consider migration as a rational livelihood strategy. Of the estimated 2.5 million–3 million Uzbek migrants, many remain irregularly in Kazakhstan and the Russian Federation, fearing inability to go back there once they have left. Structural demand for cheap (migrant) labor has not decreased in these two countries of destination, but, as said, immigration quotas have been cut by 50%. Additionally, the Russian Federation has banned all foreigners from retail trade. The closure of the Cherkizovo market in Moscow in June 2009 for example left 11,000 Tajik migrants without a job (ICG 2010). Returning migrants are reported to be transferring all their savings back to Uzbekistan, and up to 80% of the returned migrants interviewed for the GTZ study (GTZ 2009) reported that they want to open their own business there.

It is unclear how many Tajik migrants have come back from the Russian Federation permanently. Many of those who did return, came back with empty hands. A report by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) indicates that the crisis has affected every third migrant, and among returning migrants, 20% could not even cover their food needs (OCHA 2009). A study by the International Labour Organization (ILO) and the Tajik Ministry of Labour and Social Protection of 6,000 returnees found that 70% of them returned due to the crisis, counting nonpayment of salaries as a crisis-induced return reason, which unfortunately even before the crisis used to be a widespread practice in irregular labor arrangements. The ILO study further notes that 63.6% of the returned migrants were willing to emigrate again another time, only 14.5% had found a job at home, 10.4% had decided to stay even without having found a job, and 11.5% remained undecided. The interviewees were very dissatisfied with remuneration in Tajikistan, which is even dropping further due to the massive return, but also mentioned concerns about xenophobia in the Russian Federation and Kazakhstan. They expressed a need for government support in various areas, such as stimulation of the subsistence economy and agriculture, loans to finance the setting up of new businesses, and vocational training and education measures (ILO and MLSP 2009).

Nepalese migrants are faced with deteriorating working conditions and wage cuts in countries of destination, which, however, has not automatically led to mass return. Instead, where possible, retrenched Nepalese tend to stay abroad and look for new employment opportunities in the shadow economy. Due to this increasing irregularization, an aggravation of working and living conditions of Nepalese migrant workers, as well as outright human rights violations against them, are reported. Those who have returned to Nepal are faced with large debts because they could neither realize their savings goals while working abroad, nor repay the loans they took for financing their trip.

As already 40% of the population lives below the poverty line and around half the population depends on remittances, the reflux of migrants and possible future decline of remittances is likely to cause more poverty and social unrest. Similar to the situation in the Philippines, transfer payments from the Nepalese authorities are limited to a very small number of returnees who were deployed abroad by official placement agencies.

Summing up, we can make the following conclusions with regard to coping mechanisms.

- Migrants who have lost their jobs due to the global economic and financial crisis depend mainly on the solidarity of their family and friendship networks.
- The few existing stimulus packages are only targeted toward officially registered migrants and therefore reach only a small fraction of those affected by the crisis.
- Despite the depth of the crisis, in many countries, returning migrants and their families perceive their own situation as less dramatic than depicted in the media: low income, lack of social security, difficult working conditions, and high debt are to a certain degree perceived as part of everyday life and not something new caused by the crisis. Therefore, as always, they act according to what they see as their best livelihood option—which still includes migration.
- Migrant experience is to a large degree marked by the fact that there is always demand for labor and the question is only what kind of salary and treatment one is ready to accept. Some migrants are not even deterred from the experience of and reports about discrimination, xenophobia, violence, and other human rights violations in destination countries, for example in Malaysia, the Gulf, or the Russian Federation.

## **Public sector responses**

The Government of the Philippines has decided on reinforcement and diversification of its labor export strategy. In December 2008, President Arroyo gave an executive order to the POEA to identify so-called Code Green Areas with a high demand of foreign labor and to negotiate new bilateral labor migration agreements with these countries. Additionally, a Filipino Expatriate Livelihood Support Fund financed with P250 million (about \$5.2 million) was opened. Help desks for returning migrants were established in all regions of the country to

assist them in finding a new job (abroad or at home). Nongovernment organizations (NGOs) make the criticism that all public support measures are only accessible to regular migrants, even though irregular migrants are even more desperately in need of help.

In the debate on labor migration management and regulation in Nepal and Uzbekistan, the labor export strategy of the the Government of the Philippines and its institutional setup are often seen as a role model. Yet, NGOs and leading Philippine migration experts criticize the labor-export strategy of the government and call for a coherent economic and social development strategy at home instead. Indeed, even 35 years of labor export from the Philippines has only partly helped reduce poverty and has not been at all conducive to sustainable development. Unlike, for example, the Republic of Korea, the Philippines has not progressed from a labor-exporting to a labor-importing country in recent years.

As Nepal is highly dependent on remittances, its government is trying to copy the Philippines' policy of labor export. A joint conference of the International Organization for Migration (IOM) Nepal and Nepal's government institutions in February 2009 recommended the opening up of new labor markets for Nepalese migrants. Nepal has also copied measures supporting returning migrants from the Philippines' example. The Nepalese Council of Foreign Employment has—in a manner similar to the Philippines—established a “Social fund for foreign employment” endowed with NR5 million in 2009: regular migrants who lost their job abroad within the first year of their contract can reclaim their migration costs (40% when returning within 6 months and 25% when returning between 6 and 12 months). But between January and April 2009, only 12 returning Nepalese managed to claim this support. Furthermore, the council offers other services for returnees, such as an information hotline and website, vocational training programs, help desks for job seekers, and awareness-raising campaigns on trafficking and irregular migration.

Tajikistan is extremely dependent on remittances, to the equivalent of as much as 45% of GDP. Estimates by ADB assume that 40% of Tajik households are receiving remittances, which help finance everyday household expenditure (ADB 2009). The government reacted to the crisis with a “Concept to Create and Keep Jobs During 2008–2015,” which promises to create 180,000 new jobs. However, the concept does not take into account the fact that already 120,000 new job seekers enter the Tajik job market in a regular year (ICG 2010). The concept includes specific measures for returning migrants in the areas of vocational training and placement services. Opening up new labor markets abroad is another important goal of the government,

which has led to an agreement with Saudi Arabia on the placement of 1,000 Tajik migrants, mostly health personnel. The government also increased efforts to improve the Tajik business environment and attract investors to the country, i.e., by organizing job fairs. However, its capacity to set up large programs is limited due to budgetary constraints connected to recent International Monetary Fund (IMF) loans and weak governance structures.

After considerable reluctance to admit to being affected by the crisis at all (ICG 2010), the Government of Uzbekistan has developed an anti-crisis program to help stabilize the economy and offer new job opportunities to returning migrants. Its measures are focusing on three issues: credit schemes, employment promotion in rural areas, and protection of migrants' rights. An improvement of the labor market in rural areas is paramount as this is the origin of the majority of migrants. A key role is played by a microcredit scheme for which two new banks (Agrobank and Kishlok Kurislish Bank) were established in March 2009. These microcredit institutions channel capital for microcredits to rural areas in order to compensate for the loss of remittances in the short run, and capital for investment, which should contribute to rural development in the long run.

The government also provides social transfers via two new funds: one for employment and one for agricultural support. In particular, the purchase of cows is subsidized, which is somewhat offset by the fact that, in turn, cattle breeding is heavily taxed. Furthermore, measures have been taken for protecting migrant workers through the establishment of crisis centers for counseling, psychological support, and awareness-raising campaigns about the risks of irregular migration and trafficking. Currently, the Government of Uzbekistan is even asking unemployed migrants to return from the Russian Federation and Kazakhstan and reintegrate themselves in Uzbekistan. However, bilateral consultation processes with those two destination countries are under way to improve the protection of Uzbek migrants there. The effectiveness of the anti-crisis measures has yet to be assessed.

Summing up, anti-crisis responses in countries of origin usually include support to returning migrants, creation of credit facilities for start-up entrepreneurs, promotion of employment, and vocational training. These approaches must necessarily be short term or the respective country will pile up enormous debts and endanger future development. Additionally, the measures should be targeted toward the welfare of families in general rather than be restricted to the small group of formally registered, officially placed migrants.

Attention should be given to coherence of these new measures with already existing policies of social welfare, employment promotion,

vocational training, and income generation. It is also very important not to heighten tensions between the local nonmigrant population and returning migrants by favoring the latter group. As mentioned above, migrants are usually not from the poorest part of the population, and support directed only to them is likely to increase social inequality as well as to cause unrest. Even now, some reports indicate that returning migrants are blamed for rising crime rates or spreading of diseases, even if evidence for this is nonexistent (ICG 2010).

Governments in all the countries reviewed also support awareness raising about the risks of irregular migration and human trafficking, mostly in joint programs with international organizations such as the United Nations Development Fund for Women (UNIFEM), ILO, and International Organization for Migration (IOM). Many governments also seek or try to improve bilateral agreements with countries of destination in order to improve protection of migrants abroad.

## **Other responses**

Private and civil society organizations usually focus on the situation of migrants abroad and the situation of their families in the countries of origin. They report on a worsening human rights situation and increasing irregularization of migrants. They also call for support to returning migrants and their families. Some NGOs actively run social relief, consulting, and training programs. Their services are of particular value when public structures are insufficient or strained. They also face less criticism than public structures when focusing on one specific group like, in this case, migrants.

Migrant Forum in Asia (MFA), a regional network of NGOs, associations, trade unions, and advocates, in February 2009, warned against neglecting the rights and protection of migrant workers from Asian countries. Having gathered experience with protectionism during the Asian crisis of 1997–1998, MFA urged Asian governments in countries of origin to create decent work opportunities, and to spend more on skills and training programs. This, it argued, would cushion the economies against future shock waves for those working at home as well as abroad. Furthermore, MFA is urging governments to stop relying on remittances for economic development.

Leading migrant and human rights NGOs in the Philippines like Migrante International, Scalabrini International, and Philippine Migrants' Rights Watch, are openly criticizing the government's labor export strategy. They deplore the country's dependence on remittances and reject the government's perspective that migrant workers should

feel responsible for the country's development. They argue that labor migration has disruptive effects on families and should therefore not be promoted explicitly as a national strategy.

The economic downturn is a particular challenge to migrants' safety abroad. According to the Moscow-based NGO Human Rights Bureau, the numbers of racist assaults in the Russian Federation doubled in 2008: 113 migrants were killed and 340 wounded (Marat 2009). The human rights organization Mafiwasta in the United Arab Emirates observed a worsening of working and living conditions of Nepalese migrants due to the crisis. In 2008, 500 Nepalese migrant workers died in the country in unexplained circumstances. In general, migrants are treated as second-class workers, paid less, and forced to work longer hours, and are often faced with harassment and violence (ICG 2010).

These issues were also discussed during the Civil Society Days that took place alongside the Global Forum on Migration and Development 2009 in Athens. More than 200 delegates from NGOs around the world called for governments to do the following (GFMD 2009):

- Take more assertive action, in collaboration with civil society organizations, to regulate and monitor recruitment practices, and enforce the applicable laws: cap permissible fees, establish as good practice that employers pay recruitment fees; establish whistle-blower protections and reporting mechanisms for abuses.
- Extend a "grace period" to migrants who lose their jobs as a result of the recession and with it their permission to remain in the country of destination, so that they have the opportunity to find another job. Allow migrants who return to their home countries to do so safely and with dignity.

Nepal, Tajikistan, and Uzbekistan have only a few NGOs dealing with migrants' rights and protection issues. This is one reason why international organizations also, such as the United Nations Development Programme, IOM, Organization for Security and Cooperation in Europe (OSCE), and UNIFEM, are particularly active in raising awareness of the risks of migration and the need for support of victims of trafficking in these countries. The international organizations criticize a lack of bi- or multilateral cooperation as one major factor for insufficient protection of migrants. They also call on countries of destination to learn from former periods of turbulence, such as the Asian crisis, and not to expel large numbers of labor migrants, since this is likely to be short term only and would only further worsen the economic and social situation in countries of origin.

## **Recommendations related to policies and programs**

The increased number of returning migrants, particularly in the Central Asian Republics, entails, on the one hand, risks for human security, and, on the other hand, new perspectives both for individual migrants as well as for a more coherent government strategy on migration and socioeconomic development.

Many returning migrants who have been working in menial jobs abroad have an above-average educational profile compared with the population of their country of origin. They bring back savings and have gained additional skills (such as a new language). Additionally, they show a high degree of flexibility and mobility. Their human resources and personal aspirations could be reinforced by targeted vocational training or business development services. As international migrants from, for example, Tajikistan and Uzbekistan, come mainly from rural areas, their return, combined with further vocational training or financial support, offers the potential for structural changes in these rural areas.

The crisis has shown that government policies should not solely rely on labor export but also put more emphasis on the creation of local employment and development. It has also made even more evident the need for coherent multilateral cooperation between governments and NGOs on migration to facilitate regional mobility.

## **Policies**

Several recommendations can be drawn from the results of our analysis of the different country studies. Most of the recommendations are of general relevance to migration management, too. However, their importance has been accentuated by the financial and economic crisis:

- In terms of rebalancing, countries of origin need to undertake policies to reduce dependency of labor migration, and instead place more emphasis on employment creation.
- Existing labor migration channels need to be formalized via bilateral migration agreements in order to reduce vulnerability of migrants.
- Countries of destination should not drastically reduce their immigration quotas. Lessons from former economic crises show that the main result of these measures is the irregularization of migration and an increase in employment in the shadow economy. Instead, countries of destination should assess their



real labor market demand and cooperate with countries of origin to organize orderly and moderate return migration. Additionally, protection of migrants' rights remains an important issue for countries of destination.

- Steps must be taken to support returning migrants without neglecting the local nonmigrant population or increasing social inequality. Here, it must be assured that inequalities between migrants and nonmigrants are not being reinforced and that misinformation about migrants and the impact of return migration that might enrage public opinion are being tackled.
- All ministries or departments involved in migration issues should participate in designing and carrying out a coherent policy on migration and development, e.g., ministries of education, labor, social security, and economic development. Regular consultations with civil society and diaspora organizations should be held.

## **Programs and projects**

On the level of development programs and projects, the following measures can be taken or reinforced to counter the effects of the economic and financial crisis on migration.

First, a thorough analysis of the effects of the crisis on migration in a particular country is necessary: How many migrants return? Is their return likely to be permanent or are they looking for new job opportunities abroad? What are their characteristics and qualification levels? What kind of resources and know-how do they bring back? In which sectors of the economy are they most likely to work back home? What kind of support do they require? How do remittance flows change over time? How does this affect households and the national economy?

Second, programs and projects to counter the effects of the financial and economic crisis on migration can be linked to activities in the areas of (among others) financial sector development, vocational training, private sector development, rural development, and social protection. The following list is certainly not exhaustive:

- Financial sector development can facilitate the flow of remittances, particularly to rural areas, for example by developing formal transfer channels, building microfinance institutions' capacities, linking them to international transfer networks, and avoiding overregulation of small amounts of remittances. A risk-based approach to transferring small amounts reduces incentives to use informal means of transfer. Additionally,

specific financial products, such as loans, insurance, and savings, that target migrants and remittance receivers can contribute to a better use of declining remittances and thereby increase social protection.

- Vocational training and labor market measures contribute to the successful reintegration of returning migrants into the labor market, including qualifications, labor market information systems, and service centers for migrants. Service centers could also help place qualified migrants.
- Private sector development measures, such as business development services, support migrants returning with savings or remittance receivers who want to open small businesses, thereby creating jobs at the local level and generating income.

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# Global crisis and fiscal space for social protection

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## Introduction

The global crisis has had a significant negative impact on economic growth and progress toward the Millennium Development Goals (MDGs). This has renewed interest in social protection, which can contribute to five objectives during crises: giving direct support for the vulnerable, providing Keynesian stimulus spending, protecting long-term human capital investments in education and health of the young, contributing to sociopolitical stability, and (in this crisis specifically) rebalancing growth toward domestic consumption.

The current crisis has shown that social protection remains relatively neglected. Only a few economies—primarily, Bangladesh, the People’s Republic of China (PRC), India, the Philippines, and Viet Nam—included social protection measures in their rescue packages, but even there, most social protection components were only in the high single digits as a share of these packages. This may be due to relative neglect of social protection issues and to a lack of social protection reforms and projects in the pipeline before the crisis hit. However, we estimate that at least 15 developing Asian economies have fiscal space for such measures, when such space is defined as a pre-crisis fiscal deficit below 3% and a tax burden below 20%.

Progress on social protection will require not just increased expenditures and commitment, but fundamental policy analysis and reform, involving a comprehensive social protection audit. Due to the “quick-spending” mentality of the rescue packages, only a few economies are using their fiscal space to make relevant reforms in social protection for a more inclusive emerging Asia.

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## **The global crisis and the role of social protection**

People's well-being (their ability to live a decent life without vulnerability to poverty, and with good access to health, education, and other municipal social services) is the ultimate objective of development and crisis response, not bouncing back toward or rebalancing economic growth. The reason we ultimately care about the global crisis is its impact, not on economic growth, which is only indirectly important, but on people's well-being, which is intrinsically important. Thus the relevance of downward revisions to expected economic growth rates is their impact on measures of well-being, particularly those measures contained in the MDGs. The slower growth resulting from the crisis implies more absolute poverty; more malnutrition; higher mortality rates among infants, children, and mothers; and worse schooling outcomes at all levels.

While long-term economic growth is probably the single most important solution to raising well-being for large numbers of people over long periods of time, social protection policies are essential as well, especially when countries emerge as middle-income economies. When governments address vulnerability, the living standards of the \$2-a-day poor, or about half of Asia's population, are becoming more important than reducing severe poverty at the \$1.25-a-day international poverty line (Bauer et al. 2008). The Asian Development Bank (ADB) defines social protection as "the set of policies and programs designed to reduce poverty and vulnerability by promoting efficient labor markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income."<sup>2</sup> For ADB, the scope of social protection is given under the following five areas:

- Labor markets: Promotion of employment, promoting labor market efficiency, protecting workers
- Social insurance: Coping with risks of ill-health, disability, oldage, unemployment, and work-related injury
- Social assistance: Redistribution to the most vulnerable groups such as single mothers, the homeless, and the physically and mentally challenged
- Micro- and area-based schemes: Programs with subnational scope such as micro-insurance, social insurance, social funds, and programs to manage natural disasters

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<sup>2</sup> [www.adb.org/SocialProtection/default.asp](http://www.adb.org/SocialProtection/default.asp), accessed 20 September 2009.

- Child protection: Programs to promote the healthy and productive development of children.

In recent years, something quite remarkable has happened to the way in which sector experts and government decision makers view social protection. They used to view it as a distraction from the business of economic growth. It was—to use an economic dichotomy that can be damning if interpreted in a particular way—*consumption* rather than *investment*. The priority was economic growth. Social protection was just about picking up the people left behind and excluded from the economic growth and social welfare path.

More recently, many of these experts and decision makers have modified their views somewhat. They now understand social protection as wholly integral to the process of economic growth. Social protection, by promoting household well-being, in turn facilitates households' decisions to accumulate health and education human capital in the younger generation, which sets the stage for long-term economic growth. Social protection softens the risks that get in the way of having a healthy, productive, and secure workforce. It promotes stability in society by reducing socioeconomic inequality. It expands the share of the national population that has the opportunity to participate in economic activity, and is a major factor in broadening demand for goods and services. It shares the gains of economic growth widely so as to build a broader basis and shared commitment to the growth and development path of a society.

Social protection also contributes to other development outcomes, such as higher school enrollment and completion rates, the poor's access to vocational training (partly through scholarships), better health for the poor (through access to social insurance among other things), and lower poverty incidence (through, for example, cash and other transfers, and public employment schemes).

Many economies in Asia are starting to realize not only that social protection is relevant to growth, but that it is part of an effective response to global or regional crises. Such social protection policies play a critical role in responding to external shocks. Social protection therefore fulfills five objectives at the same time:

- First is what we might term the income replacement effect for the newly vulnerable. Social protection provides financial resources to individuals and households whose financial resources are depleted by crises generally, mostly through lost work. These transfers dampen the crisis impact on their expenditures and, therefore, on the well-being resulting from these expenditures.

- The second element is a Keynesian one. Since social protection transfers are intended to target the poor and vulnerable, it is likely that their recipients have a higher marginal propensity to spend these transfers than nonrecipients. Spending by recipients, through the traditional Keynesian multiplier, raises the incomes of other people in the economy.
- Third, social protection transfers to financially constrained households minimize the pressure on these households to halt investments in the human capital of their children, particularly in health and education. Thus social protection transfers contribute to long-run human capital accumulation in the economy as a whole, and so improve the prospects for long-term economic growth.
- A fourth contribution is to sociopolitical stability, by mitigating inequality in income distribution and by maintaining sociopolitical support from groups adversely affected by crises.
- A fifth contribution—specific to this crisis—involves the growing belief that a proper crisis response is to rebalance growth, that is, to make growth in Asian economies less dependent on external demand and more dependent on domestic demand. Social protection redistributes resources to segments of the population with relatively low consumption expenditures and can, therefore, help stimulate long-term domestic demand.

## **Social protection in fiscal stimulus packages**

Social protection and the current crisis present an ambiguity. On the one hand, social protection is a component of many fiscal stimulus packages (Table 1 shows stimulus packages among developing Asian economies, with and without safety net components.) On the other hand, social protection expenditures were generally low in pre-crisis budgets, and are also relatively small elements of the fiscal stimulus packages.

Governments are not fully taking advantage of the crisis to increase the focus on social protection for inclusive growth. A recently popular hypothesis (investigated further in the following pages), is that this crisis may be an opportunity for enhanced priority for social protection, in particular due to increased fiscal space for social protection. But data on actual expenditure commitments on social protection paint a less optimistic picture. Table 2 shows that pre-crisis spending on social protection as a share of gross domestic product (GDP) was generally low, about 5% for the region of developing Asia as a whole, compared

**Table 1: Fiscal stimulus packages of developing Asian economies**

With a social safety net component		Without a social safety net component
Armenia	Korea, Republic of	Fiji Islands
Azerbaijan	Kyrgyz Republic	Lao People's Democratic Republic
Bangladesh	Malaysia	Papua New Guinea
Cambodia	Mongolia	Samoa
China, People's Republic of	Pakistan	Sri Lanka
Georgia	Philippines	Uzbekistan
Hong Kong, China	Singapore	Vanuatu
India	Taipei, China	
Indonesia	Tajikistan	
Kazakhstan	Thailand	
	Viet Nam	

Source: ADB 2009a, p. 9.

**Table 2: Public expenditures on social protection**  
(% of gross domestic product)

Subregion	No. of Countries	% of GDP
East Asia (China, People's Republic of; Japan, Korea, Republic of; Mongolia)	4	9
Central Asia (Kazakhstan, Kyrgyz Republic, Tajikistan, Uzbekistan)	4	7
Western Asia (Armenia, Azerbaijan)	2	5
South Asia (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka)	7	3
Southeast Asia (Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Philippines, Viet Nam)	6	3
Pacific (Cook Islands, Fiji Islands, Marshall Islands, Nauru, Papua New Guinea, Tonga, Tuvalu, Vanuatu)	8	3
Developing Asia and the Pacific	23	5

Source: Authors' calculations based on data from the ADB Social Protection Index.



to about 21% for the Organisation for Economic Co-operation and Development (OECD) as a whole.<sup>3</sup> On average, while the economies of South and Southeast Asia were (precrisis) low spenders on social protection, those of East and Central Asia were high spenders, and Western Asia was average. Some countries spent more on social protection, even if they were poorer. Nepal, for example, has increased its social protection spending massively, and Sri Lanka has traditionally spent much in this area. Both countries have lower per capita GDP than many Southeast Asian countries, which tend to spend much less on social protection.

Although social protection is a component in the vast majority of stimulus packages, the actual share is relatively small. It is also difficult to put an exact figure on this share because (i) hard data are difficult to come by, (ii) expenditures are sometimes counted as social protection even when they do not really help the poor and vulnerable, and (iii) different sources have different figures. The International Labour Organization (ILO) and the International Institute for Labour Studies (IILS) (2009) estimate that transfers to low-income individuals and households constitute 6.8% of rescue packages in 12 unnamed Asian developing economies for which breakdowns are available. In contrast, 46.5% was for infrastructure. Specific data for Viet Nam suggest that about 5% of its 2009 stimulus package consisted of social expenditures.<sup>4</sup>

The International Monetary Fund (IMF 2009) estimates that about 15% of the stimulus package in the Asian G20 countries (Australia, the PRC, India, Indonesia, Japan, and the Republic of Korea) was spent on social safety nets.<sup>5</sup> ADB's countercyclical finance programs also provide some analysis on the composition of fiscal stimulus packages, indicating that expenditures for social protection are relatively low, at between 5%–15% of the stimulus packages. On the other hand, Zhang et al. (2009), provide some evidence, as shown in Table 3, that the shares may be higher.

A caveat to all this is that there is no common definition of social protection among the different sources, so that variations in the broad estimates of the social protection element in fiscal stimulus packages may be largely driven by differences in definition or scope of social protection expenditures, an issue that is beyond the scope of this paper to address.

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<sup>3</sup> [http://stats.oecd.org/Index.aspx?datasetcode=SOCX\\_AGG](http://stats.oecd.org/Index.aspx?datasetcode=SOCX_AGG), accessed 19 September 2009.

<sup>4</sup> [www.adb.org/Documents/RRPs/VIE/43315-VIE-RRP.pdf](http://www.adb.org/Documents/RRPs/VIE/43315-VIE-RRP.pdf), accessed 19 September 2009.

<sup>5</sup> Authors' estimates based on Figure 1.34 in IMF (2009).

**Table 3: Social protection components of fiscal stimulus packages**

<b>Country</b>	<b>Fiscal stimulus (\$ billion)</b>	<b>Share of GDP (%)</b>	<b>Share devoted to social protection (%)</b>
Bangladesh	1.15	1.38	12.81
China, People's Republic of	4.00	2.84	23.00
Georgia	2.28	19.92	42.11
Indonesia	6.33	1.40	8.77
Malaysia	12.12	5.67	34.29
Philippines	6.95	4.40	15.15
Thailand	44.92	17.22	23.45
Viet Nam	8.42	9.68	16.79

Source: Zhang et al. (2009).

Some commentators have suggested that this crisis may offer an opportunity to increase the fiscal space for social protection. This is a difficult claim to assess. Here, we take fiscal space for social protection to mean that a government can afford to increase its expenditures on social protection without jeopardizing its long-run fiscal health. Loosely, fiscal space is the ability to spend while still being prudent about the budget. How might we assess whether it exists?

One first step might be to compare actual expenditures with estimates of how much a basic social protection package would cost. This is of course a complex exercise, but the ILO (2008) has helped us somewhat here. It computed the cost of a basic social security package, which is analogous to what ADB calls social protection, for a group of low-income countries—seven from Africa and five from Asia. We can combine the ILO's cost estimates for the five Asian countries with these countries' actual expenditures on social protection from ADB's own calculations for its own Social Protection Index.

The ILO's conclusion is that the costs of a basic social protection package are relatively affordable—even for poorer countries—and it seems that its conclusion is plausible. Of the five countries for which comparisons are possible (Table 4), three are already spending close to what is required, and the two for which actual expenditures are significantly lower than the estimated costs of the basic package are countries for which actual expenditures are low, even relative to other low-income Asian countries. If we extrapolate from Table 4 that a basic social protection package costs about 6% of GDP and we take from

Table 2 that the average actual spending on social protection is about 5% of GDP, it seems that as far as commitment of aggregate resources go, the costs of the basic package are affordable.

**Table 4: Estimated cost of basic social protection versus actual expenditures (% of GDP)**

<b>Country</b>	<b>Cost of basic social protection package<sup>a</sup></b>	<b>Actual expenditures in 2004<sup>b</sup></b>
Bangladesh	6.1	6.3
India	3.9	4.0
Nepal	7.0	2.3
Pakistan	3.8	1.6
Viet Nam	4.4	4.1

Sources: <sup>a</sup> ILO (2008); <sup>b</sup> data provided by ADB to the authors. See also ADB (2008).

But what about fiscal space itself? Although it has no single widely accepted quantitative measure, it is sometimes decomposed into four subcomponents, often jointly referred to as the “fiscal space diamond.” Each subcomponent measures some aspect of long-term fiscal capacity of government (as a share of GDP): fiscal balance, tax revenues, official development assistance, and reprioritization and efficiency of expenditures. Of these four elements, the third element (official development assistance) is more relevant for lower-income countries, but less so for middle-income economies. The fourth element (reprioritization and efficiency of expenditures), consists of the increased resources that would be made available for spending if existing expenditures were rationalized to eliminate waste and to go to highest-value uses.

Since the third element is less relevant for many developing Asian economies, and since the fourth is difficult to measure, we focus on the first two measures: fiscal balance and tax revenues. The idea is that countries with low fiscal deficits and low tax revenues have more fiscal space in the sense of having more room to raise expenditures and revenues.

Even some countries with fiscal deficits could afford social protection. ADB (2009a) shows that there are no clear criteria for determining whether fiscal deficits or tax revenues are low, but it uses a rule of thumb from the European Stability and Growth Pact, which requires its member countries to keep their fiscal deficits below 3% of GDP, as a threshold for prudent budget management. We therefore divide ADB

economies into those with deficits below and above the 3% threshold in 2008, prior to the crisis (Table 5).

**Table 5: Deficits above and below 3% of GDP, 2008**

<b>Below 3%—“Prudent”</b>		<b>Above 3%—“Imprudent”</b>
Armenia	Kyrgyz Republic	Bangladesh
Azerbaijan	Lao PDR	Cook Islands
Brunei Darussalam	Marshall Islands	India
Cambodia	Nepal	Malaysia
China, People’s Republic of	Papua New Guinea	Maldives
	Philippines	Mongolia
Georgia	Solomon Islands	Pakistan
Hong Kong, China	Thailand	Palau
Indonesia	Tonga	Samoa
Kazakhstan	Viet Nam	Sri Lanka
Korea, Republic of		Tajikistan
		Tuvalu

GDP = gross domestic product, Lao PDR = Lao People’s Democratic Republic.

Source: ADB (2009b), p. 257, Table 6.1.

Thus quite a large number of Asian economies satisfy the 3% “rule.” Of course, the crisis has uniformly caused deficits to rise, in many cases to above this rate, but increasingly finance experts in Asia and in the IMF support the view that the 3% rule becomes less relevant during severe economic downturns. Because, by this precrisis measure, quite a few countries were fiscally prudent prior to the crisis, they may therefore also have the fiscal space for increased expenditures on social protection.

But lifting revenues is crucial. A second indicator of fiscal space is the tax burden, which is measured as a share of GDP. The assumption is that countries with low tax burdens have higher capacity to raise additional revenues through taxation. As above, the question is what constitutes “low,” for fiscal deficits and tax revenues—and again, there is no hard and fast rule. ADB (2009a) notes that, although the average tax burden in OECD countries is over 35%, many developing Asian economies have significantly lower tax burdens (Table 6).

The results in this table seem to imply fiscal space for a considerable number of Asian economies. If we try to combine our two criteria, and define countries with fiscal space as those whose pre-crisis deficits were below the 3% prudent threshold and tax burden below 20% of GDP, we generate the following list of economies (Table 7). Thus, there is evidence to support the contention that there is some fiscal space for increased expenditures on social protection in these countries.

**Table 6: Developing Asian economies by tax burden**  
(% of GDP)

<b>Less than 10%</b>	<b>Between 10% and 20%</b>	<b>Between 20% and 30%</b>	<b>Higher than 30%</b>
Bangladesh	Armenia	Marshall Islands	Cook Islands
India	Azerbaijan	Micronesia	Fiji Islands
	Cambodia	Nepal	Georgia
	China, People's Republic of	Pakistan	Kiribati
	Hong Kong, China	Palau	Maldives
	Indonesia	Philippines	Papua New Guinea
	Korea, Republic of	Singapore	Samoa
	Kazakhstan	Sri Lanka	Solomon Islands
	Kyrgyz Republic	Tajikistan	Tonga
	Lao People's Democratic Republic	Thailand	Tuvalu
	Malaysia		Viet Nam

Source: ADB (2009b), p. 258, Table 6.2.

**Table 7: Developing Asian economies with fiscal space for social protection** (a deficit below 3% and a tax burden below 20%)

Armenia	Korea, Republic of
Azerbaijan	Kyrgyz Republic
Brunei Darussalam <sup>a</sup>	Lao People's Democratic Republic
Cambodia	Marshall Islands
China, People's Republic of	Nepal
Hong Kong, China	Philippines
Indonesia	Thailand
Kazakhstan	

<sup>a</sup> Brunei Darussalam is also included in this table because of its high current account balance, oil revenues, and small population, which together give fiscal space for social protection, despite a high tax burden.

Source: Authors' computations from Tables 5 and 6.

## Fiscal space for social protection reforms

Increased priority on social protection must involve not just commitment to higher expenditures but also to fundamental structural reform. Periods of crisis are usually periods of increased sociopolitical demand for social protection. But to some extent, this is similar to saying that during natural disasters, there is increased demand for a network of roads and highways by which to transport food, tents, and rescue workers. They are needed now, but cannot be built at short notice. Just as

a country needs a network of roads and highways, so a country needs an infrastructure network of social protection mechanisms by which to distribute financial resources to all the needy groups in the population.

Sadly, just as many countries have weak physical infrastructure, so too do many countries have poorly developed social protection infrastructure. This is hampering governments' ability to accomplish the five objectives of social protection mentioned earlier. The problem will be solved not just by committing more financial resources to social protection—there must be fundamental reform to the institutions of social protection, including pension systems, health care financing and delivery, transfer programs (including conditional cash transfers), and unemployment benefits. We need to step back and ask “How should we reform our social protection programs?” As a first reply, we suggest the following.

## **Principles for reforming social protection**

Many of the challenges that developing countries face in making social protection effective in the short run are identical to the challenges they face in making it effective in the long run.

### **Historical capacity determines future orientation**

The scale and composition of the social protection components of governments' recent fiscal stimulus packages are very likely to be strongly influenced by the country's precrisis level of institutional capacity and its menu of social protection programs—you work with what you've got. Therefore, many low-income countries are those least likely to have such components. Also, the precrisis mix of social protection programs influences the *composition* of the stimulus. For example, countries with newly developed conditional cash transfer programs may rely more heavily on such mechanisms, while countries without such capacities may rely on older standbys.

### **Further need for reforms**

This point is not of much consolation or use in the short run. You do work with what you've got, and so with respect to fighting this fire, many countries can do no better than pump as much water as they can through the existing pipes. But this point does have implications for the medium to long run. And since the region has seen two big economic crises about a decade apart, it is not a question of if, but when, the

next crisis will hit. Governments must work on the fundamental issues of getting the basic administrative infrastructure and program menu of social transfer programs right, now.

Some countries have seized the opportunity of the crisis and engaged in major reforms of their social protection systems. In Mongolia, for example, the government is reforming its social protection system to become more targeted. In the PRC, new health and pensions as well as low-cost housing schemes are being upscaled as part of the fiscal stimulus package. (But these programs had been pilot-tested earlier.) In Viet Nam, discussions on the strategy for the next 10 years were recently intensified to allow for more radical reforms in the existing social protection system and concentration of programs.

Six main challenges in reforming the basic administrative infrastructure merit emphasis.

## **1. Auditing basic requirements**

The first challenge is the collection of information. This involves developing the capacity to measure how many households and individuals fall below the poverty line, the magnitude of their income losses, the impact of such transitions on particular household decisions (such as children's schooling, health services utilization, social services utilization, transitions from formal to informal work), and the size of any government benefits received.

This capacity should be sufficient to detect short-run variations in these household outcomes so that governments can have information on the extent and speed of recovery (or lack of it) from a crisis, as well as the degree of effectiveness and gaps in its response. Information needs to be collected not only on individuals and households but on schools, health systems, and various units of government. What is important is to keep track of whether expenditures on vital social programs are being reduced, and whether the quality and quantity of supply of vital social services are declining.

## **2. Improving targeting for expenditure rationalization**

A second challenge has to do with improvements in targeting. In normal times, the role of targeting is to find the poorest in order to minimize errors of inclusion and exclusion (errors in providing benefits to the nonpoor and failing to provide benefits to others who are poor). During crises, the goal is to find those with a high marginal propensity to consume rather than to save. These separate goals are in fact largely reconciled because it is widely recognized that the poor have

a higher propensity to spend than the wealthy. Improved targeting is also important to rationalize expenditures, as a tool to win over ministries of finance to the “fiscal prudence view” of social protection.

From a Keynesian macroeconomic perspective, expenditures matter because they raise short-term demand for goods and services. But from a long-run microeconomic perspective, certain categories of expenditures especially matter because they yield long-term benefits, and because reductions in these categories are difficult or costly to reverse. Examples include investments in the health and educational human capital of the young, because once the young are taken out of school or suffer health declines, the costs of recovering from these setbacks are often considerably greater than the resources required to prevent these setbacks in the first place. In addition, the negative long-run impact of such setbacks on economic growth is heavy. Social protection programs need to be able to identify vulnerable households, and to be able to direct resources of sufficient magnitude to protect households from making such negative adjustments.

### **3. Keeping it simple**

A third challenge is to give priority to simple, unified, national social protection programs over complex, fragmented, and local ones. Few resources and limited capacity imply that countries should try to avoid multiple local social protection programs that have overlapping objectives and beneficiaries, and that require multiple targeting mechanisms, registries of beneficiaries, and monitoring and evaluation frameworks, etc. Unless there are substantial regional differences in preferences or circumstances, such a patchwork is unlikely to compare favorably with national programs.

### **4. Focusing on doable measures that protect against life risks**

A fourth challenge is that of maximizing technical efficiency or minimizing various administrative and transactions costs. Fiscal space notwithstanding, the magnitude of government allocations for social protection is chronically inadequate vis-à-vis social protections needs. In such a context, achieving greater social protection is as likely, if not more likely, to come from increasing the efficiency of given levels of social protection expenditures than in increasing the scale of spending. Indeed, it seems that the political support for increased spending is endogenous with respect to levels of technical efficiency: the more technically efficient or cost-minimizing a nation’s social protection infrastructure, the more politically palatable it is to increase the social



protection budget. Thus technical efficiency not only gives more bang for the buck, but can generate political support for more bucks. Among areas that need focus are computerization of information systems and record keeping, reducing corruption, improving governance and public financial management, strengthening workflow and benefit-delivery mechanisms, and upgrading staff skills.

## **5. Understanding the political economy**

A fifth challenge (though some might argue that it is the first), is to engage with the political economy of reforming social protection. Economic crises tend to offer short periods of relatively widespread political support for social protection. Responses—particularly to people's needs—are often politically determined, especially when the economic crisis falls within a time span of pre-election periods (as in Indonesia, the Philippines, or Thailand) or in the preparation of the next 5- or 10-year plan (as in the PRC, India, or Viet Nam). Hence, support for social protection can be quite short-lived depending on how quickly the economy recovers, especially when the economic health of politically powerful elites bounces back faster than those of the poor, or whether other issues grab the spotlight.

Yet reforms to social protection institutions require a long-term commitment, and it seems increasingly clear that such reforms involve attention not just to technical and economic aspects of policy, but also to the politics of reform. The failure of many well-conceived social protection policy initiatives can be traced to inadequate understanding of, and engagement with, powerful stakeholders and entrenched interests. This element is often exacerbated by insufficient analysis of the legislative and institutional dynamics, and of the cultural and value systems. Above all, reform of social protection must be premised on a broad-based understanding and ownership of the reform agenda among the population.

All this requires systematic study of the existing political economy of redistribution and social protection; an assessment of the existence and degree of political space for sustained reform and the political chances of success for the different elements of the reform agenda; and a strategic plan for reform that explicitly includes political strategies for navigating the reform agenda through the political economy.

## **6. Increasing social insurance**

A sixth challenge involves changing mindsets on social protection. Much of the understanding emphasizes its *ex post* redistribu-

tive nature—distributing resources to the poor, implicitly after the transition to poverty has taken place. Rather, a much more sophisticated conceptualization is warranted, through ex ante assessment of the needs of the vulnerable poor, the efficiencies of existing programs, and the availability of financing sources. Of particular importance is social insurance as a major tool for social protection, as it not only addresses idiosyncratic individual- and household-level shocks, such as unemployment, illness, disability, or death, but also covariant risks that hit communities, countries, continents—even the whole world.

Such large-scale covariant risks are persistent and, in that sense at least, predictable. The current global crisis was preceded by the global food and energy price crisis in 2007 and 2008, the Asian financial crisis of the late 1990s, as well as various oil shocks, global recessions, and debt crises in the 1970s and 1980s (not to mention natural disasters, floods, droughts, earthquakes, epidemics, and climate change effects).

Social insurance would be an effective tool to protect against such shocks, which always hit the poorest hardest. Social protection as ex ante insurance against large-scale covariant risk is no longer an abstract idea, but a concrete challenge that must be urgently addressed. But a first stage of addressing the challenge of insuring against predictable risks is fully understanding the impact of such risks on the poor, their coping mechanisms, calculating costs and benefits, and determining institutional structures.

## **What roles can donors play?**

Donors are in a position to boost social protection conditions by observing the following principles:

*Do no harm.* This principle is elementary yet still worth stating. Stiglitz (2009) argues that in the 1997–1998 Asian crisis, IMF’s assistance came with conditions that made the crisis worse. But, as observed by Association of Southeast Asian Nations (ASEAN) and the World Bank (2009), it seems that social protection has been sufficiently mainstreamed in the last decade for its inclusion in fiscal stimulus programs to become less controversial. Still, the resources and expertise required for long-term progress on reform priorities may be beyond the reach of many low-income countries, perhaps some middle-income ones. Even by our rough estimates, not all Asian economies have fiscal space for social protection, and the recent crisis may have jeopardized what pre-crisis fiscal space existed in the countries that did. As government budgets shrink, the quantity and

quality of supplies of critical social services will decline, with resultant impoverishment and reversal of progress made toward the Millennium Development Goals.

*Make a consistent commitment.* There may be national political support for increased social protection expenditures in the short run but perhaps not in the long run. Donors can play an invaluable role by making a long-term commitment to provide funding for social protection.

*Learn first through a social protection audit.* A useful way to conceptualize the road to fundamental social protection reform using the framework of a social protection audit, which involves three steps:

- *Measure carefully people's real risks and vulnerabilities.* Donors must take seriously the challenge of measuring, with statistical sophistication and heavy reliance on population-level micro-data, all the various vulnerabilities faced by the population. They must measure not only which vulnerabilities exist, but how many people are affected by each one, the size of the vulnerability faced by the representative person, whether this size is an income shortfall from a poverty line among the elderly population, or the average cost of catastrophic illness, where vulnerabilities tend to be geographically concentrated, the duration of the vulnerabilities, and so on. Bigger vulnerabilities get higher priority, smaller vulnerabilities get lower priority. We might call this the population's "demand" for social protection.
- *Assess existing programs.* The next step is to assess the existing social protection activities, in terms of the number of beneficiaries they reach, the value of the benefits per beneficiary, and various measures of program quality like cost efficiency, targeting efficiency, and political popularity. We might call this the "supply" of social protection.
- *Determine the space for unmet needs and for system reforms.* The difference between demand and supply is the extent of social vulnerability that is currently not met by existing social protection efforts. This is the unmet need for social protection, and it is here that new initiatives must be prioritized. Donors should enumerate all the things that might be done to address these unmet needs (such as pension reforms, expansion of health coverage, and conditional cash transfers), each with an estimate of costs as well as benefits. These costs are not limited to dollar costs, but also cover costs in terms of, for example, administrative capacity, political capital, and leakage. The benefits are

the magnitude of the vulnerabilities that each policy will eliminate: the more people a policy reaches, or the larger the benefit per person reached, the greater the benefits.

A new focus among donors would see social protection as an infrastructure-like instrument of economic growth and would aggressively market loans for the expansion, reform, and modernization of social protection programs, including the training of professionals and the building of administrative capacity, including the capacity for better targeting. This opportunity also involves encouraging greater participation of the private sector in the expansion and rationalization of social protection.

Given ADB's recent emphasis on making growth and development in the region more inclusive, and given its emphasis on regional cooperation, ADB could play a stronger role in social protection by (i) rebranding social protection as a necessary investment for inclusive growth, (ii) developing innovative knowledge products on social protection for the region's need, including addressing climate change and disaster insurance, (iii) investing in social protection infrastructure (including information technology for social insurance), and (iv) promoting more innovative employment schemes and social assistance programs either in its budget support or project lending. Social protection is particularly important for Asia's emerging middle-income countries where economic growth is high, but the benefits of such growth often leave out the poor and vulnerable. In such countries, an emphasis by ADB on investments in those countries, more on the social side than the economic side, would reap handsome long-term gains.

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# Addressing unemployment and poverty through infrastructure development as a crisis-response strategy

*Chris Donnges*<sup>1</sup>

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## Introduction

Economies are being boosted by the government stimulus they are getting in response to the financial and economic crisis that has swept through the world. Some of the emerging economies in Asia and the Pacific seem to be growing again and are making a surprising recovery. This rebound has several causes and future analysis no doubt will assess the relative importance of various factors. Boosting domestic spending through economic stimulus measures will certainly be among these. Aggressive stimulus packages indeed are helping revive domestic demand while social safety nets have the potential to mitigate the negative impacts of the crisis on the poor and vulnerable. In addition to boosting short-term economic growth and income generation, these measures can also be used to address longer-term development objectives such as job creation, poverty reduction, and climate change adaptation.

Most countries in the region are in need of further infrastructure development. A share of the economic stimulus spending has therefore been allocated to infrastructure projects. Investments in infrastructure encourage (local) development by improving access to goods and services and reducing transport and transaction costs. They can, by the same token, also be used as a strategy for generating local income by encouraging the use of employment-intensive methods for construction, rehabilitation, and maintenance.

This chapter looks at infrastructure development and public works as a component of crisis-response measures in four selected countries and discusses the potential for job creation through the use

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of employment-intensive methods. It briefly touches upon a few key issues to be considered when using such methods and concludes with a section on resource requirements.

## **Development issues, challenges, and impact**

The global financial and economic crisis has become a global jobs crisis. Unemployment is rising and the number of working poor is increasing. Global unemployment could increase by at least 38 million by the end of 2009, according to the International Labour Organization (ILO). For Asia, this year for the first time in recorded history, the number of unemployed may pass 100 million. Even if the resumed economic growth continues, employment could take years to recover to pre-crisis levels. In the poorer developing countries especially, where social safety nets are scarce, loss of regular income can have important development consequences and will put more people into poverty.

Decline in the economic growth of developing economies drives additional people into poverty. Even before the crisis, Asia still had two-thirds of the world's poor. ILO fears that the crisis may result in the numbers of people in extreme poverty rising by 200 million relative to 2007. World Bank research estimates that, in 2009 alone worldwide, as many as 90 million more people could be trapped in poverty<sup>2</sup> as economic growth slows and that almost one-third (29%) of all developing countries—and this list includes various countries in Asia—will be “highly exposed” to the poverty effects of the crisis (February 2009). The Asian Development Bank (ADB) estimates that the projected gross domestic product (GDP) decline in the region will result in 2009 with about 60 million more \$1.25-a-day poor and 80 million additional vulnerable people living under \$2-a-day in Asia compared to a scenario when the high growth rates of 2007 would have continued. The respective figures for 2010 would be around 100 million additional \$1.25-a-day poor and 130 million more vulnerable people.<sup>3</sup> It is apparent that the crisis will undo some of the regional achievements made in poverty reduction in recent years.

Countries are affected in different ways by the current crisis. At risk in most countries, however, are those groups that were already vulnerable before the crisis and have few coping mechanisms: the working poor and their dependent families. Crisis-response measures need to target vulnerable rural and urban people whose livelihood conditions

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<sup>2</sup> [www.worldbank.org/financialcrisis/first-slide.htm#](http://www.worldbank.org/financialcrisis/first-slide.htm#) (accessed August 2009).

<sup>3</sup> [www.adb.org/Economic-Crisis/Crisis-Impact-People.asp](http://www.adb.org/Economic-Crisis/Crisis-Impact-People.asp) (accessed August 2009).

are likely to be adversely affected by the crisis. These groups often require additional social assistance as they are often excluded from economic stimulus packages where such packages exist.

To address the unemployment and poverty challenges exacerbated by the crisis, this paper discusses the use of employment-intensive methods in infrastructure development and public works, which make up an important component of various economic stimulus packages and social safety nets in Asia. It also briefly touches upon the fact that stimulus packages should not only generate short-term economic growth but also address longer-term issues such as poverty and climate change.

## **Public sector and other responses: policies and programs**

International organizations and governments need to work together to jointly address the current financial and economic crisis and to mitigate its impact. The World Bank in 2009 put out several recommendations on possible responses to the crisis. To mitigate the potential impact on labor demand and employment, it recommended that “low-income countries have fewer options (compared to middle-income countries) and must rely on administratively less demanding programs that contain an important self-targeting component—above all, on public works and targeted micro-credit schemes” (World Bank 2009). ADB is also supporting the region in cushioning the social impact of the crisis, with support for public investment programs in infrastructure and social sectors. ADB’s crisis-related lending is expected to increase by more than \$10 billion in 2009–2010.<sup>4</sup>

In February 2009, the ILO/ADB High-Level Asian Regional Forum on Responding to the Economic Crisis, held in Manila, Philippines, provided an overview of the economic and labor market impacts of the crisis and the national policy responses in the region. It called for rapid action to support employment and income and stimulate consumption and domestic demand, including measures to maximize the employment impact of fiscal stimulus packages, protect the poor and the vulnerable, and support small and medium-sized enterprises and a “green recovery.” Main recommendations included the development and implementation of employment-generation approaches to target the vulnerable.

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<sup>4</sup> [www.adb.org/Economic-Crisis/default.asp](http://www.adb.org/Economic-Crisis/default.asp), accessed August 2009.



In June 2009, about 4,000 representatives of governments and of workers' and employers' organizations met in Geneva during the annual International Labour Conference to discuss effective responses to the growing impact of the crisis on employment, social protection, and the world of work. The delegates adopted the Global Jobs Pact, which implies a commitment by ILO to make employment and social protection a central element of all economic and social policy. To support job creation and help people into work, the pact recommends various options, including strategies using public employment guarantee schemes for temporary employment, emergency public works programs, and other direct job-creation schemes.

In the London Summit in April 2009, G20 leaders asked ILO to assess actions taken at country level in response to the crisis and identify what is required for employment creation and social protection. ILO thereupon assessed employment and social protection policy responses in 54 countries, looking at 32 specific measures grouped in four areas.<sup>5</sup> The report submitted to the G20 meeting in Pittsburgh (24–25 September 2009) shows that on average each surveyed country had taken 10 new measures from mid-2008 through mid-2009 (ILO 2009a). It concludes that 47 out of 54 countries have increased spending on infrastructure (the most frequent measure). Only 18 out of 54 countries, however, have applied employment criteria to their infrastructure spending. The report notes that the frequency of public investments in infrastructure is high among middle-income countries. Lower-income countries had taken more measures than high-income countries to expand social protection. The report also suggests that action taken demonstrates a clear concern for protecting today and preparing the ground for a future recovery of economic growth.

As a response to the crisis, various countries in Asia have introduced economic stimulus packages or other measures to boost their economies, as now discussed. These measures often lead to increased spending on infrastructure through public works and provide subsidies to businesses and low-income households.

Indonesia has done relatively well in escaping the impact of the crisis. To limit more substantial damage to the economy, however, the government approved and has started to disburse an economic stimulus package worth Rp73.3 trillion, with more than 85% earmarked for fiscal stimulus. This includes an infrastructure component

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<sup>5</sup> Measures to stimulate labor demand, labor market policies to protect jobs and support the unemployed and job seekers, measures to expand social protection and food security, and measures to strengthen social dialogue and rights at work.

of Rp12.2 trillion. The government has set a series of conditions for programs that can be financed from these stimulus funds: an essential one is that projects must be labor intensive.

Cambodia was vulnerable to the impacts of the crisis through its openness to trade and investment. Poverty is widespread, particularly in rural areas, and the 30% of the population living under the poverty line face new hardships, while the near-poor are at risk of spiraling into poverty. Cambodia lacks the fiscal space to put together an economic stimulus package similar to Indonesia's. The government instead decided to develop a strategy for social protection with its development partners. The strategy has a menu of policy options both to create social safety nets that can reduce the negative impact of the crisis on the poor and vulnerable in general and to provide a springboard for the poor to escape long-term poverty.

The Philippines' dependence on exports, foreign investments, and foreign loans made it vulnerable to the crisis. The president issued an executive order mandating all government agencies to reserve 1.5% of their maintenance, operating, and other expenses for emergency employment. These reallocations would be used to hire some 150,000 people from among the poor and those displaced by the crisis. Local government units were also urged to generate savings for emergency employment. In addition, authorities are implementing Comprehensive Livelihood Emergency Employment Programs.

Infrastructure investments will make up a large part of this combined stimulus package and the country expects that this additional investment in infrastructure will serve as the best and most effective stimulus to pump-prime the economy, create jobs and livelihoods, and provide massive employment.

In India, 86% of jobs are in the informal sector, which is most vulnerable to the crisis, particularly casual laborers in urban and semi-urban areas. The National Commission for Enterprises in the Unorganized Sector has prepared a report recommending actions to mitigate the impacts of the crisis. Areas for immediate attention include enhancing pro-poor public investment in rural infrastructure and introducing an urban employment guarantee program. India already has national programs to improve infrastructure and create employment, and these could now be used to mitigate the negative impacts of the crisis.

Nationwide programs such as the National Rural Employment Guarantee Scheme and the Rural Road Network Improvement Scheme (Pradhan Mantri Gram Sadak Yojana or PMGSY) cover almost all the states in India and could, with little improvisation or tilt toward employment-intensive approaches, create additional job opportunities for crisis-affected populations. It is also proposed (by the ILO)

to launch an Urban Employment Guarantee Pilot Scheme to extend India's rural social safety net to urban areas where most crisis-affected people live or work. (There have also been discussions on such an extension within the Government of India.) Like the National Rural Employment Guarantee Scheme, this scheme could provide guaranteed work for 100 days in a year to below-poverty line families in urban and semi-urban areas.

## **Recommendations for the short and medium term**

Economic stimulus packages and social safety nets present an opportunity to enhance the job content of crisis-recovery responses. Countries with sufficient fiscal space have put together stimulus packages while poorer countries depend more on international assistance to develop their social safety nets to respond to the current crisis. The size of the fiscal stimulus packages varies from 1% of 2009 GDP in Viet Nam to 12% of 2009 GDP in the People's Republic of China (*Asia Pacific Update*, May 2009).<sup>6</sup> Investments in infrastructure (public works) are generally a main component of these measures. This presents an opportunity to create employment through employment-intensive methods during construction and maintenance.

According to a recent study by the World Bank on the job-creation potential of several fiscal stimulus packages that are being implemented in some of the larger economies in Latin America, the employment-generation potential of the infrastructure investments is about 40,000 for every \$1 billion invested (Tuck et al. 2009). According to the study, the fiscal stimulus packages that are being implemented in the region "have the capability to generate at least two million new jobs per year in the area of public works, one of the primary investment targets of the stimulus packages."<sup>7</sup> It estimates that with the \$25 billion additional stimulus investments in infrastructure about 2 million jobs could be generated in the short term. Unfortunately, a comparable study for Asia is not available.

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<sup>6</sup> <http://go.worldbank.org/OB8QITE7U0>

<sup>7</sup> <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22260926~pagePK:64257043~piPK:437376~theSitePK:4607,00.html>

Employment-intensive methods have indeed been used for decades to address challenges of poverty and unemployment. Investments in infrastructure create a unique opportunity to promote direct, indirect, and induced employment in sectors where works can be implemented using a labor-based or labor-intensive approach, both in rural and urban settings. The focus on infrastructure in the stimulus packages is one such recognition and with the current crisis there is again a strong call for this kind of intervention.

## **Indonesia**

The creation of large numbers of job opportunities and the stimulation of local economic development are core objectives under the economic stimulus package in Indonesia. The use of employment-intensive methods assumes that this will result in additional (i.e., incremental) employment benefits. The possible range of such incremental benefits (by proportion of the value of the works) by using employment-intensive methods (compared to equipment-based methods) under the economic stimulus package in Indonesia is shown in Table 1. The data in this table reflect over 30 years of worldwide experience with the application of employment-intensive methods and technologies. Activities that are most relevant and significant in the context of the objective of the infrastructure investments under the economic stimulus package, and that have the largest comparative job creation advantage, are highlighted. The last column indicates the number of direct short-term jobs that can potentially be created by applying employment-intensive approaches and technologies.

Based on the composition of already-allocated funds for infrastructure investments under the economic stimulus package, an indicative estimate has been made of the additional direct job creation potential when employment-intensive methods instead of equipment-based methods are used. This estimate is presented in Table 2. The table also includes an estimate of the additional indirect job creation, when using employment-intensive methods in Indonesia. International experiences show that a spin-off cum multiplier factor of 2.0 is quite common when employment-intensive approaches are being used. For equipment-based methods this factor is significantly lower, in the order of 1.25.

Table 2 shows that when employment-intensive methods are used for the portfolio of activities/projects that have been identified under the infrastructure component of the economic stimulus package, 1.2 million additional jobs could be created.

**Table 1: Comparison of differences between employment-intensive and equipment-intensive methods regarding direct job creation** (for selected activities with demonstrated medium-to-good potential for applying employment-intensive methods)

	Equipment-intensive method (% labor)	Employment-intensive method (% labor)	Average additional benefits employment-intensive methods (% labor)	Additional direct annual short-term job creation using employment-intensive methods (with Rp12.2 trillion investment) <sup>a</sup>
<b>Construction subsector activities</b>				
<b>Rural and urban roads</b>				
(Re-) construction/rehabilitation low-volume unpaved roads	10–20	40–70	40	488,000
(Re-) construction/rehabilitation low-volume paved roads	5–15	20–50	25	305,000
Routine off-carriageway maintenance of all categories of roads and routine maintenance of unpaved roads	5–15	75–85	70	854,000
<b>Social infrastructure (schools, clinics, markets, etc.)</b>				
(Re-) construction/rehabilitation	20–30	25–35	5	61,000
Routine maintenance	35–45	40–50	5	61,000
<b>Natural resource management (including agriculture, fisheries)</b>				
Agricultural terracing and land development	5–15	50–70	50	610,000
(Community) forestry plantation and O&M	25–35	40–70	25	305,000

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Table 1 continued

	Equipment-intensive method (% labor)	Employment-intensive method (% labor)	Average additional benefits employment-intensive methods (% labor)	Additional direct annual short-term job creation using intensive employment-methods (with Rp12.2 trillion investment) <sup>a</sup>
<b>Construction subsector activities</b>				
Water and soil conservation	15–25	40–70	35	427,000
Fish pond development	10–20	70–80	60	732,000
Flood protection, river training works and drainage	10–20	40–60	35	427,000
<b>(Community-based) gravity irrigation</b>				
(Re-) construction and rehabilitation	15–25	40–70	35	427,000
Cleaning channels and reservoirs of large irrigation schemes	10–20	50–80	50	610,000
<b>Electrification, water and sanitation, and communication</b>				
Excavation of trenches for laying pipes and cables.	5–15	60–80	60	732,000
<b>Rural airstrips</b>				
(Re-) construction, rehabilitation, and maintenance works	10–20	40–70	40	488,000

<sup>a</sup> Assuming daily wage rate for unskilled, casual labor of Rp50,000 and 200 days of work per year is equal to one job.

Source: ILO (2009b)

**Table 2: Potential additional employment creation using labor-based methods instead of equipment-based methods for infrastructure investments under the Government of Indonesia 2009 economic stimulus package**

Activity type	Estimated portfolio (Rp billion)	Equipment-based methods			Labor-based methods			Additional jobs using LB methods		
		% labor cost	Direct jobs	Indirect jobs	Total jobs	% labor cost	Direct jobs		Indirect jobs	Total jobs
<b>Rural and urban roads</b>										
(Re-) construction/rehabilitation low-volume unpaved roads	1,575	15	15,750	19,688	35,438	55	86,625	173,250	259,875	224,438
(Re-) construction/rehabilitation low-volume paved roads	0	10	0	0	0	35	0	0	0	0
Routine (off-carriageway) maintenance of all categories of roads	1,575	10	10,500	13,125	23,625	80	126,000	252,000	378,000	354,375

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Table 2 continued

Activity type	Estimated portfolio (Rp billion)	Equipment-based methods			Labor-based methods			Additional jobs using IB methods		
		% labor cost	Direct jobs	Indirect jobs	Total jobs	% labor cost	Direct jobs		Indirect jobs	Total jobs
<b>Natural resource management (including agriculture, fisheries)</b>										
Agricultural terracing of land and land development	500	10	3,333	4,167	7,500	60	30,000	60,000	90,000	82,500
Water and soil conservation	100	20	1,333	1,667	3,000	55	5,500	11,000	16,500	13,500
Fishpond development	100	15	1,000	1,250	2,250	75	7,500	15,000	22,500	20,250
Flood protection, river training works and drainage (and disaster relief)	700	15	7,000	8,750	15,750	50	35,000	70,000	105,000	89,250
<b>(Community-based gravity irrigation)</b>										
(Re-) construction and rehabilitation	1,400	20	18,667	23,333	42,000	55	77,000	154,000	231,000	189,000

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Table 2 continued

Activity type	Estimated portfolio (Rp billion)	Equipment-based methods				Labor-based methods				Additional jobs using LB methods
		% labor cost	Direct jobs	Indirect jobs	Total jobs	% labor cost	Direct jobs	Indirect jobs	Total jobs	
Cleaning channels and reservoirs of large irrigation schemes	500	15	5,000	6,250	11,250	65	32,500	65,000	97,500	86,250
<b>Electrification, water and sanitation and communication</b>										
Excavation of trenches for laying pipes and cables	500	10	3,333	4,167	7,500	70	35,000	70,000	105,000	97,500
<b>Rural airstrips</b>										
(Re-) construction, rehabilitation, and maintenance	200	15	2,000	2,500	4,500	55	11,000	22,000	33,000	28,500
<b>Investments with no (significant) scope for LB methods</b>	5,050	0	0	0	0		0	0	0	0
<b>Still unallocated funds</b>			0	0	0		0	0	0	0
<b>Total</b>	12,200		67,917	84,896	<b>152,813</b>		446,125	892,250	<b>1,338,375</b>	<b>1,165,563</b>

LB = labor-based.

Source: ILO 2009b.

## Philippines

The Government of the Philippines estimates that its stimulus package of P7.0 billion, which consists of combined savings in maintenance, operating, and other expenses, could create some 150,000 temporary jobs. This allocation of 1.5% of the 2009 operating budget of government agencies will solely be used for the temporary hiring of displaced workers and their families. Even before the global economic downturn, the Philippine employment situation was already critical. In 2007, there were on average 2,716,000 unemployed and 6,757,000 underemployed workers (*Business World*, 12 February 2009). The global crisis has compounded this and job-creation programs are among the country's top development priorities. The responsibility for organizing the implementation of the response is with the regions, so as to increase the efficiency, targeting, and integration of the local delivery of the stimulus measures and to increase the sustainability and local ownership of recovery projects.

In addition, the government hopes to create additional jobs by front-loading infrastructure investments and by raising the absorptive capacity of government agencies to make them use their budgets more productively and efficiently. This pump-priming plan would create 800,000 temporary jobs. It is not clear, however, how many of these jobs were already incorporated in the 2009 budget and how many additional jobs will be created by such a stimulus. In any case, the creation of 800,000 additional jobs would require an extra amount of salaries of around P30 billion (based on 150 days of work at an average daily wage of P250).

A third component of the stimulus package is the Comprehensive Livelihood and Emergency Employment Programs. The responsibility for implementation is again with the regions. Table 3 illustrates employment creation under these programs in one of the country's 17 regions (Region 8—Samar and Leyte). The table shows that various government departments are involved in implementation and that progress in job creation is monitored against individual targets.

## Cambodia

Cambodia lacks the fiscal space to design an economic stimulus package as, for example, Indonesia has done. To mitigate the effects of the crisis, it was decided to reinforce the provision of social safety nets. Infrastructure and public works (cash-for-work and food-for-work) are often an integral component of these safety nets. Rural road projects,

**Table 3: Comprehensive Livelihood and Emergency Employment Programs** (as of 20 August 2009)

<b>Department</b>	<b>Initiative and/or Project</b>	<b>Individual target</b>	<b>Employed accomplishment</b>
Environment and Natural Resources	Bantay Gubat	4,784	581
Environment and Natural Resources	Upland Development Program	3,706	3,706
Health	Botika ng Barangay	88	7
Labor and Employment	Isla	452	229
Labor and Employment	Tupad	956	451
Public Works	Oyster	2,948	806
Social Welfare and Development	SEA-K	2,629	1,331
Social Welfare and Development	Cash for Work	757	200
Tourism	Greet	127	12
Trade and Industry	OTOP	439	439
<b>Total</b>		<b>16,886</b>	<b>7,762</b>
Percentage		100%	45.97%

Source: Based on agency reports to the Regional Kalahi Convergence Group-8.

for example, have been an important delivery mechanism for reinstalling community access over the past decade and for providing local communities with temporary employment and income.

A study was undertaken by ILO in 2003 to compare the costs and potential benefits of the various construction approaches used in the country and to inform the government in its policy setting for current and future operations related to rural infrastructure provision (Munters 2003). In general, labor-based methods for constructing rural gravel-surfaced roads in Cambodia were found to be less expensive than works carried out using equipment-based methods. It was estimated that using labor-based methods to carry out a program of rural road upgrading, combined with labor-based maintenance of the existing maintainable road network, could generate between 3.7 million and 6.7 million days of work per year, depending on the extent of the program.

## India

In India, the worst-affected segments are probably casual laborers in urban and semi-urban areas. India has a number of ongoing employment-intensive public work programs that could be extended or replicated to improve livelihood security and respond to the crisis. Investments in rural and urban infrastructure can be increased under these programs to generate additional employment. In fact, the government recently decided to increase the allocation of funds under its National Rural Employment Guarantee Scheme to provide 200 days of employment instead of 100 days to eligible households to fight the current drought. Table 4 depicts the immediate annual employment creation potential of various government programs.

To provide relief to crisis-affected workers, the government could extend its social security net (NREGA) to urban areas. An urban employment guarantee scheme could be designed to provide guaranteed work for 100 days a year to below-poverty line families in urban and semi-urban areas, similar to what is happening in rural areas. Launching such a scheme could protect informal urban workers from the effects of lost employment and income as a result of the crisis.

**Table 4: Ongoing programs of the Government of India with large employment potential**

<b>Program title</b>	<b>Objective/Description</b>	<b>Proposed interventions for crisis response</b>	<b>Immediate employment potential</b>
Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Ministry of Urban Development	Focus is on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of agencies toward citizens	JNNURM interventions are ongoing in about 60 cities. As majority of the job losses due to crisis are in urban and/or semi-urban areas. A large number of crisis-affected jobless workers could be offered alternative short-term employment by identifying more labor-intensive activities in execution	12 million workdays equivalent to 120,000 persons employed for 100 days

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Table 4 *continued*

<b>Program title</b>	<b>Objective/Description</b>	<b>Proposed interventions for crisis response</b>	<b>Immediate employment potential</b>
National Rural Employment Guarantee Act (NREGA), Ministry of Rural Development	NREGA is the flagship program of the government that promotes inclusive growth. The act aims at enhancing livelihood security of households in rural areas	The affected migrant labor in the construction industry or other sectors could be offered alternative employment under NREGA without affecting the implementation modalities	20 million workdays equivalent to 200,000 persons employed for 100 days
Pradhan Mantri Gram Sadak Yojana (PMGSY) or other rural roads schemes, Ministry of Rural Development	PMGSY caters to the rehabilitation and maintenance of the huge rural road network in the country	Labor-based and equipment-supported technology for rehabilitation and labor-intensive techniques for routine maintenance if suitably integrated in the PMGSY and other rural roads offer huge potential for employment opportunities.	4 million workdays equivalent to 40,000 persons employed for 100 days
Urban and/or rural housing: Ministry of Rural Development, Ministry of Urban Development	Various ongoing programs of the government on rural and urban low-cost housing (10,000 units)	Such schemes could be identified in consultation with the relevant ministries and/or departments to accommodate affected populations	0.5 million workdays equivalent to 5,000 persons employed for 100 days

Source: Gupta 2009.

## **Difference in approaches**

The examples in the four selected countries of (potentially) different crisis-response interventions that aim at using infrastructure and public works investments to create jobs show the difference in possible approaches. It is important to distinguish here between labor-based and labor-intensive methods. The latter are characterized by a maximum use of labor and their main objective is to provide a social safety net by creating a maximum numbers of jobs. The quality of the work done by labor-intensive approaches is often of secondary impor-

tance only. Safety net programs are frequently conceived as “make-work” programs where cost-effectiveness and quality aspects are not as important as the number of workdays created. Labor-intensive methods are only suitable for works that can be implemented using unskilled labor, for example for earth-moving operations.

On the other hand, labor-based (sometimes referred to as local resource-based) approaches and technologies make optimum and flexible use of local labor and locally available materials, skills, and capacities as main resources, supported by light equipment. This, in combination with appropriate work methods, ensures better quality, higher productivity, more cost-effectiveness, the creation of additional local employment opportunities, and a more sustainable use of natural resources than equipment-intensive works. Quality control and quality assurance are very important elements and labor-based works have demonstrated that they can produce the same quality of work as equipment-based methods. Small-scale contractors, communities, and local people are all involved in the implementation of labor-based works and this ensures that the majority of the investments remain in the locality, thereby contributing significantly more to poverty reduction and local economic development than what may be achieved using equipment-based methods.

Over the years, employment-intensive approaches (both labor-intensive and labor-based) have demonstrated their impact. Studies that have been carried out in different countries on the comparative advantage of labor-based approaches over equipment-based approaches show that labor-based methods and technologies indeed have distinct advantages. A recent ILO study (2009c) in Indonesia for example shows that the labor-based methods introduced in the country in response to the 2005 tsunami have advantages such as:

- Improved quality assurance and quality control throughout the project cycle
- The exclusive use of local contractors
- Different procurement procedures, aiming at better quality
- More scope for labor-based approaches creating more employment opportunities
- A (cost-) effective integration of “hands-on” capacity building activities for the public works department and contractors’ staff
- The active involvement of beneficiaries in the planning and implementation process
- Active promotion of the employment of local laborers and women (about 2,200 workdays per kilometer; 30%–35% of workers are women)

- Increased cost-effectiveness (10%–15%) of the investments (at same or higher construction standard)
- Promotion of the local economy through increased cash transfers.

It is important that a sufficiently broad spectrum of sectors is available that offer opportunities to shift technologies in favor of those that generate more employment and use local resources. Based on more than 30 years of worldwide experience with the application of employment-intensive approaches and technologies, the following sectors and activities are particularly relevant for the application of these methods:

Sectors (and subsectors) and activities with a high level of labor content:

- Natural resource management (e.g., agriculture, forestry, soil and water conservation)
- Low-volume unsealed roads (construction and maintenance) and high-volume roads (maintenance)
- Community-based gravity irrigation development (construction, maintenance and operations)
- Solid waste management (waste transport, separation, disposal)
- Water and sanitation, electrification and telecommunication (trenches for laying pipes and cables)
- Agricultural terracing and land development, and cleaning irrigation canals, fishpond development
- Water and soil conservation, flood protection, river drainage, and irrigation works.

Irrespective of the choice of technology, eventually the long-term effectiveness of investments in infrastructure will depend on the selection of subprojects so that they reflect communities' infrastructure needs. A lack of rural road access, irrigation systems, and other basic infrastructure, for example, is a major contributing factor to rural poverty. Infrastructure investments therefore can contribute to poverty reduction if selected in accordance with needs. Improving local infrastructure also creates new income-earning opportunities for people and acts as a prime catalyst to local economic growth.

Economic stimulus and immediate employment creation are obviously the immediate objective of crisis-response packages. A sustainable impact of the investments in infrastructure and public works, on the other hand, can come from the longer-term benefits

of the works carried out and assets created. The present job crisis thus provides an opportunity to begin certain initiatives now that will address other global development challenges.

The ultimate goal is to converge short-term stimulus goals with the long-term goals of sustainable development. As Justin Lin, the chief economist of the World Bank, has said: “The global recession represents an opportunity for developing economies to increase fiscal spending on projects that create sustainable growth in the future like infrastructure and the environment.”<sup>8</sup> If countries also create jobs in this process, increased spending on infrastructure helps them reach these multiple objectives.

## **Resource requirements**

### **Financial resources**

No additional capital resources are generally required to implement employment-intensive public works under economic stimulus packages because allocations for infrastructure investments are already included. What matters is the selection of sectors (and subsectors) and projects, and the change of technology from more equipment-intensive to more employment-intensive methods using labor-based or local resource-based approaches for planning, construction, rehabilitation, and maintenance. Technical assistance, however, is sometimes necessary to facilitate a shift in technology if insufficient capacity is available in a country.

The Government of India puts employment as the key concern for crisis recovery. The expected annual investment in infrastructure development of \$500 billion a year during the 11th Plan presents a huge opportunity for the country to create additional employment within existing development budgets. No additional budgets are required and it is estimated that with a 10% earmarking of the investment budget for employment-intensive works, an additional 2.5 million jobs can be created.

Relying on social safety nets to mitigate the impacts of the crisis as in Cambodia, however, requires dedicated financing. The development of an affordable and effective social safety net in poorer countries often needs support from development partners. Cambodia is a good

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<sup>8</sup> <http://chiangmai2.mofcom.gov.cn/aarticle/chinanews/200811/20081105890566.html>



example as it has many ministries, institutions, and donors involved in the development and implementation of social safety nets, from emergency to recovery, rehabilitation, and development. It lacks, though, an integrated system or sustainable program that can respond to this crisis—and others when they occur.

## **Technical resources**

Apart from the timely disbursement of funds, sufficient institutional and technical capacities and adequate monitoring are crucial for the successful implementation of the infrastructure investments under economic stimulus packages and social safety nets. Stakeholders need orientation and training in the various planning and implementation issues related to the technologies, from participatory project prioritization through design, implementation, and supervision to contracting and contract administration.

Experience from employment-intensive infrastructure development shows that there is often a need for a comprehensive approach to building capacity at local level for the planning, works implementation and supervision, and maintenance of the created assets in order for these type of interventions to be effective and sustainable in terms of local development, poverty reduction, and employment creation. Responsibilities for infrastructure and other public works have often been decentralized in Asia to local government units. The local authorities should therefore have the technical means to handle employment-intensive works.

Capacity building to establish the required technical resources at local government level, however, will not only cater for requirements for employment-intensive infrastructure works but will contribute to the management and implementation resources of local governments in general. A recent proposal to support the development of employment-intensive approaches in eastern Indonesia concluded that:

There is undoubtedly a place for improved and further use of the employment intensive approaches. There is also a good basis on which to build through the ILO linking up with either an existing or planned major programme whereby the ILO “added value” involves essentially technical assistance on the back of existing or committed capital investment streams for infrastructure works. It is however important to accept that elements of the employment intensive approach are already being

practiced in infrastructure and planning programmes and it would not be appropriate to establish parallel systems but rather build on and improve existing systems. The challenge for the ILO will be to achieve the realization of its approaches without being overcome by the major need to address basic technical managerial and planning needs which are likely to be technology neutral or technology insensitive. This is because of the daunting overall need for basic skills improvement especially at district and village level where general capacity building support may well be more welcome than specialist technical support for employment intensive approaches (ILO 2008).

This is interesting and relevant. Employment-intensive infrastructure works require technical resources for planning, implementation, supervision, and maintenance. Such resources, however, are equally required for works using more capital-intensive technology, and investing in building up these resources will likely have an overall impact on the management and implementation capacities of local governments.

To ensure an adequate understanding of specific employment-intensive planning and implementation issues, training should also be organized for technical line ministries. Again, in view of the magnitude of the crisis-response packages, a trained team of core trainers would be responsible for delivering training of trainers and direct training courses at regional or provincial level.

Employment-intensive works often consist of a large number of comparatively small subprojects dispersed over a geographically large area to reach a large number of people. Such programs require adequate supervision, and its quality is therefore a key condition to effectively apply employment-intensive methods and should be looked at when training needs are addressed.

It is equally important to train local government authorities and their administrative and financial staff in the skills necessary to facilitate implementation of employment-intensive works. Depending on the implementation modalities, it may also be necessary to train local contractors, as they may lack experience and be unfamiliar with the specific requirements of employment-intensive public works.

Training can take place on the job or in special classroom sessions. Experience with employment-intensive works shows that effective training in such works involves technical training on employment-intensive works technology; on contract procedures, contract management, and business management; and on safety issues and maintenance.

## **Institutional resources**

Having in place an efficient delivery system for implementing infrastructure and public works in normal conditions is crucial to the successful implementation of the infrastructure investments under various stimulus packages. A key condition is that an enabling institutional setup is already in place that makes optimum use of already available capacities for the timely planning, programming, and implementation of the investments. It is very important that responsibilities and authorities at the various levels are clearly formulated and explained to make the procedures more employment friendly, which will result in the creation of additional jobs and generate more local income.

Important, too, is the choice of procurement methods. In particular, tendering and contracting methods or formats and contract packaging are key instruments in stipulating the type of work method that will be used during employment-intensive construction or maintenance works.

Finally, monitoring the processes, outputs, and employment effects of the infrastructure investments is important to check whether short-term employment and longer-term development objectives of the investments are being achieved. As the purpose of monitoring is not only to check progress against objectives and targets, but also to improve the performance of the delivery of the investments, it is important that an effective feedback mechanism is part of the monitoring system. Process and output monitoring should focus on monitoring the effectiveness of targeting, the generation of short-term employment, the creation or improvement of the physical infrastructure (including quality issues), and the delivery costs per generated worker-day.

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# Fiscal space for social protection policies in Viet Nam

*Paulette Castel*<sup>1</sup>

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## Introduction

This chapter evaluates the fiscal implications of Viet Nam's current social protection strategy. It also gives estimates of the cost of policies that would rapidly increase the coverage of social insurance so that, in time of recession, the social protection sector is efficient in reducing poor and ordinary workers' vulnerability to income shocks.

## The social protection sector in Viet Nam

Over the last 20 years, Viet Nam has developed a strong poverty reduction program concentrated on the development of infrastructure and economic opportunities in the poorest areas. It has also started building a modern social security system, the priority being the achievement of universal health insurance by 2015. In that context, programs targeted at individuals, such as social assistance (monthly cash benefits), are small and limited to people whose capacity to work is seriously limited. As the figures in Table 1 show, social protection expenditures were equivalent to about 3.7% of gross domestic product (GDP) in 2008.

A very large share of these expenditures (equivalent to about 2.5% of GDP) was related to the state budget's long-term commitments toward people with national merit and public sector pensioners who retired before 1995. The state budget finances part of the current pensions because, when the Viet Nam Social Security administration was established in 1995, it was unable to take on the financial burden of paying the benefits to people who had worked and retired from the public sector under the old system. Given the economic transition and the relatively small size of the enterprise sector, the system at its onset

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**Table 1: Viet Nam social protection budget 2008 (estimate)**

	<b>D billion</b>	<b>Share of GDP (%)</b>	<b>Source</b>
<b>Social assistance</b>	<b>21,711</b>	<b>1.47</b>	ILSSA (2009)
Monthly cash benefits	2,036	0.14	
Aid to natural disaster victims	4,762	0.32	
Social services	1,301	0.09	
Benefits to people with national merit	13,613	0.92	
<b>Social insurance</b> (budget transfer for pre-1995 public sector retirees)	<b>23,044</b>	<b>1.56</b>	Viet Nam Social Security
<b>Health insurance</b> (state budget transfer for the poor)	<b>2,217</b>	<b>0.15</b>	Viet Nam Social Security
<b>Education subsidies</b>	<b>1,432</b>	<b>0.10</b>	Socialist Republic of Vietnam (2005)
<b>Labor market policies</b>	<b>1,327</b>	<b>0.09</b>	ILSSA (2009)
<b>NTPPR and P135-II, 2006–2010</b>	<b>4,564</b>	<b>0.31</b>	Socialist Republic of Vietnam (2005)
<b>Total</b>	<b>54,295<sup>a</sup></b>	<b>3.67</b>	
<b>Memorandum items</b>			
State budget participation in NTPPR, 2006–2010 (D billion)	16,018		Socialist Republic of Vietnam, (2005), IDA (2007) <sup>b</sup>
State budget participation in P135 (D billion)	12,950		
Health insurance subsidies	4,076		
Education subsidies	2,073		
Other NTPPR expenditures (D billion)	33,445		
GDP (D billion)	1,477,717		General Statistics Office
Minimum wage (D '000)	540		MoLISA regulation
Number of recipients of health insurance subsidies ('000)	15,829		Viet Nam Social Security
Contribution rate (%)	3		Health insurance regulation

D = dong; IDA = International Development Association; ILSSA = Institute of Labor, Science and Social Affairs; MoLISA = Ministry of Labor, Invalids and Social Affairs; NTPPR = National Targeted Program on Poverty Reduction; P135 = Program for Socio-Economic Development in Communes Facing Extreme Hardship in Ethnic Minority and Mountainous Areas.

<sup>a</sup> Higher than state budget social spending of D50,265 billion because it includes health insurance and education subsidies. <sup>b</sup> Figures refer to total spending planned over 2006–2010.

Note: People with “national merit” are mainly war heroes and heroes from the revolution (and some of their relatives).

Source: Author.

would have run deficits if the Government had not programmed these transfers to Viet Nam Social Security.

Since 1995, social insurance coverage has expanded; and since 2005, all types of enterprises, whatever their size, have had to register with Viet Nam Social Security all their employees with a labor contract of 3 months or longer. In 2006, the Social Insurance Law defined the legal framework to expand the coverage of the pension system to farmers and self-employed on a voluntary basis, and to create an unemployment insurance scheme.

The formal sector was still relatively small in 2006, representing 38.7% of wage employment and 16.1% of total employment (Table 2).

**Table 2: Social security and poverty rates, 2006<sup>a</sup>**

	Persons	Share in total (%)	Poverty rate <sup>b</sup>
<b>Employment in formal and informal sectors</b>	41,893,513	79.8	14.8
<b>Wage employed potential participants in mandatory social insurance system</b>			
Enterprise sector	9,753,103	18.6	8.1
Registered	6,769,062	12.9	7.5
Short-term contracts, etc. not registered	2,984,041	5.7	9.5
Small- business employees not registered	7,707,555	14.7	17.4
<b>Farmers and self-employed potential participants in voluntary health insurance and pension systems</b>			
Farmers and self-employed	19,356,539	36.9	11.6
Not in agriculture, aquaculture, and forestry	5,028,279	9.6	2.0
Only in agriculture, aquaculture, and forestry	9,924,339	18.9	17.5
In both sectors	4,403,921	8.4	9.5
<b>Low-income earners</b>	5,076,316	9.7	35.6
<b>Pensioners, inactive, and unemployed</b>	10,587,569	20.2	7.2
Pensioners below standard retirement age	461,269	0.9	1.3
Inactive and unemployed	10,126,300	19.3	7.5
<b>Total</b>	<b>52,481,082</b>	<b>100.0</b>	<b>13.2</b>

<sup>a</sup> Estimates based on the Vietnam Household Living Standards Survey 2006. <sup>b</sup> Poverty rate criteria taken from General Statistics Office, Government of Viet Nam.

Continuing the National Hunger Eradication and Poverty Reduction program (HEPR, 1998–2005), the National Targeted Program on Poverty Reduction (NTPPR, 2006–2010) supports poor households and economic development of poor communities. It covers policies and programs that facilitate poor households' access to credit, health insurance, education, housing, clean water, and agricultural extension services, etc., and develops infrastructure in poor communes. In the poorest localities, the Program for Socio-Economic Development in Communes Facing Extreme Hardship in Ethnic Minority and Mountainous Areas (Program 135-I, 1999–2001 and 2002–2004 and Program 135-II, 2006–2010) funds infrastructure projects and coordinates social policies.

In health insurance, besides funding the free access to health insurance for the poor under the NTPPR program, the government is aiming to achieve universal coverage by 2015. According to the new law on health insurance of 2008, mandatory coverage will be gradually implemented through 2014. Currently, contributions to health insurance are mandatory to the wage employed who are registered with Viet Nam Social Security. Informal sector workers and family members of formal sector employees can register voluntarily. Viet Nam Social Security contributes to health insurance cards for pensioners and the beneficiaries of social assistance. As mentioned, the state budget subsidizes the full purchase of health insurance cards to the poor and the populations of mountainous areas (previously partly financed through the Health Care Fund for the Poor).

Since January 2009, the state budget has also explicitly assumed the financial burden of health insurance cards provided to children under the age of 6 (previously financed by the Children's Fund) and half the cost of health insurance cards for the near poor so that people previously registered as poor but whose income has increased above the poverty line in recent years do not lose health insurance coverage. In 2010, state and local budgets assume responsibility for 50%<sup>2</sup> of the financing of all near poor and students' insurance cards. Finally, during 2012–2014, health insurance will become mandatory for all workers and their family members.

The budget for providing social assistance to vulnerable groups is relatively small. Indeed, more is spent on aid to victims of natural disasters, which accounted for about 0.32% of GDP in 2008. Individual targeted programs such as social assistance (monthly cash benefits) represented only 0.14% of GDP.

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<sup>2</sup> The state budget will finance 30%, local budgets 20%.



Since 2007, the government has indicated its willingness to expand social assistance. The relevant regulations were changed in April 2007 and the budget in 2008 was increased significantly to D2,100 million from D510 million in 2007 (approximately, from 0.05% to 0.14% of GDP). The groups targeted are mostly individuals whose capacity to work is seriously limited. As a result, the social assistance programs have little impact on the working poor: about one-third of the registered poor are ineligible for such assistance, and approximately half the budget is received by the nonpoor (Pham Anh and Castel 2009).

## Government response to the crisis

Viet Nam had some fiscal space to respond to the impact of the global financial crisis, because since 2001, government current revenues had usually exceeded plan targets and fiscal deficits had been financed without monetization (IDA 2007). Although the drop in 2009 in commodity prices and corporate taxes had reduced the expected amount of fiscal revenues, the government in its stimulus package expanded social expenditures by about D7,200 billion for 2009, or 0.44% of GDP (4.11% versus 3.67%, Table 3). This included disbursement of a Tet holiday bonus to the poor, increased housing support, and creation of an additional targeted program directed to the 61 poorest districts.

According to figures from the Ministry of Labor, Invalids and Social Affairs (MoLISA), the Tet bonus was distributed to 2.3 million poor households (approximately 9.2 million people). The benefit per individual was particularly high, at D200,000, equivalent to 1 month of the poverty line used by MoLISA to determine poverty in rural areas in 2006.<sup>3</sup>

The remaining part of the budget was targeted to increase the housing support program and to intensify development policies in the poorest regions through an additional program. Although poverty has been declining there, it remains very high in comparison to the rest of the country. Under Decree 30a, each of the 61 poorest districts was given in advance D25 billion to develop projects. In June 2009, 11 of 62 district poverty reduction projects had been approved, and 37 economic groups, corporations, and enterprises had agreed to support 57 poor districts (General Statistics Office, press release, June 2009).

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<sup>3</sup> Given the rise in consumer prices, this level is similar to the General Statistics Office's 2006 per capita food poverty line in 2008.

**Table 3: Viet Nam social protection budget 2009** (estimate)

	<b>D billion</b>	<b>% GDP</b>	<b>Source</b>
<b>Social assistance</b>	<b>23,649</b>	<b>1.42</b>	
Monthly cash benefits	2,036	0.12	ILSSA (2009)
Tet 2009 bonus	1,700	0.10	World Bank (2009)
Aid to natural disaster victims	4,879	0.29	ILSSA (2009)
Social services	1,343	0.08	ILSSA (2009)
Benefits to people with national merit	13,691	0.82	ILSSA (2009)
<b>Social insurance</b>	<b>25,879</b>	<b>1.56</b>	
State budget transfer pre-1995 public sector retirees	24,829	1.49	Gian et al. (2009)
Severance pay 2009, 200,000 workers	1,050	0.06	World Bank (2009)
<b>Health insurance</b>	<b>6,051</b>	<b>0.36</b>	
State budget transfer for the poor	3,789	0.23	Author's estimate
Children under 6 years	2,013	0.12	Author's estimate
Near poor	249	0.01	Author's estimate
<b>Education subsidies</b>	<b>1,432</b>	<b>0.10</b>	Socialist Republic of Vietnam (2005)
<b>Bonus to low-income civil servants</b>	<b>360</b>	<b>0.02</b>	World Bank (2009)
<b>Labor market policies</b>	<b>1,342</b>	<b>0.08</b>	ILSSA (2009)
<b>Targeted poverty reduction programs</b>	<b>9,689</b>	<b>0.58</b>	
NTPPR and P135 2006–2010	4,564	0.27	ILSSA (2009)
Poorest 61 districts (Decree 30 <sup>a</sup> )	1,525	0.09	World Bank (2009)
Increased housing support	3,600	0.22	
<b>Total</b>	<b>68,402</b>	<b>4.11</b>	
<b>Memorandum items</b>			
GDP (D billion)	1,663,444		Author's estimate <sup>a</sup>
Minimum wage (D '000)	650		MoLISA regulation
Number of recipients of health insurance subsidies ('000)	16,193		Author's estimate <sup>b</sup>
Number of near poor ('000)	2,128		Author's estimate <sup>c</sup>
Number of children under 6 years ('000)	8,602		Author's estimate
Contribution rate (%)	3		Health insurance regulation

GDP = gross domestic product, ILSSA = Institute of Labor, Science and Social Affairs; MoLISA = Ministry of Labor, Invalids and Social Affairs.

<sup>a</sup> Based on General Statistics Office data for GDP growth of 5.3% in 2009 and consumer price index trend. <sup>b</sup> About 7.9 million people are estimated to live in mountainous areas (6 years old and above).

<sup>c</sup> The number of near poor is the gap between the number of poor in 2008 (age 6 and over) and the number of poor in 2009 (age 6 and over).

The objective of this additional program is to reduce the poverty rate in these districts to levels close to the average for the province by 2015 and the region by 2020. One particular aspect is that it gives ministries the responsibility to create teams that directly help, in the field, local authorities to design and submit development plans.

## **Household vulnerability during the crisis**

Employment trends at the beginning of 2009 were worrying. Estimates based on the past trend of employment elasticity to growth in Viet Nam at aggregate and enterprise levels forecast a possible fall in employment in 2009 of between 195,000 and 659,000 people (Nguyen Viet et al. 2009). A study conducted by Central Institute for Economic Management and the World Bank of enterprises in 24 of the 133 operating industrial parks indicated that in March, April, and May 2009,<sup>4</sup> about 40% of the enterprises had reduced employment (CIEM-World Bank 2009). Also, rapid assessment surveys by the Vietnamese Academy of Social Sciences reported heavy job losses in enterprises of the Thang Long industrial park near Hanoi (Nguyen Thi 2009).

In fact, open unemployment of workers from industrial parks and other enterprises of the manufacturing or services sectors did not increase sharply. MoLISA (2009) indicates that about 80% of laid-off workers who reported to local offices (workers who, more likely, would have been eligible for unemployment insurance) obtained another job in the following few months. It is possible that local offices underestimated the overall reduction in formal employment. Anecdotal evidence in the footwear industry indicates that some idle workers are still on the roll of their former enterprise. They continue to contribute to social security (through their former enterprise) in the expectation of being rehired when activity picks up. In another case, enterprises obtained workers' resignations but delayed reporting the downsizing to social security (Nguyen Thi 2009).

Most of the dismissed workers would not have been eligible for unemployment insurance anyway. In the enterprise sector, the share in employment of temporary and seasonal workers with short-term contracts is high in Viet Nam. In 2006, about 3.0 million of the 9.7 million wage employed (i.e., 30.6%) who worked in the enterprise sector were not registered with social security (Table 2). Most of the downsizing appears to have been carried out through the nonrenewal

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<sup>4</sup> The survey covered 11 provinces. Questionnaires were sent to 4,048 enterprises.

of short-term contracts, voluntary (sometimes induced) resignations, and less overtime work.<sup>5</sup>

Because the formal sector is relatively small, social protection mechanisms offer little in the way of mitigating the crisis impact on ordinary workers. Severance pay was the main income support for dismissed workers. According to the Labor Code, employers must pay termination benefit or severance pay of half a month's salary for each working year. In fact, few enterprises paid such benefit to all their dismissed workers. In some cases, enterprises only paid 1 or 2 months of salary to workers who voluntarily resigned (Nguyen Thi 2009). In other cases, workers with less than 1 year of work in the enterprise in effect received half a month's salary, but workers "making mistakes" or who were dismissed because of their low ranking in terms of productivity (a ranking set each year to define the employee's Tet bonus) received no benefits.

Among export-oriented craft villages that have also suffered from the drop in activity, contracts are informally signed on an annual basis, and salaries are paid either on a daily-rate basis, or on a piece-meal basis. Consequently, no businesses or producers paid any types of insurance, redundancy, or unemployment benefits for their workers.

In Viet Nam, the crisis has not been the only economic shock that ordinary workers have had to cope with in recent years. Confronted with rising inflation and ballooning imports of consumption goods, the government in March 2008 implemented a stabilization package that drastically cut the credit growth rate, froze some public investment projects, and reduced government expenditures. Partly as a result, GDP growth fell from 8.5% in 2007 to 7.5% in 2008. The resulting burst of the real-estate bubble and the drop in public investment reined in construction growth, which probably had a large impact on informal sector workers. According to the Vietnam Household Living Standards Survey (VHLSS) of 2006, construction had about 2.6 million workers in 2006, of whom 87.9% were informal.

For those who became poor during 2008 or 2009, only those who had been previously registered as poor and had managed to escape poverty could likely be reconsidered as poor. The reason is that social assistance screening procedures are slow in Viet Nam and the lists of the poor are reestablished only when a new poverty line is issued (usually every 5 years).

Living standards have not fallen dramatically, however, because workers in the industrial parks are young with few dependents and

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<sup>5</sup> In addition, enterprises more readily dismissed unhealthy workers and those making minor mistakes.

because families of migrant workers rely on various sources of income. Many of the migrant workers who work in the craft villages and the construction sector in Hanoi still maintain their agricultural work at home and only take up craft jobs during the off-farm season while some of their household members remain on the farm.

## **Fiscal space for the social protection strategy: Expected trend of social expenditures from 2010 to 2020**

The Social Strategy Paper drafted by ILSSA (2009) is the principal source of information about government plans for the next 10 years in the social protection sector. The strategy is not yet final, so the figures and the comments presented in this section are preliminary.

### **Health insurance**

The major increase of state budget funding to the social protection sector will come from the implementation of the health insurance policies designed to move the country toward universal coverage. State budget transfers are expected to increase from about 0.36% of GDP in 2009 to 0.5% of GDP in 2010 and to remain stable as a share of GDP in the years to 2020. Two trends explain this increase. First, starting in 2010, the state budget will (as said) cofinance half the amount of students' health insurance cards. The estimate in Table 4 assumes that the state budget finances all these subsidies. Second, in 2010 the official poverty line will be adjusted and the lists of the poor will be totally revised. With the current poverty line, households with per capita income lower than D200,000 per month in rural areas, and D260,000 in urban areas, are "poor." These thresholds are likely to be increased in 2010 to D300,000 and D390,000, respectively. ILSSA projects that with these new levels, the number of registered poor may reach 12.3 million in 2010. This larger number should lead to an increase of about D1.1 billion in state subsidies for the poor given a stable number of beneficiaries living in mountainous areas.

### **Social assistance**

ILSSA's Social Strategy Paper foresees that the basic benefit will be readjusted, to 50% of the minimum living standards level. The revision of the poverty line will also lead to some increase in the monthly cash benefits. However, as the eligibility criteria are much more related to

**Table 4: Viet Nam social protection budget**  
(estimates 2010–2020)

	D billion			% of GDP		
	2010	2015	2020	2010	2015	2020
<b>Social assistance</b>	<b>23,361</b>	<b>31,904</b>	<b>35,629</b>	<b>1.22</b>	<b>0.90</b>	<b>0.57</b>
Monthly cash benefits	3,205	7,080	13,036	0.17	0.20	0.21
Aid to natural disaster victims	5,000	7,500	10,000	0.26	0.21	0.16
Social services	1,386	1,574	1,715	0.07	0.04	0.03
Benefits to people with national merit	13,770	15,750	10,878	0.72	0.45	0.17
<b>Social insurance (pre-1995 public sector retirees)</b>	<b>26,759</b>	<b>39,235</b>	<b>45,916</b>	<b>1.39</b>	<b>1.11</b>	<b>0.74</b>
<b>Health insurance cards</b>	<b>9,288</b>	<b>16,920</b>	<b>29,274</b>	<b>0.48</b>	<b>0.48</b>	<b>0.47</b>
Poor population in mountainous areas	4,887	7,915	12,190	0.25	0.22	0.20
Children under 6 years	2,711	5,315	9,392	0.14	0.15	0.15
Students (all children 6 to 14 years)	1,493	2,970	5,738	0.08	0.08	0.09
Near poor	197	720	1,954	0.01	0.02	0.03
<b>Education subsidies</b>	<b>1,863</b>	<b>3,419</b>	<b>6,025</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>
<b>Labor market policies</b>	<b>1,357</b>	<b>3,514</b>	<b>3,730</b>	<b>0.07</b>	<b>0.09</b>	<b>0.06</b>
<b>Targeted poverty reduction programs</b>	<b>4,564</b>	<b>11,003</b>	<b>15,310</b>	<b>0.24</b>	<b>0.31</b>	<b>0.25</b>
<b>Total</b>	<b>67,192</b>	<b>105,994</b>	<b>135,884</b>	<b>3.50</b>	<b>3.00</b>	<b>2.19</b>
<b>Memorandum items</b>						
GDP (D billion)	1,922,151	3,527,750	6,217,101			
Minimum wage (D '000)	750	1,376	2,426			
Number of poor ('000)	12,340	10,115	7,890			
Poor population in mountainous areas 15 years old and above ('000)	15,924	14,342	12,715			
Number of near poor ('000)	1,789	3,496	5,241			
Number of children under 6 ('000)	8,628	9,093	8,944			
Number of children 6 to 14 years ('000)	12,496	12,755	13,288			
Health insurance contribution rate (%)	3	3	3			
Total population ('000)	86,656	91,670	96,252			
Health insurance, fully subsidized persons (%)	28.3	25.6	22.5			
Poverty rate (%)	14.4	13.9	13.8			
Poor and near poor rate (%)	16.5	17.7	19.3			

Sources: Author's calculations based on ILSSA 2009; Gian et al. 2009; and General Statistics Office data.

people's working capacity than to a household's poverty situation, the impact is not expected to be substantial. The forecasts in Table 4 are consistent with an increase of the number of beneficiaries in line with population growth, and adjustments to the basic level of monthly cash benefits in line with GDP growth.

The amount of benefit paid to people with national merit is expected to decrease steadily over time, and this decline will relieve some of the budget constraints in the social services sector. But, because the risk of natural disasters in Viet Nam is high, the relative weight of the aid to victims of natural disaster will likely remain constant as a share of GDP. Consequently, rather than declining to 0.6% of GDP in 2020 as in Table 4, our estimate of future fiscal space assumes that social assistance will more likely use resources at least equivalent to about 0.8% of GDP in 2020.

## **Social insurance**

Fiscal space will be made available as the financial burden of the benefits paid to pre-1995 retirees decreases. Estimates indicate that this burden could fall from 1.4% of GDP in 2010 to 0.7% in 2020, if, among others, the Government continues to adjust those benefits according to minimum-wage changes (Gian et al. 2009). Any lower benefit increase would create more fiscal space.

## **Education subsidies and labor market policies**

The estimates assume that the budget will remain constant as a share of GDP. The fiscal space created by the regular reduction in the number of the poor will likely be used to improve the quality of schooling in poor areas and to support wider access to higher education.

## **Targeted poverty reduction programs**

Over the next 10 years, the NTPPR, Program 135, and projects under Decree 30a should continue. It is still unclear, though, whether Decree 30a funding will gradually replace that for other projects.

The estimates shown in Table 4 assume that the state will commit funds of about 1.6% of GDP for the next 5 years, and of 1.2% for the period 2016–2020 for all the programs combined. As the funding for health insurance policies and for the programs to improve access and quality of education to the poor is budgeted separately, this funding corresponds to the level of commitment of the period 2006–2010 in relation to the provision of agriculture extension services, vocational

training, community development and infrastructure, the distribution of productive land, the access to clean water and housing improvements (Table 5). However, if the government does not raise total funding, health insurance funding could significantly reduce resources available to other programs.

## **Overall social protection spending and fiscal space**

On the basis of all these assumptions and expected developments, the overall size of the social protection sector over the next 10 years is forecast to decline from 3.5% of GDP in 2010 to 3.0% in 2015 and 2.2% in 2020.

Still, benefits paid to pre-1995 retirees and to people with national merit consume a large portion of this budget: 1.6% of GDP in 2015 and 0.9% in 2020. The decrease in these programs is, though, large enough to free resources to support health insurance policies and, possibly, to introduce new social policies.

Fiscal space will really materialize, however, only if no important quasi-fiscal deficit develops in the health insurance and social insurance sectors. As the discussion below indicates, the probability of such an event is, however, relatively low.

## **Expected financial position**

### **Health insurance**

In 2005, total health expenditures amounted to 5.2% of GDP; public health spending accounted for 2.3% of GDP (Ministry of Health 2005). Health insurance financed half public health spending; state budget transfers financed the other half. If Viet Nam adopts the same trend as other countries, per capita health expenditures are likely to rise by at least the same rate as per capita GDP. In fact, it would be desirable that public health expenditures in Viet Nam rose faster than that, because the poor currently underuse health care services. Forecasts indicate that, in 2015, total health expenditures could amount 8.8% of GDP and public health expenditures to 3.4% of GDP (Castel 2007). If in 2015, as in 2005, the state budget finances half this budget, to match the rest, health insurance must raise the equivalent of about 1.7% of GDP in 2015.

Our simulations indicate that if universal coverage is achieved, the policy that links the basic premium for health insurance to the minimum wage (and thus to general income growth) will be



**Table 5: National Targeted Program on Poverty Reduction and Program 135-II, planned budgets, 2006–2010**

	National budget	Donors	Local budgets and community contribution	Credit	Total
<b>National Targeted Program on Poverty Reduction 2006–2010</b>					
Extension services	200		100		300
Vocational training	2,500		500		3,000
Model duplication	40		260		300
Community development	10	55	10		75
Infrastructure	1,050	550	2,050		3,650
Capacity building, advocacy, monitoring	155	105	115		375
Distribution of land	800		200		1,000
Health assistance	4,076				4,076
Education assistance	2,073				2,073
Housing, access to drinking water	1,600		3,500		5,100
Credit	3,614			26,000	29,614
<b>Program 135-II<sup>a</sup></b>					
Production support					2,225
Infrastructure					8,750
Infrastructure operation and maintenance					875
Capacity building					525
Living standard support					525
Management and supervision					50
<b>State budget funding</b>	<b>D billion</b>		<b>% of 2006 GDP</b>		
Health assistance	4,076		0.4		
Education assistance	2,073		0.2		
Credit	3,614		0.4		
Other programs and projects under NTPPR	6,355		0.7		
Program 135-II	9,065		0.9		

<sup>a</sup> 70% covered by state budget funding; excludes official development assistance of an additional \$300 million.

successful in balancing health insurance finances in 2015 and, probably, in supporting the growth of the health sector in the following 5 years. If half the workers in the informal sector do not follow the health insurance regulation or if formal employment in the enterprise sector does not grow as expected, the revenue shortfall could hit 0.3%–0.5% of GDP.

## **Pension system**

In the pension system, short-term concerns are few. First, the state budget already bears the financial burden related to pre-1995 retirees. Second, the system created in 1995 is far from being mature, so very few of the contributors have reached retirement age with pension rights. As a result, the system currently accumulates reserves and provides resources through the buying of public bonds and regular loans to other social areas and public projects.

There are, however, medium- to long term concerns about the system's financial viability. The retirement age is currently low and pension benefits paid to public sector retirees are quite high relative to what workers have contributed. If the government continues to adjust public sector pensions annually at the same rate as the minimum wage, this will produce a deficit in the medium term. If, alternatively, it adjusts public pensions according to the consumer price index, the system should remain financially sound for much longer.

## **Fiscal space and reforms to reduce household vulnerability**

Assuming that government receipts (beside health insurance and social insurance revenues from contributions) remain stable as a share of GDP, the above analysis suggests that in the next 10 years, the trend of public social spending in Viet Nam should allow the government to continue building a comprehensive social security system for the whole population. As mentioned, reliance on universal coverage programs along with large poverty reduction programs appears to be the key feature of the country's social strategy.

The integration of large numbers of the informal sector population into the pension system will also open new possibilities to introduce mechanisms that reduce households' vulnerability to income shocks. Under these mechanisms, in the event of job loss or reduced income (due, for example, to economic downturn, drought, animal disease, or epidemic), those covered by social insurance could be allowed to

borrow from their own future retirement benefits. Long-term sickness and disability insurance could be established as well. The introduction of notional defined contribution accounts, as foreseen in the ILSSA 2009 Social Strategy Paper draft paper, will help that process.

However, unless it is accelerated, this strategy will be ineffective in protecting most of the current workers and their families from income shock because it will take many years to develop and to reach a significant share of the population. Although the government has recently introduced a voluntary pension scheme for informal sector workers, our simulations using data from the VHLSS 2006 show that the system will most likely provide income support for only a few elderly in the next 30 years. Even in the best-case scenario, in which all informal sector workers with earnings of at least the minimum wage join the mandatory or the voluntary pension system from 2007, coverage of the elderly with pension income would reach only 34.8% in 2030 (Table 6).

**Table 6: Pension income coverage of elderly  
in the best-case scenario (%)**

<b>Old-age income status</b>	<b>2020</b>	<b>2030</b>
With no pension or lump sum	35.6	21.4
With pension income	13.4	34.8
With lump sum paid at retirement	51.0	43.8

Note: Author's simulations based on data from the Vietnam Household Living Standards Survey 2006, under the assumption that, starting in 2007, all workers contribute either to the mandatory or voluntary pension system.

The most important reason for this result is that, in order to be financially viable, the pension system requires the beneficiaries of monthly pension income to contribute for a minimum of 20 years. A rather small lump sum is paid otherwise. Many workers in the informal sector who could join social insurance “tomorrow” are already 40 years old or above (women) or 45 years old or above (men). They cannot, therefore, contribute for 20 years before reaching retirement age even if they delay retirement up to the age of 60 for women and 65 for men. The same issue is also seen in the case of the mandatory system and workers of the enterprise sector. The mandatory system was open to private sector employees in 1995. All workers who registered with social security when they were 40 or above (women) and 45 and above (men) will reach retirement age in the coming years without 20 years of contribution.

Poverty rates among the elderly are not particularly high, but if rural to urban migration intensifies, the issue of poverty could emerge. Providing universal income support to all the elderly in rural areas would, though, be unaffordable. Our simulations indicate that at best, only 32.3% of the elderly in rural areas are likely to be pensioners in 2030. Providing income support to the poorest would, therefore, probably be difficult to implement because the program would have to screen large populations of uncovered elderly. In our simulations, in 2020, about 12 million elderly people are forecast as living in rural areas.

In addition to the issue of poverty emerging among the elderly, the fact that many of those in the pension system are entitled only to small lump sum amounts is eroding the public's trust in social security. Right now, workers in Viet Nam do not seem to value social security benefits. Studies (To Trung and Castel 2009) and much anecdotal evidence indicate that wages are often underreported and registration avoided if possible. The figures in Table 6 indicate that even if all the workers of the informal sector participate in the voluntary pension system immediately, about half the elderly would be entitled to only small lump sum amounts in 2030. And even if poverty among the elderly does not increase because relatives and friends support them (to a greater or lesser extent), public opinion will perceive that social insurance is costly and irrelevant.

## **Supporting access to old-age income**

Table 7 presents an estimate of the cost in 2020 of a program that would provide pension income equal to the minimum wage to the elderly who have contributed to the pension system but are eligible only to a lump sum<sup>6</sup> when they reach pension age. The cost of the program consists in financing the gap between the minimum wage and the retiree's lump sum. In the calculation, the lump sum is transformed into an annuity, as if social security could keep and invest the lump sum and use it with the returns to finance part of the overall benefit. As with Table 6, these estimates are based on our simulations, which assume that all workers join the pension system, which in turn explains why the number of retirees from the voluntary system is so high.

The cost of 2.86% of GDP looks particularly high, but this is the higher bound. In practice, the cost of this policy could be lower. If, for

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<sup>6</sup> That is, to all those who, between 2008 and 2020, contribute to the pension system but reach retirement age with fewer than 20 years of contributions.

**Table 7: Cost of providing a minimum pension to the elderly<sup>a</sup>**

<b>Cost</b>	<b>Number of beneficiaries</b>	<b>Cost (% of GDP)</b>
Retirees from the mandatory pension system who:		
worked in the public sector	74,931	0.03
worked in the private sector	98,126	0.04
Retirees from the voluntary pension system	6,483,048	<b>2.86</b>
<b>Share of elderly with pension income (%)</b>		
If lump sum is paid to those with fewer than 20 years of contribution	14.2	
If the Government subsidizes pensions to retirees who have contributed for fewer than 20 years (assuming that half of informal sector workers contribute in coming years)	39.1	

<sup>a</sup> “Elderly” here refers to those in the mandatory and voluntary pension systems but who reach pension age with fewer than 20 contribution years. The simulation assumes, as in Table 6, participation of all workers.

Source: Author’s calculations.

example, 40% of informal sector workers join now, the cost would be around the level of the benefits that the state budget paid in 2008 to pre-1995 retirees (1.5% of GDP).

Other policies (matching contributions, subsidized loans, etc.) could help promote take-up and reduce the cost of providing old-age income support to current cohorts of middle-aged workers (*Vietnam Development Report 2007*). The earlier estimates show that these policies are fiscally workable and in the range of the fiscal space that will likely be available in the medium term. Their implementation would, moreover, be temporary, as they are limited to the generation of workers who will not have had the opportunity to contribute for 20 years.

## Conclusions

Today a large proportion of workers in Viet Nam are employed in the informal sector. Although the enterprise sector is rapidly developing, many workers are employed in small businesses, are farmers, or do casual work. Large enterprises hire a significant part of their workforce under short-term contracts. As a result, in times of economic slowdown, most of the dismissed workers are not covered by social security. Moreover, no policy can be put in place to help workers cope

with the income shocks because of the impossibility of implementing verification methods on income and employment of informal sector workers. Accordingly, the Government's social protection strategy is aiming to develop a comprehensive social security system covering the whole population.

This chapter has, first, evaluated the fiscal implications of such a strategy given the willingness of the Government to continue improving living standards in the poorest regions. It has, second, shown that if the process is not accelerated, achieving wide population coverage with social insurance (including pensions) will take, at best, many years. At worst it will not be possible because in the short and medium terms, public opinion will regard social insurance as costly and irrelevant. This chapter has, finally, demonstrated that the implementation of policies that boost pension system participation is fiscally workable.

The integration of large groups of the informal sector into the pension system could, furthermore, open new possibilities to introduce mechanisms that reduce ordinary households' vulnerability to income shocks in time of crisis.

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# The global economic crisis: Can Asia grasp the opportunity to strengthen social protection systems?

*Mukul G. Asher*<sup>1</sup>

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## Introduction

The main objectives of any social security (or social protection) system<sup>2</sup> are consumption smoothing over an individual's lifetime insurance (particularly against longevity and inflation risks),<sup>3</sup> income redistribution for society as a whole, and poverty relief. However, these have to be traded off against economic growth, labor market efficiency, and labor market flexibility. As resources devoted to social protection have opportunity costs, needs of groups other than the elderly in society, and other needs such as health, education, and infrastructure, have to be traded off against allocations for retirement. Individual, fiscal, and societal affordability should also be considered when constructing and reforming social security systems.

The need to strengthen social protection systems in Asia has been evident since at least the 1997–1998 Asian financial crisis. The initial efforts to strengthen social protection systems in its aftermath, however, were not sustained in many parts of Asia as economic recovery was swift and robust (Howell 2001).

Roughly a decade later, the current global financial and economic crisis—whose origins are from industrial rather than developing

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<sup>2</sup> “Social protection” denotes major branches of social security such as pensions, health care, work injury, and social assistance.

<sup>3</sup> Longevity risk concerns the probability that accumulated savings and retirement benefits may be inadequate to last until death. Inflation risk concerns the probability that the value of retirement benefit may not be protected against inflation during the retirement period.



countries—has for several reasons once again underscored the urgency of strengthening social protection systems in Asia.<sup>4</sup>

First, the crisis is expected to reduce the medium-term growth rate of most Asian countries. As the single most important macroeconomic variable in potentially providing economic security for both the young and the old is the trend rate of economic growth, any lowering of medium-term growth prospects will make the task of strengthening social security systems more difficult.

Industrial countries in North America, Europe, and Japan have been significant contributors to economic growth and dynamism of Asian countries. As their role is likely to become less significant, many Asian countries will need to rebalance their economies away from an external sector orientation toward a greater weight for domestic demand, particularly household consumption. While such rebalancing will be a challenge for many Asian countries, it also provides an opportunity to use strengthening of social protection systems to increase domestic demand, and to manage inequalities.

Second, lower medium-term growth could adversely impact the pace and quality of job and livelihood creation in many Asian countries. This would increase the need for social protection, but could reduce the capacity of society to meet this need.

Third, the global crisis has necessitated the use of aggressive fiscal stimulus packages in several Asian countries. These appear to be manageable if the crisis is not too prolonged. But if it is, fiscal risks, and risks to the balance of payments due to a combination of lower net exports, remittances, and investment flows, could rise. These risks in turn may lead to upward pressure on interest rates, raising the cost of managing public debt.<sup>5</sup> They may also reduce the fiscal flexibility required to allocate greater resources for social protection.

The global crisis has considerably enhanced the “poverty relief” objective of social security systems. As poverty levels, on the one hand, and gross domestic product (GDP) and employment growth, on the other, are inversely related, sustaining growth and enhancing employment elasticity with respect to GDP should be an integral part of social protection strategies in Asia.

It is in the above context that this paper analyzes the implications of the global economic crisis, and demographic and labor market

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<sup>4</sup> The scope of this paper is limited to East and South Asia, thus excluding West and Central Asia.

<sup>5</sup> For 2010, public debt as a share of GDP is projected to be nearly 200% for Japan, over 60% for India and the Philippines, and over 50% for Malaysia and Thailand (EIU 2009). This would suggest both high costs of financing debt and constrained space for continued fiscal stimulation.

trends for social protection systems in Asia, with its main focus on pensions or retirement financing.

## **Demographic and labor market trends**

Demographic and labor market trends set the context within which social-protection responses to the global economic crisis will need to be structured by Asian countries.

Tables 1–3 provide demographic indicators for selected Asian countries. On the basis of the data they show, the following observations may be made.

Asia is set to experience rapid aging in the 21st century. The sample countries included in Table 2 will have nearly 40% more elderly persons by 2050 than the world had in 2005. The share of these countries in the world's elderly is projected to increase from 42% in 2005 to 47% by 2050. If all the developing member economies of the Asian Development Bank (ADB) were included, Asia will be home to more than half of the world's elderly by 2050, or over 1 billion people.

The rapid aging of Asia is a result of reduction in fertility rates and increased life expectancy at birth and at age 60. As is well known, increased longevity raises pension costs disproportionately. Uncertainty about longevity trends (due to uncertain impact of medical technology and other factors) is increasing the complexity of designing pension programs. Even during 2005–2010, only the Philippines and India are projected to exhibit fertility rates above the global average, but six of the 11 sample countries exhibit fertility rates significantly below the replacement rate.

The statutory pensionable age, however, remains relatively low, ranging from 55 to 65 years for men and 50 years to 65 years for women. Some of the high-income countries such as Japan, the Republic of Korea, and Singapore are taking measures to increase the retirement age, or the age at which full pension rights accrue.

As women live longer, and on average have less exposure to the labor force, their lower retirement age gives them, on average, fewer resources to finance old-age needs, including health care. Addressing gender issues should therefore be an integral part of programs in all branches of social security.

The median age in the sample countries (with the exception of the Philippines) will be well above average for the world in 2050 (Table 1). In Japan, the Republic of Korea, and Singapore, the median age will be nearly 55 years. Similarly, only in the Philippines and India will the percentage of total population aged 60 and above be less than the global average (Table 2).

**Table 1: Demographic trends in selected Asian countries**

Country/Area	Total population (million)		Average annual rate of change in population (%)		Total fertility rate		Median ages (years)		Life expectancy at birth (years)	
	2007	2050	2005-2010	2045-2050	2005-2010	2045-2050	2005-2010	2045-2050	2005-2010	2045-2050
World	6,671.2	9,191.3	1.17	0.36	2.6	2.0	28.0	38.1	67.2	75.4
<b>Asia</b>										
China, People's Republic of	1,328.6	1,408.8	0.58	-0.32	1.7	1.8	32.5	45.0	73.0	79.3
India	1,103.4	1,592.7	1.55	0.30	3.0	1.8	24.3	38.7	63.1	75.9
Indonesia	231.6	296.9	1.16	0.10	2.2	1.8	26.5	41.1	70.7	78.6
Korea, Republic of	48.2	42.3	0.33	-0.89	1.2	1.5	35.0	54.9	78.6	83.5
Malaysia	26.6	39.6	1.69	0.41	2.6	1.8	24.7	39.3	74.2	20.1
Philippines	87.9	140.5	1.90	0.50	3.2	1.8	21.8	36.3	71.7	78.7
Singapore	4.4	5.0	1.19	-0.38	1.2	1.6	37.5	53.7	80.0	84.6
Sri Lanka	19.7	18.7	0.47	-0.55	1.9	1.8	29.5	43.4	72.4	77.6
Thailand	63.9	67.4	0.66	-0.27	1.8	1.8	32.6	44.3	70.6	78.1
Viet Nam	87.4	120.0	1.32	0.21	2.1	1.8	24.9	41.6	74.2	80.3
Japan	127.9	102.5	-0.02	-0.78	1.3	1.6	42.9	54.9	82.6	87.1

Source: United Nations, 2008. *World Population Prospects: The 2008 Revision*.

**Table 2: Demographic trends in selected Asian countries**

Country/ Area	Life Expectancy at age 60, 2000–2005		Percentage of total population aged 60 and above		Population aged 60 and above (millions)	
	Male	Female	2005	2050	2005	2050
World	n.a.	n.a.	10.3	21.8	672.8	2005.7
China, People's Republic of	18	21	11.0	31.1	144.0	437.9
India	17	19	8.0	21.0	89.9	329.6
Indonesia	17	19	8.3	24.8	18.9	73.6
Korea, Republic of	19	24	13.7	42.2	6.6	17.8
Malaysia	18	20	6.7	22.2	1.7	8.8
Philippines	17	19	6.0	18.2	5.1	25.5
Singapore	17	21	12.3	39.8	0.5	2.0
Sri Lanka	17	19	9.7	29.0	1.9	5.4
Thailand	17	22	11.3	29.8	7.1	20.1
Viet Nam	19	21	7.6	26.1	6.5	31.3

n.a. = not available.

Source: United Nations. 2008. *World Population Prospects: The 2008 Revision*.

**Table 3: Demographic ratios in selected Asian countries**

Country/Area	Old-age dependency ratio	
	2005	2050
World	11	25
China, People's Republic of	11	39
India	8	21
Indonesia	8	29
Korea, Republic of	13	65
Malaysia	7	25
Philippines	6	19
Singapore	12	59
Sri Lanka	9	36
Thailand	11	38
Viet Nam	9	30
Japan	30	74

Source: United Nations. 2008. *World Population Prospects: The 2008 Revision*.

Challenges arising from a sharply increasing median age, rising old-age dependency ratio (Table 3), and concomitant reduction in the share of the working-age population will need to be addressed by many Asian countries.

Three major implications of the above demographic trends suggesting varying levels and pace of aging among Asian countries may be noted.

First, rapid population aging signified by rising old-age dependency ratios and increasing life expectancy at age 60 suggests that greater resources will have to be devoted to the elderly. A substantial share of the increase in resources will be through the government budget. Finding more budgetary resources, particularly when the medium-term growth rates are likely to be moderate, will be a challenge as there will be other demands on such resources. Aggressive fiscal stimulus packages by Asian countries to sustain growth during the current global crisis may also constrain future fiscal flexibility as the resulting future budget deficits will need to be financed. Some countries such as the People's Republic of China (PRC), however, have considerable fiscal capacity to expand government expenditure, including that required for social security and safety nets.

Second, the social security needs of foreign workers will need to be addressed by Asian countries. Many countries in the region, such as the Republic of Korea, Malaysia, and Singapore, are large and persistent recipients of foreign labor, much of which is supplied from countries within the region, such as Bangladesh, India, Myanmar, the Philippines, Sri Lanka, Thailand, and Viet Nam.

Totalization agreements and agreements involving working and living conditions of foreign workers involving Asian countries will need to be encouraged.<sup>6</sup> Recent agreements by Japan with the Philippines and Indonesia for special arrangements for workers from these two countries to be employed in Japan on a temporary basis represents an example of taking advantage of demographic complementarities, as well as drawing attention to the social security needs of foreign workers.

Third, global demographic trends suggest that more than three-fifths of the potential livelihood generation between 2005 and 2020

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<sup>6</sup> Totalization agreements are designed to ensure that individuals and employers do not end up paying social security taxes or contributions in more than one jurisdiction, or alternatively avoid paying them in either jurisdiction. They also assist in recognition of pension rights and in cross-border social security administration. The Philippines has entered into about 10 such agreements, mainly with countries in Europe and with Canada. India has also made several such agreements, primarily with European countries.

will be in the Asian region (Table 4). India alone would need to generate a quarter of the potential global livelihoods, while the PRC's and Indonesia's share will be 8.5% and 3.8%, respectively (Table 4). In sharp contrast, Europe's working-age population will exhibit a decline, while the share of North America in potential livelihood generation will be only 2.8%. Africa, with a share of 27.5%, will also face significant challenges in livelihood generation.

The above analysis suggests that the Asian region, particularly its developing countries, will need to create a better balance between creation of new jobs and livelihoods on the one hand, and preserving existing but unsustainable jobs on the other.

The share of formal sector employment varies from 84.3% in developed economies to only 20.8% in South Asia (Table 5). While the corresponding share is higher in Southeast Asia and the Pacific (38.8%) and in East Asia (42.6%), even these proportions are lower than the global average of 46.9% (Table 5). There are also variations according to gender, with the share of women in formal employment considerably lower than that of men, particularly in South Asia (Table 5).

In developed economies, it was the expansion of the formal sector, with identifiable and relatively stable employer-employee

**Table 4: Potential livelihood generation<sup>a</sup>  
by region, 2005–2020**

	<b>No. (millions)</b>	<b>% of world total</b>
World	846.6	100.0
Asia and the Pacific	526.7	62.2
India	211.7	25.0
People's Republic of China	71.8	8.5
Indonesia	32.0	3.8
Africa	232.6	27.5
Europe	-17.8	-2.1
Latin America and Caribbean	79.3	9.4
North America	23.6	2.8

<sup>a</sup> Defined as the number of economically active persons, those between 15 and 64 years of age in a given region, for whom livelihoods will need to be generated in the formal or the informal sectors.

Source: United Nations. 2008. *World Population Prospects: The 2008 Revision*. <http://esa.un.org/unpp>, accessed 7 July 2009.

**Table 5: Persons with wage or salary employment status on the labor market, circa 2008 (%)**

Country/Area	Total			Men		Women	
	Share of employed	Share of working-age population	Share of employed	Share of working-age population	Share of employed	Share of working-age population	
South Asia	20.8	9.7	23.4	15.6	14.6	3.5	
Sub-Saharan Africa	22.9	13.8	29.2	20.5	14.4	7.4	
Southeast Asia and Pacific	38.8	21.9	41.5	28.6	35.0	15.1	
East Asia	42.6	23.3	46.0	28.9	38.3	17.6	
North Africa	58.3	24.4	58.8	38.5	56.7	10.5	
Middle East	61.5	29.0	64.4	41.6	53.5	15.0	
Latin America and the Caribbean	62.7	38.6	60.6	46.1	65.8	31.8	
Central and Southeast Asian Europe and CIS	76.6	41.5	75.4	48.0	78.0	35.7	
Developed economies	84.3	46.6	81.7	51.8	87.5	41.6	
World	46.9	26.5	47.4	33.0	46.0	20.1	

CIS = Commonwealth of Independent States.

Source: Hagemeyer 2009, Table 4.2, p. 64.

relationships, which contributed to earnings-related, social insurance-based social security programs.

The prospects for increasing the share of formal sector employment are not, however, promising in many Asian countries. The current global economic crisis is expected to lower the medium-term trend rate of economic growth, and hence the rate of increase in per capita income over the next several years. As there is a positive correlation between per capita income and coverage, some Asian countries will find it challenging to increase coverage through formal sector employment growth.

The above analysis indicates that there is an urgent need for Asian economies to construct multi-tiered social security systems, involving a mix of risk-sharing arrangements among the stakeholders—beneficiaries, employers, the state, families and the community, and not-for-profit organizations (both domestic and foreign). There is therefore increasing recognition that retirement incomes (pensions) cannot solely be based on earnings or contributions. These would need to be supplemented by other types of retirement income transfers.

Such transfers may be instituted through *ex ante* interventions (during the working life) and *ex post* interventions (after retirement). In the former, the main challenge is to design matching contributions by the state to ensure an adequate benefit, but without adversely impacting contribution density,<sup>7</sup> retirement decisions, and incentives to participate in the formal systems, while ensuring fiscal sustainability.

The *ex post* interventions can be in the form of social pensions or minimum guarantees under the formal sector pension systems. The social pensions can be universal, *i.e.*, provided to eligible individuals as a right, or resource-tested. In each case, there are considerable challenges with respect to design, implementation, and linkages with the rest of the pensions system.

Retirement income transfers should be distinguished from social assistance, whether universal or resource-tested. The latter is available to all who qualify regardless of their age. Retirement transfers, on the other hand, are targeted at retirees.

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<sup>7</sup> This is defined as the ratio of the number of potentially maximum contributions by a worker during the full working life, and the number of contributions actually received by the social security authorities.



## Overview of social security systems in Asia

Many Asian economies offer a wide range of social security programs: old-age, sickness and maternity, work injury, unemployment, and family allowances (Table 6). This range suggests that there is a general acceptance of the importance of the role of social security in ensuring equitable growth and social stability. Since space constraints preclude a detailed description of the social security programs in each economy, the discussion is confined to the broad features and characteristics of Asia's social security systems.

**Table 6: Availability of programs under different branches of social security in selected countries of Asia and the Pacific**

Economy	Sickness and maternity			Work injury	Unemployment	Family allowances
	Old age, disability, and survivors	Cash benefits for both	Cash benefits plus medical care <sup>a</sup>			
Australia	X	X	X	X	X	X
China, People's Republic of	X	X	X	X	X	X
India	X	X	X	X	X	<sup>b</sup>
Indonesia	X	<sup>b</sup>	<sup>d</sup>	X	<sup>b</sup>	<sup>b</sup>
Japan	X	X	X	X	X	X
New Zealand	X	X	X	X	X	X
Philippines	X	X	X	X	<sup>b</sup>	<sup>b</sup>
Korea, Republic of	X	<sup>b</sup>	<sup>d</sup>	X	X	<sup>b</sup>
Singapore	X	X	X	X	<sup>b</sup>	<sup>b</sup>
Sri Lanka	X	<sup>b</sup>	<sup>d</sup>	X	<sup>f</sup>	X
Taipei, China	X	X	X	X	X	<sup>b</sup>
Thailand	X	X	X	X	X	X
Viet Nam	X	X	X	X	X	<sup>b</sup>

<sup>a</sup> Coverage is provided for medical care, hospitalization, or both.

<sup>b</sup> Has no program or information is not available.

<sup>c</sup> Old-age benefits only.

<sup>d</sup> Medical benefits only.

<sup>e</sup> Maternity benefits only.

<sup>f</sup> Coverage is provided under other programs or through social assistance.

Source: [www.ssa.gov/policy/docs/progdsc/ssptw/2006-2007/asia/ssptw06asia.pdf](http://www.ssa.gov/policy/docs/progdsc/ssptw/2006-2007/asia/ssptw06asia.pdf)

The considerable heterogeneity in social security systems in Asia reflects a host of historical and other factors, including the level of economic development and structure of the economy. Some of these benefits, however, may be intermediated through social assistance or other public programs in some countries such as Indonesia and Sri Lanka. In Asia, publicly managed defined benefit and defined contribution schemes predominate. Only the two economies of Hong Kong, China and Australia operate privately managed defined contribution schemes.

The availability of a social security program, however, does not necessarily imply that it is well designed, has wide coverage, or is financially sustainable. Nor does it imply that the social security organization administering it is well governed, or that different components of the social security system complement each other to bring about systemic effectiveness and financial sustainability.

Asian countries have varied contribution rates to social security programs: old-age protection, employment, and health care (Table 7). Changes in the contribution rate are usually motivated by the larger macroeconomic and political economy changes in a country. For instance, Thailand's Social Security Fund, in view of the current global economic crisis, has reduced contribution rates from 5% to 3.5% for all employers and employees. The state's contribution to plans will also be reduced from 2.75% to 2.25% in 2009. Estimates suggest that the reduction in contribution rates will collectively save B22.6 billion for employers and employees, and B3.8 billion for the government.

In some Asian countries, the total contribution rates are quite high. Thus, the PRC's total contribution rate is 40%, India's 36.1%, Singapore's 34.5%, Japan's 25.5%, and Viet Nam's 25%. The social security contributions are statutory levies and therefore impact on the cost of hiring workers. They also adversely affect the disposable income available to workers, leading to liquidity constraints. These countries have little room to raise contribution rates to improve retirement benefits.

At the other end of the scale, the contribution rates are quite low for some countries like Australia and Indonesia (9%), Brunei Darussalam (10%), and Myanmar (4%). These countries therefore have greater flexibility in improving retirement benefits through higher contributions.

Several Asian countries, such as Malaysia and Sri Lanka, do not require civil servants to contribute to their pensions, and finance pension liabilities out of current revenue. In several countries, such as Indonesia and Thailand, contributions by civil servants cover some proportion of the pension costs, with the remaining financed out of the government's annual budget.

**Table 7: Contribution rates of social security programs in Asia and the Pacific, 2008**

Economy	Old age, disability, and survivors			All social security programs <sup>a</sup>		
	Insured person	Employer	Total	Insured person	Employer	Total
Australia <sup>d</sup>	0	9	9 <sup>e</sup>	0	9 <sup>f</sup>	9 <sup>e</sup>
China, People's Republic of <sup>d</sup>	8	20	28	11	29 <sup>f</sup>	40 <sup>c</sup>
India <sup>d</sup>	12	17.6	29.6	13.8	22.3	36.1
Indonesia	2	4	6	2	7 <sup>f</sup>	9
Japan <sup>d</sup>	7.7	7.7	15.4	12.4	13.1	25.5 <sup>c</sup>
New Zealand	0	0	0 <sup>e</sup>	0	0	0 <sup>e</sup>
Philippines <sup>d</sup>	3.33 <sup>b</sup>	7.07 <sup>b</sup>	10.4 <sup>b</sup>	4.58	8.32 <sup>f</sup>	12.9
Korea, Republic of <sup>d</sup>	4.5	4.5	9	7.58	8.53	16.11
Singapore <sup>d</sup>	20 <sup>b</sup>	14.5 <sup>b</sup>	34.5 <sup>b</sup>	20	14.5 <sup>f</sup>	34.5
Sri Lanka	8	12	20	8	12 <sup>f</sup>	20 <sup>c</sup>
Taipei, China <sup>d</sup>	1.3 <sup>b</sup>	4.55 <sup>b</sup>	5.85 <sup>b</sup>	2.865	8.485	11.35
Vanuatu	4	6	10	4	6	10
Viet Nam <sup>d</sup>	5	11	16	7	18	25

<sup>a</sup> Includes old age, disability, and survivors; sickness and maternity; work injury; unemployment; and family allowances. In some countries, the rate may not cover all these programs. In some cases, only certain groups, such as wage earners, are represented. When the contribution rate varies, either the average or the lowest rate in the range is used.

<sup>b</sup> Also includes the contribution rates for other programs.

<sup>c</sup> Government pays the total or most of the cost of family allowances.

<sup>d</sup> Contributions are submitted to a ceiling on some benefits.

<sup>e</sup> Government pays the total cost of most programs from general revenues.

<sup>f</sup> Employers pay the total or most of the cost of work injury benefits.

<sup>g</sup> Employers pay the total cost of cash sickness and maternity benefits.

<sup>h</sup> Government pays the total cost of the universal old-age and disability pensions.

<sup>i</sup> Data are at least 2 years old.

<sup>j</sup> Government pays the total cost of unemployment benefits.

<sup>k</sup> Employers pay the total cost of family allowances.

<sup>l</sup> Plus flat-rate contributions.

<sup>m</sup> Government pays the total cost of the universal old-age pension.

<sup>n</sup> Government pays the total cost of cash maternity benefits.

Source: [www.ssa.gov/policy/docs/progdesc/ssptw/2006-2007/asia/ssptw06asia.pdf](http://www.ssa.gov/policy/docs/progdesc/ssptw/2006-2007/asia/ssptw06asia.pdf)

While there is evidence of parametric reform in civil service pension schemes, fundamental systemic reform has not been widespread (Asher 2000). In 2004, however, India's central government introduced a New Pension Scheme (NPS), which shifted pensions of newly recruited civil servants from a defined benefit to a defined contribution method (Asher 2008).

The NPS incorporates features designed to reduce transactions costs (e.g., a central record-keeping agency will be responsible for maintaining records, resulting in economies of scale). The NPS gives limited investment options with a number of asset managers, with a default option including a life-cycle type of fund which automatically rebalances an individual's portfolio with age. The investment management is auctioned and those investing do not know the individual identity of the members. The NPS is to be regulated by the Pension Fund Regulatory and Development Authority (PFRDA). The PFRDA 2009 bill is, however, yet to be passed by Parliament. When fully operational, the NPS will mandatorily cover about 20 million civil servants at all levels of government.

## **Pension assets and investments**

For a variety of reasons, pension assets in Asia have been exhibiting rapid growth. The pension assets in Asia and the Pacific increased from \$1,251 billion in 2003 to \$2,951 billion by 2008, surpassing those in Europe, but still behind assets in North America, which had \$4,686 billion in 2008 (Watson Wyatt 2009). Many of the largest pension funds in Asia, such as those in PRC, Japan, the Republic of Korea, and Singapore, are sovereign wealth funds. Such funds are an integral part of what has come to be known as the shadow banking system, with hedge funds and private equity funds constituting other components.

In many Asian low- and middle-income countries, the limitations of domestic financial and capital markets, and lack of capacity or unwillingness to engage in international diversification of pension fund assets, have meant that investment risks have been concentrated in terms of geography (domestic assets) and allocation of assets. In countries such as India and Sri Lanka, much of the provident and pension fund investments are in government securities, while in countries such as Indonesia, domestic bank deposits account for more than half of total investments of the national provident fund. Nearly all the assets of Malaysia's Employees Provident Fund are invested domestically. Some Asian economies, notably the PRC; Hong Kong, China; Japan; the Republic of Korea; Singapore; and Thailand have, however, been diversifying their pension assets internationally to varying degrees.

As in other regions, the global economic crisis has added to the challenge of investing provident and pension fund assets of Asian countries in a manner that generates high real rates of return over a prolonged period (Watson Wyatt 2009).

## **Provident and pension fund governance and regulation**

The governance and regulation of provident and pension funds involve managing principal–agent (or agency) relationships. These arise when principals (provident and pension fund beneficiaries, and taxpayers when government funding is involved) need to rely on agents (provident and pension fund managers and trustees, government bureaucrats) to pursue the interests of the principals. While there has been increasing recognition of the need for institutionalizing good governance practices involving clarity, accountability, transparency, and management of differing interests among stakeholders, progress among Asian countries has been relatively modest. State domination of provident and pension fund sponsorship and management in Asia has led to less receptivity to the role of an independent pension regulator that would enforce good governance practices.

There are, however, encouraging signs that governance and regulation issues are beginning to receive the due attention of policy makers. It is in this context that the establishment of India's interim Pension Fund Regulatory and Development Authority may be regarded as an encouraging sign. International organizations such as the International Social Security Association, and the Organisation for Economic Co-operation and Development are also increasingly emphasizing good governance and regulatory practices by their members. Most Asian countries are members of at least one of these two organizations. Increasing the role of private occupational pensions in Asian countries, and the pressures to generate better returns on pension assets, are also likely to increase the importance of good governance and regulation.<sup>8</sup>

## **Recent progress in social security reform in the People's Republic of China**

In recent years, the PRC has made rapid progress in extending coverage in all five realms of social security protection indicated in Table 6. Policy makers appear committed to unifying rural and urban social

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<sup>8</sup> Thus, Japan's Government Pension Investment Fund, with assets of \$1.2 trillion, became an independent institution in April 2006. Earlier, it was part of the Ministry of Health, Labour and Welfare.

security systems. The aim is to achieve universal coverage by 2020. Zhu (2009) mentions several special characteristics of the PRC's approach—the involvement of academics and social partners, piloting and gradual expansion, political will, inclusion of extension in national socioeconomic development plans, special campaigns for targeted groups, employment–promotion measures for less privileged groups, and several other proactive policies.

## **Avenues for strengthening social protection systems**

This section briefly enumerates various possible avenues for strengthening social protection systems, with examples from Asian countries. Depending on the context, objectives, and financial, fiscal, and institutional capacities, each Asian country can combine these avenues to structure an appropriate strategy.

### **Avenue 1: Modernizing and professionalizing existing formal social security organizations in performing core functions**

Each provident and pension fund must perform five core functions with a reasonable degree of competence and efficiency (Ross 2004). These are: reliable collection of contributions, taxes, and other receipts (including any loan payments in the security systems); payment of benefits for each of the schemes in a timely and correct way; securing financial management and productive investment of provident and pension fund assets; maintaining an effective communication network, including development of accurate data and record-keeping mechanisms to support collection, payment, and financial activities; and production of financial statements and reports that are tied to providing effective and reliable governance, fiduciary responsibility, transparency, and accountability.

There are several examples of the initiatives taken by various provident and pension funds in Asia designed to improve the performance with respect to one or more core functions. Countries such as Malaysia, the Philippines, and Singapore have been making increasingly sophisticated use of information technology to improve administration and compliance efficiency, and to generate management information systems that are conducive to better decision making.

The PRC,<sup>9</sup> Malaysia, and Thailand have become more aggressive and professional in investing social security funds. These initiatives could potentially lead to higher returns, though the risks are also likely to be greater.<sup>10</sup>

## **Avenue 2: Parametric or systemic reforms of some components of existing systems**

Parametric reforms involve changing one or more parameters of the pension system, such as altering the pension benefit formula, increasing the retirement age, and changing preretirement withdrawal provisions. A systemic reform involves substantive changes in such areas of the pension system as basic philosophy (such as a shift from social risk pooling to individuals bearing pension risks), or pension methods (such as a shift from a defined benefit to defined contribution method of pensions).

The examples of parametric and or systemic pension reforms include:

- Introduction of deferred annuity scheme by Singapore, called CPF Life, to help address the longevity risk. CPF Life does not increase the resources available to an individual in retirement but changes the timing of withdrawals, and introduces a private risk-pooling insurance scheme financed by members themselves.
- New Zealand has introduced a portable, defined contribution scheme called the Kiwi Saver Scheme to help manage additional resources needed to address longevity risks.
- Several countries, such as Japan, Malaysia, and Singapore, are encouraging retired individuals to be at least partly active in the labor market.

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<sup>9</sup> China Investment Corporation, one of the country's several sovereign wealth funds, has been taking an increasingly aggressive stance in diversifying assets, with a rising share of assets invested internationally. It is also rapidly professionalizing its staff, often paying internationally comparable market compensation packages. As the country's financial and capital markets deepen, the investments can be expected to become more diversified and sophisticated. The ultimate contingent liability will, however, rest with the state.

<sup>10</sup> This is exemplified by the 57.3% share in RHB Capital Bhd., a private sector financial conglomerate controlled by Malaysia's Employees Provident Fund. Such unusual investment choices could generate higher returns, but also involve substantial risks. There is also a possibility that a disproportionate share of the time and energy of the management (of the Employees Provident Fund) may be needed to manage such risky investments.

- Many countries, such as the Fiji Islands, India, and the Philippines, are tightening up on preretirement withdrawals from provident and pension schemes. This will ensure that the “power” of compound interest is harnessed for a longer period.
- A shift by India’s civil service pension scheme from a defined benefit to a defined contribution method is an example of systemic reform.

### **Avenue 3: Introducing or expanding retirement income transfers that do not entirely depend on formal labor market relationships or entirely on contributions by members**

There is wide variety of retirement income transfers. These include social pensions, and co-contributions by the state. For poverty reduction, social assistance programs targeted at the poor of all ages may be more appropriate. There are also conditional cash transfers<sup>11</sup> which may be appropriate in some circumstances.

Examples from Asian countries include:

- Thailand’s “30-Baht Scheme” (also known as the Universal Coverage Health-care Scheme), introduced in 2001, has not only been continued but expanded with greater state support, to cover nearly 50 million citizens. By 2006, per capita expenditure on this scheme was B1,659, while corresponding expenditure was B1,738 for health benefits under the Social Security Office schemes, and B8,785 under the Civil Servants Medical Benefits Scheme (Iwana 2009).
- In stimulus packages of several countries, including the PRC and India, there is a significant social assistance and retirement income transfer component.
- In 2007, the Beijing municipal government extended coverage of old-age benefit to all elderly citizens under its jurisdiction. This may be regarded an example of a social pension.
- A 2007 Korean initiative expects to cover 70% of all senior citizens through a basic old-age pension financed by the government.
- Indonesia has provided cash transfers to cushion the burden on low-income people from restructuring its fuel subsidy scheme.

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<sup>11</sup> These pay recipients in exchange for an action that brings private behavior closer to the social optimum (de Janvry and Sadoulet 2004). Therefore, they are best regarded as part of broader social safety nets.



If this avenue is to be effective, fiscal reforms—focusing on better delivery of government services, including social pensions, and on reallocating funds toward social security needs—will be essential in many Asian countries.

## **Avenue 4: Other initiatives**

Examples of other initiatives include:

- Countries such as the PRC, India, Malaysia, the Philippines, and Thailand are encouraging occupational private pension plans or individual retirement accounts (or both) to broaden the sources of retirement financing and risk sharing.
- Countries such as Bangladesh, India, and Indonesia are encouraging the linking of pensions with microfinance. Policy makers hope that this will also help enhance financial inclusion and strengthen social cohesion.
- The Republic of Korea and Singapore are experimenting with reverse-mortgage schemes to use housing equity for financing retirement.

## **Conclusions**

As a result of rapid population aging due to declines in fertility and increased longevity, Asian low- and middle-income countries will have a much shorter period in which to construct social security systems that can provide adequate benefits to most of the eligible population; that are sustainable financially and fiscally; that are affordable by individuals, businesses, and the economy as a whole; and that are robust in riding out macroeconomic cycles, such as the current global economic crisis. Moreover, even while exhibiting these characteristics, their social security systems will need to ensure that a high trend rate of economic growth and incentives for labor–market participation are sustained.

While there is considerable heterogeneity among Asian countries with respect to population size; per capita income levels; and institutional, fiscal, technological, and managerial capabilities, the analysis in this paper suggests some common areas for turning the global economic crisis into an opportunity for strengthening social protection systems.

First, social security systems are increasingly regarded as integral to overall economic, social, and political management of the country, rather than being isolated and of secondary concern. The

current global economic crisis has reinforced and perhaps accelerated this trend. The role of the state in social security financing, management, and supervision is also expected to increase in Asia-Pacific countries.

The PRC, India, Indonesia,<sup>12</sup> and Viet Nam<sup>13</sup> are examples of countries that have relatively recently begun the task of integrating social security reform initiatives, involving pensions, health care, and social safety nets, into their development strategies. These initiatives are designed to rebalance the economies of these countries to make them less vulnerable to external shocks, and to achieve more inclusive and broader development. The governments do, however, recognize the importance of sustaining a high trend rate of economic growth, as without larger national incomes, the task of managing competing objectives, and adequately providing for the young and the old, may become more difficult. Some Asian countries, such as Bangladesh, the Fiji Islands, and Myanmar, offer scope for greater integration of social protection systems in their broader development strategies.

Second, following from the first, is the increasing recognition that an effective reform of social security systems requires complementary reforms in other areas. These include fiscal policies, labor markets, financial and capital markets, and provident and pension fund governance and regulation. Expansion of retirement income transfers and of social assistance requires concomitant reforms in public service delivery systems. The importance of government competence in delivery of public services has increased considerably as Asian countries pursue aggressive fiscal stimulation packages.

Policies to promote retirement income from labor market participation even after formal retirement will be imperative as life expectancy (at birth and at 65) continues to rise in Asia-Pacific countries. This also implies that countries must be relatively flexible about the formal retirement age rules.

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<sup>12</sup> Indonesia has embarked on a long-term objective of achieving universal coverage for all branches of social security, primarily through its social insurance mechanism. It passed the SJSN, Law No. 40/2004, and Law No. 11/2009 on social welfare to achieve this goal. Actual progress, however, has been relatively slow. A social security secretariat was set up in May 2009 but its budgetary allocation is not on a firm footing.

<sup>13</sup> Viet Nam also has a long-term goal of universal coverage using social insurance methods, complemented by means-tested social assistance and transfers. It passed a law on health insurance in November 2008 and Decree 62/2009ND-CP on health insurance in August 2009. It has, however, postponed the implementation of unemployment insurance, but has provided cash transfers to the poor to cope with the current crisis.

Increasing use of prefunding in pension financing, as in the PRC, India, Malaysia, the Philippines, and Thailand, requires concomitant reforms in financial and capital markets, greater investment management expertise among provident and pension fund organizations, and promotion of enhanced financial literacy and financial-inclusion policies.

Third, the analysis in this paper strongly suggests the urgent need for far greater professionalism among provident and pension funds in many Asian countries when performing core functions. The mindset of the relevant government ministries and organizations must change from “providers of welfare services” to being professional service providers, with a strong emphasis on economic efficiency and organizational effectiveness.

Attaining better outcomes from less expenditure of resources should be the primary motto guiding social security reform. Asia must exhibit greater urgency in investing professional education and training facilities, and in undertaking empirical evidence-based analytical research on social security issues.

In conclusion, for Asian countries to strengthen social protection systems, considerable attention to professional details and openness to innovative experimentation will be needed. In addition, construction and maintenance of robust databases, strong analytical capabilities, appropriate organizational structures and mindsets, and understanding of the subtleties of pension economics (particularly sustainability over a long time-horizon, the tyranny of seemingly small numbers exerting a powerful impact on pension scheme viability, and the true meaning of what is meant by “funding pensions”) will also be needed. It is vital that provident and pension fund organizations publicly communicate to stakeholders stochastic actuarial assessments providing long-term projections of the impact of changes in demographic, labor market, and other variables on the sustainability of current pension arrangements.

The global economic crisis represents a potential opportunity to progress toward more extensive and robust social protection systems. As there is considerable heterogeneity among Asian countries with respect to the above constraints, progress in taking advantage of the crisis to strengthen social protection is likely to be uneven, and perhaps less rapid and comprehensive than desired.

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# **Income support in times of global crisis: An assessment of the role of unemployment insurance and options for coverage extension in Asia**

*Wolfgang Scholz, Florence Bonnet, and Ellen Ehmke<sup>1</sup>*

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## **Market economy and unemployment insurance: Some clarifications<sup>2</sup>**

Minimum institutional requirements for sustainable market economies are the following: (Schumpeterian) entrepreneurs, guaranteed ownership rights, financial institutions, social security, and an employable workforce.<sup>3</sup> In other words, economic development requires systems for the interpersonal redistribution of income and wealth. Such systems function through (i) the collection of taxes and social security contributions from economic entities on the basis of their past or current economic activities<sup>4</sup> or of economic transactions; and (ii) simultaneous provision of benefits and services to individuals on the basis of predefined sets of rules. Interpersonal redistribution systems are called “social security” or “social protection.”<sup>5</sup>

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<sup>2</sup> This introduction draws on WS and the Social budgeting class of the Maastricht Graduate School of Governance (2009).

<sup>3</sup> Such economies are called social market economies in case social security is developed in such a way that it promotes workers' emancipation.

<sup>4</sup> Examples of current economic activities are instantaneous income production (labor income, profits), or consumption;

<sup>5</sup> In this paper, we do not distinguish between “social security” and “social protection” but grant ourselves the freedom to use both notions interchangeably.

Social security through classical unemployment insurance (UI) was designed to provide temporary income security and to prevent poverty during temporary unemployment. In this role, it buys out labor from the production process, a procedure that, because of positive external effects on the average stock of human capital, lifts macroeconomic output to higher levels than without the buyout.<sup>6</sup> In periods of decline of general economic demand, UI temporarily “stores” idle labor outside the production process and, while providing it with transfer income, allows for maintaining and upgrading its skills until the income-generation process picks up again and (enhanced) employability allows for reintegration of the unemployed at maintained or higher productivity levels.

The current economic crisis makes even more visible the crucial role that UI can play in any prospectively successful set of policy measures to weather economic storms. This is the case in *high- and middle-income countries* where UI is being rediscovered as an institutionalized societal stabilizer allowing for considered preparation for the post-crisis future. It is generally accepted as a political program to maintain UI and develop it further in high-income countries, and to implement it in middle-income countries (Schmid 2009), with the aim of bolstering them on their advancement toward mature capitalist economies.

The crisis seems increasingly to be fostering consensus on the necessity of investing in social protection, giving a “social floor”<sup>7</sup> in low-income countries, too.<sup>8</sup> However, in this context UI is not yet high on the agenda of national development policies. Major development agencies avoid addressing the concrete problems of covering contingencies related to (un-)employment risks (MECD 2001 and DFID 2009 can stand for many others): social protection is understood as a set of measures providing subsistence for the poor, policies within which UI is not expected to play a meaningful role.

The reasons offered for this reluctance are well known: UI (i) is a solution only for employees in formal labor markets; (ii) requires control mechanisms in order to prevent moral hazard; (iii) must be

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<sup>6</sup> The reasoning is actually the logically consistent development of an argument made by Xavier Sala-i-Martin with respect to pension systems (Sala-i-Martin 1995).

<sup>7</sup> Such a floor should consist of two broad main elements: services, allowing geographic and financial access to essential public goods such as water and sanitation, health, and education; and transfers, providing a basic set of essential social benefits, in cash and in kind, paid to the poor and vulnerable.

<sup>8</sup> Among the explicit promoters are OECD’s Development Assistance Committee (OECD 2009a), the Chief Executives’ Board of the UN System (promoting the establishment of a worldwide Social Protection Floor) (UN 2009), and ILO (advocating “adequate social protection for all” and urging “the international community to provide development assistance, including budgetary support, to build up a basic social protection floor on a national basis”) (ILC 2009).

combined with a wider range of employment services and policies; and (iv) requires rules for its interactions with social assistance.

The issue of UI in Asia has to be seen against these considerations but must, also, be subject to a cost–benefit analysis that takes into account the economic and political pros and cons of UI in the region’s dynamic capitalist development.

## **Social protection of unemployed workers: Overview**

The current crisis is probably only a temporary break in the world’s economic growth process. In the line of the world’s many economic crises since the beginning of the 19th century, the current crisis is rooted in global imbalances and is characterized by the exposure of almost all countries to a strong decline in effective demand. It can be expected that the fall in demand will be followed by pronounced adjustments of economic structures.

Loss of demand and sector restructuring emphasize the need to ensure availability to societies of instruments that simultaneously stabilize unemployed workers’ consumption, that offer time to maintain or update workers’ skills for their later reintegration, and that help companies bridge the time required for productivity-enhancing restructuring.

Such social security for the unemployed can be provided through contributory social insurance (UI) or noncontributory income support schemes, or a combination of both, usually supplemented with other labor market policies (public works, training, etc.).

For a better focus on Asia, we first look at the global situation of coverage by such programs.<sup>9</sup>

Available information allows us to distinguish legal and effective UI coverage (Table 1).<sup>10</sup> The results show two essentials:

- *Legal coverage.* Out of all 184 countries,<sup>11</sup> 78 (42%) provide legal coverage through statutory programs. The population covered in all countries represents about 30% of the total economically active population, with a share of 3% in the low-income countries and of almost 70% in the high-income countries.

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<sup>9</sup> The following text draws on work done by Florence Bonnet.

<sup>10</sup> See Figure 3, for a structured overview of the country database underlying the following analysis.

<sup>11</sup> The database comprises 48 low, 46 high, and 90 other income groups.

**Table 1: Legal and effective unemployment insurance coverage by development level** (first decade 21st century)

Type of coverage	Country category by income level				
	Low	Lower-middle	Upper-middle	High	All
<b>Legal coverage (see explanations in Box)</b>					
Existence of a statutory program for unemployed (Number of countries; in parentheses: % of selected countries in overall country grouping [statistical coverage])	5 (8)	17 (35)	20 (54)	36 (80)	78 (44)
Legal social security–based coverage of unemployed (% of economically active population in country grouping)					
Contributory and noncontributory schemes	2.9	18.1	38.4	69.2	30.6
Mandatory contributory schemes only	2.9	15.4	30.3	58.9	25.7
<b>Effective coverage<sup>a</sup> (see explanations in Box)</b>					
Recipients of unemployment benefits: (% of all unemployed in country grouping—LFS)					
Total	1.3	3.6	10.4	38.8	12.9
Contributory schemes only	1.33	3.6	9.8	31.3	10.9
Noncontributory schemes only	0.0	0.0	0.6	7.6	2.0
<b>Noncoverage</b>					
Nonrecipients of unemployment benefits: Complementary group (% of all unemployed in country grouping—LFS)	98.7	96.3	89.1	60.9	86.9

LFS = labor force survey.

<sup>a</sup> Because of current unavailability of statistical data, the unemployed beneficiaries of *general* social assistance schemes (i.e., schemes not specifically designed as unemployment assistance) are not included. Including them would increase coverage rates only in countries where such schemes exist on a larger scale, i.e., high-income and a few middle-income countries. The total underlying database comprises 184 countries; the table includes only those that provide at least minimal forms of statutory UI coverage.



- *Effective coverage.* This shows a similar pattern: the relative share of persons receiving UI benefits among the unemployed is on average 13%. In the low-income countries almost 99% of all unemployed are excluded from cash transfers, whereas in the high-income countries virtually 61% are excluded.<sup>12</sup>

The observation that low-income countries' UI protection is solely contribution-based relates to the fact that their capacities do not allow for implementation of social assistance-type transfer systems.

### **Legal and effective coverage—Some explanations**

*Legal coverage* estimates that percentage of the economically active population, which is legally protected against loss of income in case of unemployment. These persons' unemployment benefits are guaranteed by legislation, but they do not necessarily currently receive such benefits. A person is legally covered if legal provisions stipulate her or his coverage through unemployment insurance or entitlement to specified benefits in certain circumstances.

*Effective coverage* is calculated as the ratio of the number of persons receiving unemployment benefits to the total number of unemployed, based on labor force survey (LFS) data.

Effective coverage is usually lower than legal coverage:

- Legal coverage is based on estimates relating legislated categories of covered workers to LFS categories.
- The effective coverage ratio is calculated using data of two different sources: the number of beneficiaries (usually administratively processed monthly data) and the LFS (usually quarterly sample-based data).
- The unemployed usually comprise categories of persons that have not acquired benefit entitlements.
- The effective coverage ratio, furthermore, depends on:
  - the average period during which a benefit is received;
  - the turnover of the (un-)employed in the labor market; and
  - the degree of segmentation of the labor market. When the same people repeatedly switch between employment and unemployment their entitlements might expire.

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<sup>12</sup> Due to data unavailability, general social assistance was excluded from Table 1.

## International capacities of crisis response through unemployment insurance

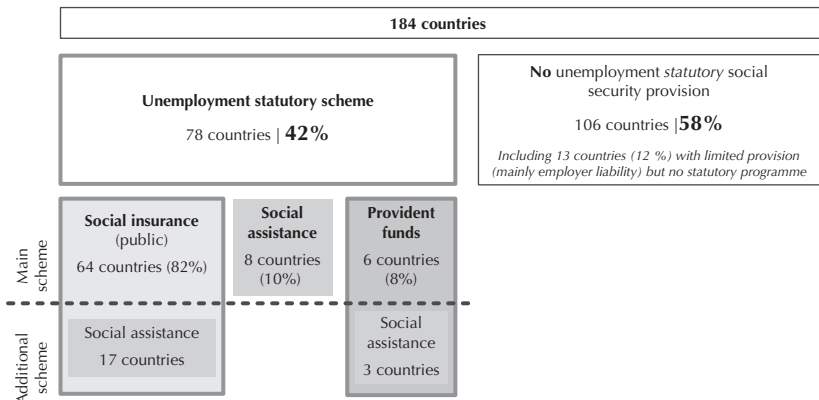
The crisis-induced loss of income opportunities could result in social and political crises, further adding to poverty, unless states organize income transfers in favor of workers and their families and simultaneously implement policies aiming at new gainful future employment.

Maintaining defined income levels can be realized through:

- *Unemployment benefits* that contributory schemes typically pay out at intervals, offering defined income replacement after a qualifying period over a limited time.
- *Unemployment assistance and general social assistance* that are usually flat periodic (noncontributory) cash transfers either because the contributions-based unemployment benefits expired, or because no such entitlements exist.
- *Other labor market policies*, which provide periodic income support, conditional on participation in employment or training programs.

Where put in place, UI schemes can obviously provide such income-maintenance benefits. However, while effective crisis response has to be available quickly, such ready solutions are impossible in most countries, particularly in low- and middle-income countries, because the required administrative structures, including the executive rules, are not in place.

**Figure 1: Unemployment insurance country allocation**



Source: ILO-SECSOC database.

Only if government systems are already institutionalized can they automatically react to changing economic conditions: the power of UI schemes as economic stabilizers stems from the fact that effective coverage is instantly extended when more workers become unemployed; in such situations, often, the average benefit paid increases automatically.

Regrettably, UI schemes that can be used accordingly exist in only 78 countries (Figure 1). A majority of them (64 out of 78) have social security-type UI as the dominant scheme, with:

- 17 countries (out of the 64) having additional employment-related social assistance that steps in when the specific UI rules are not applicable;
- 8 countries<sup>13</sup> offering tax-based social assistance as the main and only unemployment scheme; and
- 6 countries offering only insignificant provident fund-type provisions.

Where insurance- or tax-based programs exist, their effective outreach is often limited because entitlement legislation is restrictive and because effective institutional implementation of UI administration, especially in low-income countries, is also very limited (Figure 2).

## **Lessons learned from past crises?**

Asian countries without adequate UI suffer most from increasing unemployment. Any attempt to launch new unemployment schemes *during* a crisis as a response to the crisis must fail. Countries that have already implemented UI systems during periods of relative economic stability, such as the Republic of Korea,<sup>14</sup> can make use of and adjust the existing rules to respond appropriately and in a timely fashion.

Of course, there are the usual problems that accompany new social security institutions like UI: lack of resources and inefficient administration, adverse individual incentive structures, too restrictive benefit payments, and fraud. The expectation of these problems often makes governments strive for “innovative” solutions. In doing so, they must however be careful not to “throw the baby out with the bathwater”: the continual solving of the above problems (and others) is part of the day-to-day routine of any political and administrative management. As with all other social security branches in UI “analysis should be framed in a second-best context. Simple theory assumes that individuals make

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<sup>13</sup> Such as New Zealand or Australia, see description in Table 4.

<sup>14</sup> Similarly Argentina on the other side of the globe.

optimal choices and that labor markets function ideally. Formulating policy within that best framework is analytically simple, but a bad guide to (UI) design in a world with limited policy tools and major market imperfections” (Barr and Diamond 2009).<sup>15</sup>

Even if legal coverage is limited to formal sector workers and effectively reaches only a proportion of the unemployed, UI schemes, once in place, can be turned into hubs contributing to the general extension of social security coverage. UI potentially contains enormous information about labor markets on the basis of individual data and, thus, about the performance of economic sectors. This information can be turned into valuable large-scale information not only for the government but also for business and civil society more widely.

Countries with formal UI are better equipped to weather crises than countries without it. Contrary to ubiquitous beliefs, no negative effects on countries’ economic performance of increased social spending during and after crises can be found and well-designed UI effectively helps overcome and possibly shorten economic recessions.

Countries routinely providing sufficient income replacement over significant periods can be more relaxed with respect to the timing and scope of anticrisis measures than countries that offer only meager or no benefits. Most probably, relatively generous UI in continental Europe versus only limited provisions in “Anglo-America” explains, though only partially, the divergence in crisis reactions between the two sets of countries as such systems buy time and provide room for macroeconomic decision makers to concentrate on core economic policy issues instead of spending time—inefficiently and helplessly (because they are not trained for this)—on organizing public labor market programs and income-stabilization measures at short notice.

## **Unemployment insurance beneficiaries in the current crisis**

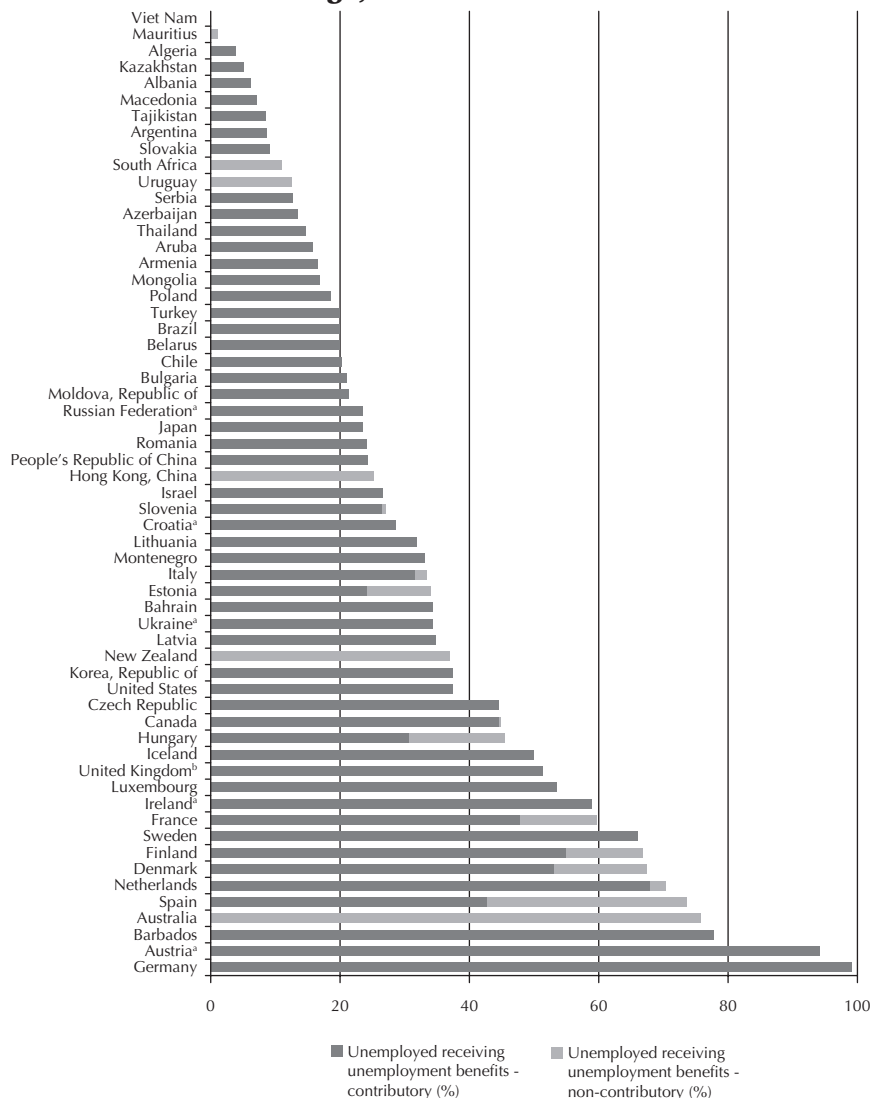
In almost all countries, the number of beneficiaries has significantly increased (Figure 3).<sup>16</sup> The reasons for differences in dynamics among

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<sup>15</sup> UI replaces “pension” in the original text of Barr and Diamond.

<sup>16</sup> All data reported thus far in this paper are precrisis; as a result of usual labor market dynamics it can be expected that since the onset of the crisis, the effective coverage ratios have increased in many countries; accordingly, in countries with contributory social insurance and noncontributory tax-financed schemes, the relative share of beneficiaries receiving contributory benefits is meanwhile, most probably, higher than shown in Figure 1. In line 1, Figure 3 shows (nonrepresentative) information for all world regions, including some Asian countries (Table 2); the other lines focus on Europe and the United States.

**Figure 2: Effective unemployment insurance coverage, selected economies**



<sup>a</sup> Unemployment assistance schemes exist but no data are available. Coverage is therefore underestimated: Austria | Emergency assistance; Croatia | Unemployment assistance; Hungary | Job seeker's aid; Ireland | Job seeker's allowance; Russian Federation | Unemployment assistance; Ukraine | Unemployment assistance.

<sup>b</sup> United Kingdom | Includes job seeker's allowance (social insurance and social assistance).

Source: ILO-SECSOC database on basis of national sources; latest available year.

various groups of countries are manifold and may be mentioned in passing (Lee 2009, Scholz 2009).

- The very high increases in Estonia, Latvia, and Lithuania<sup>17</sup> indicate that these countries during the 1990s seriously implemented rights-based UI and have effective unemployment administration systems.
- The low increases in countries like France and Germany are related to the fact that both countries offer additional labor-market instruments (such as “partial unemployment benefit” in Germany, see below). In other countries the low increases, or even declines, in numbers point to different country-specific aspects. For example, the Government of Hungary, against the general trend, chose to implement austerity policies to “boost investor confidence” (OECD 2009a), while Belarus and Serbia are not as deeply integrated in the world economy as most other countries.
- The numbers available for Australia, Japan, Korea, New Zealand, and Thailand all point in the right direction, although variation is large between countries: individual entitlements as well as attitudes of employers (and employees) toward hiring and firing policies differ significantly.

## **Income support to the unemployed: Global policy responses**

Governments make use of all three areas of unemployment-related income support that were mentioned above in the section, *Lessons learned from past crises?*: contribution-based unemployment benefits; unemployment assistance and general social assistance; and other labor market policies, including publicly organized paid employment. The extent to which these instruments are being used is determined by their accessibility<sup>18</sup> to governments, and differ by country category (Table 3).

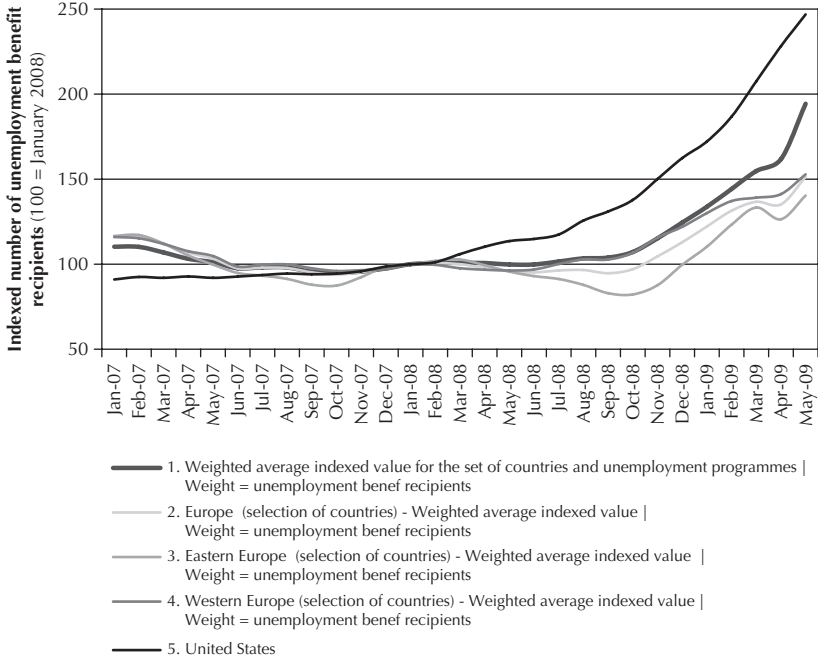
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<sup>17</sup> The individual countries are given in Table 2 (on which Figure 3 draws).

<sup>18</sup> Here, “accessibility” stands for the degree of availability to governments of effective UI administration, including UI’s cooperative links with enterprises and, thus, reach-out to the unemployed or employed envisaging unemployment. The degree of availability depends on spatial allocation of UI offices, quantity and quality of staffing, practicability, efficiency and effectiveness of administrative procedures and other prerequisites.

**Figure 3: Number of recipients of unemployment benefit**

Indexed monthly number of social security unemployment beneficiaries (base 100 in January 2008)  
Weighted average for a selection of countries



Source: Table 2.

**High-income countries**

The most common responses in high-income countries are modifications of provisions established within existing UI, i.e., extension of the maximum benefit payment period, extension of coverage, and increase of benefit levels paid.

Some—among which most prominently are France, Germany, and the Netherlands—successfully apply measures supporting “partial unemployment.”<sup>19</sup>

<sup>19</sup> One might prefer “partial employment” instead, as the measure is actually meant to avoid social unemployment at all (while it, of course, accepts economic unemployment); accordingly, beneficiaries of partial unemployment benefit are being counted, in labor market statistics and in the national accounts, as employed; “partial employment” must however not be confused with “part-time employment,” which is obviously something different.

Although it is too early for a full assessment of the measures taken in the current crisis, Germany's case clearly shows success. In 2009, unemployment increased only by around 150,000 while GDP decreased by around 5%.<sup>20</sup>

Any full or partial unemployment benefit unfolds its full potential only in combination with other labor market instruments aimed at increasing employability. Accordingly, training and related measures are part of stimulus packages introduced in most European countries (and, for example, in the Republic of Korea).

## **Middle-income countries**

Partial unemployment benefits have been implemented or extended in a number of middle-income countries such as Poland and Turkey. But while in most European middle-income countries these schemes potentially cover the majority of the employees, in many Asian and Latin American middle-income countries the labor market shares of self-employment and informal<sup>21</sup> employment are high, and so many of those whose labor incomes are affected cannot access the existing unemployment schemes. In such situations, special targeted measures for both the formal and informal sector become necessary.

The most common form of crisis response in middle-income countries is the extension of existing, or introduction of new, public-employment schemes, which can easily be discontinued once the crisis is over.

## **Low-income countries**

In their crisis response, low-income countries commonly face a triple constraint in that they are adversely hit through declines in trade, remittances, and foreign direct investment; they have limited access to foreign capital; and their scope of social security is extremely narrow. Also, many of these countries face a permanent crisis of poverty and lack of income, independently of any financial crisis impacts.

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<sup>20</sup> This compares to increases in the order of 1 million during earlier recessions in the order of only 1% of GDP decline.

<sup>21</sup> The concept "informal employment" captures unprotected jobs in both the formal and informal sectors. Informal employment or informal wage jobs are those in which the employment relationship [...] is not subject to national labor legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.) (Schmid 2009).



**Table 2: Number of unemployment benefit recipients**

Country	January 2008	Latest month available		
	Number of unemployment benefit recipients ('000)		Date	January 2008 = 100 <sup>a</sup>
Argentina   Recipients of unemployment benefits	112	126	December 2008	<b>113.1</b>
Armenia   Recipients of unemployment benefits	15	18	March 2009	<b>121.7</b>
Australia   Job seekers receiving new-start allowance and youth allowance	322	392	May 2009	<b>121.6</b>
Azerbaijan   Recipients of unemployment benefits	2,632	2,613	April 2009	<b>99.3</b>
Belarus   Recipients of unemployment benefits	26	21	February 2009	<b>79.1</b>
Belgium   Recipients of unemployment benefits	517	662	April 2009	<b>128.0</b>
Bulgaria   Recipients of unemployment benefits	64	98	April 2009	<b>154.2</b>
Canada   Employment insurance beneficiaries receiving regular benefits	460	697	April 2009	<b>151.5</b>
Chile   Superintendencia de Pensiones—Unemployment	95	153	April 2009	<b>161.5</b>
Croatia   Recipients of unemployment benefits	64	67	May 2009	<b>106.1</b>
Czech Republic   Recipients of unemployment benefits	124	209	May 2009	<b>168.8</b>
Denmark   Unemployed recipients of social assistance	13	15	May 2009	<b>114.2</b>
Denmark   Unemployed recipients of unemployment benefits	45	82	May 2009	<b>183.2</b>
Estonia   Recipients of unemployment benefits	3	17	March 2009	<b>525.9</b>
Finland   Recipients of basic unemployment allowance	17	21	December 2008	<b>122.9</b>
France   Assedic—SA	2,081	2,373	May 2009	<b>114.0</b>
Germany   UI beneficiaries	1,167	1,180	April 2009	<b>101.1</b>
Hungary   Job seekers' allowance recipients	114	106	December 2008	<b>93.0</b>
Hungary   Recipients of job seekers' assistance	54	49	December 2008	<b>90.6</b>
Israel   Claims for unemployment benefit SA	56	90	May 2009	<b>161.0</b>
Japan   UI - Basic allowance	542	793	March 2009	<b>146.3</b>
Republic of Korea   UI beneficiaries	273	455	April 2009	<b>166.2</b>

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Table 2 continued

Country	January 2008	Latest month available		
	Number of unemployment benefit recipients ('000)		Date	January 2008 = 100 <sup>a</sup>
Latvia   Recipients of unemployment benefits	29	69	May 2009	<b>236.4</b>
Lithuania   Recipients of unemployment benefits	22	69	March 2009	<b>308.0</b>
Luxembourg   Demandeurs d'emploi indemnisés	5	7	April 2009	<b>131.2</b>
Macedonia   Recipients of unemployment benefits	25	25	March 2009	<b>103.4</b>
Montenegro   Recipients of unemployment benefits	9	12	March 2009	<b>133.3</b>
The Netherlands   SA	190	207	April 2009	<b>109.0</b>
New Zealand   Recipients of unemployment benefits	28	37	April 2009	<b>163.3</b>
Poland   Unemployed with rights to benefit	268	374	April 2009	<b>139.6</b>
Russian Federation   Recipients of unemployment benefits	1,269	1,934	April 2009	<b>152.4</b>
Serbia   Recipients of unemployment benefits	76	72	March 2009	<b>94.7</b>
Slovenia   Recipients of unemployment benefits	15	23	March 2009	<b>149.3</b>
Slovakia   Recipients of unemployment benefits	21	54	May 2009	<b>257.1</b>
Spain   Recipients of unemployment benefits—Contributory	933	1,671	May 2009	<b>179.2</b>
Spain   Recipients of unemployment benefits—Noncontributory	610	890	May 2009	<b>145.8</b>
Sweden   Recipients of unemployment benefits	165	168	April 2009	<b>101.9</b>
Turkey   Recipients of unemployment benefits	107	311	March 2009	<b>290.9</b>
Thailand   Recipients of unemployment benefits	59	190	June 2009	<b>220.6</b>
United Kingdom   Claimants Job seeker's Allowance	795	1,545	May 2009	<b>194.3</b>
Ukraine   Recipients of unemployment benefits	496	545	May 2009	<b>109.9</b>
Uruguay   Recipients of unemployment benefits	21	26	April 2009	<b>127.4</b>
United States   Continued claims	2,723	6,722	May 2009	<b>246.8</b>

<sup>a</sup> Calculated on the basis of the original (not rounded) data.

Source: Data reported by national social security institutions and/or unemployment programs.

**Table 3: Income support to the unemployed by type of measure and country category**

Countries by income level (number of cases in parentheses)	Number of countries and type of measure taken						
	Countries with statutory unemployment benefit scheme	Extension of maximum payment period	Extension of coverage	Increase of benefit level	Introduction of public employment	Extension of cash benefit and social assistance	
Low income (5)	2 <sup>a</sup> / 2 <sup>b</sup> / -1	c	c	c	1	4	
Lower middle income (9)	5 <sup>a</sup> / 1 <sup>b</sup> / -3	2	1 / 1 <sup>d</sup>	c	5	5	
Upper middle income (14)	10 <sup>a</sup> / 1 <sup>b</sup> / -3	4	5	3	5	3	
High income (18)	15 <sup>a</sup> / 0 <sup>b</sup> / -2	11	6	4 / 1 <sup>d</sup>	3	2 / 1 <sup>d</sup>	
All (46)	32 <sup>a</sup> / 4 <sup>b</sup> / -9	15	12 / 1 <sup>d</sup>	7 / 1 <sup>d</sup>	14	14 / 1 <sup>d</sup>	

<sup>a</sup> At least one statutory unemployment scheme in place.

<sup>b</sup> Unemployment scheme with limited provisions.

<sup>c</sup> No scheme in place.

<sup>d</sup> Indicates constraints (rather than extension), i.e., pro-cyclical measures.

Notes: One-time payments are not included. Extension of cash benefits and social assistance appears to be especially dynamic in the low- and lower-middle-income countries. However, data should be interpreted with caution as most of the measures are donor-financed transitory pilot schemes with very low coverage effects.

Source: ILO-SEGSOC.

In this situation, one cannot expect any tangible response from UI systems that have only very recently been set up, for example in Bangladesh and Viet Nam.

### **Good practices, pitfalls, and shortcomings**

Due to lack of up-to-date information, an assessment of the measures taken has to be based, at the moment, on experience gained during past crises. The significance of interventions depends on

- the readily available array of measures foreseen by law,
- the preparedness of the administration to actively use measures,
- the readiness of the government to provide additional financing, and
- (in case of partial unemployment and training) the readiness of companies and their employees to respond appropriately.

In countries where these conditions are being fulfilled, the potential positive impacts of UI can be fully exploited.

Partial unemployment has advantages as follows

- The company maintains its production routine (though at a reduced level) and can easily expand again once demand picks up.
- UI avoids the payment of unemployment benefits.
- Workers continue paying contributions to all social security institutions (including UI).

In countries with UI but where the range of standard measures foreseen is narrow, where the administration is understaffed and not well trained or otherwise inefficient, where financial resources are limited, and where company responsiveness to measures offered is low—in all such cases, the provision of unemployment benefits can only have limited income effects at the macro level, although these might be of great help to the households actually covered, and capacity to implement more complex measures such as partial unemployment is limited.

In order to perform better in the future, it is important for the low-income countries to document carefully the effects of the crisis on companies, labor markets, and private households, and to use that information for sound improvements to the range and quality of legal and administrative (UI) measures. This will enable them to be better prepared for the next crisis.

In countries without UI, “self-targeting” public work programs are often praised as an alternative to UI because they pay only low wages and thus “automatically” attract those in dire need. These programs must be treated with caution as they might be selective among the poor and not reach out to those most in need.

## **The East Asian welfare state and unemployment insurance**

Lee (2009) has argued that Asia’s underlying fundamental sociocultural currents are very favorable to the introduction of social security in the region.<sup>22</sup>

These observations must, indeed, be taken into account when one interprets the low unemployment-coverage ratios in the region, and it might be tempting to speak of an “East Asian Welfare Model,”<sup>23</sup> especially when focusing on the region’s most developed economies, including Hong Kong, China; Japan; the Republic of Korea; Singapore; and Taipei, China.

At the same time, however, it must not be forgotten that these economies represent only a small share of Asia’s total population. Also, Lee’s observations have lost some of their earlier significance, as “it is now almost indisputable that overall income inequality in the region has increased” (Lee and Eyraud 2008). The tradition of “(employer-based) ‘employment protection’ ” (Vandenberg 2008) is irrelevant for the vast majority of the Asian labor force and legislation has lowered in a number of economies, companies’ dismissal costs and increased workers’ numerical flexibility (Lee and Yoo 2008, Kubo 2008).<sup>24 25</sup>

Among nine selected Asian economies<sup>26</sup>—Australia; the People’s Republic of China (PRC); India; Japan; Korea; New Zealand; Taipei, China; Thailand; Viet Nam—UI ranges from very good to almost nonexistent: the PRC; Japan; the Republic of Korea; and Taipei, China have bona fide UI schemes, although effective coverage in the PRC is

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<sup>22</sup> Lee specifically refers to East Asia and its Confucian traditions. Lee’s and ADB’s definitions of “East Asia” do not completely match.

<sup>23</sup> Also see Kwon (1997).

<sup>24</sup> The literature distinguishes between numerical and functional flexibility (Schmid 2009).

<sup>25</sup> This development resembles similarities to typical employment policies of many of the highly specialized, medium-sized, manufacturing enterprises in Germany.

<sup>26</sup> Vandenberg (2008), ISSA (2009).

still only limited because of its large rural economy and the resulting financing problems.

The PRC's UI system was formally established in 1986; it specifically aimed at UI for workers in state-owned enterprises contributing to solving problems arising from intended reforms. The participation of social associations and their full-time staff, private nonenterprise groups and their employees, and self-employed workers was left for provincial governments to decide on (Shu 2009).

Legal coverage in Viet Nam, where UI legislation was first implemented in 2007 (ISSA 2009), resembles standard social insurance-type regulations, but effective coverage began only in January 2009 when enterprises were advised to take action (MoLISA 2008). India has recently added an "employment allowance" to its social security scheme but benefits are low, and legal and effective coverage are both limited.

Thailand's system was introduced after the Asian financial crisis of 1997–1998. The government, however, did not intend to invest too much in UI administration. As a result, the standard moral hazard concerns (see next paragraph) are not being addressed administratively, but by the rules governing benefit entitlements, their levels, and payment periods.

Australia and New Zealand<sup>27</sup> have means-tested social assistance systems to cover the unemployed. Therefore, their systems cannot be characterized as bona fide UI.<sup>28</sup> To some extent, these two countries can be considered as similar to Malaysia and Singapore which, thus far, have consciously done without UI but opted for full employment. "These countries feel that such insurance is a disincentive to work and therefore creates a moral hazard" (Vandenberg 2008). An important difference between Australia and New Zealand on the one hand, and Malaysia and Singapore on the other, is that the former provide sufficient subsistence support whereas the latter are in effect "riding a tiger," because a full-employment strategy without UI allows for no mistakes.<sup>29</sup>

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<sup>27</sup> Australia and New Zealand have been included as they belong to the wider Asian economic space.

<sup>28</sup> While many UI systems around the world also offer means-tested benefits they do so, typically, only after a transition period during which income related benefits are being paid; in short: UI first pays income related benefits, when individual unemployment extends over a too long period the income related benefit is being replaced with a usually lower (means- or income-tested, often flat) benefit.

<sup>29</sup> Singapore's Minister of Finance noted in 1997: "Our strategy has been to encourage economic self-reliance by promoting social mobility. Instead of providing large unemployment benefits and price support schemes, we prefer job creation and market competition. The provision of subsidies has been selective and confined mainly to education, healthcare and public housing." Quoted in Vandenberg (2008).

India comprises a relatively old contributory scheme (dating from 1948) but its eligibility conditions are restrictive and it covers only 2% of the workforce.

## **Unemployment insurance in Asia and ILO Conventions No. 102 and No. 168**

Two up-to-date ILO Conventions relate to UI: the Social Security (Minimum Standards) Convention, 1952 (No. 102) [C102] and the Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168) [C168] (ILO 1952, 1988).<sup>30</sup> Worldwide, C102 has been ratified by 45 economies and C168 by seven. In Asia and the Pacific, only Japan has ratified C102; no regional economy has signed C168.

It would be a misunderstanding, however, to assume that countries (including those in Asia) have not signed because they are unable to fulfill the minimum conditions as defined by those Conventions. A detailed investigation in governments' replies to a worldwide ILO survey suggests that there is "a considerable lack of knowledge among [ILO] member states regarding the content of social security Conventions" (ILO 2008).

C102 covers full social security, i.e., has provisions for the nine classical branches of social security, including UI; C168 sets higher standards solely for UI and aims at the promotion of productive employment through coordination of UI and employment policy. Both Conventions, appearing complex at first sight, in essence provide a robust framework for the design of any meaningful UI system by laying down basic principles and minimum requirements for its good governance.

Some essential content of UI provisions in Asia can also be found in the two Conventions. In other words, the authors of the various national Asian laws were either aware of the contents of C102/C168, or they took advice from sources familiar with the Conventions, or legislators quasi-automatically formulated provisions resembling elements of C102/C168 because the very nature of "social security" required exactly these.<sup>31</sup>

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<sup>30</sup> See [www.ilo.org/ilolex/index.htm](http://www.ilo.org/ilolex/index.htm)

<sup>31</sup> Quite in contrast to general beliefs, the range of possible social security regulations is relatively narrow. In other words, once a government has decided to implement social security (for example, UI) then the very nature of (societal) protection of income losses (= social security) requires certain types of provisions; within these provisions a certain, but only limited, range of parameter fixings is possible. If provisions lie outside these limits (for example, they are too low) they lose their "social security" character.

This does not necessarily imply that the Asian laws are in conformity with the two Conventions—this is most probably not even the case for the relatively “soft” C102. An assessment of the actual distance between national legislation and the Conventions would be a natural first step to be undertaken in those Asian countries that consider expanding coverage of existing UI or its introduction where it does not yet exist.

## **Unemployment insurance in East Asia: Sc(h)ope for extension and implementation?**

Unlike any other region in the world, East Asia appears to be prepared to *start an autonomous process of systematic extension of social security*. Several factors point to this direction (see also Berg and Kucera 2008):

- Economic development is dynamic and requires expansion of internal demand.
- Large parts of the population are still excluded from the fruits of economic development while, at the same time, East Asia’s economies are (or will soon be) in general sufficiently productive to satisfy the resulting demand.
- Economies are developed enough to provide the reliable governance structures required for sustained implementation of social security.
- Some countries already have social security systems that can be used as platforms for formal social security based income security.
- UI will be part of this process. Historical evidence shows that countries in the past managed to introduce UI while substantial parts of their labor force were still working in informal rural areas (Table 4).
- The implementation of UI schemes in East Asia can take advantage of well-functioning blueprints in Europe. Also, it should be recalled that when C102 was adopted by the ILO, the societal and organizational conditions necessary to fulfill C102’s practical prerequisites were much more costly than today.
- The current economic crisis will contribute to coverage extension. The initiation, improvement, and further development of social security have in many countries typically been induced by crises. One option to make the “East Asian social model” more crisis-proof is the extension of existing social security. Respective activities in Thailand can be understood as the



government's response to a simultaneous amalgamate of societal, political, and economic crises, while the PRC government's policy directions explicitly aim at a "harmonious society," which is conceptually not very different from Europe's social cohesion approach.

**Table 4: Unemployment insurance adoption and income per capita**

Country	Year UI established	% of total workforce currently covered	Income per capita in year UI adopted (or 2005 if no UI) <sup>a</sup>	% of workforce engaged in agriculture when UI adopted <sup>b</sup>
<b>Six Asian study countries</b>				
Singapore	No UI	0	26,960	0.3 <sup>c</sup>
Korea, Republic of	1995	36	13,060	12.4
Malaysia	No UI	0	4,165	14.8 <sup>c</sup>
PRC, public sector	1986	–	850	60.0
PRC, private sector	1999	14	885	46.9
Sri Lanka	No UI	0	846	34.3 <sup>d</sup>
India	2005	2	620	54.2
<b>Six countries which adopted UI much earlier</b>				
Japan	1947	–	1,541	52.6
Greece	1954	–	2,358	48.2
France	1905	–	2,894	42.7
United Kingdom	1911	–	4,709	8.8
United States	1935	–	5,467	17.6
Australia	1944	–	7,362	–

– = no data, PRC = People's Republic of China.

<sup>a</sup> GNI or GDP per capita; constant \$. <sup>b</sup> Latest figures provided for those without UI. <sup>c</sup> 2004.

<sup>d</sup> 2003.

Source: Vandenberg 2008, Table 9, with further details.

Progress will materialize the sooner the region begins to assume an active role in promoting the value of public goods. Private sector development, i.e., the accumulation of private wealth in the hands of few accompanied by development of a middle-class (of still insufficient

size), has in the past been given priority in many Asian countries. Public sector development must now follow. Under such a changed paradigm the implementation of UI will be a nonspectacular event and will occur automatically.

Policies reinforcing the advantages of the formal sector must actively address the actors in labor markets. The Organisation for Economic Co-operation and Development (OECD) has recently proposed a three-pronged strategy aiming at formalizing economies (OECD 2009b).

This strategy, supported by the ILO, can be effectively reinforced by a simultaneous build-up of UI systems. More generally, formalization cannot be thought of without extension of social security coverage—and the obverse, namely that extension of social security coverage implies formalization. Significantly, the OECD strategy is an emancipatory strategy, in that it aims at productively overcoming poverty. It is not a strategy aiming at solely lifting poor people just above the poverty line. In other words, any UI implementation strategy must explicitly target not only the poor but also include all formal sector employees with all (or a substantial share) of their wages.<sup>32</sup>

## Conclusions

All countries with established UI schemes have been able thus far to react quasi-automatically to the income-protection needs of dismissed workers. Intelligent solutions, such as partial unemployment regimes, have contributed to keeping unemployment substantially lower than would have been the case otherwise. These and other measures contribute to stabilizing aggregate demand and, at the same time, contribute positively to productivity levels of labor and capital in preparation for the time when the crisis is over.

East Asia belongs to those regions where UI is still underdeveloped. In reaction to the experience of the 1997–1998 financial crisis Asian economies built high levels of reserves through aggressive export strategies. This strategy has proved successful so far in the current crisis, but the focus on financial matters has distracted governments from improving the conditions of the functioning of the real economy, including protection of unemployed labor.

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<sup>32</sup> Technically, this implies either no contribution collection ceiling or a ceiling fixed at a sufficiently high multiple of the national average wage. The low ceilings set in many US states are not reasonable benchmarks.

The PRC government has understood these mechanisms and is, therefore, extending social security, including UI, and has been successfully using the established administrative structures for bolstering the worst income effects on dismissed workers and migrants. Because of the economic interdependencies of the PRC and its neighbors, the neighbors are expected to follow the PRC's example the sooner, the better.

Asia has meanwhile reached sufficiently high income levels that allow it to both build UI and its effective administration, and to formalize labor markets through extending social security in general. Most Asian countries have reached development levels that will start the required government initiatives quasi-autonomously; this will include combining passive and active labor market policies. Striving for mere passive systems would imply *ex ante* acceptance of development standstill, and would miss a chance to improve factor productivity further.

As in other parts of the world, meaningful UI will not emerge as long as governments do not take the initiative. Consequently, the prevailing paradigms about the role of the state, and its size, must be adjusted from "small government" to "sufficient government." This adjustment has to be accompanied by a better balance between public interests and private profit orientation.

To effectively address any future crises, governments need to have in place a set of instruments and institutions that allow an immediate response for providing income replacement to those who lose their employment or whose income is reduced. Income-support measures must be combined with labor market policies that support existing and create new decent jobs.

Governments and the international community must now take stock of gaps and deficiencies in programs that provide protection for the unemployed, with a view to improvement and reform.

In countries where employment protection legislation is only strong on paper but weak in application, and where social security and social dialogue are insufficiently developed, no system of labor market security can emerge unless policies are put in place, effectively.

The prospects for all this to happen are good in Asia. Therefore, the question is not whether Asia will expand social protection—including UI—but when.

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# **Financial crisis and social protection reform—Brake or motor? An analysis of reform dynamics in Indonesia and Viet Nam**

*Katja Bender and Matthias Rompel*<sup>1</sup>

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## **Introduction**

Social protection refers to the entire system of protective measures that assist individuals, households, and communities to better manage risks and economic shocks and that provide support to the critically vulnerable. Among the major risks it covers are illness, accident, death, unemployment, and old age. Social protection includes public as well as private approaches.

Social protection reforms are on the political agenda in many low- and middle-income countries, as they are in Indonesia and Viet Nam, the two focal countries of this study. A striking characteristic of both countries is the broad scope of ongoing reform initiatives: Reforms are not directed at particular social protection pillars only, but comprise the entire social protection system. Further, in both countries social protection systems show similar structural characteristics comprising mandatory and voluntary contribution-financed social insurance and complementary means-tested and non-contribution-financed social assistance or basic social protection providing economic or social support for poor individuals or vulnerable groups of society. Also, both countries have to deal with similar challenges regarding the design of social protection measures.

The study aims at analyzing in how far the current global financial crisis impacted on reform dynamics in Indonesia and Viet Nam within the area of social protection. In its comparison of social protection reform priorities and initiatives before and after the financial crisis, the demarcation point marking “before” from “after” is taken to be the third quarter of 2008.

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## **Case study: Indonesia<sup>2</sup>**

### **Country background**

Indonesia has achieved remarkable progress in its transition to democracy and its economic recovery from the Asian financial crisis of 1997–1998. It is now characterized by a young and growing democracy with a population of 233 million in 2008 and has once again become one of the world's emergent middle-income countries.

Annual growth in 2007 was at 6.3%, the highest in 10 years. Unemployment in the formal sector decreased from 10.3% in 2006 to 8.3% in 2008. However, the informal sector is very large. According to the National Labor Force Survey (2007), the informal sector accounts for a substantial and growing part of the working population, currently with 69% of the total labor force.

Poverty levels that had increased by over one third during the Asian crisis are now back to precrisis levels, falling to 16.6% in 2007 and 15.4% in 2008. However, the proportion of the population vulnerable to falling into poverty remains high at around 46% of the population, based on the \$2 poverty rate. About 30% of the population lives slightly above the poverty line.

### **Impact of the financial crisis**

Starting in late 2008, Indonesia was affected by the financial crisis through all three transmission channels (financial markets, trade, and capital flows), but soon started showing signs of recovery. To deal with the impact, the government introduced a range of financial, monetary, and fiscal policy measures (the focus below is on their impact on social protection).

A budget revision that became effective in March 2009 protects spending on public infrastructure, education, and poverty reduction programs, including the extension of free health care, the continuation of the subsidized rice program for the poor (RASKIN), and an extension of the Unconditional Cash Transfers (UCT) Program for 2 months in 2009 (January and February).

Due to favorable initial conditions and timely policy responses, Indonesia's economy<sup>3</sup> has so far managed the financial crisis with

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<sup>2</sup> Unless indicated otherwise, data are based on national statistics from Bank Indonesia and BPS–Statistics Indonesia.

<sup>3</sup> Writing in the third quarter of 2009.



growth rates remaining at comparatively high levels and continuing positive trends in poverty reduction. The reduction in exports seen in the crisis has been offset by strong internal demand, so that the economy will continue to grow, although at slightly slower rates. As fiscal performance was solid in recent years with an almost balanced budget in 2008, fiscal space for the financial stimulus package is available. However, the effectiveness of the stimulus will depend heavily on timely execution. Although total disbursement is planned in 2009, by April 2009 “only” 21% of the full-year budget had been disbursed (*Jakarta Post*, 13 May 2009). Tax components were implemented promptly, but delays persisted particularly in capital project execution. However, authorities are aware of the need to quickly disburse and several measures have been undertaken (IMF 2009: 12–13).

## **Social protection prior to the crisis**

### **Overview**

The government is planning and implementing major reforms in the area of social protection. Publicly provided social protection in Indonesia is based on two kinds of public interventions, namely:

- Mandatory social insurance or mandatory savings for civil servants, the armed forces, and formal-sector employees; and
- Complementary means-tested social assistance for vulnerable groups of society. In 2004, the government ratified the Law on the National Social Security System (Undang-Undang Sistem Jaminan Sosial Nasional, or SJSN, Law No. 40/2004), which foresees reforming the existing social protection system toward universal coverage. The new system is to be launched in October 2009. Law No. 40/2004, a framework law, is an important milestone because it stipulates that the existing social security programs in Indonesia will be expanded so as to cover all Indonesian citizens, including those who are not working in the formal sector and the poor.<sup>4</sup>

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<sup>4</sup> For a detailed overview and analysis of Indonesia’s social protection system, see GTZ (2008).

## **Social insurance**

Mandatory social insurance programs cover employees of the military (through PT Asabri, PT Askes), civil servants (PT Askes, PT Taspen), and those employed in private enterprises above a certain staff size and total payroll (PT Jamsostek). Those in the last group are insured against work accidents, illness, death, and funeral risks, but not against unemployment. In case of retirement, they receive a lump sum payment from a mandatory saving scheme (provident fund) related to their contributions plus interest. Members of the armed forces and civil servants are insured against illness (PT Askes) as well as old age, in case of which they receive lump sum payments as well as annuity benefits for life after retirement (through PT Asabri and PT Taspen, respectively). The social insurance schemes are at present financed by employer, employee, or a mix of employer and employee contributions depending on the scheme. Law No. 40/2004 foresees harmonizing the financing modality by relying exclusively on joint employer–employee financing (except for the death benefit, which will be financed by employer contributions only).

Voluntary social insurance programs are still very limited in scope. For example, at present, Jamsostek as well as the Ministry of Social Affairs are running programs targeted at the informal sector. Jamsostek is trying to extend its insurance coverage to the informal sectors whereas the Ministry of Social Affairs is offering a saving scheme to informal sector workers (Askesos). According to Law No. 40/2004, social insurance coverage is to be extended to persons not receiving a regular wage as well. Thus, this law offers the opportunity to cover the large informal sector economy. Membership is to be based on voluntary flat-rate contributions. The voluntary social insurance programs comprise health and working accident insurance (the same benefit package as formal sector employees), as well as old age and death (lump sum payments).

Further, several regional health insurance programs coexist, which in some instances are universal to those living in a particular area, for example health insurance with pro-poor components in Jembrana and Kupang districts (since 2007).

A total of 18.6 million people are covered by mandatory social health insurance (Jamsostek: 2.8 million, public sector schemes: 15.8 million). Only a small number of the 60 million workers in the informal sector had joined the program offered by Jamsostek by the end of 2007 (about 84,729).

Old age protection covers civil servants and formal sector employees only. Civil servants and the military (together, about 4.6 million) are

covered by contributory final salary defined benefit schemes. In addition, they receive an endowment lump sum on retirement that is also defined benefit and final salary oriented. Of the 33 million employees in the formal private sector, only about 8.2 million contribute to the mandatory provident fund and 15.8 million are nonactive members of Jamsostek. Around 4 million people have access to schemes financed by regional or local government.

## **Social assistance**

Efforts to establish a comprehensive social protection system, including social assistance provisions, were strongly influenced by the Asian financial crisis. As an immediate response, several social safety net programs (JPS) to help poor people especially were implemented by a wide array of government agencies providing health services (Kartu Sehat), subsidized rice (Raskin), fuel subsidies, and scholarships for poor children. However, assessments of these ad hoc measures revealed low coverage, poor targeting, and, in general, little coordination. The fuel subsidies were reduced in 2005, despite intense controversy.

Today, social assistance in Indonesia covers the provision of cash and in-kind benefits including access to health services to the poor in general and to specific vulnerable groups that can be classified as belonging to the chronically poor. Further, providing free access to health services for the near poor is included as well. These measures rest on different institutional pillars. Cash benefits to the poor are provided in terms of temporary programs (UCT) or are at a pilot stage (conditional cash transfers). The health scheme for the poor and near poor—Jamkesmas—is a permanent program. Social assistance to specific vulnerable groups is based mainly on Law No. 6/1974 on Social Welfare, Law No. 25/1999 (National Development Program, Proenas), Law No. 4/1979 on Child Welfare, Law No. 4/1997 on Disabled Persons, and Law No. 13/1998 on the Elderly.

Cash transfers (conditional and unconditional) are paid to poor households as a form of basic social assistance. Unconditional cash transfers are provided occasionally and UCT was introduced in response to the reduction of fuel price subsidies in 2005 (12 months) and in 2008 (7 months) and 2009 (2 months). Poor and near-poor households receive quarterly payments of an equivalent of Rp300,000 (\$30). Since 2007 conditional cash transfers have been paid in 13 pilot regions to chronically poor households with school-age children, infants, or expecting and/or lactating mothers. Here the quarterly payment varies from Rp150,000 to Rp550,000 (\$15 to \$55), depending on the composition of the household.

In 2004, a new health program for the poor was introduced: Asuransi Kesehatan Masyarakat Miskin (Health Insurance for Poor Population) or Askeskin. This scheme aimed at providing free primary health care services at public health centers (Puskesmas) and in-patient treatment in “third class” hospital wards. In 2008, the Ministry of Health issued a decree expanding Askeskin through Jamkesmas to include the near poor as well.

Further, a multitude of small social assistance programs (BKSP) exist. They are targeted at specifically vulnerable groups, including the elderly, mentally disabled persons, and persons suffering from chronic illnesses, and provide income support. A temporary component is targeted at the victims of natural disasters. The funds for this program are channeled to recipients via specific service provider organizations. In addition, they provide social services (e.g., health, scholarships, and housing) for certain groups like poor families living in slum areas, vulnerable children and adults, and drug addicts (Sigit and Surbakti 2006).

At local level, several social assistance programs are in place, too. Examples include the above health insurance programs with pro-poor components in Jembrana and Kupang districts (since 2007). Local government in Jembrana also provides subsidies and scholarships to students. In Makassar, poor people have received free health care at Puskesmas (since 2006) and free education in selected areas (since 2007) (Bahagijo 2007). In addition to the above programs, several districts have implemented their own district health insurance programs under an earlier program (JPK/Gakin scheme).

Basic health services are accessible for the 76.4 million poor and near poor through the Jamkesmas scheme. In 2005, 19.1 million households and in 2008, 19.2 million households received unconditional cash transfers. More than 76 million people in chronically poor households with school-age children, infants, or expecting and/or lactating mothers received conditional cash transfers. An evaluation of the UCT program in 2005 showed that the program was effective: 94.2% (first payment) and 89.6% (second payment) of beneficiaries received the transfer in full. The transfer was used for basic necessities and did not lead to a reduction in working hours (BAPPENAS 2009). The coverage of social assistance programs targeted at specific vulnerable groups is rather low, with rates ranging from 0.7% (disabled people) and 1.0% (elderly) up to 15.0% (street children).

## **Organizational framework**

Five ministries and government agencies and four social security administering bodies are involved. The Coordinating Ministry for People’s

Welfare (Menko Kesra) has the official role of coordinating social policy issues between ministries and of harmonizing conflicting policies or programs. It has until recently been responsible for the “Task Force,” an interministerial working group charged with preparing the draft law and secondary legislation required as the legal follow-up to the SJSN framework law (No. 40/2004). The main part of these tasks has now nominally been transferred to the National Social Security Council (see below).

The Department of Social Affairs (DepSos) has executive responsibility for social assistance measures provided to specific vulnerable groups, the UCT program, and the CCT pilot as well as other pilot schemes for especially vulnerable groups. The Ministry of Health is, through its responsibility for the Jamkesmas health protection scheme for the poorest, directly involved in the provision of social protection.

The Ministry of Finance has a variety of roles within the wider social protection reform area. It has supervisory authority over the existing social security administering bodies and private pension funds. As part of the sharing of responsibilities within the Task Force, it has been assigned the areas of old age security and long-term insurance. In addition, the ministry has overall responsibility for overseeing the budgetary effects of the existing as well as proposed new social security and social protection programs.

BAPPENAS has the mandate to coordinate the preparation of the national midterm plan (as well as the annual short- and long-term plans). In addition, it is jointly responsible with the Ministry of Finance for coordinating the annual budget allocation to the sector ministries and for putting it forward to Parliament. BAPPENAS is increasingly taking the role of being the think tank and coordinator for other government institutions. It is also responsible for the monitoring and evaluation of several social assistance programs.

The administrative setup of social insurance is mainly organized according to group affiliation. The social security administering bodies are PT Askes (health insurance for civil servants), PT Taspen (civil servants), PT Asabri (armed forces), and PT Jamsostek (formal sector employees and the informal sector).

In 2008, the National Social Security Council was formally established with the appointment of its 16 members by presidential decree. The SJSN Law (No. 40/2004, Articles 6 to 12) assigns to the Council the legal responsibility for general policy formulation, synchronized implementation of the national social security system, and monitoring of implementation. The National Social Security Council will report directly to the president.

## **Major challenges**

As coverage by the existing social insurance system is still low, extension of coverage is one of the major challenges. The low coverage rate of the Jamsostek scheme is also caused by the high proportion of employers who do not enroll their employees. As concerns health protection, about 100 million Indonesians are covered by some sort of social protection. Thus, approximately 130 million out of the 230 million population (56%) are still without any publicly provided social protection coverage.

The present system still excludes most of the nonpoor in the informal sector from any arrangement: they are not covered by contributory social insurance and are ineligible for any form of social assistance. Given that the informal sector constitutes a substantial part of the working population, with a high proportion of them nonpoor, developing an effective strategy on behalf of this population group is crucial for realizing the goal of universal coverage.

With the exception of health insurance, regular social assistance coverage is limited as well. The UCT program is not a permanent institutionalized program and coverage by social assistance programs targeted at specific vulnerable groups seems to be low.

Despite the political will to extend social protection, a viable financing strategy is not yet in place. The system also suffers from a high degree of fragmentation. The situation is further complicated by the national policy of increasing local autonomy and decision making. Since the policy of local autonomy was introduced in 2001, social development has been the joint responsibility of the central Government (Ministry of Social Welfare) and local administrations. Improved coordination between national and regional initiatives is, therefore, essential.

## **Major reform initiatives**

One of the main areas of ongoing reform is the follow-up process to Law No. 40/2004. As regards implementation of the law, the focus so far has been on harmonizing all relevant laws and regulations by 2009. Further, Law No. 40/2004 stipulates that the existing social security administering bodies should be transformed from their current for-profit status to nonprofit organizations. This process is intended to be completed by October 2009. The establishment of the National Social Security Council has been another step in advancing the implementation of Law No. 40/2004. However, without an adequate budget its scope is obviously very constrained.

As regards social assistance, the major focus has been on extending social health protection. However, the final decision on which

model is the most appropriate is yet to be taken, and ideas conflict. Plans put forward by the Ministry of Health to extend Jamkesmas to provide basic health coverage for the entire population even question the entire systemic status quo. The cash transfer programs do not seem to rank high on the political agenda, and other social assistance programs carried out by DepSos even less.

The lightly shaded parts of Tables 1 and 2 summarize the development status of the social protection system prior to the financial crisis. The darkly shaded parts summarize the changes after that.

**Table 1: Social protection reform in Indonesia**  
 (up to October 2008 in light shade,  
 from November 2008 to August 2009 in dark shade)

Instrument	Social insurance <sup>a</sup>						Other instruments
	Compulsory social insurance			Voluntary social insurance			Individual saving accounts
Target group	Civil servants, military and police, formal sector employees			Nonwage employed			Formal sector employees
Type of risk	Illness	Old age	Others	Illness	Old age	Others <sup>b</sup>	Unemployment
Agenda setting							
Policy formulation	↓	↓	↓	↓	↓	↓	↓
Decision making				↓	↓	↓	
Implementation	↓	↓	↓	↓			↓
Evaluation	↓	↓	↓				
Policy response							Ineffectiveness of severance payments is realized but no specific policy response
Ongoing implementation processes regarding Law No. 40/2004: Harmonization of all relevant rules and regulations. Establishment of Social Security Council in autumn 2008. Establishment of Secretariat of Social Security Council in May 2009.  Agenda setting: Announcement of plans to achieve universal health coverage by 2013 via Jamkesmas.							

<sup>a</sup> National initiatives only.

<sup>b</sup> Further benefits to be included are related to working accident insurance and death.

Source: Authors.

**Table 2: Social protection reform in Indonesia**  
(up to October 2008 in light shade,  
from November 2008 to August 2009 in dark shade)

Social assistance <sup>a</sup>									
Type of benefit	Benefits in cash			Health			Other social services		
Target group	Poor	Near poor	Chronic poor <sup>b</sup>	Poor	Near poor	Chronic poor <sup>c</sup>	Poor	Near poor	Chronic poor <sup>d</sup>
Agenda setting									
Piloting									
Policy formulation									
Decision making									
Implementation									
Evaluation									
Policy response	Agenda setting for permanent institutionalization ongoing		No policy response, although coverage seems to be very low	High priority area. Furthering policy formulation and adjustments at implementation level are ongoing processes  Agenda setting: Announcement of plans to achieve universal health coverage by 2013 via Jamkesmas					No policy response, although coverage seems to be very low
	Decision making: Law No. 11/2009 on Social Welfare  Policy formulation: Results of social impact studies will determine future poverty reduction policies								

<sup>a</sup> National initiatives only.

<sup>b</sup> Target groups include the elderly and persons living with disabilities.

<sup>c</sup> Covers a broad range of specific groups including the elderly, persons living with disabilities, or neglected children. It is not clear how far there are overlapping provisions concerning provisions for the poor (Jamkesmas) and potential additional measures provided by DepSos.

<sup>d</sup> Covers a broad range of specific groups including the elderly, persons living with disabilities, neglected children, people living in slum areas, or drug addicts.

Source: Authors.



## **Impact of the financial crisis on reform dynamics**

The National Social Security Council secretariat was established in May 2009, which is another major step toward implementing Law No. 40/2004, and policy formulation for reforming the social security administering bodies is intended to be ready by October 2009. Further, in February 2009 Jamsostek announced plans to increase coverage of informal sector workers. However, it is not possible to identify any discernible causal link between the crisis and these moves.

In the area of social assistance, a substantial reform step was made by the passage of Law No. 11/2009 on Social Welfare in January 2009, which replaces Law No. 6/1974 on Social Welfare. The law foresees the establishment of a comprehensive system of social assistance, including income support and social services for the poor and other disadvantaged population groups. Taking into consideration the weak political position of DepSos, the ratification of Law No. 11/2009 is surprising. However, as regards the timing, Law No. 11/2009 was passed when the crisis first hit Indonesia and when it was still highly uncertain how severe the economic impact would be. Uncertainty regarding future developments (with a collective memory of the dramatic experiences of the 1997–1998 crisis) might, then, have facilitated the law's passage.

The crisis did not prevent social assistance reforms, at least at the decision-making level. Further, the government is preparing a highly ambitious plan to achieve universal coverage by 2013 through extending the Jamkesmas health program. At the implementation level, the crisis response seems to be rather on the extension of the Community Block Grants (PNPM) program, but not of the UCT, since the budgeted UCT for January and February was not a response to the crisis, but rather the final months of the UCT. Indeed, UCT coverage in 2009 was lower than in 2008 (18.5 million households versus 19.0 million in 2008). However, the political situation and the crisis might have also led to the planned scaling up of the pilot conditional cash transfers faster than initially designed.

In summary, it seems that the crisis had no impact at all on the speed of social insurance, but did create a new focus on social assistance (Law No. 11/2009). Policy responses in the aftermath of the crisis also highlighted once again the priority given to the extension of social health protection. Regarding the implementation of social assistance measures—at least at first sight—the crisis did not invoke any immediate changes. Rather, despite the negative experiences with the fuel subsidy and other social safety net relics employed after the Asian crisis, the government returned to these instruments to be able to protect the vulnerable population quickly.

## **Case study: Viet Nam<sup>5</sup>**

### **Country background**

Belonging to the group of low-income countries, Viet Nam has achieved tremendous development success in recent years. The annual growth rate was 8.5% in 2007, and gross domestic product (GDP) per capita increased from \$829 in 2007 to \$975 in 2008. The number of employed people rose from 37.8 million in 1999 to 44.2 million in 2007. The unemployment rate in urban areas fell from 6.7% in 1999 to 4.6% in 2007. However, the Viet Nam's informal sector is still very large and accounts for about 80% of the workforce. The poverty rate dropped from 37.4% in 1999 to slightly below 16% in 2006, and the number of near poor having expenditure lower than 1.5 times the poverty line declined from 57.5% in 2002 to 38.4% in 2006 (data from the Vietnam Health and Living Standard Survey). The population was 86.8 million in 2008.

Immediately prior to the crisis, the economy experienced turbulence that started in late 2007, with an overheated economy resulting from large capital inflows leading to accelerating inflation, asset price bubbles, and a widening trade deficit. Consumer price inflation surged to 12.6% in 2007 and 19.9% in 2008. The stock market index reached its highest value in 2007, but has been declining since the first quarter of 2008, a first sign of a “de-heating” of the economy. The trade deficit widened from \$2,287 million in 2002 to \$15,984 million in 2008 (data from IMF Financial Statistics).

### **Impact of the financial crisis**

Viet Nam has been hit less hard than most other countries, though more so than Indonesia. Recent growth forecasts clearly reflect signs of recovery. The growth outlook is particularly due to the domestic demand-driven services sector and an improved outlook for commodity and low-cost manufactured exports. The government initiated a comprehensive financial stimulus aimed at maintaining business activities, stabilizing consumption, and preventing unemployment. However, inflationary pressures might rise again both due to the comprehensive financial stimulus package, which will cause the highest fiscal deficit ever (official forecasts range between 8% and 9.7% of GDP), and to the induced credit growth of 17% in the first half of

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<sup>5</sup> Unless indicated otherwise, data are from the General Statistics Office.

2009 (BMI 2009). In this context, the government faces the challenge of balancing further stimulation measures and inflationary tendencies.

## **Social protection prior to the crisis**

### **Overview**

Major social protection reform started after the Seventh National Congress of the Government of Viet Nam in 1991 and accelerated from 2000.<sup>6</sup> Today, the social protection system of Viet Nam is based on

- Mandatory social insurance for public and private sector;
- Voluntary social insurance for the self-employed, farmers, wage employed with short-term or no labor contracts, and students; and
- Complementary means-tested social assistance for vulnerable groups.

### **Social insurance**

The implementation of social insurance is mandated by the Law on Social Insurance adopted in 2006 and by the Law on Health Insurance, which was amended in 2008 and came into effect in January 2009. The mandatory social insurance programs for public and private sector employees cover illness and maternity, old age, disability, survivors, as well as work accidents and industrial diseases. It was planned to implement an unemployment insurance scheme from January 2009 for workers having a labor contract of at least 12 consecutive months (though this was postponed by the crisis). According to the law, unemployment benefits will amount to 60% of the average salary. The social insurance schemes are financed by income-related contributions by employers and employees. Old age insurance is organized on a pay-as-you-go basis.

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<sup>6</sup> Viet Nam's definition of social protection is more comprehensive than the definition used in this study. Besides social insurance and social assistance it includes active and passive labor market policies as well. However, issues related to either social insurance and social assistance or labor market policy are not mutually exclusive. For example, unemployment insurance is an instrument for passive labor market policies and one of the key social insurance measures at the same time. Passive job counseling services for the long-term unemployed are a component of active labor market policies, but can also be subsumed as a component of social assistance.

The mandatory social insurance is complemented by a voluntary social insurance pillar targeted at the self-employed, farmers, wage employed with short-term or no labor contracts, and students, thus providing an option of social protection for the informal sector as well. The voluntary insurance has a health insurance element, which was enacted in 2005. In 2008 a second pillar covering old age, death, and disability came into effect. The voluntary pillars are financed by flat-rate contributions.

Coverage of the mandatory insurance increased between 2001 and 2008 from 4.8 million to 8.5 million people. The coverage of the voluntary social insurance is still very low with only about 500,000 members. The amended Law on Health Insurance stipulates that universal health coverage should be achieved by 2014. Coverage of the social health insurance increased from a total of 16.2 million people in 2003 (of whom 11.3 million participated in the compulsory social insurance) to a total of 34.5 million in 2006 (of whom about 25.0 million participated in the compulsory social insurance), approximately. Among the participants in the voluntary scheme, around 99% were students in 2003. This ratio decreased to 85% in 2006, with the total number of informal sector workers covered at about 1.4 million (data from Viet Nam Social Security). Financial sustainability is a crucial issue. Despite massive cross-subsidies from the mandatory health insurance, the voluntary scheme faces severe financing bottlenecks and almost faced bankruptcy in 2008.

## **Social assistance**

Social assistance in Viet Nam covers the provision of cash and in-kind transfers to specific vulnerable groups and of in-kind transfers to the poor in general. These social assistance measures rest on two different institutional pillars. Regular social assistance delivery to specific vulnerable groups is guided by government decrees, the most important, —Decree 67/2007/ND-CP on Social Assistance Regimes and Decree 68/2007 on the Establishment of Social Service Centers. Support to the poor in general is carried out under a framework of temporary programs, such as the National Targeted Program on Poverty Reduction.<sup>7</sup>

Regular social assistance is financed by local budgets with support from provincial transfers. Cash transfers are paid to specific vulnerable

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<sup>7</sup> In addition, invalids, veterans, and other persons who gave service to the country are covered by specific regulations and receive cash benefits and in-kind transfers.

groups, but not to poor households in general. Beneficiaries include poor persons who belong to one of the following groups: lonely elderly as well as elderly persons above 85, orphans, HIV-infected children, persons with disabilities, and HIV-affected persons who are unable to work. Families who adopted either an orphaned child or two seriously disabled children are also targeted by social assistance, irrespective of household income. In addition, cash transfer beneficiaries are entitled to certain in-kind benefits. These include free access to in- and outpatient health care, education tuition waivers, or vocational training for children. The poor in general are targeted by the National Targeted Program on Poverty Reduction and do not receive any cash handouts, but are entitled to various in-kind benefits such as free health care, microcredits, vocational training for children and persons living with disabilities, agricultural extension, and tuition waivers.

The introduction of Decree 67 was an important step toward a more comprehensive, target group-oriented and harmonized policy framework, which addresses some of the main shortcomings of former social assistance legislation. It replaced at least seven decrees and three prime minister's decisions, included additional target groups, and increased benefit levels. Total coverage of regular social assistance has been expanded in recent years from 416,000 beneficiaries in 2005 to more than 1 million beneficiaries in 2008, or 1.2% of the total population. The elderly (above 85 years old) constitute the largest group (43.1%) followed by persons with disabilities (24.5%). Total spending in 2007 reached almost D910 billion, or roughly \$51 million, and increased in 2008 to D1,700 billion (about \$95 million), equaling 0.2% of GDP (data from MoLISA/Institute of Labor, Science and Social Affairs [ILSSA]).

The poverty reduction programs improved access to health and education services: 99.5% of the poor received health cards in 2008. During 2006–2008, school fees and other schooling contributions were exempted and reduced for about 7.8 million poor pupils. Almost 4.2 million poor households received preferential loans, and almost 2.1 million of the poor were provided with business development instruction and technical transfers; 30,000 people were supported in vocational training each year and vocational training costs were exempted and reduced for 60,000 poor people (data from MoLISA/ILSSA). Given the total number of about 13.8 million poor persons, the coverage of employment promotion services seems to be quite low.

## **Organizational setup**

Three ministries, the Prime Minister's Office, and one implementing agency are involved. There are two regulatory agencies—MoLISA and the Ministry of Health. Within MoLISA there are two major responsible units—the Social Insurance Department and the Social Protection Bureau; the latter is responsible for all policies related to social assistance. The Social Protection Bureau within MoLISA is also in charge of coordinating the implementation of programs under the National Targeted Program on Poverty Reduction 2006–2010. The implementing agency for social insurance (including health insurance) is Viet Nam Social Security (VSS). The district offices of MoLISA implement the policies related to social assistance programs.

## **Challenges**

The Viet Nam's social protection system has experienced fundamental reforms during the last few years and has already achieved impressive results, for example as regards changes in coverage. Reform in the area of social insurance has been moving fast. However, one of the most important challenges today seems to be the development of a viable financing strategy, in particular for the two voluntary insurance pillars. Further, the extension of voluntary insurance coverage is another challenge. The newly established unemployment program is also still in need of an effective implementation strategy.

As regards social assistance, the baseline level for calculating benefits is still very low, equivalent to 18.6% of the minimum wage or 32.5% of the poverty line. Benefits provided under the poverty programs are often low as well (for example, D5 million or about \$280 to build a new house). In addition, the process of beneficiary identification is still incomplete. As regards shelter for the poor, ethnic minorities and other disadvantaged people (12.5% of rural households and 22.3% of ethnic minority households) are still living in inadequate houses (data from MoLISA/ILSSA). Coordination between regular social assistance and poverty programs as well as alternative coexisting poverty programs needs to be strengthened. For example, under the current design, groups covered by Decree 67 and poverty programs are not mutually exclusive, which leads to duplication of benefits. Further, transaction costs are unnecessarily high as administrative processes related to Decree 67 and poverty programs are not combined.

Finally, as regards the institutional background, regular social assistance is only provided to the chronically poor who are unable to support themselves. The poor in general are targeted by temporary programs only. Provision for the near poor who are in danger of easily falling back into poverty does not exist at all.

## **Major reform initiatives**

The entire field of social protection is a very dynamic reform area, and it is difficult to outline specific reform initiatives as Viet Nam is continuously progressing on its way to an inclusive and comprehensive social protection system that entails reform initiatives in all areas. This is underlined by the fact that the government has assigned MoLISA (through ILSSA, its affiliated research institute) to draft a reform strategy for 2011–2020 with the objective of developing a comprehensive and inclusive social protection system.

As for the key social insurance programs, one important area is the implementation of unemployment insurance. For old age insurance, extending coverage of the voluntary insurance pillar as well as reforming the financing structures, including a potential transition from a pay-as-you-go to a fully funded system, rank high on the political agenda.

Although reforming social insurance is in general considered as more important than reforming social assistance (with the notable exception of the extension of social health protection for the poor), social assistance reforms are on the political agenda as well. The (relatively) low level of benefits and the lack of coordination between the various measures are well recognized by policy makers. Further, the extension of social services to vulnerable groups, including, potentially, public–private partnerships, is another area in which policy makers are strongly interested.

Stronger coordination between social assistance and social insurance, as well as the modernization of social insurance and social assistance management systems (including improvements to data management and information processing systems), are also on the reform agenda, both at the policy formulation and implementation levels.

The lightly shaded parts of Tables 3 and 4 summarize the Viet Nam's social protection system prior the financial crisis. The darkly shaded parts summarize the changes after that.

**Table 3: Social protection reform in Viet Nam**  
(up to October 2008 in light shade,  
from November 2008 to August 2009 in dark shade)

Social insurance							
Instrument	Compulsory social insurance				Voluntary social insurance		
Target group	Civil servants, military and police, formal sector employees				Self-employed, farmers, wage employed with no or short-term contract, students		
Type of risk	Illness	Old Age	Unemployment	Others <sup>a</sup>	Illness	Old Age	Others <sup>b</sup>
Agenda setting	↓	↓	↓	↓	↓	↓	↓
Policy formulation	↓	↓	↓	↓	↓	↓	↓
Decision making	↓	↓	↓	↓	↓	↓	↓
Implementation	↓	↓	Postponed	↓	↓	↓	↓
Evaluation	↓	↓			↓		
Policy response	Ongoing adjustments at implementation level. Subsidies for employers to prevent layoffs and smoothen social insurance payments				Decision making: New Law on Health Insurance (2008) and Decree 62/2009 introducing partial subsidies for low-income households. Ongoing adjustments at implementation level	None, but political awareness of fragile situation exists	
	Policy formulation: Development of a comprehensive Social Protection Strategy 2011–2020 encompassing all areas of social protection (MoLISA/ILSSA)						
	Agenda setting: Resolution 30/2008						

<sup>a</sup> Other benefits of mandatory social insurance include disability, death, work accidents, and industrial diseases.

<sup>b</sup> Other benefits of the voluntary social insurance include death and disability.

Source: Authors.



**Table 4: Social protection reform in Viet Nam**  
 (up to October 2008 in light shade,  
 from November 2008 to August 2009 dark shade)

Social assistance									
Type of benefit	Benefits in cash			Health			Other social services <sup>a</sup>		
Target group	Poor	Near poor	Chronic poor <sup>b</sup>	Poor	Near poor	Chronic poor	Poor	Near poor	Chronic poor
Agenda setting			↓	↓	↓	↓	↓		↓
Policy formulation			↓	↓	↓	↓	↓		↓
Decision making			↓	↓	↓	↓	↓		↓
Implementation			↓	↓	↓	↓	↓		↓
Evaluation			↓	↓	↓	↓	↓		↓
Policy response	One-time cash transfer for poor persons		Ongoing adjustments at implementation level	Decision making: New law on health insurance (2008) and Decree 62/2009 maintaining full subsidies for poor and introducing partial subsidies for near poor			Agenda setting: Extension of social services		Agenda setting: Extension of social services
	Policy formulation: Development of a comprehensive “Social Protection Strategy 2011–2020 encompassing all areas of social protection until end of 2009 (MoLISA/ILSSA) Agenda Setting: Resolution 30/2008								

<sup>a</sup> The poor in general are entitled to various in-kind benefits such as microcredit, vocational training for children and persons living with disabilities, agricultural extension, and tuition waivers. The groups belonging to the chronic poor receive in-kind benefits such as education tuition waivers, vocational trainings for children and housing support.

<sup>b</sup> The chronic poor refers to the groups covered by Decree 67, i.e., poor persons belonging to one of the following groups: lonely elderly as well as elderly persons above 85, orphans, HIV-infected children, persons with disabilities, and HIV-affected persons who are unable to work. Families who adopted either an orphaned child or two seriously disabled children are also targeted by Decree 67 regardless of the household income.

Source: Authors.

## **Impact of the financial crisis on reform dynamics**

The introduction of Resolution 30/2008 in December 2008 constitutes a clear signal by the government that social protection is not only to stay on the political agenda but that it is also considered one of the appropriate policy areas to deal with the impact of the crisis.

As regards the development of the Social Protection Strategy 2011–2020, the crisis did not cause any delays. MoLISA/ILSSA is working on a draft, which will be finalized by the end of 2010.

In November 2008, a new Law on Health Insurance was adopted, which came into effect in July 2009. The law establishes the aim of achieving universal coverage by 2014 and introduces full and partial subsidies for various population groups. A complementing government decree was issued in August 2009 (Decree 62/2009/ND-CP) establishing regulations for implementing the health insurance law. An essential feature of the new law is that it introduces state full and partial state subsidies for certain population groups. Fully subsidized contributions will be paid, among others, for the poor and children below 6 years of age. The near poor, rural residents, and pupils and students near the poverty line will receive a 50% subsidy compared with a 30% subsidy for students in general. Thus, the crisis did not change the commitment to reform of social health protection.

Further, to avoid problems in implementing social insurance policies, the government decided in February 2009 to provide interest-free loans to certain enterprises for paying salaries, social insurance, and unemployment subsidies for their workers. The fiscal stimulus incorporated a one-time cash transfer to the poor—for the first time, cash transfers have not been restricted to the chronically poor.

Unemployment insurance was intended to be introduced by January 2009, but this was postponed because of the crisis. Its introduction remains a priority among policy makers.

All in all, the crisis did not decelerate social protection reform. On the contrary, at the agenda-setting level the financial crisis was “used” by the government to signal its commitment to social protection reform. At the policy formulation and decision-making levels, the crisis did not change the progress of advancing social protection reform. At the implementation level, the impact is ambiguous: As regards the ongoing implementation of social insurance, no setbacks occurred—the government even introduced incentive measures to smooth implementation as well as a cash transfer to the poor in general. However, in terms of the implementation of new instruments, the crisis caused a delay in unemployment insurance.

## **Conclusions**

During the 1990s, Indonesia and Viet Nam embarked on a transition process from a state-centered economy toward developing a market economy. Both countries have achieved impressive development results with strong growth records and continued success in reducing poverty. Indonesia is a middle-income country, and Viet Nam is ambitious to enter that group. Although the financial crisis hit both countries in late 2008, the impacts were less severe than in most other Asian countries. The governments reacted swiftly in introducing comprehensive fiscal stimulus packages besides financial and monetary policy measures.

In the area of social protection, both countries have been embarking on comprehensive reform paths with social protection systems. Both have shown similar structural characteristics by building on mandatory and voluntary insurance combined with means-tested social assistance measures. In Indonesia, reforms were initially motivated by the disastrous consequences of the Asian crisis and the disappointing experiences with ad hoc social safety nets measures. In Viet Nam, reforms originated from the political will to avoid large inequalities that might result from the country's transition to a socialist market economy.

Viet Nam has chosen a gradual reform strategy, initially focusing on extending social health protection and then gradually shifting its focus to include other social insurance pillars and social assistance. Reforms are progressing continuously with an acceleration of reform dynamics since 2000. In contrast, Indonesia initiated a comprehensive “big bang” reform by passing Law No. 40/2004. However, it is probably the intended comprehensive scope of reform that constrains reform progress, with slow progress in implementing Law No. 40/2004, for example, even now.

Besides the type of reform strategy chosen, the two countries' organizational structures (in which policy formulation and implementation takes place) differ considerably, most likely also impacting on reform dynamics. The number of stakeholders involved in formulating and implementing policies is far more encompassing in Indonesia than in Viet Nam, thereby increasing the complexity of coordination as well as the potential for conflicting interests. Further, whereas Viet Nam more or less maintains its hierarchically organized political and administrative system, the comprehensive and impressive political and administrative decentralization reforms in Indonesia have the side effect of adding further complexity, thereby aggravating vertical coordination and encouraging duplication of approaches at central and local levels.

The impact of the crisis on reform dynamics has been similar in both countries. The most important finding is that the crisis did not

slow the reform dynamics in either country. At the policy formulation and decision-making levels, the crisis had no impact at all—or even accelerated reforms or strengthened reform commitment, as seen, for example, in the introduction of the new Law on Health Insurance and complementing government decrees promoting further advancement toward universal coverage in Viet Nam; or the introduction of Law No. 11/2009 on Social Welfare in Indonesia. In implementation terms, Indonesia seems to have been relatively unaffected by the crisis. In Viet Nam, the crisis induced a delay in implementing unemployment insurance, though the government introduced incentive measures to smooth the further implementation of other social insurance pillars and introduced cash transfers for poor people.

Developing a comprehensive social protection system is of course a long-term process. Both country examples show that it is possible to initiate reform processes even at relatively low income levels and to continue reforms steadily, even when facing an economic downturn.

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# Reforming social protection systems when commodity prices collapse: The experience of Mongolia

*Wendy Walker and David Hall*<sup>1</sup>

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## Introduction

Coming on the heels of the food crisis in early 2008, when Mongolia experienced one of the highest inflation rates in Asia, the worldwide drop in mineral prices as a result of the financial crisis had a direct impact on a government budget that receives 40% of its revenue from mining. During the commodity boom, the Government expanded social benefits significantly, partially funding a Child Money Program (CMP) that disbursed 5.6% of fiscal expenditure from a special fund generated from mining revenue. The collapse of copper and other mineral prices in 2008 had immediate fiscal consequences for the budget, exposing the dependence of key social transfers on commodity prices. The financial crisis highlighted the risks of channeling mining revenue through the welfare sector and underlined the lack of mechanisms for targeting the poor when resources are limited.

Lessons learned from the Asian financial crisis of 1997–1998 demonstrate that falling demand for exports have an economywide, systemic impact that is difficult to counter without very significant reserves. The 2008 crisis has underlined the validity of this lesson for Mongolia. An overview of the transmission channels of impact in Mongolia confirms the systemic links between key sectors, notably mining, banking, construction, agriculture, and retail, and the consequences for employment and social welfare. A further lesson from the 1997–1998 crisis is that government expenditure to protect the poor and sustain social services is critical. Because of the fiscal constraints experienced during a crisis, effective targeting becomes even more important. The current crisis has demonstrated the importance of this lesson for Mongolia, which failed to build up the necessary fiscal

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reserves during the commodity boom and to establish mechanisms for targeting social benefits for the poor.

Without a sufficient fiscal surplus from earlier years, in March 2009 the government's fiscal position became difficult as a result of declining revenue from the lower commodity prices. With the assistance of donors, the government began a reform of the social welfare system that aims to achieve fiscal sustainability, target resources to the poor, and consolidate the wide range of existing benefits built, in part, during the commodity boom. This chapter describes the impact of the collapse of commodity prices on Mongolia, the transmission channels of impact, and how the government and donors have attempted to respond so that fiscal sustainability is ensured and the poor are protected.

The paper is written in the context of rapidly evolving reforms and decisions. For this reason, the chapter shares the unfolding experience of Mongolia's response to falling commodity prices, from the point of view of reforming social protection, but does not offer definitive conclusions as these would be premature.

## **Rapid growth, social welfare expansion, and collapse of commodity prices**

### **Rapid growth**

Mongolia went through a difficult period of economic transition from a socialist to free market economy in the early 1990s. The withdrawal of funding from the former Soviet Union resulted in a virtual collapse of the state budget and drastic cuts in subsidies and welfare programs. Between 1990 and 1994, the economy experienced a per capita gross domestic product (GDP) contraction of around 30%. Economic restructuring and privatization led to massive retrenchments in the public sector and to the closure of many nonviable state enterprises. Social sectors were heavily impacted by the transition, with severe budget cuts.

During the period of transition, economic reforms were undertaken in the areas of price liberalization and privatization, giving Mongolia one of the least restrictive trade regimes in Asia and a relatively liberal foreign investment regime. During the same period, new democratic laws and institutions were put in place, media freedom was established, and civil society was allowed to function freely.

From 1995, Mongolia's economy started to show signs of recovery and growth. By the early part of this decade, economic reforms, combined with a buoyant world economy, had put Mongolia on a strong growth trajectory. In 2003–2007, sustained growth was achieved with

an average annual GDP growth rate of about 9%. A dramatic rise in the value of exports in dollar terms, driven largely by soaring international commodity prices, gave the government unprecedented financial strength, as the current account balance turned from a deficit of \$102.4 million to a surplus of \$264.8 million in 4 years (Table 1).

**Table 1: Economic indicators, 2003–2007**

<b>Indicator</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Exports of goods (\$ million)	627	872	1,066	1,544	1,951
(% year-on-year change)	19.7	39.0	22.2	44.8	26.4
Copper exports (% year-on-year change)	n.a.	n.a.	14.7	94.8	27.7
Imports of goods (\$ million)	827	971	1166	1,408	2,003
(% year-on-year change)	21.6	17.5	20.0	20.8	42.3
Current account balance (\$ million)	-102	24	30	222	265
(% of GDP)	-7.1	1.3	1.3	7.0	6.7
Foreign direct investment (\$ million)	132	129	258	290	360
External debt (\$ million)	1,240	1,312	1,360	1,414	1,529

n.a. = data not available in source document.

Source: World Bank (2009a).

The extent to which the poor benefited from the economic boom remains questionable. Initial analysis by the National Office of Statistics of the survey data from 2002/03 to 2007/08 showed little change in the proportion of poor households nationally, with the figure remaining stubbornly close to one third of the population, underlying the need for a clear social safety net program to address their needs.

The rapid growth in the economy fueled inflation, which was further exacerbated by the impacts of the global food and fuel crisis. Inflation reached 33% in May 2008, which was much higher than in most other Asian countries. The prices of wheat (primarily imported) and meat (domestically produced) contributed nearly half the overall inflation, with oil prices accounting for a small but growing proportion. This spike in food and oil prices threatened to push large numbers of people back below the poverty line.

There were many causes of hyperinflation in Mongolia, including rising demand fueled by rapid increases in wages, social transfers, and remittances, and by monetary expansion; increases in the prices of government services (such as hospital charges, school fees, and

electricity tariffs); and opportunistic behavior in the domestic market. The immediate impacts of the inflation hit particularly hard at the household level. Poor households reported consuming less and lower quality food; cutting back on expenditures for schooling and medicines; limiting travel; substituting energy sources; and moving in with relatives to reduce costs, particularly of food and heating (ADB 2008).

## Social welfare expansion

The period of economic boom allowed the government to be generous, with large wage increases in the public sector and an increase in social welfare expenditures, comprising social insurance, social assistance allowances, and labor market programs (Table 2). Coverage of benefits administered by the Ministry of Social Welfare and Labor (MSWL) increased 7.6 times from 2004 to 2007. As a share of GDP, the overall MSWL budget, without the financial crisis, would have increased from 7% in 2006 to 23% in 2009.

**Table 2: Welfare services budget, 2006–2009** (MNT '000)

<b>Item</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009 planned budget</b>
Pension and benefits	15,964	28,475	52,667	63,144
Veterans and elders	3,243	4,248	18,594	17,958
New family program	11,814	29,724	17,500	17,500
Honored mothers	4,909	8,876	11,625	108,625
Child money	36,104	131,457	148,650	166,008
Services for disabled	1,630	1,397	5,005	6,279
Community-based social welfare service	1,120	1,503	17,223	28,941
Total for welfare services	74,783	205,680	271,264	408,456

Source: Ministry of Social Welfare and Labor, September 2008.

The large increase in expenditure can be attributed to the introduction and expansion of benefits that fulfilled electoral promises, had pro-natal objectives, and benefited large populations without any means-testing requirements, notably the Child Money Program.



When the government first introduced the CMP benefit in 2005, it was at the modest amount of 3,000 togrog (MNT) a month for children under 18 years of age. Initially the CMP was a conditional cash transfer targeting poor households with children meeting specific requirements. In addition to passing a proxy means test (the first of its kind in Mongolia), children had to be immunized, live with their parents, attend school, and not engage in child labor (Araujo 2006).

Despite these conditions, by the end of 2005, the program had reached over 600,000 children, from about 300,000 of the country's 500,000 households. As this was probably twice the number of poor households in the country, it was evident that there were serious inclusion errors. Overall, based on 2006 data, the World Bank estimated that 19% of the poor were excluded from the program and 61% of the nonpoor were included. When the data were disaggregated by quintile of household per capita consumption, it was found that 19% of the households in the poorest two quintiles were excluded from the program, and that these quintiles accounted for only 50% of total beneficiary households (Araujo 2006).

With the introduction of universal quarterly benefits, the number of CMP beneficiaries soared from less than 160,000 in 2004 to more than 1 million (40% of the population) in 2006, and subsequently expenditure rose by 173%.

Expenditure under the MSWL was further increased in 2006 by the introduction of two new large one-time benefits with pro-natal objectives: MNT500,000 for newlyweds and MNT100,000 for newborn children. However, as these reached a far smaller target group than the CMP, the overall cost was much lower. By 2008, more than 80% of social welfare beneficiaries were those receiving child money. Despite the problems associated with targeting, for a large number of very poor households with children (81% in the poorest two quintiles), CMP had soon become critical in terms of sustaining their livelihoods (ADB/PTRC 2009).

The expansion of CMP also had hidden costs, which are yet to be quantified. In terms of the administrative burden, there is anecdotal evidence from interviews (Hall and Bavuusuren 2009) with staff from the Social Welfare and Labor Office (SWLO) suggesting that CMP administration distracted the country's nascent social work services from providing the wider range of tasks envisaged for them in the 2003 Social Security Sector Strategy Paper. Staff complained that the CMP was not social work, but a wealth redistribution mechanism imposed on the SWLO to administer.

## **Collapse of commodity prices**

If commodity prices had not crashed in 2008, the CMP may have proven to be an effective mechanism for the redistribution of the country's mineral wealth. However by March 2009, the price of copper had fallen by 60% from its peak in April 2008 to \$3,500 a ton. This fall had immediate and negative consequences for the fiscal account, real economy, balance of payments, exchange rate, and government capacity to sustain social transfers. With a significant percentage of Mongolia's population living in poverty, the government was faced with the challenge of managing an orderly adjustment to this external shock.

A benefit of the rapid fall in commodity prices was that inflation also plummeted, easing the pressure on the poor. By September 2009, the annual rate had fallen to 4.9%. However, the consequences of the coping measures taken by poor households during the food crisis may extend well beyond the period of high inflation as households are faced with poorer health and education outcomes resulting from the reductions of expenditure in these areas.

## **Transmission channels and their impacts**

The collapse in commodity prices had an economywide systemic impact that affected many sectors through a variety of channels. Declining revenue in the private sector hit government revenue, and this contributed to cuts to public budgets, including social welfare.

### **Declining exports, imports, tourism, and remittances**

The main transmission channels of the financial crisis can clearly be linked to falling commodities prices and exports. Mineral exports, a key source of government revenue, were hard hit. Although the volume of copper exports was maintained, their value dropped by 56% in US dollar terms over the 12-month period to July 2009. Gold production fell by 50% and with no exports at all in June and July 2009 (due in part to labor disputes and an operator's license being revoked). Overall, exports for the first 6 months of 2009 were down 37.4% from the same period in 2008 (World Bank 2009b).

Declining commodity prices impacted the rural economy because of its reliance on cashmere and other livestock products. As a result of a sharp fall in cashmere and meat prices, combined with the residual impacts of high inflation rates that preceded the financial crisis,

reports emerged of rural families being increasingly unable to afford school fees, textbooks, and essential medical care.

With fewer exports came fewer imports. Imports fell by 40% in dollar terms from a year earlier, with industrial goods falling the most sharply, reflecting the slowdown in industrial production in Mongolia. Food product imports fell less dramatically as food demand was less dependent on the domestic slowdown and exchange rate depreciation than other types of imports (World Bank 2009b).

The global recession also reduced income from tourism and from remittances sent by Mongolians working abroad. This, combined with declining exports, contributed to a current account deficit of 15.2% of GDP by the second quarter of 2009 (World Bank 2009b).

## **The banking crisis and the consequences of the credit freeze**

The decline in revenue from commodities was soon felt in the banking sector as people struggled to repay their loans. The number of toxic assets grew rapidly, curtailing the capacity of the country's nascent commercial banking sector to play a role in economic recovery. Over the 12 months to July 2009, the number of bad loans increased 3.6 times to 13.7% of outstanding loans. Several banks were reported to be unable to meet capital asset requirements and the total shortfall was estimated to be MNT76.2 billion (World Bank 2009b).

The construction sector, a key employer during the economic boom of recent years, showed the highest ratio of nonperforming loans (NPLs) to total loans, at 28.7%. By February 2009, sales of houses and real estate had slumped by 90% and prices had fallen by 20%–30% from their peak in mid-2008. By August 2009, 440 constructions projects had come to a standstill. Over 7,800 household were directly affected by this, having already paid in advance for houses or apartments in these projects. Of Mongolia's MNT2.4 trillion in circulation, MNT998 billion was now locked in frozen construction sector projects.<sup>2</sup>

Given the collapse of commodity prices, it is not surprising that mining and quarrying come a close second with regard to the ratio of NPLs, at 27.4%. Overall, between the second quarter of 2008 and the second quarter of 2009, NPLs and loans in arrears increased by 274.1% (World Bank 2009b).

As NPLs surged, banks became extremely cautious in granting new loans, with their main concern being to reduce loan amounts

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<sup>2</sup> [www.business-mongolia.com/mongolia-business/1-trillion-mnt-is-at-halt/](http://www.business-mongolia.com/mongolia-business/1-trillion-mnt-is-at-halt/)

and to control bad-debt risks. Newly issued loans dropped by 43% (or MNT593 billion) in the second quarter of 2009 from MNT1,041 billion in the second quarter of 2008 (World Bank 2009b). This, in turn, undermined economic growth as existing businesses that were unable to obtain credit curtailed their expansion plans and as new businesses failed to launch. The banks' ability to recapitalize was constrained by the limited number of shareholders and private entities willing to invest in banks. Without urgent recapitalization, the banks have been unable to play an effective role in restarting the economy.

The cost of imports and difficulties in obtaining credit impacted businesses, particularly those in the retail sector. Sales revenue declined by 15.7% in the first quarter of 2008 relative to the first quarter of 2009. This caused a fall in company income (before tax) of 64.4% and a corresponding reduction in company taxes paid (World Bank 2009b).

### **Falling government revenue and across-the-board budget cuts**

All the factors discussed above seriously affected government revenue, which fell by 29% in real terms in January–July 2009 compared to a year earlier (World Bank 2009b). All areas of tax revenue were hit—corporate income tax, windfall profit tax, value-added tax, excise, and import duties.

One option for governments during a financial crisis is to increase public expenditure to stimulate the economy. This requires either substantial reserves or access to credit. Mongolia's government however, had failed to take full advantage of the economic boom when commodities prices were high to build fiscal surpluses. As a result of the increased social transfers and salary hikes of earlier years, the government had insufficient reserves in 2008 to sustain current expenditure, let alone to offer any economic stimulus package. Unable to raise further revenue and unable to obtain low-cost credit in the crisis, the government had no choice but to cut spending.

The cuts in the national budget were made in all sectors. Infrastructure projects were the main focus: planned capital investments to replace and repair boilers, transmission lines, and distribution systems for the main power system.

The cuts in the state budget did not result in public sector retrenchments, though there is evidence of private sector retrenchments. By the end of July 2009, the number of people registering as unemployed at SWLO branches grew by 29.4% over the same period in 2008, to 40,700 (NSO 2009). (This figure is a reflection of people previously

employed now searching for new employment, as the long-term unemployed and informal sector workers do not make use of SWLO services.) The number of people formally registering as unemployed (at around 3.8% of the labor force) may well be less than one-fifth of the total number actually unemployed (World Bank 2009b).

Assessing the consequences for the poor of these impacts is difficult, as the necessary household-level data have not yet become available. However, according to a World Bank assessment, based on the historical correlation between economic growth and poverty, it is estimated that the current economic slowdown means that 20,000–40,000 fewer Mongolians (0.7%–1.4%) will be lifted out of poverty in 2009 than would have been the case if earlier levels of growth had been sustained (World Bank 2009b).

## **Government's response to the crisis**

The sudden fall in commodity prices in 2008 underlined Mongolia's over-reliance on mineral revenues for the state budget. The downturn created a precarious fiscal situation leaving the government with little choice other than to negotiate assistance from the international community.

In early March 2009, it arranged a \$224 million standby agreement with the International Monetary Fund (IMF), based on an agreed budget deficit of 6% GDP for 2009 and 4% for 2010. Support was also forthcoming from the Asian Development Bank (ADB), Japan International Cooperation Agency (JICA), and the World Bank, which together offered assistance through a combination of policy development loans and grants worth \$150 million.

By the end of March 2009, the Parliament had approved an amended 2009 budget with a 5.4% GDP deficit. As part of the IMF standby agreement, the government committed itself to reducing expenditure, while still maintaining “a social policy to ensure that the poorest segments of the society would be protected adequately through a comprehensive overhaul of social transfer programs, by improving targeting and raising the level of social support to the very poor” (IMF 2009).

In April 2009, ADB and JICA negotiated a set of 12 policy reform conditions with the government (relating to proposed lending), the first of which committed the government to “Social welfare reform to improve efficiency and protect the poor through (i) improvement in targeting (through proxy means-testing); (ii) consolidation of social welfare programs, including Child Money Program; and (iii) achievement of fiscal sustainability” (ADB 2009).

The World Bank also negotiated a Development Policy Credit with the government that supports the reform. According to this, the reform will “Protect the poor during the downturn by retargeting social policies to the poor” (World Bank 2009c).

## **Impact on Ministry of Social Welfare and Labor**

As with most ministries, MSLW found itself facing cuts of close to 20%. In March 2009, the budget for social welfare services was reduced by MNT74.8 billion, a decrease of 18.6% from the 2009 budget approved by the Parliament in November 2008. The CMP, in particular, was targeted for a major cut, from MNT143 billion to MNT95 billion. The reason given for the CMP cut was that the quarterly benefit, amounting to MNT100,000 per child per year, was dependent on the Mongolia Development Fund, which was now depleted by the collapse of the copper price. Concerns about the potential impact of such a significant cut on the poor—and uncertainly regarding how best to implement the cut—resulted in the proposal being reconsidered. With agreement from IMF, the budget for the CMP was again revised and, in June 2009, the Parliament approved another amendment to the budget that reinstated the MNT143 billion for the CMP (World Bank 2009b). While this reversal may have protected poor households from a sudden cut, it failed to resolve the basic dilemma of how to fiscally sustain the CMP or to target it efficiently, thus reducing the fiscal burden.

Concerns about the potential consequences of a sudden end to quarterly payments of the CMP, as proposed in March 2009, prompted donors to carry out an analysis of the impacts of the proposed cuts on the poor. This analysis showed that an immediate cut of the CMP quarterly benefit would increase the poverty rate by 3 percentage points (Verme 2009). Because the progressive nature of the proposed Children’s Benefit only partially met the objective agreed with IMF of “improving targeting and raising the level of social support to the very poor” it was clear that further thought would have to be given to the issue of targeting the poor.

## **Findings ways to protect the poor**

Although there was general agreement between the international agencies and officials in the MSLW on the need for fiscally sustainable, targeted benefits, it was also recognized that a sudden cut in the CMP in the middle of a financial crisis would be extremely detrimental to the poor. A series of alternatives was explored that sought to protect

the poor while still making fiscal savings. The ideal option would have been to remove the nonpoor from the CMP rosters. However, this was not possible for the following reasons:

- The lists of beneficiaries contained no socioeconomic data that would have facilitated identification of poor and nonpoor.
- No national database of CMP beneficiaries existed, and so rapid identification of beneficiaries was impossible.
- Uncertainty existed about the quality of locally held information and the capacity of local government bodies to identify the poor and nonpoor beneficiaries of the CMP.

As part of the dialogue, the World Bank proposed to maintain a benefit for children, but to make it progressive by providing marginally more money to successive children. This was justified on the basis that, given the higher poverty rate among families with more children, this reform would be more pro-poor than flat benefits for each child.

The proposed reforms of the CMP did not achieve sufficient savings to meet the broader fiscal objectives of reducing overall social welfare expenditure. To do this, a proposal to consolidate the number of MSWL benefits from 66 to 22 was developed by MSWL staff. In addition to the reform of the CMP described above, the consolidation exercise included the following key features:

- Discontinuation of selected social welfare benefits not essential for the poor.
- Replacement of discontinued benefits with a temporary benefit (for 2010) for the poor, making use of the savings made through reforms to the CMP and discontinuation of selected benefits.
- Simplification and consolidation of the remaining existing benefits, clarifying the distinction between benefits and beneficiaries.

The main savings proposed came from the reform of the CMP and the discontinuation of benefits for newlyweds, newborns, pregnant and breastfeeding women, and twins. The old CMP and these essentially pro-natal benefits would now be replaced with the new, progressive, Children's Benefit, starting in the fifth month of pregnancy. The progressive nature of the proposed Children's Benefit only partially met the objective agreed with IMF of "improving targeting and raising the level of social support to the very poor."

## **Initiation of the proxy means test**

In the absence of any comprehensive national database of the poor, alternative means had to be found to use the savings achieved through consolidation to target the poor. The policy matrix agreed with ADB and JICA specified that this should be done through a proxy means test (PMT). This would require a nationwide effort to identify the poor, as well as a means of updating the information on a regular basis.

MSWL accepted the proposal to establish a new PMT, but implementation faces several challenges. First, the original PMT had generated many inclusion errors and did not adequately accommodate differences between livelihoods in rural and urban areas. The World Bank and ADB are assisting in revision of the variables and implementation. Second, the new system will have to be thoroughly tested before being applied nationally. This testing will take time and will be conducted under the Food Stamp Program supported by ADB, which was initiated during the food crisis. Third, to apply the PMT nationally, significant resources will need to be mobilized for the survey and its maintenance.

Given the challenges faced in establishing the PMT, the government agreed that the process would be phased over a 16-month period, with full-scale implementation scheduled from January 2011. To protect the poor during this transition, MSWL proposed that a temporary poverty benefit be introduced, equivalent to about MNT40,000 per month for the poorest quintile of households which would be targeted through existing systems.

## **Challenges ahead**

At the time of writing (March 2010), the reform legislation is still being considered by the Parliament. A consensus-building process has been undertaken over the past 6 months and numerous stakeholders have been consulted. Following the election promises of wealth distribution from the mining revenue made in the summer of 2009, a Human Development Fund based on revenue from mining was created in the late fall of 2009. A portion of this fund is designated to distribute benefits (MNT120,000) to all citizens in 2010. The first distribution of MNT70,000/person was made in early February 2010 to elderly, disabled, and children under 18. A second distribution of MNT50,000 will be made later in the year. The remaining citizens will begin receiving their benefit by August–September 2010. Distribution is being done via the Social Welfare Agency. The Child Money Program



was suddenly halted on 1 January 2010 despite objections from ADB and the other donors. A specific poverty benefit targeting the poor is being designed by the World Bank and it is planned that this will begin implementation in 2011.

The experience of initiating social welfare reform during the economic crisis in Mongolia has seen both breakthroughs and bottlenecks. On the one hand, reaching consensus on the Social Welfare Action Plan within MSWL—and receiving the necessary support of donors for this—has been a breakthrough that facilitates changes under discussion for nearly a decade. However, building the political will to achieve the necessary legislative reforms to change a system, which, in its various stages of development, has provided state assistance to virtually all citizens, has proved to be a major bottleneck to the reform process. For a breakthrough to be achieved in this area, it will be necessary to build a broad-based understanding of the costs of not targeting benefits and of implementing electoral promises through the social welfare system.

Specific challenges encountered include:

- *Recovering commodity markets and disincentivization.* The financial crisis has provided the opportunity to carry out reforms that will target the poor and create a financially stable social safety net. Consensus building and implementation will take time. As commodity prices increase and raise government revenue, the incentive to act quickly or make hard choices about targeting benefits and implementing change may weaken.
- *Sustaining political will.* Despite the government's firm commitment to reform social welfare, at the political level, the idea of targeting benefits to the poor is not universally accepted. As the CMP and the benefits for newlyweds were originally based on electoral promises made in 2004, politicians rescinding these risk being accused of breaking promises. The reform requires a new legal framework that must be approved by the Parliament. A social welfare bill has been drafted but much consensus building remains to be done to reach approval.
- *Timing of reforms and creation of new national benefits for wealth distribution.* In the most recent election campaign (for the 2009 presidential election) both parties made generous promises to create "wealth sharing" benefits that would give every adult citizen of Mongolia at least MNT1 million (about \$870). With the election of the Democratic Party candidate, there are now high expectations among the electorate that this amount will be coming their way in the near future.

- *Public understanding of the reforms.* The social welfare reforms are at risk if wealth redistribution is, once again, made the responsibility of MSLW. The use of MSLW and its agencies to distribute benefits that are not targeted creates confusion in the public's mind.
- *Donor coordination and sustained engagement.* The reform process has so far benefited from excellent donor coordination and collaboration with government. Successful implementation of the reforms will require sustained engagement and capacity building.

A fiscal crisis can provide an opportunity to introduce reforms to a social welfare system. In the case of Mongolia, an opportunity arose to delink social welfare benefits from government revenue generated from commodities and to target those most in need. These reforms would help the government to build reserves and better protect the poor during future crises. However, implementation of the reforms requires strong commitment and consensus among politicians and the public, particularly in view of past electoral promises that offered wide spread benefits. Some of the greatest challenges in reforming the system include creating interim strategies to address the impacts of the crisis as they evolve and the time it takes to change perceptions and push through the necessary legislative reforms. In Mongolia, it is not yet clear if the opportunities presented by the crises will be seized, or set aside as rising commodity prices can create reform complacency and an attitude of "business as usual."

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**Box 9: Informing the health systems reform agenda:  
The role of an Asia-Pacific observatory**

Many countries in Asia and the Pacific health systems do not deliver quality services to the whole population. Over the last 2 decades there have been various attempts to reform, but results have been mixed. Part of the problem is that we do not have an agreed way of assessing the performance of health systems, nor of evaluating “what works” in terms of policy reform. There is overall consensus about the main goals of a health system: to improve overall health outcomes and equity in health outcomes through provision of efficient, affordable, quality health services. However, we still lack agreement about how to strengthen health systems to achieve these goals, and about how to monitor progress in the implementation of such efforts.

To address this gap, the World Health Organization, the World Bank, and the Asian Development Bank are in the process of establishing an Asia-Pacific Observatory on Health Systems and Policies. It will provide policy makers with standardized information and analysis on the different components of health systems—human resources, health financing, organization of services and so on—allowing cross-country comparison. The observatory will also look systematically at the impact of particular policy measures and present options for reform, aiming to inform policy dialogue at country and regional level.

This kind of analysis should be particularly useful during times of economic uncertainty, as now. Sound evidence of health systems challenges should help decision makers to anticipate (and later to monitor) the impact of economic crises on the health sector. This will, in turn, help to ensure that spending choices are guided by the best evidence—necessary at all times, but particularly so when budgets are tight.

Sources: Rebecca Dodd and Henk Bekedam, Division of Health Sector Development, WHO/WPRO; Ties Boerma, director of the Department of Health Statistics and Informatics at WHO Headquarters. [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)

# The impact of the global recession on the health of the people in Asia

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## Introduction

Asia has been affected by the world's economic recession. As a result, unemployment and inflation rates continue to increase, affecting household income and expenditure capacity, which in turn have negative effects on people's health and the health care systems of Asian countries.

The objective of this chapter is to examine the pathways through which recession affects people's health, and provide policy recommendations to minimize the negative effects of the global recession on health in Asia. This study also carries out a very preliminary empirical analysis based on small-scale survey data from Bangladesh, the People's Republic of China (PRC), and Nepal.

## Experience of previous economic recessions

The impact of recession on health is transmitted through the following major paths (Figure 1):

- *Job losses, underemployment, informalization, and poverty in the absence of a comprehensive safety net.* Unemployment and poverty increase the financial barrier to health or the incidence of catastrophic health care expenditure. In addition, the impact on the vulnerable poor through the loss of formal jobs can lead to the loss of health insurance and other entitlements, affecting access to health care.
- *Currency devaluation, fall in the real value of wages, and increase in the prices of medical supplies and services.* Depreciation

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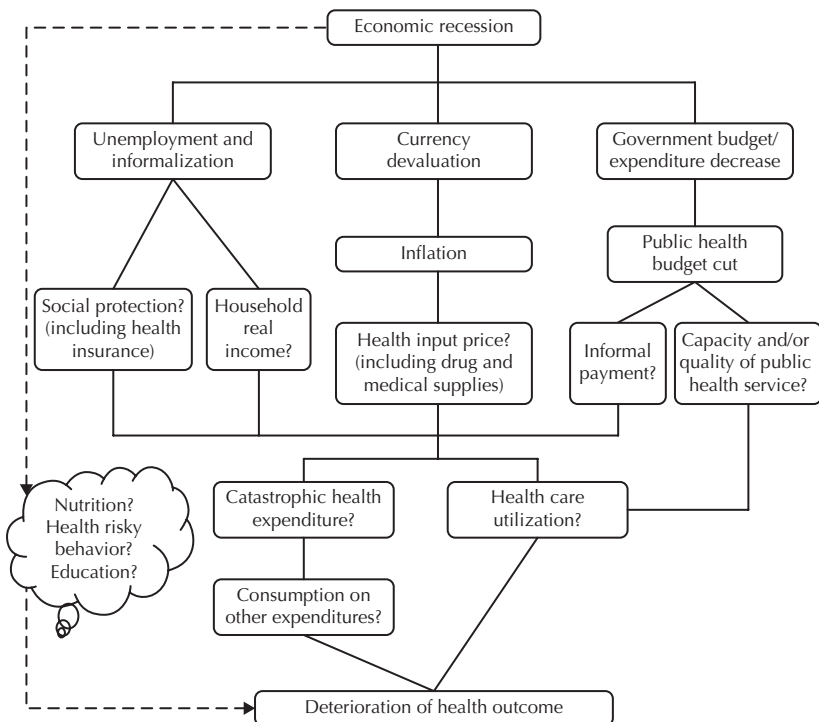
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of national currencies and inflation can increase the cost of imported health goods, affecting health care utilization rates and the health status of people. They can make essential health services and medicine unavailable or unaffordable.

- *Government budget cuts and deterioration of the public health and education system.* With decreased economic growth, public sector revenues also decline. This may result in budget cuts for the health sector, which lowers the quality of public health care and increases informal payments for health care. Also, preventive health services and long-term care treatment may be the first to be cut.

Based on the above pathways and conceptual framework, this paper examines the experience of previous economic crises in terms of their impact on health care utilization and health expenditure, health behavior and nutrition (health-related lifestyles), health outcomes of individuals, and health financing and policy.

**Figure 1: Conceptual framework**



Source: Authors.

## **Health expenditure and health care utilization**

Expenditure on both public and private health care declined in Thailand during the Asian financial crisis of 1997–1998. Although expenditure on medical care and institutional care decreased by 36%, spending on self-medication (from pharmacies as a cheaper alternative to medical care provided by physicians) increased by 12% (Macfarlane Burnet Centre for Medical Research 2000).

There was little change in the proportion of health expenditure out of total (consumption) expenditure in the Republic of Korea during that crisis, but people in lower-income groups experienced a larger decrease in the proportion of health expenditure than higher-income groups (Yang, Prescott, and Bae 2001). Also, drug expenditure turned out to be more sensitive than that for medical care to income and economic conditions.

During the economic crisis in Thailand, the utilization of private hospitals declined due to the decrease in household income. In contrast, the number of people using public health facilities increased by 15% in 1998, on the extension of health insurance (Macfarlane Burnet Centre for Medical Research 2000). In Malaysia, the crisis contributed to the substitution of free public health care for private care, resulting in an 18% increase in the population covered by the public health system (Macfarlane Burnet Centre for Medical Research 2000, Hopkins 2006).

However, in Indonesia where the public health delivery system is weak, the utilization of both public and private sector health care decreased, and self-treatment or non-treatment increased rapidly. During 1993–1997 in Viet Nam, the utilization of inpatient health care decreased by 25%, and the poor decreased their use of both public and private health facilities (Macfarlane Burnet Centre for Medical Research 2000).

## **Cost of therapeutic goods**

Most health care systems of Asia depend on imported medical goods, technology, and pharmaceutical products. The increase in their price as a result of currency devaluation has serious negative impacts on the health care budget of many low-income countries. However, the increase in pharmaceutical prices can have some positive effects, such as greater utilization of generics and essential drugs.

At the end of 1997, pharmaceutical prices increased by 40% relative to the first half of the year in the Philippines, while Thailand scaled down some health programs due to the increase in prices of

pharmaceuticals and medical supplies. Indonesia saw a 61% increase in prices of medical care and pharmaceuticals in 1996–1998, and the Lao People’s Democratic Republic a 100%–300% rise during the same period (Macfarlane Burnet Centre for Medical Research 2000).

## **Government policy and public expenditure on health**

As a result of the Asian crisis, unemployment and bankruptcy of firms reduced general tax revenues, resulting in a decrease in government expenditure on health and education, which was especially the case for countries that relied on International Monetary Fund (IMF) loans, such as Indonesia and Thailand. The Government of Thailand responded to budget austerity by squeezing expenditure on programs with smaller short-term effects on health, and as a result, the budget for health promotion and HIV/AIDS control declined by 54%. But the negative impact of the crisis on the health of the poor was mitigated by the increased budget allocation for free medical care in Thailand (Hopkins 2006).

Facing a reduced budget, the Philippines lowered or delayed funding for STD/AIDS control, drug procurement, and maternal and child services. Indonesia experienced a budget cut in HIV/AIDS of 50% and in primary health care of 6% in 1999. But there was no decrease in children’s immunization rate of standard EPI (expanded program on immunization) in Indonesia (Macfarlane Burnet Centre for Medical Research 2000).

In Malaysia, the Ministry of Health postponed the development of many health projects, especially those which were reliant on more expensive imported capital (Suleiman, Lye, et al. 1998). The delay in capital projects helped maintain the level of the primary care operating budget, meeting the additional demand for public-sector services in a situation of declining family income (Hopkins 2006).

Government policy to enhance social protection plays an important role during an economic crisis. Stuckler, Basu, et al. (2009) show that active labor market programs that keep and reintegrate workers in jobs could mitigate some adverse health effects of economic recession. For every \$10 higher investment in active labor market programs, there was a 0.038% lower effect of a 1% rise in unemployment on suicide rates.

## **Health behavior**

Studies on the relationship between employment and alcohol consumption show conflicting results, such as a positive correlation between unemployment and heavier alcohol consumption (Crawford,



Plant, et al. 1987) and no correlation between alcohol consumption and employment (Cook, Cummins, et al. 1982). There is no research available for the impact of economic crisis on health behavior, including alcohol consumption, in Asia.

In a research on the impact of the Finnish economic crisis in the late 1990s on alcohol consumption, less-educated, single, and unemployed people were associated with greater alcohol consumption during a period of high unemployment (Luoto, Poikolainen, et al. 1998). Compared with the employed, the unemployed were more exposed to stress and increased alcohol consumption. Based on a health and social support study in Finland, Virtanen, Vahtera et al. (2008) did a 5-year study to examine the change in health behavior of 10,100 people following a change in employment status. Those who were exposed to chronic unemployment and experienced a decrease in employment status increased their alcohol consumption, gained weight, and reduced their physical activity and sleeping time.

## **Health outcomes**

### **Mortality**

Studies on the relationship between mortality and economic conditions show conflicting results in developed countries. However, those results are from developed countries with high income and good safety nets, and it is controversial whether those results can be applied to low-income countries. The age-adjusted mortality rate in the Russian Federation increased by more than 30% during the economic crisis of 1990–1994 (Notzon, Komarov, et al. 1998), and the mortality rate was 5%–7% greater during the economic crisis of 1995–1996 (Cutler, Knaul, et al. 2002).

All-cause mortality in the Republic of Korea continued to decline during the economic crisis in the late 1990s, but suicide and homicide, as well as death related to pneumonia and alcohol dependence, increased (Khang, Lynch, et al. 2005). According to Chang, Gunnell, et al. (2009), the 10,400 more suicides in 1998 than in 1997 in Japan; Hong Kong, China; and the Republic of Korea were associated with the economic crisis, especially with the rise in unemployment.

### **Nutritional status**

Income loss and the rise in food prices due to economic crisis affect nutritional status. Micronutrient intake declines and malnutrition increases (especially for children), and less nutritious diets and more working hours among employed mothers reduce breast feeding.

Those problems are more serious for the poor and unemployed in urban areas.

In Indonesia, vitamin A deficiency among children and pregnant women became more prevalent, and obesity among poor women increased, during the 1997–1998 crisis (Macfarlane Burnet Centre for Medical Research 2000). Overall, malnutrition fell in the Philippines, but the nutritional status of the vulnerable population deteriorated. In Thailand, the crisis had no major impact on nutritional status, but the prevalence of anemia rose for pregnant women.

## **Mental health**

Employment and mental health are closely related. Unstable employment has a negative impact on mental health (McDonough 2000), and precarious employment is positively related to anger, depression, suicide, and substance abuse (Virtanen, Kivimaki, et al. 2005). Mental health of the unemployed is worse than that of the employed (Creed and Reynolds 2001; Chang, Jang, et al. 2004).

Economic depression is associated with suicide, and the suicide rate was higher for the unemployed than the employed in the United States, Europe, and Japan (Lewis and Sloggett 1998, Kposowa 2001, Aihara and Iki 2002). Suicides increased after the 1997–1998 crisis in the Republic of Korea (Park, Lee, et al. 2003). According to a survey in Thailand, 40% of the respondents said that the economic crisis increased stress, and 4.6% of the respondents had suicidal impulses (Wibulpolprasert, Tangcharensathien, et al. 1998).

## **Impact of the global recession on health in Bangladesh, People's Republic of China, and Nepal**

### **Objectives**

Surveys were conducted to get preliminary results of the impact of the current global crisis on the health of workers in three Asian countries (Bangladesh, the PRC, and Nepal). To evaluate the different impacts on people of different socioeconomic status, we investigated respondents' employment status and household income.

This survey has many limitations. Only 3 months were given for the building of the conceptual framework, design of questionnaire, translation of questionnaire into local languages, field survey, statistical analysis, and reporting. Due to time limitations, the sample size is

small, and statistical testing is not possible in some cases. This empirical analysis is therefore intended to draw a very preliminary picture of the impact of the recession on health in some Asian countries.

## **Methodology**

Surveys were conducted in different sectors (garments in Bangladesh, electronics and furniture in the PRC, and remittances in Nepal). Most of the questions are about the change from the first half of 2008 (before the recession) and the first half of 2009 (after it). Consequently, there can be a recall bias when respondents compare the situation of 2008 and 2009.

In Bangladesh, for the employee group, 20 garment factories were randomly selected and 10 employees were selected using systematic sampling in each factory. Data from the unemployed group were collected using snowball sampling because it was not possible to use other sampling methods. In total, 308 people were surveyed (200 employed and 108 unemployed).

In the PRC, 380 employed workers were interviewed by random cluster sampling; 86 unemployed workers were interviewed by simple random sampling method. The unemployed were from the overall labor market, including many different occupations

In Nepal, three districts—Sunsari District from Eastern, Chitawan District from Central, and Kaski District from Western Nepal—were chosen randomly. The three districts are average districts in terms of participation in remittance earning, industrial development, tourism activities, and overall economic development. Each district was divided into rural and urban strata. From each stratum, 25 households were interviewed. Hence, a total of 150 households were surveyed (105 employed and 45 unemployed), 50 from each sample district.

## **Country contexts**

### **Bangladesh**

In Bangladesh, the effect of economic recession is uncertain since the country has little exposure to the failing financial institutions of the developed world (Bangladesh Bank 2008). According to the IMF, there will be contraction in the United States and European Union, but the recession will be little felt in the Middle East (IMF 2008). Consequently, remittance flows to Bangladesh may not face any problems because about 63% of such flows are from the Middle East.

However, Bangladesh suffered significant income loss from a severe terms-of-trade shock, mainly originating from higher food and petroleum prices in the external sector (Bangladesh Bank 2008). Bangladesh faced double-digit inflation due to huge increases in world food prices in 2008. In 2009 the trend has eased due to decreases in food prices, but the threat of inflation remains due to sharp increases in nonfood items, high inflation expectations from the previous year's price, and the lagged responses of previous years.

The export sector is at huge risk for two important reasons. First, Bangladesh exports depend too heavily on readymade garments (about 70%). Second, most exports go to the United States and European Union, and as they are facing recession, this may decrease demand for readymade garments there, and thus may have a negative effect on the export earnings of Bangladesh. However, some argue that decreased income in those countries may boost demand for Bangladeshi ready-made garments as most of them are low priced. The demand may fall if recession in the United States and European Union is prolonged.

## **People's Republic of China**

The PRC is becoming more dependent on international trade but less dependent on foreign direct investment. Therefore, the impact of the financial crisis was felt initially through export-oriented industries, and then spread to the entire economic system. Declines in exports and corporate profits will result in lower tax revenues. During the recent crisis, starting in 2008, the growth rate of government revenues declined by nearly 13 percentage points. Moreover, inflation has grown rapidly, especially for food, but the medical services prices index is stable and lower than the rate of GDP growth.

However, the PRC has maintained its commitment to health care. In the next 3 years, a medical insurance system for the employed, medical insurance for urban residents, and a new rural cooperative medical system will cover all residents, resulting in health insurance coverage of over 90%. The government has taken the following major measures to improve health care insurance. First, it increased the coverage of the medical insurance system to protect more people. In 2008, pilot sites of the basic medical insurance system for urban residents covered 229 cities. In 2009, health insurance included college students in urban resident health insurance for the first time. The government will increase the subsidy for retirees from closed and bankrupt state-owned enterprises to access basic medical insurance.

Second, the government has increased subsidies. In 2009, it raised them for the new rural cooperative medical scheme to CNY80 per capita per year, reaching CNY120 in 2010. In addition, it has raised the ceiling on benefits, which will be six times the local residents' per capita income. It also expanded urban and rural medical assistance. In 2009, there is CNY6.45 billion in subsidies for the medical assistance program.

## **Nepal**

Remittances are a crucial part of the economy, as in most South Asian countries. With a gradually shrinking agriculture sector, now constituting about one-third of the national economy, dependence on and exposure to international trade and labor flows are rapidly increasing. The current global crisis is expected to cause up to a 30% decline in remittances, which provide a lifeline to many rural communities. Tourism will likely be another badly hit industry. Tourist inflows during the first 4 months of FY2009/10 declined by 5% relative to the same period in FY2008/09. However, because of increased tourist spending per day (from \$22.80 to \$48.68) during the same period, the contribution of the tourism sector to GDP increased from 1.4% to 2.3% (MOF 2009).

There has been a 41% increase in the foreign aid commitment to the government in FY2008/09 relative to FY2007/08 (MOF 2009), despite the global downturn. A significant share of the contribution from external development partners is in public health sector, at around a quarter to one-third of total public expenditure on health (MOHP 2009).

The budget allocated to the Ministry of Health and Population has increased by 19% in FY2009/10 relative to FY2007/08 in nominal terms. In relative terms, the share of budget allocated to the Ministry declined by 1.3% from 6.33% of the total budget in FY2008/09 to 6.23% in FY2009/10. Taking into consideration a significant rise in the public budget in nominal terms, a slight decline in share relative to the previous year cannot be considered a significant adverse impact of the crisis.

## **Empirical results**

### **Health outcome**

In Bangladesh, a total of 33.5% of the employed and 29.6% of the unemployed rated their current health status to be much or little better after the recession, and almost similar proportions of those groups

rated their health status as getting worse. However, there was no statistically significant difference between the two groups in this respect.

In the PRC, there is little difference in terms of the change in reported overall health status between the employed and unemployed (Table 1). In mental health, both the employed and unemployed experienced an increase in stress and depression, but a greater proportion of the unemployed reported a statistically significant increase in stress and depression. As much as half the unemployed reported that stress became much worse in 2009. But there is little difference in the change in overall health status and depression among people in different income groups.

In Nepal during the recession, the unemployed faced worse health status than the employed, especially in terms of stress and depression. In addition, the change in health status differs by income groups (Table 2). The proportion of people who reported worse health—in terms of reported health status, stress, and depression—after the recession was significantly high in the low-income group.

## **Health behavior**

In Bangladesh, cigarette consumption increased for the unemployed while there was little change for the employed, but the difference between the two groups was not statistically significant. In the PRC, a total of 9.5% of the employed drank alcohol more than they used to do, but 19.3% of the unemployed increased drinking during the recession. There is no statistically significant difference in the change in drinking and smoking tobacco by employment status.

In Nepal, drinking levels after the recession increased significantly in the unemployed relative to the employed (Table 3). At the same time, people in the low-income group increased the amount of drinking and smoking than other groups. As many as 38% of low-income group people increased drinking from 2008 to 2009, while none of those in the high-income group did.

## **Health expenditure**

In Bangladesh, in terms of the change in medical expenditure (ambulatory, inpatient, and self-medication), only the increase in ambulatory care expenditure of the employed over the period of 2008 and 2009 was statistically significant.

In the PRC, the participation rate in medical insurance for the employed increased significantly from 76.7% in 2008 to 89.7% in 2009, while the rate of participation among unemployed workers

**Table 1: Change in health status during the recession by employment status, People's Republic of China (%)**

	Reported health status			Stress			Depression		
	Employed	Unemployed		Employed	Unemployed		Employed	Unemployed	
Much better	5.0	1.2		2.4	1.2		2.6	0.0	
A little better	11.4	10.5		8.8	1.2		11.1	3.5	
Similar	73.7	73.3		49.7	20.0		66.7	43.5	
A little worse	9.0	14.0		28.2	31.8		15.3	32.9	
Much worse	0.8	1.2		10.9	45.9		4.2	20.0	
$\chi^2$	4.577			61.151			41.613		
P-value	0.298			0.000			0.000		

Source: Authors.

**Table 2: Change in health status during the recession by income group, Nepal (%)**

Income group	Reported health status			Stress			Depression		
	High	Middle	Low	High	Middle	Low	High	Middle	Low
Much better	3.13	1.28	0.00	15.63	2.56	5.00	18.75	5.13	5.00
A little better	3.13	10.26	17.50	21.88	20.51	7.50	18.75	20.51	15.00
Similar	78.13	76.92	62.50	43.75	57.69	55.00	46.88	15.97	57.50
A little worse	15.63	11.54	20.00	18.75	16.67	30.00	15.63	14.10	20.00
Much worse	0.00	0.00	0.00	0.00	2.50	2.50	0.00	1.28	2.50
$\chi^2$	18.3011			28.98			28.8894		
P-value	0.0030			0.0000			0.0000		

Source: Authors.

**Table 3: Change in drinking and smoking during the recession by employment status, Nepal (%)**

	Drinking		Smoking	
	Employed	Unemployed	Employed	Unemployed
Much less	8.00	0.00	20.69	0.00
Slightly less	12.00	16.67	20.69	37.50
Similar	64.00	33.33	40.38	50.00
Slightly more	16.00	50.00	17.24	12.50
Much more	0.00	0.00	0.00	0.00
X <sup>2</sup>	36.2844		27.5255	
P-value	0.0000		0.0000	

Source: Authors.

**Table 4: Health insurance coverage by employment status, People's Republic of China (%)**

	Employed	Unemployed
2008	76.7	54.7
2009	89.7	50.0
t statistic	99.015	43.014
P-value	0.000	0.000

Source: Authors.

decreased significantly from 54.7% in 2008 to 50% in 2009 (Table 4). Loss of employment leads to the loss of health insurance coverage. For both the employed and unemployed, there is no statistically significant change in medical expenditure in terms of ambulatory care, inpatient care, and self-medication during the recession. The big increase in inpatient expenditure for the unemployed (although it is not statistically significant) may be related to the loss of health insurance coverage. Comparing health expenditure across income groups, there was no significant difference in 2008, but there was a significant difference in 2009. The expenditure on ambulatory care and medicine by people in the low-income group decreased substantially. In 2009, expenditure on self-medication by people in the low-income group is much less than half that of people in the high-income group.

In Nepal, both for the employed and the unemployed, medical expenditure decreased, especially expenditure on ambulatory care among the unemployed. In 2009, ambulatory care expenditure of the unemployed is only about half that of the employed, whereas there



**Table 5: Medical expenditure of different income groups before and after the recession, Nepal**

	2008				2009			
	High	Middle	Low	P-value	High	Middle	Low	P-value
Ambulatory	9,487.5	13,546.4	11,316.2	0.8411	8,208.5	12,751.6	3,741.2	0.0443
Inpatient	4,546.8	7,158.9	8,242.5	0.8624	3,565.6	6,973.0	562.5	0.035
Self-medication	1,236.7	2,198.2	414.1	0.3907	1,067.0	1,364.1	344.6	0.0438
Total	15,271.0	22,903.6	19,972.8	0.8527	12,841.2	21,088.8	4,648.1	0.0246

Source: Authors.

was little difference in 2008. The unemployed also experienced a statistically significant decrease in total medical expenditure from 2008 to 2009. In 2008, there were no significant differences in medical expenditure across different income groups, and people in the low-income group tended to spend more on medical care than those in the high-income group (Table 5). But after the recession, significant differences in medical expenditure across income groups were seen. There was a huge decrease in inpatient expenditure for people in the low-income group. Total medical expenditure of people in the low-income group is only about a third of that of high-income group people in 2009.

## Health care utilization

In Bangladesh, unmet needs in terms of health care utilization increased from 2008 to 2009 for both the employed and unemployed, but it was not statistically significant. The unemployed group decreased their use of private health facilities in 2009 and at the same time they increased their use of government health facilities, meaning that, when facing economic hardship, they substituted public health facilities for private ones. In contrast to the unemployed, the employed increased their use of private health facilities. But the difference in the number of visits in 2008 and 2009 was not statistically significant.

In the PRC, unmet needs are higher for the unemployed than the employed in both 2008 and 2009. Compared to 2008, the proportion of people that had unmet needs increased significantly for both the employed and unemployed in 2009. However, there were no statistically significant differences in unmet needs by employment status and income group. But the reason for unmet needs varies by employment status. In 2008, 11% of the unemployed responded that “inability to pay” was the major reason for the unmet need, but it increased to 33% in 2009. The employed and unemployed reduced the number of visits

to both public and private health care facilities over the period 2008 and 2009. Compared to 1 year earlier, satisfaction with government health services increased in terms of waiting time, doctor's explanation, and overall satisfaction. There was little sign of a deterioration of quality in public health facilities.

In Nepal, the unemployed increased their use of government health facilities (in terms of number of visits) while the employed decreased their visits (not statistically significant). Similarly, people in the low-income group increased use of government health care facilities but decreased use of private health care facilities, implying a substitution of public for private health facilities, although it is not statistically significant. The overall satisfaction with public health facility improved in terms of waiting time, doctor's explanation, and overall evaluation, implying no sign of deterioration in the quality of care in public health care facilities due to the crisis.

## **Policy implications and recommendations**

### **Policy implications**

#### **Summary of empirical results**

The results from the preliminary survey show that the global economic recession does not seem to have had a serious negative impact on health in Asia yet. Except for increased stress and depression of the unemployed, there is little impact on self-assessed health status. But there is a negative impact on health behavior, and the unemployed have tended to increase smoking tobacco and drinking alcohol, which will have a harmful effect on their health in the long run. There are signs of an increasing gap in health expenditure and utilization between the employed and unemployed and across different income groups, which will have a negative impact on health equity in the long run.

There is some evidence of a substitution of cheaper alternatives, such as public health facilities, for private health care providers during the crisis. There is little evidence of a reduction of government spending on health care. As a result, patients' evaluation of the quality of care in public health care facilities remains more or less unchanged.

### **Policy implications**

Little evidence of the immediate negative impact of the crisis on health may stem from several factors. First, the impact of the crisis may not be as serious as some worried about or even expected. Many

Asian countries have experienced higher growth rates than forecast. For example, the price competitiveness of the garment industry in Bangladesh still seems strong, and remittances to Bangladesh and Nepal have not fallen much because the majority of their remittances are from countries that are not seriously hit by recession.

The role of intermediating factors that mitigate the negative impact of the recession is very important. Governments of many countries quickly implemented fiscal stimulus packages and social protection programs. For example, the Government of the People's Republic of China increased the commitment to health care and extended the health insurance system, and there is no sign of a deterioration in the public health care system in Bangladesh and Nepal.

But the empirical results of this study do not necessarily invite optimism. It is too early to see the real, long-term impact of the recession on health status. There are already signs of decreased health care utilization and expenditure by the unemployed and worse off. Many households still have some resources for buffering the impact of the recession. However, those resources will be depleted soon, and then they will suffer, especially vulnerable populations.

The empirical results of this study also show that the unemployed tend to increase smoking and drinking, and the gap in health expenditure across different income groups increases. Those changes will have a negative effect on health and health equity in the long run. Therefore, the impacts of the global economic crisis on health and health care should be monitored closely for a few years, on the basis of morbidity and mortality data.

## **Implications for health care financing**

There is little sign of a reduction of government investment in health in the study. But it is still uncertain whether governments will continue to put a priority on health and keep a stable or increasing spending level for health care. Apart from its developed countries, health care financing systems in most of Asia fail to provide financial protection for illness and health care costs. Therefore, there is a high risk that health care financing systems may deteriorate or stagnate during the recession.

The role of government health expenditure is very weak, and the majority of health expenditure is out-of-pocket (OOP) spending in low-income countries of Asia. Catastrophic payment for health care and resultant impoverishment are the highest in the world in Asian countries (Xu et al. 2007). Countries with high OOP payments are associated with high incidence of catastrophic payments, and OOP payments for health care absorb more than one-quarter of household

resources net of food costs in at least 10% of all households in Bangladesh, India, and Viet Nam (van Doorslaer et al. 2007), while 2.7% of the population became impoverished after they had paid for health care in Asia (van Doorslaer et al. 2006). Economic recession in Asia will reduce people's capacity to pay for health care, resulting in reduced access to health care, worsening health outcomes, and impoverishment due to illness in the long run.

## **Policy recommendations**

Without an active role of government in health care, the global recession will have a detrimental effect on health and health care in Asia in the long term. To avoid negative effects of the recession on health, Asian governments need to strengthen health care financing by investing more public resources in health care and by improving its efficiency. Governments can use the crisis as an opportunity for reforming both health care systems and policies.

### **Strengthening health care financing**

Social safety nets and health care financing guarantee access to health care and other essential public services in a recession. During the Asian crisis, the Republic of Korea and Thailand expanded their social security programs and safety nets, which mitigated the potentially devastating impact of huge unemployment. Recently, as seen, the PRC has increased its commitment to health insurance and social safety net programs, contributing to protecting the vulnerable population and minimizing the impact of the crisis. Before universal population coverage, coverage for the unemployed by employee schemes can also play a key role in providing a safety net for those who are made unemployed by the downturn.

In many low-income countries of Asia, health care financing is weak, characterized by low per capita health spending (less than \$100), low health expenditure as a share of GDP (less than 5%), and lack of purchasing mechanisms to improve health care delivery efficiency. Tax-based health financing systems, such as those in Malaysia and Thailand, suffer from weaknesses of potential political manipulation, fiscal pressure on government, and limited fiscal space for health. Social health insurance (SHI) systems also have weaknesses related to premium collection costs and the lack of coverage for a huge informal sector, and as a result, the incremental approach of covering the formal sector first and extension of SHI to the informal sector takes too

long in many low-income countries. Furthermore, SHI premiums are subject to the economic cycle, and can fall during recessions.

In Asia, a mixed approach to health care financing is desirable. Governments should provide a full subsidy for the poor. They also need to provide at least a partial subsidy for the informal sector for their SHI premiums. Thailand achieved universal population coverage thanks to a full subsidy for the poor and for the informal sector. Population coverage of SHI in the Philippines and Viet Nam is stagnant due to the low coverage of the informal sector, in turn because governments provide no subsidy. An increase in population coverage can also raise the bargaining and purchasing power of the financing agency, which can purchase better care at low cost from health care providers.

Population coverage is insufficient to provide financial protection. For example, population coverage of SHI is more than 60%, but health insurance accounts for only about 10% of total health expenditure in the Philippines, due to limited benefit coverage, especially a very low benefit ceiling. The benefit package should, therefore, be extended.

## **Increasing the effectiveness of health care financing**

### **Effective payment system for health care providers**

Providers play a key role in resource allocation in health care, and the payment system determines the key economic incentive for providers. Most low-income countries of Asia use input-based (or historical) budgeting and fee for service. Inflexible budget payment to health care providers does not improve their performance. Fee-for-service payment results in demand inducement and an increase in the amount and intensity of health care. The implementation of payment systems that give health care providers the right incentive for cost-effective health care, such as capitation and case-based payment, will increase the effectiveness of the health care system.

### **Strengthening primary health care**

Primary health care facilitates greater allocative efficiency and thus more effective resource use, supporting progress toward the goal of universal coverage (WHO 2009a). This is particularly important given the increasing pressures on public services and the need for ways of reducing exclusion. Less than 20% of financial resources are spent on primary care in Asian countries such as Cambodia, the PRC, the Lao People's Democratic Republic, Mongolia, the Philippines, and Viet Nam (WHO 2009b). Asian countries should increase the priority of primary health care in their health policy and resource allocation.

### **Rational drug policy**

Pharmaceutical expenditure is a major component of OOP payment and a huge financial burden in many Asian countries. Pharmaceutical expenditure accounts for almost half of total health spending in Cambodia, the PRC, the Lao People's Democratic Republic, and Viet Nam (WHO 2009b). Where recession is accompanied by inflation and devaluation of domestic currencies (as in 1997–1998 in Asia and 2001–2002 in Latin America), the price of imported medicine increases. If cost increases are not absorbed, the impact will lead to shortages or increased costs of care. The following are therefore needed: financing mechanisms for the procurement of essential drugs, vaccines, and other medical supplies; promotion of the rational use of drugs; increased use of generic drugs; and standardized prescribing practices.

### **Monitoring the impact of the crisis**

Given the rapid evolution of the crisis and the uncertainty surrounding its impact on different countries, monitoring its effects is important. Particularly, the impact of the crisis on disadvantaged groups, such as the urban and rural poor, unemployed, female-headed households, homeless children, and ethnic minorities, needs to be assessed continually.

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# **The impact of the global recession on the poor and vulnerable in the Philippines and on the social health insurance system**

*Axel Weber and Helga Piechulek<sup>1</sup>*

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## **Introduction**

Asia is currently affected by the world's most serious recession since the 1930s. Unlike the Asian financial crisis in 1997–1998, this global recession may affect not so much the very poor as perhaps those vulnerable to poverty. Unemployment and underemployment could rise significantly. There could be consequences from such developments for the system of social protection in the Philippines. This paper analyzes the impact of the global economic and financial crisis on health insurance coverage, and especially for the poor, in the Philippines. The paper will discuss both the impact on formal and informal sector coverage. It will recommend reforms in the Philippines' health insurance system to improve coverage, targeting, fiscal sustainability and services.

## **Impact of the crisis on the Philippines**

The economic disadvantages of the Philippines now, in the course of the crisis, turn out to be advantages. The impact of the crisis on the Philippines has been less harsh than on other countries, especially Asia's newly industrialized economies (NIEs), because the country is less linked than others with global investment flows, and is less dependent on global trade.

However, there is some risk as there is a chance of mild recession if the global recovery is slow and if revenue flows from remittances, exports, and services deteriorate more than expected. But at

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<sup>1</sup> Axel Weber is a consultant for social protection, and Helga Piechulek is the manager of the GTZ health program in the Philippines.

the moment this seems unlikely. Also, election-related spending (elections are scheduled for May 2010) could boost gross domestic product (GDP). In summary, the following has been seen:

- exports and foreign direct investment (FDI) have registered sharp downturns;
- important growth sectors, such as mining and tourism, have slowed down;
- remittances from the large number of overseas Filipino workers (OFWs) have not declined, continuing to rise in the first quarter 2009; and
- in total, demand has been relatively stable, leading to reduced, but not severely falling GDP.

The effects of the crisis so far have been moderate, the global economic crisis may affect the Philippine economy through the following three major transmission mechanisms:

- Due to reductions in exports, some job losses have occurred in the export sector, particularly in electronics and furniture industries.
- Lower remittances of overseas foreign workers (OFWs) living and working abroad might affect domestic demand. Lower remittances mean lower domestic consumption, tending to slow economic growth. Families of returning OFWs are also at risk of falling into poverty if that OFW cannot find alternative domestic employment.
- Foreign investments, though not a major driver of economic growth in the Philippines, have considerably slowed, with a net inflow of foreign equity capital reported in 2008 at half the previous year's level. This translates into slower economic growth and lower domestic employment.

In sum, the economic outlook for the Philippines is not as bad as the global crisis might have foreshadowed. The impact on GDP and employment—both factors that influence social security and health insurance—has been moderate. GDP is still expected to grow in 2009, and forecasts do not raise any red flags about coming severe falls in either GDP or employment.

The social impacts of crises can be divided into three effects:

- unemployment and underemployment,
- subsequent loss of social security, and

- reduction in social welfare due to financial restrictions and pro-cyclical government policy.

In general, unemployment and poverty increase households' vulnerability to health shocks. Without savings and adequate social safeguards, unemployment and impoverishment following economic slowdown result in lower food intake and poorer housing and sanitation conditions. Unlike many developed countries, where one of the main tasks of social protection is to protect people from the economic and social effects of economic downturns, social protection in the Philippines becomes even worse during unemployment. People lose all kinds of social security entitlements unless they continue to contribute on their own. Thus, any economic downturn is aggravated through a pro-cyclical architecture of the social security system (meaning that the system as it is designed aggravates a crisis instead of alleviating it).

During the 1997–1998 crisis, the government compounded this effect by a general austerity policy instead of investing in social protection. Maybe this is one reason why the Philippines now introduced the Pantawid Pamilyang Pilipino Program. This program is one of the more comprehensive programs in Asia. It started only in 2008. It is a conditional, means-tested cash transfer program following the model of Latin America, namely Brazil and Mexico. It provides grants to poor families, particularly in order to improve the health, nutrition, and education of children between 0 and 14 years. It has the purpose of short-term poverty alleviation and wants to break the intergenerational poverty cycle through investments in human capital.<sup>2</sup>

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<sup>2</sup> The target group of the program comprises the poorest households in the country, selected through a three-step means test. In January 2009, 379,345 households were identified. The target for 2009 is 700,000 households. The beneficiaries receive two types of grants: P6,000 (\$130) per year or P500 (\$11) per month per household independent of the number of household members and the number of children for covering health and nutrition expenses. P3,000 (\$65) per school year (10 months) or \$6.5 per month per child for covering educational expenses. A maximum of three children are eligible. Thus, a household with three children can receive P1,400 per month (\$31) or P15,000 per year. In order to avail of the benefits, the families have to comply with a certain number of conditions. The households will receive the cash grant for a maximum of 5 years. The compliance with the conditions is monitored by municipalities. Non-compliance will lead to the suspension of the cash grant. A budget of P10 billion per year (\$200 million) has been allotted for this program (assuming that there are about 700,000 families). The specific features of this program is the regional targeting combined with a proxy means test, as well as conditionality and grants that are uniform but depend, to some extent, on household size.

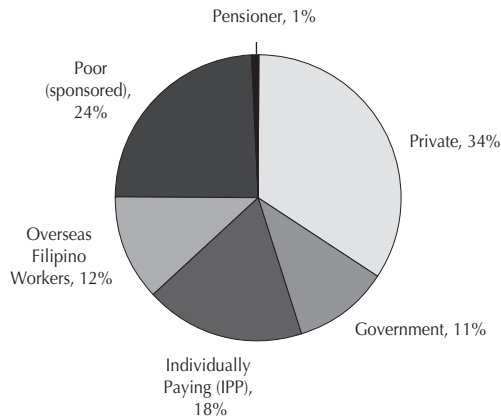
## Social health insurance system in the Philippines

PhilHealth, a government agency, implements the National Health Insurance Act of 1995 (Republic Act 7875) through the National Health Insurance Program (NHIP). NHIP replaced the old Medicare Program introduced 23 years earlier. Its mandate is to provide all citizens with the mechanism to gain financial access to health services, in combination with other government health programs.

Under the National Health Insurance Act, all citizens are required to enroll in the NHIP to become PhilHealth members to avoid adverse selection and social inequity. Members are assigned with a permanent and unique PhilHealth Identification Number. Membership has several categories (Figure 1):

- Employees (private sector and government), who are compulsory members and whose half of the contributions are being paid by the employer) (P100–P750 per month depending on the salary).
- Members of the Individually Paying Program (IPP), mainly the self-employed and those in the informal sector, who are voluntary members and have to pay 100% of the contribution (P1,200 per year).
- Members of the Sponsored Program (namely, the poor), for whom the contribution 100% is paid by the state.

**Figure 1: PhilHealth membership structure**



Source: PhilHealth.

- OFWs (P900 per year).
- Retirees over 65, who are enrolled free of charge if they have at least 120 months prior enrollment.
- Family members, who are insured with the members free of charge.

In the context of the global crisis, most people who became unemployed also lost their PhilHealth entitlement, unless they become IPP members and pay the contribution voluntarily. There are no cushioning measures, such as special transitional regulations. (Usually the employees keep their membership for 3 months as the contributions paid entitle cover for 3 months).

Coverage is estimated at around 66% of the population, close to 100% in the formal sector<sup>3</sup> and around 50% in the informal sector (Table 1). Coverage varies substantially by region, and is highest in the National Capital Region and lowest in the Autonomous Region in Muslim Mindanao. Coverage is lowest in the informal sector nonpoor group (individually paying members).

**Table 1: Enrollment 2008 and PhilHealth target**  
(estimates)

	<b>% of POP</b>	<b>% coverage of sector</b>	<b>Coverage in % of total population</b>	<b>Target</b> (Coverage of Sector) (%)
Formal sector	45.0	90.0	40.5	97.0
Informal sector	55.0	49.1	27.0	75.0
<i>IPP</i>	30.0	40.0	12.0	
<i>Sponsored</i>	25.0	60.0	15.0	
<b>Total</b>	<b>100.0</b>		<b>67.5</b>	<b>84.9</b>

IPP = Individually Paying Program.

Sources: PhilHealth; authors' estimates.

<sup>3</sup> There are no exact estimates as to how far compulsory membership is enforced. There are estimates that there is an evasion of about 10%. This is why coverage rate in Table 1 is estimated with 90%.

The formal sector accounts for about 45% of the population in the Philippines and people working therein are mostly covered by PhilHealth. The informal sector can be divided into:

- Those who are part of the informal sector, but not poor (about 30% of the population and 12% PhilHealth insured). They become members of PhilHealth on a voluntary basis through the IPP. At present, 40% of the IPP-targeted population is covered.
- Those who are part of the informal sector and poor (about 25% of the population and 15% PhilHealth insured). PhilHealth should automatically cover these people, with the national government and relevant local government unit (LGU) jointly paying their contributions under the Sponsored Program. Currently, 60%–70% of the Sponsored Program target population is covered.

Benefits include:

- *Inpatient coverage.* A subsidy for room and board, drugs and medicines, laboratories, operating room and professional fees for hospitalization of not less than 24 hours.
- *Outpatient coverage.* Day surgeries, dialysis, and cancer treatment procedures such as chemotherapy and radiotherapy in accredited hospitals and private clinics.
- *Special benefit packages.* Coverage for up to the fourth normal birth delivery, a Newborn Care Package, tuberculosis (TB) treatment through directly observed treatment, short-course (DOTS), etc.

Compared to similar countries in the region, health expenditure—even as a share of GDP—is among the lowest in the Philippines (Table 2). This corresponds to the findings in the ADB social protection index.<sup>4</sup> On the other hand, population coverage is among the best.

Total expenditure on the mainstream programs of PhilHealth in 2008 was around P21.3 billion (\$450 million). The reserve that PhilHealth accumulated amounts to about P50 billion (\$1.1 billion) and/or P90 billion (\$2 billion including buildings) total assets, which is more than two and/or four times its annual income. In terms of

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<sup>4</sup> The level of social protection in the Philippines is below the average of Asia. Indicators were social protection expenditure as share of GDP, coverage, distribution of benefits, and level of benefits. See Baulch et al. (2008).

total health expenditure in the Philippines, PhilHealth plays a relatively subordinate role (Table 3) with out-of-pocket (OOP) payments being very high and representing around 48% of total expenditure.

**Table 2: Health expenditure in selected Asian countries, 2006**

	<b>Total expenditure on health as % of GDP</b>	<b>Gov. exp. on health as % of total health exp.</b>	<b>Per capita total exp. on health (ppp in \$)</b>	<b>Per capita gov. exp. on health (ppp in \$)</b>	<b>GDP per capita (ppp in \$)</b>
Indonesia	2.1	5.1	78.0	36.0	3,990.0
Malaysia	4.2	7.0	454.0	203.0	14,225.0
Philippines	3.3	5.5	199.0	72.0	3,539.0
Thailand	3.5	11.3	323.0	207.0	8,379.0
Viet Nam	6.0	5.1	221.0	57.0	2,774.0
Average	3.8	6.8	255.0	115.0	6,581.4

exp. = expenditure, gov. = government, GDP = gross domestic product, PPP = purchasing power parity.  
Source: PhilHealth: Health Care Financing in the Philippines. 2009.

**Table 3: Health expenditure structure, Philippines**

	<b>2005 (%)</b>
National government	16
Local governments	13
Philhealth	11
OOP	48
Private insurance	2
HMOs	4
Employers	3
Private schools	1
Others	1
<b>Total</b>	<b>100</b>

HMOs = health maintenance organizations, OOP = out-of-pocket.

Source: PhilHealth: Health Care Financing in the Philippines. 2009.

This shows that there is still room for expanding PhilHealth financing. The average support value of PhilHealth benefits (meaning the average percentage of the amounts of medical bills reimbursed) is

higher in some provinces but lower in Metro Manila and in secondary facilities. The reason for this is that PhilHealth benefits are capped and there are no efficient cost controls in place. This means that maximum amounts are paid depending on the level of the facility (primary up to tertiary) and the diagnosis. These maximum amounts rarely cover the actual medical bill.

In May 2009, PhilHealth, with German Technical Cooperation (GTZ) support, carried out a study in Region 8 of the country to get figures about drugs bought outside the hospital, parallel professional fees, etc. The results showed that the support value is 27% on average, around 50% in government hospitals, and 20% in private hospitals. In terms of the different care levels, support value is highest in tertiary hospitals (32%) and lowest in secondary facilities (21%); it is also relatively low for drugs (19%) and professional fees (30%), compared to operational rooms (61%) and x-ray and laboratories (58%).

Providers are not normally bound to a fee schedule though PhilHealth has for many years made an effort to control prices and quality. Recently it has done this through contracting out. Anecdotal evidence suggests that some providers adjust their prices according to the patient's ability to pay. But in general, people who cannot afford the part that exceeds PhilHealth's reimbursement (the copayment) receive no treatment.

The problem arises mainly through the existing system of provider relations. Ideally a social health insurance system contracts with and directly and fully reimburses providers. The PhilHealth payments corresponding to the costs for "room and board," "professional fees," and "drugs and investigations purchased in the hospitals" are directly paid to the hospital's bank account (PhilHealth share), and the hospitals deduct those amounts from the patient's payment upon discharge. For drugs purchased outside the hospital, members send a separate claim to PhilHealth but the amounts are much smaller than the ones observed in the third-party payment system. Even though PhilHealth reimburses the provider directly, the patient makes the copayment in cash up front. Patients are therefore financial buffers between provider and health insurer, having to pay first and only being reimbursed later. In the absence of a binding fee schedule, it would not be a solution to lift the cap on PhilHealth benefits as providers may raise their fees as soon as they know that patients get higher reimbursement.

Even though the poor are covered free of charge, not all of the poor are covered. There are various reasons for this.

- Even if the premium is paid 100%, there is still a large copayment because the benefits have a low support value. Poor people cannot afford to pay this and thus see no benefit in



registering in the system, even if it is free. This might be also a reason for the low relative consumption (Figure 11).

- LGUs are supposed to pay a share of the costs of the premium for the poor (between 10% and 90%). Many LGUs do not comply with their obligations.
- There are problems with identifying the poor (which is the task of the LGUs). The current means test is inefficient, fraud occurs, and LGUs are not making enough effort to register the poor. The sponsored insurance cards are also used politically by the LGUs within a patronage system. “You vote for me, I give you the card, whatever your level of income.”
- The poor generally have little awareness about free membership in PhilHealth.

To boost coverage among sponsored members and the IPP, PhilHealth should increase the support value, raise awareness of its benefits among the poor, and secure funding.

## **Impact of the crisis on PhilHealth**

### **Coverage and access**

Though the crisis has not yet gripped the Philippines, the global recession in the medium term could impact on PhilHealth membership. For those insured in the formal sector, the crisis could mean rising unemployment and hence loss of their PhilHealth entitlement. As many of those in the formal sector will not fall under the national poverty line (equivalent to \$1.4 on international standards), they will be ineligible for the Sponsored Program. However, they will be vulnerable to poverty and may not be able to afford an IPP contribution to PhilHealth. As a result, people may lose their health insurance completely and therefore any access to adequate and affordable health care.

Even if those currently employed do not lose their jobs, every year the Philippine economy needs many new jobs for its labor market entrants. With GDP growth slowing, more people will be unable to enter the labor market, increasing the number of informal sector unemployed or underemployed.

### **Benefits**

Even if benefits are provided to an increasing number of poor, the support value is so low that large OOPs are inevitable, which the poor cannot afford. So with increasing numbers of poor and unemployed,

there are more and more people who, in spite of PhilHealth, have no access to adequate health care.

## **Contributions and finance**

The crisis could affect contributions and finance in various ways. For those working in the informal sector, it could mean rising poverty. Normally the central and local government would then have to pay their PhilHealth contribution through the Sponsored Program. However, even before the crisis, the LGU's contribution to the Sponsored Program was insufficient, despite improvements in budget allocations to the Department of Health. Given that the economy is expected to grow by only about 3% in 2009 (World Bank 2008), it is questionable whether additional allocations will be made for health.

Even if in 2009 and 2010 (that is, a presidential campaign period), the political will is there to pay for additional sponsored members, political interference and inefficiencies in identifying the sponsored beneficiaries and the nonsustainable funding<sup>5</sup> of this category of members would challenge coverage in the long run. Another point is that, if economic growth slows, the assessment base of contributions will stagnate. As the contributions for the large group of the employed are linked to salaries, stagnating salaries will cause those contributions to slump. If business opportunities shrink due to an economic downturn, voluntary members may cancel their membership. Finally, if the government adopts a pro-cyclical austerity policy (as it did in the last crisis), government subsidies will shrink and PhilHealth will be unable to expand or even maintain current membership of the Sponsored Program.

## **PhilHealth policy vis-à-vis the crisis**

Generally, PhilHealth has few ways to counteract the crisis, largely because it depends on rules and regulations set by the legislature and therefore has only limited room for adjustment; and because it has limited power vis-à-vis providers and employers.

Still, with an economic downturn people will appreciate even more an effective health insurance system and one that prevents them from falling into poverty. But as seen above, any economic downturn

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<sup>5</sup> PhilHealth has to negotiate every year the level of support for members of the Sponsored Program with the government. It is, however, a government agency with relatively little political clout. Furthermore, the Department of Health does not have much bargaining power with the Department of Finance.

resulting in increasing numbers of poor people will undermine actual access to health care in the Philippines. This can only be changed by the following measures:

- *Financing:* By government compliance with its own regulations in order to create the resources for the members of the Sponsored Program. This is a constant PhilHealth demand.
- *Coverage:* Improving the identification methods for the poor, raising awareness, and finding transitional regulations for the unemployed. The extension of coverage is supported by PhilHealth through the KaSAPI program<sup>6</sup> as well as through the demand to LGUs to boost sponsored membership. Regulations to extend coverage for the unemployed have been discussed recently.
- *Benefits:* Increasing substantially the support value. In this area, PhilHealth has recently increased the benefits by around 30%, is working on contracting modalities with providers (linking payment levels with billing practices), and on drug price lists.

## Conclusions and recommendations

About 20% of the population are not covered and have no access to quality health care. This is aggravated in a crisis because the unemployed fall out of the system. This could be partly resolved through creation of an “extended membership” on unemployment.

The crisis affects PhilHealth financially in two ways. First, LGUs are even more likely not to fulfill their obligations to cover the poor, so that more poor people will remain without access. Second, PhilHealth’s income is hit.

Both issues could be solved by making an assessment of LGU financial capacity; by the national government supporting the Sponsored Program, and by using PhilHealth reserves to cover temporary shortfalls in contribution incomes.

The current reimbursement system of PhilHealth makes the patient a financial buffer between health insurer and provider, reducing the effectiveness of health insurance coverage.

Every crisis not only creates hardships but also opportunities, of which three stand out:

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<sup>6</sup> KaSAPI (or Kalusugang Sigurado at Abot Kaya sa PhilHealth Insurance) is a social health insurance program created for organized groups to have access to PhilHealth.

- Increase the support value of PhilHealth,
- Improve health insurance coverage for the unemployed, and
- Increase coverage for the poor.

All would improve acceptance and effectiveness of PhilHealth and are feasible. The crisis thus creates the chance to improve efficiency and effectiveness of the system as a whole. They also correspond to the recommendations of the WHO high-level government consultations in January and May 2009.<sup>7</sup>

### **Recommendation 1: Increase the support value of PhilHealth**

As the support value currently is low in PhilHealth and leaves members with a high burden of out-of-pocket payments, measures to increase the support value to an average of 80% is recommended. Such an increase can be achieved through two types of measures:

- increasing the PhilHealth benefits, or
- reducing providers' costs.

As said above, an increase in PhilHealth reimbursements is not recommended before parallel efforts have been made in the area of contracting out and provider payment, which will lead to some control at least over price increases. Otherwise, PhilHealth funds will vanish in higher prices. Three measures should aim to have

- a binding fee schedule and price lists for providers;
- clear-cut copayments for patients, which are affordable; and
- a direct billing procedure where PhilHealth enters in direct financial contact with providers without involving patients, covering the whole amount less copayments.

These three measures will release patients from financial problems and at the same time give PhilHealth a grip on prices and quality. Health care prices are high in the Philippines, especially drug prices, which are a multiple of those in other Asian countries. Therefore, steps to control prices and to reinforce markets in health care are highly recommended.

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<sup>7</sup> WHO: Documentation of high-level government consultations in January and May 2009.

Yet such measures can only to a limited extent be implemented by PhilHealth alone. What is needed is an effort of the legislature to reform the provider payment system and to introduce an effective fee schedule that will allow PhilHealth to redefine its benefits and support value. These moves must relate to the whole sector, because if price controls are introduced for PhilHealth only, this might negatively affect provider attitudes toward PhilHealth patients.

These moves will also be of great benefit for the development of the private health insurance market in the Philippines. This has been an issue for a decade or more and change is needed to improve social health protection. A concerted effort by social partners, government, and the development community may well be necessary to overcome strong resistance, especially from health care providers.

Once the pricing in the health sector has become more transparent, consideration should be given to increasing PhilHealth funding and benefits to a level that guarantees support values above 80% for regular members and 100% for sponsored members, as in some other countries. Also, direct billing arrangements with providers should be arranged, which would free patients from advancing costs and would also increase transparency for PhilHealth. The benefit scheme could be reformed in several ways:

- To consider coverage of outpatient surgery.
- To reimburse a fixed percentage of the bill, leaving a copayment to a patient that is 20%–30% for smaller but frequent items and less for catastrophic cases.
- To introduce a stop-loss, meaning that copayment must not exceed a fixed annual maximum, for example P5,000 for individuals and P10,000 for families.

These measures will be financed partly through frozen or even reduced provider payments. Partly it will be necessary to increase contributions for PhilHealth. But this might be possible if the members get a substantially better service in return. If the current support value is around 27%, this would mean an increase of about 50% of the expenditures for PhilHealth. A detailed actuarial study could bring clarity to this.

## **Recommendation 2: Improve health insurance coverage for the unemployed**

Coverage for the unemployed should be improved. Currently, those made unemployed lose their PhilHealth entitlement, even if they have been paying members for many years. An entitlement to subsidized

membership on unemployment could be adopted. The contribution should be paid from the national budget. Conditions should be:

- Becoming unemployed after 1 January 2010, and presenting a certification of the employer about the date of unemployment.
- Being a registered unemployed person and seeking employment, having contributed a minimum of 1 year's consecutive contributions to PhilHealth. The entitlement would then be, for example, 1 month per year contributed, for a maximum of 12 months.

An actuarial study should be carried out to evaluate the costs and to introduce this regulation by January 2010. Implementation should be monitored, and those results could be used in discussions about a possible introduction of an unemployment benefit scheme.

### **Recommendation 3: Increase coverage for the informal sector**

To increase the coverage in the informal sector could be done through several ways targeting both the poor and the nonpoor:

- Through an increase of the financial engagement of the LGUs. If LGUs do not fulfill their obligation, the national budget could complement if LGUs agree to a prior financial assessment.
- Through awareness campaigns, especially among the poor, which will also create pressure on the LGUs to comply with obligations. To create grievance procedures for the poor in case their access to the program is denied.
- Through enlarging and supporting the KaSAPI program, which currently supports PhilHealth in registration and contribution collection of IPP via CBOs.

The objective should be to achieve universal coverage, though PhilHealth's objective of achieving 85% coverage (which is regarded as universal) by the end of 2009 seems unrealistic.

In any case, some analysis of the following should be pursued:

- evidence about existing patronage systems that lead to sponsoring for nonpoor members;
- the existing means test and development of recommendations for its improvement based on international practices and on the experiences with the Pantawid Pamilyang Pilipino Program;

- the reasons why LGUs do not comply with their obligations to cofinance the sponsored program and to register the poor population; and
- the problems of sponsored members to seek recourse to benefits if the support value is far below 100%.

## **Recommendation 4: Involve development partners**

Development partners such as GTZ, WHO, and ADB could engage in more medium-term support, as envisaged in their respective assistance strategies. This especially refers to supporting PhilHealth:

- through studies and technical assistance in solving the problems mentioned above,
- politically, in its requests for example for higher support values, and
- in creating awareness to achieve 100% coverage in the country.

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### **Box 10: Health security: Thailand**

Thailand's health security system provides a glimpse of what is possible—with sufficient will—in a middle-income country. Different segments of the country's 67 million population are protected by three health schemes, gradually rolled out since the early 1980s.

The Civil Servants Medical Benefit Scheme, established in 1982, covers civil servants and other permanent employees of the central government, as well as their dependents. Some 4 million people are entitled to health care at any medical institution.

The Social Security Fund, set up in 1990, entitles employees working in private companies employing more than one person to health care financing. Unemployed workers are entitled to receive benefits for up to 6 months. The Fund, financed through contributions from the government, employers, and employees, covers over 9 million people.

The Universal Coverage Scheme, launched in 2002, targets the population not in the other schemes. Members are only required to submit an application form to the provincial health office or to one of the health care facilities in a network of regional health facilities. He or she is entitled to health care services with only 30 baht per admission to any care provider within the network. The care package, covering about 47 million people, is comprehensive and offers both inpatient and outpatient services.

None of these three health security schemes is free of problems. The Civil Servants Medical Benefit Scheme is costly for the government to run while the Social Security Fund has limited coverage for informal sector workers. The Universal Coverage Scheme has, in effect, limited its coverage by requiring a national ID (not everyone has one) and pre-registration at health networks (people are generally loath to reflect illness beforehand). Quality of care is also an issue since health care providers need to work within stipulated budgets.

Still, the three schemes provide a health safety net for the majority of the population and a firm foundation for gradual improvement of coverage and service quality.

Source: Reisque Iwana in "Health security in Thailand: Can the Universal Coverage Scheme be sustained in the current global economic crisis?" [www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/papers.asp)



# Implications of economic recessions on quality, equity, and financing of education

Jouko Sarvi<sup>1</sup>

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## Introduction

Under its long-term strategic framework, *Strategy 2020*, the Asian Development Bank (ADB) has refocused its operations under five core areas that best support its agenda, reflect the needs of ADB's developing member countries and ADB's comparative strengths, and complement efforts by development partners. The education sector is one of ADB's five core operational areas (ADB 2008a). This reflects the potential of the sector to support inclusive social and economic development.

ADB's strategies in the education sector are guided by the recommendations of ADB's comprehensive strategic study (ADB 2008b). It provides a systematic analysis of education and human capital development challenges in Asia and the Pacific. The study also presents a set of actionable recommendations for assistance operations in the education sector designed to ensure that support to development of education in the region continues to respond effectively to the needs arising from evolving labor markets and economic and social development.

The economic crisis has served to further confirm the strategic directions for supporting development of education in the region in the coming years. Inclusive growth requires continuous development of an adequate human resource base. An adequately educated and trained workforce is a highly important factor for growth and economic expansion in the region. The skills shortage that has arisen from the widening mismatch between education graduates and labor market needs has persisted despite the slowdown in economic activity and layoffs due to the crisis. The shortage constrains economic expansion in key sectors and the efforts of governments to accelerate growth (ADB 2009a, ILO 2008).

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Developing countries in the region recognize the economic and social returns on investment in education and skills development, and seek assistance for optimizing that investment to support economic recovery and rebalancing of growth. Overall, rates of return on primary, secondary, and higher education are relatively high in the region. However, the impact of economic recessions on individuals varies depending on their level of education: workers who have not progressed beyond basic education are more vulnerable to job loss and falling wages than workers with secondary and, especially, higher education. Recessions tend to lower the return on unskilled labor and raise the return on better-educated or higher-skilled labor. This pattern was evident, for example, in Thailand during the 1997–1998 Asian financial crisis (Psacharopoulos and Patrinos 2007). Investments in a well-educated and skilled workforce can help accelerate economic recovery and foster growth during economic crises.

## **Short-term measures**

The crisis has direct implications for the different levels of education. In basic and secondary education, there is a risk that, in low-income countries in particular, public education budgets will be reduced, while at the same time the ability of many families to pay for their children's education will decline due to cutbacks in employment and incomes. Thus, many children, particularly in poor families and other vulnerable groups, are at risk of slipping out of school.

Prior to the crisis, skills shortages were a major constraint in relatively more advanced and technically specialized areas. These shortages persist in areas where demand remains strong, and are likely to reemerge in connection with economic recovery. More important, already by the first quarter of 2009, the economic crisis had led to estimated layoffs of 60 million in the region, and the trend of layoffs continued. Addressing the employment issue can require significant short-term investment in retraining and redeployment of laid-off workers, supported by expanded employment services and effective policies to support labor market mobility and flexibility.

## **Longer-term challenge**

The longer-term challenge will be to redirect education and skills development in support of rebalancing Asia's economic growth. The

economic crisis has highlighted the vulnerability of growth strategies that are exceedingly reliant on exports and the importance of strengthening Asian economies' internal sources of growth. Rebalancing entails shifting from export-led growth to consumption-driven growth (ADB 2009a).

In the education sector, rebalancing growth has implications at all levels. In basic and secondary education, it entails increasing the provision and improving quality and equity, to provide a strong and inclusive foundation for higher levels of education. In technical and vocational education and training (TVET) and skills development, it entails strengthening training in support of a shift in emphasis from traditional export sectors to services in support of a shift toward consumption-driven growth. A key element is ensuring that the workforce has appropriate and flexible skills, and that policies and mechanisms are in place to ensure labor market mobility and flexibility. In higher education, rebalancing growth will require a stronger emphasis on sustainable expansion strategies and qualitative diversification, including science and technology education, and innovation.

## **Perspectives of subsectors of education**

### **Basic and secondary education**

The impact of the economic crisis on the progress in enrollments in public basic and secondary schools can be mixed in the region. On the one hand, the loss of income due to unemployment can reduce social demand for education, particularly among poor and vulnerable households. On the other hand, in countries where job opportunities have declined, at least in the short term, the opportunity costs of education can decrease and interest in enrolling in education can increase among those unemployed persons who can afford it. The number of students who cannot afford to continue their studies in private education increases during economic crises, pushing them to seek enrollment in public schools.

Even prior to the crisis, most non-income Millennium Development Goals and Education for All goals, including universal primary education, were at risk of not being met. On average, enrollments in primary education in the region are already high, at about 90%. However, the regional average masks significant variance between and within countries. Progress in enrollment, particularly in South Asia and in some Pacific countries, is behind the rest of the region. The progress

in the region is undermined by poor quality, poor attendance, and high dropout rates. In addition, equitable access to primary education remains a persistent problem. In many middle-income countries with high enrollments, out-of-school children are predominantly from disadvantaged groups, such as children (and especially girls) of poor families, children of ethnic minorities, and children in remote areas (ADB 2008b).

The policies of most developing countries in the region promote free basic education—primary and lower secondary education—through financing from public funds. However, in practice parents are struggling with many substantial hidden private costs, including the costs of providing school uniforms and transport for their children. During recessions, the ability of many families to pay for the hidden costs of their children's basic and secondary education declines, due to cutbacks in employment and incomes.

During recessions there is a risk that, in poorer countries in particular, public education budgets for basic and secondary education are reduced, initially affecting particularly the allocations for nonsalary expenses, which are for inputs for improving quality (such as teaching and learning materials and teachers' professional development). In low-income countries, a very high proportion (well above 90% in some countries) of the basic and secondary education budget is used for teachers' salaries (ADB 2008b). Hence, nonsalary budget allocations for inputs for improving quality are insufficient even in "normal" times and the impact of the recession can further undermine efforts to improve education quality. Furthermore, as the bulk of the sector budget is earmarked for teachers' salaries, in the longer term the budget cuts, if severe, may lead to unplanned ad hoc reduction of numbers of teachers in some countries.

During the Asian financial crisis, the trend of increased dropouts of children of poor families was evident, for example, in Indonesia, where reduced education sector budgets shifted the burden for education expenses to families. Consequently, many poor families withdrew their children from school, or withdrew the youngest children to help continue sending older children to school. Subsequently, children of poor families often have difficulty in motivating themselves to return to school when economies recover and family incomes increase (Thomas et al. 2004).

Therefore, while there may be a need to provide additional financial support to help developing countries tackle the risk of widening financing gaps in basic and secondary education budgets, there may also be an increasing need to provide carefully targeted social protection measures to help poor parents and other vulnerable

groups keep their children in school. The economic stimulus packages that governments have pushed through may help protect social spending and poverty reduction programs in public sectors. In addition, demand may increase for more direct support to the education sector.

For example, the Government of Mongolia has sought specific support to help safeguard achievements in the education sector and to mitigate any negative impact of the crisis on the poor. In response, ADB is financing the Education for the Poor: Financial Crisis Response Project for Mongolia. The project will provide support for protection of access to preschools for poor children; continuation of the targeted provision of textbooks to secondary school students from poor families; provision of block grants to schools in need of operation and maintenance funds; and capacity development in the line ministry in financial management, budgeting, monitoring, and evaluation to help with planning of operations during times of budget constraints. The fiscal stimulus packages in several countries, among them the People's Republic of China, Malaysia, and Thailand, also include direct support for education (Zhang et al. 2009).

Continued targeted assistance to the poor and other vulnerable groups is particularly important in low-income countries where the economic crisis may cause national Education for All plans to be postponed or even cut. But it is also important in middle-income countries that have achieved higher enrollments, where evidence clearly indicates that these groups continue to be marginalized and left out of school, despite the overall increase in enrollments (ADB 2008b). This assistance should be expanded and improved to include those who have become vulnerable during the recession and are at risk of falling below the poverty line.

Strong evidence exists of the positive impact of education scholarships and stipends in basic and secondary education, as part of conditional cash transfer programs, particularly when they are targeted at the poorest households, and support girls' education (World Bank 2009). Such scholarships and stipends should be expanded in response to the recession.

## **Technical and vocational education and training, and skills development**

The economic stimulus packages often include funds for retraining workers made redundant during the economic downturn. Demand for effective measures to retrain and redeploy laid-off workers is likely to increase. The large scale of the layoffs is likely to put a strain on the

capacity of skills development systems to meet short- and medium-term training needs. Thus, significant investment in improving flexibility and responsiveness of TVET systems, skills development, and employment services will likely be required, accompanied by policy measures to enhance labor market flexibility.

The economic crisis provides political momentum for comprehensive reform in the TVET subsector. In many developing countries, the government plays the dual role of policy maker and regulator on the one hand, and training provider on the other, and often performs that role inefficiently. Development agencies should provide more assistance to strengthen governments' capacity to provide policy guidance and regulatory frameworks for TVET and skills development, while governments increasingly shift the role of training provision to the private sector and industry. These moves would improve the flexibility and responsiveness of TVET and skills development, and strengthen linkages with industry. They would also provide essential support to economic rebalancing, as they would help define, through consultation with the private sector and industry, the skills needed for the domestic economy.

In both developed and developing countries, reemployment training programs have produced mixed results. The more positive impacts have been on reemployment and increased earnings for women in developing countries (Betcherman et al. 2004). There is strong evidence of the consequences of losing a job: female workers are affected more severely than male workers, and this has wide-ranging implications for the families of female workers, especially in poor households (King DeJardin 2009). Therefore, support for the design and implementation of reemployment programs targeting women will be important to alleviate the impact of the recession.

Redeployment training programs in transitional economies have achieved better results (Dar et al. 2003). This may be because it is easier to place retrained workers in new employment under conditions of structural adjustment (when some sectors are contracting and others are growing) than under cyclical unemployment (where jobs are being shed across most sectors of the economy). These results are encouraging from the point of view of the potential impact of support for redeployment training and for TVET and skills development in developing countries whose economies are undergoing restructuring or rebalancing.

In addition, the type of training seems to matter. Training programs that have employer sponsorship and are offered in enterprises tend to perform better (Adams 2007). Companies that continue training their personnel during a recession are better poised to profit

when the recovery begins (Blinkhorn 2008). Some recent research shows that 88% of human resource professionals believe that properly planned staff training can play a major role in addressing the challenges created by a recession (IMC Learning 2009).

The effectiveness of training and retraining for the unemployed depends primarily on whether jobs will be available at the end of the training. During cyclical contractions, they may not be, and so retraining and redeploying unemployed workers for the formal labor market will not be a high priority. Demand for skills in the informal labor market is likely to increase, particularly in developing countries experiencing a cyclical contraction and with a rapidly increasing youth population.

Although youth unemployment poses a serious challenge and vulnerability risk in the region, the crisis provides political momentum for increasing public–private partnerships to tackle them. TVET and skills development systems will need to adjust, and become responsive to the needs of informal labor markets, and pursue such partnerships to alleviate the pressure from the increasing rate of unemployment among the youth and to improve cost-efficiency of skills training programs for youth.

Already prior to the crisis, due to rigid and costly TVET and skills development systems in place in many developing countries, there was a need to enhance cost sharing and partnerships with the private sector. The crisis has further highlighted the need for such cost sharing to improve relevance, financial efficiency, and sustainability, and to help governments protect basic and secondary education budgets. Moreover, the TVET subsector itself is vulnerable to budget cuts because of its high cost structure compared with basic and secondary education, which can be expected to enhance the momentum for cost sharing and partnerships in TVET.

## **Higher education**

As countries develop and prosper, higher education is envisaged to play an increasingly important role in developing human resources and contributing to the movement of people, students, and workforces in the region (ADB 2008c). ADB's comprehensive strategic study indicated that the demand for higher education was expected to double in 5 years and triple in 10 years in many developing countries in the region (ADB 2008b).

Investment in higher education will continue to increase due to strong demand, as adequate output of higher education graduates is essential to support economic development and growth. The question

is not whether increased investment in higher education is justified, rather, it is about the government's role in ensuring that enough higher education graduates are available, among other things, to position the region's economics for recovery from the recession. It is also important to ensure that higher education is adequately diversified, based on equitable access and not serving merely upper-income groups, and that it is financially sustainable based on cost sharing and partnerships with stakeholders, including the private sector (Sarvi 2008).

There is strong demand for rapid quantitative expansion of higher education systems, particularly in low-income and low-middle-income countries in the region. In middle-income countries, demand is increasing for further diversification of higher education to, for example, science and technology, as well as to innovation, in order to support development toward a knowledge-based economy.

But there are also increasing concerns about ensuring the quality and relevance of higher education during expansion and diversification, as highlighted by the crisis. While demand for higher education graduates will remain unaffected in some key areas, there are already signs of significant declines in demand for graduates in other areas. Higher education priorities require careful review. Mechanisms will need to be strengthened to help new graduates find employment or receive loans to establish their own businesses, and companies will need to be provided with incentives such as tax breaks and loans when they employ graduates. Indeed, the Government of the People's Republic of China has announced such measures to tackle increasing unemployment among university graduates.

The rationale for cost sharing in higher education was evident prior to the crisis, and the crisis underlines the importance of cost sharing and financing partnerships in this subsector. Costs per student in higher education are much higher than in primary and secondary education. On average, low-income countries spend 34 times more on a student in higher education than on one in primary education, and 14 times more than on one in secondary education. The corresponding figures for high-income countries are 1.8 and 1.4 (Glewwe and Kremer 2005). In developing countries, sudden and large shifts of government financing to higher education can put at risk adequate government financing to basic and secondary education. It will be important to mitigate this risk, particularly during the economic downturn when public budgets in poorer countries have fewer funds for basic and secondary education. Thus rationalization of higher education financing is a high priority, to improve cost-efficiency and sustainable financing in the higher education subsector and in the education sector as a whole.



Empirical evidence and international comparisons do not generally support arguments that free higher education increases enrollments and improves equity. Within the context of constrained public resources, increasing public allocations to higher education, at the expense of basic and secondary education, is counterproductive (Ben Mimoun 2008). Moreover, there is substantial evidence that in many developing countries an increasing number of students (or their families) are willing and able to participate in sharing costs in high-quality higher education, or even to pay the full student costs (Kapur and Crowley 2008).

The demand for cross-border collaboration in higher education and labor markets is increasing in the region. Countries are increasingly seeking support for developing capacity in policy, quality assurance, cost sharing, and innovative financing strategies and partnerships in higher education. Sharing experiences in these intertwined development areas is important for improving the cost-efficiency and sustainability of higher education financing, and can also effectively support equitable access, quality, and relevance of higher education (Sarvi 2009, 2008). Cross-border collaboration will help governments share their lessons and experiences from targeting their resources at basic and secondary education as a public good, rather than disproportionately in higher education where cost recovery from beneficiaries is more justified.

Comprehensive longer-term reforms in higher education are important. Similar to the situation in TVET, the economic crisis provides political momentum for reform and rationalization of higher education. There is significant scope to develop governments' capacity to focus on their role in setting higher education policies, providing quality assurance, and creating a supportive regulatory environment for cost sharing and financing partnerships with stakeholders, including the private sector (ADB 2009b).

## **Conclusions**

In the region's education sector it is important to increase monitoring of the impact of the economic crisis, particularly on

- enrollment, completion, and learning outcomes;
- education sector budgets, in particular nonsalary expenditures as these are important for quality inputs and are usually first at risk during sector budget cuts;
- external donor funding available for education; and

- variance in the impacts on the education sector in countries, to help design response options accordingly.

In addition, support to education of girls, as well as poor, vulnerable, and other disadvantaged children, should be strengthened by

- sharpening the focus of programs that implement scholarships, stipends, and conditional cash transfer activities;
- providing support to other appropriate social protection measures in basic and secondary education projects; and
- expanding and improving targeting to include those who have become vulnerable during the current recession and are at risk of dropping below the poverty line.

Support to TVET and skills development is necessary to help design and implement retraining programs, particularly for unemployed women and youth, and to facilitate and leverage partnerships with the private sector in these programs.

In the medium to longer term, using the political momentum provided by the crisis and in order to support the rebalancing of growth, it will be important to provide assistance for comprehensive governance, policy, and finance reforms in the education sector, and for capacity development in sector planning, management, and system efficiency. These measures will help improve quality, equity, flexibility, and sustainability of financing of education and skills training, leading to improved relevance and responsiveness to labor market needs.

Comprehensive reforms should focus on:

- Helping develop capacity in cost-sharing and partnership strategies, in post-secondary education in particular. This will help governments rationalize the financing structure in the whole education sector so as to become more sustainable and to protect budgets at basic and secondary education levels during crises in the future.
- Facilitating knowledge sharing and leveraging cross-border and regional cooperation in education reform issues, particularly in financing arrangements, as well as in cost sharing and partnerships in postsecondary education subsectors.
- Drawing lessons from specific regional studies and capacity development efforts to support development of policies and strategies in postsecondary education, and further inform and align strategic priorities in these subsectors.

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# Impact of the global recession on sustainable development and poverty linkages

*V. Anbumozhi and Armin Bauer<sup>1</sup>*

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## Introduction

Economic crises never happen overnight. They are the results of years of global economic change, policy errors, and misjudgments. For what has turned out to be the worst recession in 70 years, the current global economic slowdown began with a collapse in the United States (US) subprime residential mortgage sector, which then spread to the entire financial sector in other industrialized countries. Massive financial sector losses then spilled over to the real sector. Engulfing Asia, the crisis has reduced economic growth in many countries that depend on exports to the US for their growth.

However, since the third quarter of 2009, there has been a clear upward trend in growth forecasts for Asian countries. After a brief pause, the People's Republic of China (PRC) and India have returned to their fast growth paths, lifting much of Asia with them. Yet even if recovery is on track, this recession will not be like most others, when what went down slowly came back. The downturn is having a fundamental impact on Asia's economic future, environmental sustainability, and livelihood options available to the poor. Asian economies in particular, need to "rebalance" their growth paradigm to one in which they place greater emphasis on serving local and regional markets as well as on reinforcing production chains, which both provide more environment-friendly products and which are more inclusive in generating higher productive employment and income for all.

The correlation between economic activity, energy use, and human development is well established (Kawai and Anbumozhi 2009). While

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climate change mitigation specifically addresses a rebalancing in the energy sector, this paper focuses on that aspect which closely relates to livelihood aspects of the poor—many of them more related to land use practices, migration, and adaptation policies. The paper explores the environmental vulnerability of poor people to global financial crises, identifying the points of interaction between poverty reduction and green stimulus measures. Finally, it introduces key long-term policy issues that are closely related to the environments of the poor. The paper draws on historical comparisons from the 1997–1998 Asian financial crisis to assess how the current crisis may affect energy use of the poor.

The paper argues that there are some short-term benefits from the global recession on the environments of the poor, especially through reduced air pollution. However, a prolonged economic slowdown with continued lack of private investments in energy efficiency and renewables will, in the long term, have a negative impact on sustainable growth and on poor people's access to energy. The paper further argues that public stimulus packages fail to create a close link between promoting economic growth and sustaining the poverty reduction goals that are directly related to environmental improvements.

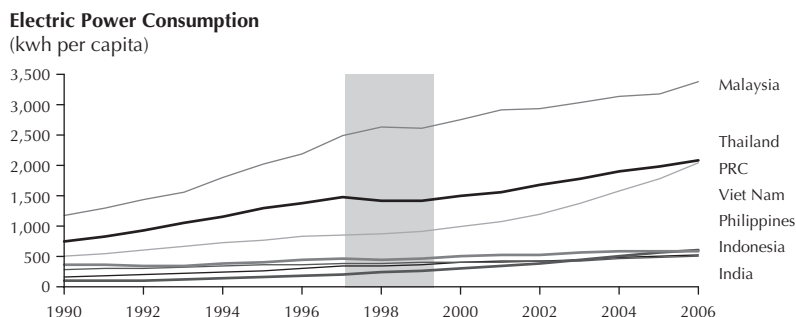
## **Interrelationship between energy use and poverty reduction**

The Asian crisis of 1997–1998 is usually associated with the floating of the Thai baht, leading to substantial currency devaluation that rapidly spread to the Republic of Korea, Malaysia, Indonesia, and several other Association of Southeast Asian Nations (ASEAN) countries. After years of high gross domestic product (GDP) growth, these countries found their growth rates coming down considerably; in some cases, they showed contraction. This situation improved somewhat after 1999, and modest growth resumed until the current crisis.

Despite massive additional investments in infrastructure and energy as part of government packages in Asia, the current global recession, which has lowered growth in many countries in the region, has important implications for energy use and for related environmental impacts.

## **Reduced energy consumption**

Growth in the region was pushed forward by many factors, one of them being the increase in energy consumption (Figure 1, which shows the impact of the Asian crisis). For countries at the early stages of industrialization, the rate of growth for energy use is close to that

**Figure 1: Changes in energy use**

PRC = People's Republic of China.

Source: Authors.

of GDP, and may even exceed it for some time, if energy-efficiency measures are not undertaken. In recent years, however, energy use has grown much more slowly than GDP, indicating the beginning of the transition in Asian economies from industrial to information and service societies.

Another reason for reduced energy consumption, despite increasing GDP, is improved energy efficiency. The rate of growth in energy consumption is slower than that of GDP for Japan, and somewhat higher than GDP for most other countries. The exceptions are the PRC and India, where several factors have resulted in a low energy-to-GDP ratio. These factors include the substantial increase in energy efficiency that has been made in the PRC in recent years, and the rapid increase in the services sector.

Despite increased public infrastructure spending as part of the global rescue packages, the economic slowdown of the last 2 years brought a major reduction in new energy investments, primarily because of a lack of interest from the private sector. Since the start of 2009, in the energy sector globally, there has been a steady stream of announcements of cutbacks in capital spending and project delays and cancellations, mainly as a result of lower prices and cash flow. Recent estimates indicate that worldwide upstream oil and gas investment budgets for 2009 have already been cut by around 21% compared with 2008, a reduction of almost \$100 billion (IEA 2009). From October 2008 to April 2009, over 20 planned large-scale upstream oil and gas projects, valued at more than \$170 billion and involving around 2 million barrels per day of oil production capacity and 1 billion cubic feet per day of gas capacity, were deferred indefinitely or canceled. A further 35 projects, involving 4.2 million barrels per day of oil capacity and 2.3 billion cubic feet per day of gas capacity, were delayed by at least 18 months.

It is likely that the upstream industry will further reduce spending on exploration very sharply in 2009, largely because the bulk of spending on development projects is associated with completing projects in Canada, now postponed. The drop in upstream spending is most pronounced in regions with the highest development costs and where the industry is dominated by small players and small projects.

Power-sector investment is expected to be severely affected by financing difficulties, as well as by weak demand. IEA (2009) estimates that global electricity consumption could drop by as much as 3.5% in 2009, the first annual contraction since the end of World War II. Asian countries are showing weaker demand: in the PRC, for example, demand fell by 7.1% in the fourth quarter of 2008 and by a further 4% in the first quarter of 2009. Weak demand growth is reducing the immediate need for new capacity.

At the same time, commercial borrowing has become more difficult and the cost of capital has risen markedly; venture capital and private equity investment has fallen sharply. If a recovery takes longer than expected, and energy prices remain at depressed levels relative to recent peaks, a shift to coal- and gas-fired plants at the expense of higher-employment options such as nuclear fuel and renewable energy may be seen, although this will depend on the policies and support mechanisms that countries and regions have in place.

The outlook for 2010's investment in renewable power projects is mixed, depending on the policy framework, but is generally falling proportionately more than that for other types of generating capacity. IEA (2009) estimates that for 2009 as a whole, investment in renewable energy could drop by as much as 38%, although stimulus provided by government fiscal packages can probably offset a small proportion of this decline. Investment in renewable energy assets has surged in recent years, recording year-on-year growth of 85% in 2007, for example. But activity slowed in 2008 as sources of finance contracted and lower fossil-fuel prices reduced the economic incentive for new investment, particularly in the last few months of the year. Preliminary data for the first quarter of 2009 indicate that the slump in investment has accelerated, with spending 42% lower than in the previous quarter. In most regions, investment in bio-refineries has all but dried up due to lower ethanol prices and scarce finance.

Asian industrial surveys suggest investment in the coal sector could drop by 40% in 2009 relative to 2008. Nonetheless, this drop is from very high levels reached in 2007 and 2008, which were exceptionally profitable: coal companies used free cash flow both to increase their investments and to pay out large dividends. Expected reductions in capital spending in 2009 are most marked among high-cost producers, especially those supplying export markets such as the



US and Australia. In contrast, Indonesian coal producers continue to enjoy high margins with little apparent disruption to planned expansion.

The economic slowdown has also had an impact on almost all energy-consuming sectors, particularly steel, automotive, and construction sectors. The reduced demand for energy in most sectors has led to corresponding reductions in overall energy consumption. In the Republic of Korea during the Asian crisis, for example, total energy consumption was about 8.1% lower than in preceding years (KEEI 2000). The current reduction in overall energy consumption, most of which is in the form of fossil fuels, has lowered emissions of carbon dioxide, a major global warming gas.

This reduction has impacts on local environmental problems, too. Because pollutants such as total suspended particulates, sulfur dioxide, and nitrogen dioxide are closely correlated with power generation, industrial activities, and transportation, a reduction in energy consumption is accompanied by reductions in the emissions of air pollutants. Thus, the economic slowdown will have the short-term effect of reducing emissions of air pollutants, resulting in some positive implications on health and livelihood conditions, especially of the urban population and the urban poor.

## **Impact on embedded emissions and trade**

The combustion of fossil fuels and woody biomass by the rural poor has regional impacts in the form of haze and acid precipitation, frequently across national borders. Over the last 20 years, emissions of carbon dioxide due to combustion of fossil fuels in Asian countries have increased dramatically, and they now exceed those in Europe and the United States. Three of the six largest emitters worldwide—the PRC, Japan, and India—are in Asia. During 1990–2006, emissions from the PRC increased by a factor of 37, Japan by a factor of 12, and India by a factor of 13. These are compounded by additional increases from other emerging economies like Indonesia, Thailand, and Viet Nam, which heavily depend on exports to drive their economies. Hence, most of the emissions are “embedded.”

The embedded emissions of Indonesia, the Republic of Korea, and Thailand actually declined during the Asian crisis as both energy use and trade volume declined in 1998. Given the lower economic and energy growth rates, one could say that the current economic slowdown will be good for the global environment. The economic slowdown has reduced oil imports, too, and as most oil and goods are transported transoceanically, a decline in oil and goods shipped can be assumed to result in fewer transport-related emissions and marine pollution.

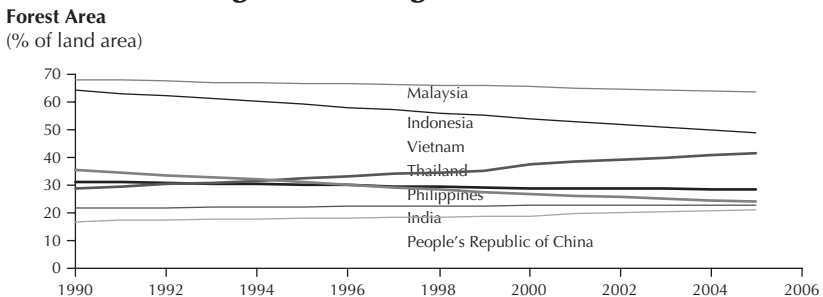
## Impact on land use

Among Asian countries, poverty affects a large proportion of the population in India (44% of the rural population), the PRC (26% of the rural population), Indonesia (24%), the Philippines (23%), and Viet Nam (21%). In addition, some of these countries have very high population densities. One might thus predict that in countries that combine high poverty levels with dense populations, the economic recession would trigger significant additional pressures on rural natural resources, including on forest habitats, as generated by subsistence households.

For much of their energy needs, many rural poor still rely heavily on traditional fuels, such as agricultural and animal wastes, and forest firewood. Even though such reliance has declined for most countries over recent years, this has been due more to an increase in amount of commercial energy used rather than less biomass in absolute terms. Bangladesh, Myanmar, and Viet Nam are among the countries that still obtain about half or more their energy requirements from traditional fuels. India, Indonesia, Pakistan, the Philippines, and Thailand still rely on these fuels for at least 20% of their total energy needs.

The need for energy as well as for agricultural land in highly populated countries of the region has been a prime factor in the changes in land use patterns. As shown in Figure 2, for too many countries the loss of forest continues at extremely high rates, sometimes exceeding 2%–3% of total forest each year, as in the case of Indonesia, the Philippines, and Thailand. For other countries, such as the PRC and India, the forest area has declined considerably. The reason for this disparity varies from one country to another. One important reason is the extension of urban habitat into rural areas. Another cause is the conversion of forest areas to agricultural and industrial zones.

**Figure 2: Changes in land use**



Source: World Bank, *World Development Indicators*.

## **Impacts on energy security, the environment, and poverty**

Depending on how governments respond, falling energy and environmental investment will have far-reaching implications on climate change and energy poverty. Cutbacks in investment in energy infrastructure will only affect capacity over the longer term. So in the near term at least, weaker demand is likely to result in an increase in spare or reserve production capacity. But there is a real danger that sustained lower investment in supply could lead to a shortage of capacity and another spike in energy prices in several years' time, when the global economy has recovered. The faster the recovery, the more likely that such a scenario will arise.

The impact on greenhouse gas emissions will depend on how the current crisis affects investment in different types of energy technology. In the short term, slower economic growth will curb growth in emissions. But in the medium and longer terms, the crisis may lead to higher emissions, as weak fossil-energy prices and financing difficulties curb investment in clean energy technologies, increasing reliance on fossil-fuel capacity. At the same time, investors will remain risk averse, so that funding for clean energy projects will be available primarily for proven technologies in attractive markets. Once the recession is over, the likely burst of economic growth (the catch-up effect) may also cancel out any short-term emissions benefits.

Cutbacks in energy investment will impede access of poor households to electricity and other forms of modern energy, which is a vital factor in pulling people out of poverty. An estimated 900 million people in Asia still lack access to electricity. This figure may grow as a result of increasing unemployment due to the current crisis, as some households that previously had access can no longer afford it, and as financial problems limit the ability of service providers to connect new customers at relatively low cost.

However, environment-friendly growth without economic slowdown could also reduce carbon emissions. The reason for this is that many of the measures to improve environmental quality (such as the replacement of less energy-efficient equipment by more efficient equipment), and more rapid introduction of natural gas and nonfossil fuels (instead of continued reliance on coal and oil), will be deferred during a protracted economic slowdown. Thus, the global and local environment would benefit from the ending of the current downturn earlier rather than later.

The current slowdown is likely to delay the ability of many countries to provide alternative sources of energy to the rural poor

who currently depend on traditional fuels. As these populations and their demand for energy increase, they will have to rely even more on traditional sources of energy. The felling of forests will result in emissions of carbon when this additional energy could otherwise have been supplied by renewable energy sources such as hydropower, solar, and wind energy. In this way, too, the current slowdown is likely to have an adverse impact on both the environment and the poor.

There are some short-term benefits for the global environment, including a reduction in the rate of air and water pollutants from lower energy use, which has direct implications for the health of the urban poor. At the same time, a prolonged economic slowdown will lead to many Asian countries postponing the replacement of inefficient equipment with more efficient and nonpolluting equipment, and delaying the construction of infrastructure to use clean fuels such as solar and wind energy as well as the “eco-restructuring” of polluting industries.

The economic slowdown is likely to have a negative impact on land use patterns by increasing the pressure to clear forests for firewood, timber, or agricultural purposes, i.e., the livelihood opportunities available to the rural poor. Further, the likely additional delay in implementing plans by many countries to build effluent-treatment plants is expected to harm further the water environment.

Thus on balance, the modest benefits to the global and local environment arising from the economic slowdown are likely to be much smaller than the costs associated with the deferment of many environment-conservation measures.

## **Global economic crises, recession, and poverty linkages**

The global crisis has affected both urban and rural poor people’s strategies to escape poverty. It is also posing risks to governments and their development projects for water supply, food security, human health, and natural resource management, which will have many direct effects on the income vulnerabilities of communities.

### **Key interactions and critical linkages**

Many governments are implementing stimulus packages. If the packages are to be consistent with environmental conservation and poverty reduction goals, there is a need to understand why both the rural and urban poor secure (or fail to secure) basic human needs. Specifically, there is a need to understand how such strategies and processes are

affected by recession. Practically all development activities and sectors are affected by the current crisis. The critical question for development planners is how effectively crisis responses can be targeted for poverty reduction.

To identify these complex linkages, two main challenges need to be addressed. The first is that, despite increasing recognition that crises and poverty incidence are interlinked, the linkages have not been clearly articulated in an environmental sense, and thus are difficult to address effectively in practice. The knowledge is fragmented. However, as in the previous section, with little comprehensive assessment of sector sensitivities, the distributional effect of poverty incidence in urban and rural populations cannot easily be studied.

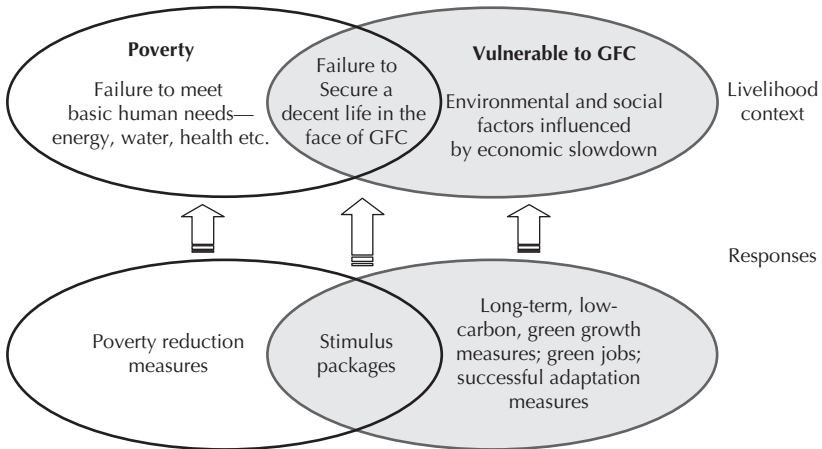
The second challenge is that, although it is becoming clear that governments need to integrate both environmental and poverty reduction considerations into their rescue programs, it is not always clear how this can be done effectively in a coherent manner. Discussions on the environments of the poor show that environmental endowments are becoming the main cause of poor livelihoods, income, and living conditions (Bauer 2008). Several stimulus packages have “green” components. This may be good for the environment, but without much information on the labor intensity of such investments, and on whether this labor is being carried out by low-skilled poor people or by highly skilled, high earners, the poverty impact of such green growth cannot be determined. In sum, it is unclear how any focus on green investment differs in its impact on poverty reduction from general investments in growth. Little is known so far—on both the economic and institutional sides—on how to integrate long-term green growth strategies into poverty reduction for more inclusive growth.

Current thinking on recovery from global crises encompasses two very different approaches, both of which can provide insights for poverty reduction. The first is based on the assessment of vulnerable sectors as the outcome, of end impacts for the projected poor. Studies conducted to date have emphasized this first approach, and assessed the ways of reducing sector sensitivity to projected future changes (for example, see Anbumozhi and Purushottam 2006). Sector adjustments can clearly reduce socioeconomic impacts and contribute to poverty reduction. Adjustments, such as change in trade patterns, adaptation of new product servicing models, eco-product innovations, technology absorption, and uptake of renewable, can contribute to climate change mitigation by reducing greenhouse gas emissions.

The second approach has focused on changing the societal factors and conditions that affect people’s capacity to respond to crisis, including direct employment opportunities, health reforms, and educational

levels. Figure 3 shows the interface between income poverty<sup>2</sup> and vulnerability to economic slowdown and between poverty and low-carbon, green-growth pathways. According to this two-track approach, it is critical for governments and poor communities to adjust their strategies to secure a decent life in the face of a global economic and environmental crisis, such as that posed by climate change.

**Figure 3: Poverty–global financial crisis linkages and overlap among responses**



GFC = global financial crisis.

Source: Authors.

## **Integrating poverty reduction strategies with low-carbon, green-growth pathways**

The links between low-carbon, green-growth strategies and conventional poverty reduction strategies may be optimized for improved livelihood conditions in the following ways:

<sup>2</sup> Apart from the impact of the environment on livelihoods, the literature on the environments of the poor covers the impact of the environment on people's vulnerability (especially relevant in the context of climate change mitigation) and on people's health (particularly relevant for assessing the impact of pollution on people).

- Low-carbon, green-growth pathways should be guided by the principle of equity. Their development should be taken as an opportunity for countries to broaden access to employment and income opportunities created in the transition to low-carbon economies that are also resilient to climate change. The integrated vision for long-term cooperative action should therefore provide a framework for a just transition to a low-carbon, sustainable economy. This “just transition” framework should enhance opportunities for development, poverty reduction, sustainable enterprises, and access to decent work. This requires a strengthening of capacities and coherent policies to seize opportunities arising from mitigation and adaptation while reducing negative impacts in those countries, regions, sectors, and social groups facing challenges.
- Stand-alone strict environmental policy measures can have significant positive and negative consequences for enterprises, workers, and communities. Adequate ex ante analysis of impacts on employment, income, and local development should be conducted to maximize benefits and to anticipate the need for a just transition.
- In order to minimize the costs and negative impacts and to realize the potential benefits, environmental, economic, and social policies and programs need to be well informed, broadly supported, and able to engage different levels of governments as well as representatives of employers’ and workers’ organizations in social dialogue for the design and implementation of policies.
- Dialogue will also be essential for dealing with the downside of reducing pollution and emissions. Workers and entrepreneurs should be assured that a green environment for society does not mean an unemployment slip for them: retraining, social security schemes, active labor-market policies, and programs to diversify economies need to be put in place to soften the blow for them.
- Assessment of labor markets as well as assessments of livelihood vulnerability will provide a good understanding of social, labor market, and enterprise risks and vulnerabilities related to environmental risks such as climate change and of the need for adaptation measures. Such a baseline is essential to analyze quantitatively and qualitatively the needs for adaptation as well as to tailor interventions and allow the monitoring of adaptation programs.

- New green economic measures have the potential to disrupt the functioning of local economies. The ability of enterprises to maintain or resume economic activity and of people to earn an income will be crucial after climate impacts such as storms, floods, and droughts. Vulnerability assessments should include socioeconomic information on the structure of local economies, including the size and nature of enterprises, the main sources of employment and income, critical factors such as respect for human rights (including labor rights), coping strategies, access to credit, and social networks.
- Embedding environmental standards and regulations in sector and local economic development leads to more integrated and effective capacity building. It provides opportunities to actively engage sector and local stakeholders in design and implementation of such standards. Targeted training can both help potentially affected individuals in at-risk sectors find new activities in other economic sectors, and allow households to diversify their income sources in line with mitigation and adaptation strategies.
- Building solid enterprises able to adapt to environmental risks is an important condition in reinforcing the capacity of an affected local economy. A solid fabric of micro, small, and medium enterprises, able to adapt to a changing environment and flexible enough to resist shocks, is critical. Building and maintaining such a fabric requires the following:
  - An enabling environment for such enterprises.
  - The targeting of environmentally sensitive value chains.
  - Capacity development programs and business development services to unleash the potential of local economies to adapt to the changing situation.
  - Building skills of workers and managers to identify and assess changes, to implement early warning systems of climate-induced disasters, to adapt technical skills to changes, and to diversify production.
  - Support to local saving, microfinance, and banking; consolidation of local banking systems; diffusion of microfinance programs; and development of financial risk-sharing mechanisms.
  - Promotion of public–private partnerships to better engage the local private sector in low-carbon, green-growth programs.
  - The embedding of mitigation and adaptation to climate change in local economic development rather than adaptation as a stand-alone goal and program.



- Ensuring social dialogue is important. Such dialogue should be among representatives of workers, employers, and governments at all levels, in an institutionalized manner, to build consensus and enhance efficiency of measures to be taken.
- Strengthening and developing social security and safety programs are crucial. Such programs have proven to be among the most important measures for enhancing economic resilience among local communities. Vulnerable sectors and areas, particularly in the informal economy, need these programs to cushion the immediate impacts of economic slowdown and environmental degradation.

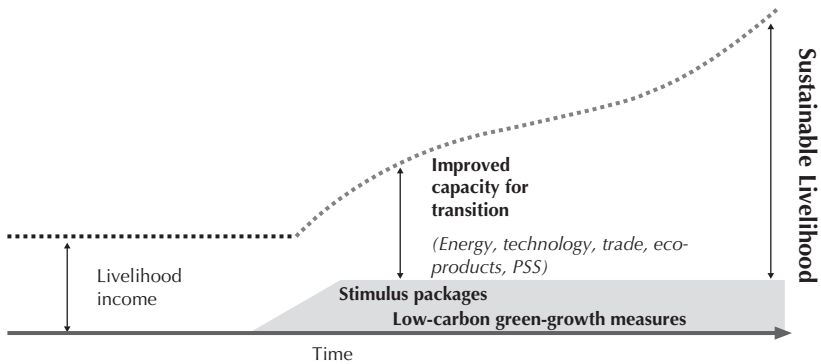
## **Economic slowdown, stimulus packages, and green growth**

### **Environmental component of stimulus packages**

The collapse in demand through falling exports and the inability of the private sector to generate growth have led most Asian governments to expand domestic demand by intervening in an unprecedented manner via stimulus programs, industrial bailouts, and near-zero interest rates. This strong government response is unprecedented because of its unusually large size (1%–16% of GDP depending on the country), wide scope, and the many countries involved (Robbins 2009).

The main investment focus of those stimulus packages is infrastructure (50%), tax reductions and promotion of small and medium-sized enterprises (35%), and social protection (about 15%). While some stimulus packages have specific green-growth dimensions, financing for environmental programs that more directly affect the poor (such as for climate change adaptation, or new technologies for the environments of the poor) is relatively low.

Some of the environmental measures that governments are taking to spur growth will also contribute to the creation of new green employment opportunities and sustainable livelihoods, as depicted in Figure 4. Some areas of renewable energy production, as well as implementation of energy-efficiency measures in buildings, are quite labor intensive across a wide spectrum of job skills compared with fossil fuel-based energy production. Measures to move toward a low-carbon economy may help sustain employment stimulation, although their implications for productivity also need to be taken into account.

**Figure 4: Long-term livelihood-sustainability scenario**

PSS = product service systems.

Source: Authors.

Policies to promote green employment across all sectors of the economy are more uncertain over the long term and should be carefully assessed.

The generation of employment opportunities through emergence of service enterprises will not only improve livelihood conditions but also will provide energy-efficiency solutions in promising ways. Energy-servicing enterprises in rural and urban areas can help their clients improve their carbon performance by carrying out energy audits, designing and installing energy-efficient equipment, financing energy-efficient projects, and providing risk guarantees for energy saving. The growth of energy-servicing activities is notable in the PRC, India, Malaysia, the Philippines, and Thailand, and is catalyzing economic opportunities in competitive energy markets.

Some countries are emphasizing employment creation with respect to the environmental measures in their recovery packages. For example, the Government of the Republic of Korea hopes to create nearly 1 million jobs over the next 4 years in green technology and industry as a result of its green new deal package, which includes not only investments in environment-related infrastructure, but also in research and development and a range of tax breaks or loans to help households move toward less environmentally damaging consumption choices. In Japan, employment in environmental industries is expected to double to 2.8 million by 2020. The PRC is developing its low-carbon industrial strategy, with the aim of realizing a step-change in energy efficiency, low-carbon energy infrastructure, development and production of low-carbon vehicles, and a contribution to developing new skills.

## **No panacea from green recovery**

The results of investments in energy production, buildings, and transport infrastructure will stay with us for decades to come. It is important to ensure that stimulus packages do not “lock in” inefficient or polluting energy technologies, or dirty modes of production and consumption. Over the long term, these investments would impose a cost to the economy in terms of health and other pollution impacts, resource depletion, and an impact on the climate. In this context, and offering general guidance for all major public investments and infrastructure developments, countries should undertake strategic environmental assessments of the policies and projects included in their economic stimulus packages. Some of the major construction projects that could be brought forward with support from the recovery packages are already likely to have environmental assessments scheduled or in train, and other measures can be taken to speed up such assessments so that these processes do not unduly slow the planned investments, which would aggravate poverty incidence. In the Republic of Korea, for example, the government is working to streamline the processes to address potential environmental and other impacts of green projects, as well as to fast-track review and approval processes to start projects sooner.

Many of the measures introduced in the stimulus packages are aimed at building infrastructure, offering tax rebates, and persuading consumers to switch to hybrid cars. The overall environmental consequences of these measures need to be carefully assessed. In some cases, these measures may lead to increased emissions and pollution, although if carefully designed they can be environmentally neutral or even beneficial.

The Japan and Korean rescue packages, for example, are to support more environment-friendly vehicles and appliances. The PRC is also putting in place financial compensation schemes to prompt businesses to discard or scrap old cars. While these measures can help remove older, less-efficient vehicles from the roads, they may also encourage greater material consumption, vehicle use, and ultimately emissions, thus offsetting the environmental benefits. Measures aimed to support green products also have the potential to generate inter- and intrasector distortions, and can act as trade-protectionist measures. Thus the economic, trade, and environmental impacts of these measures should be carefully assessed.

The economic slowdown also poses a risk to efficient and effective environmental policies and to international cooperation to tackle global environmental challenges. It has often been difficult to introduce

economic instruments for environmental policy because industries have argued that such measures would put them at a disadvantage with foreign competitors. A rapid transition toward low-carbon green growth, accompanied by short-term flanking measures to smooth the transition for affected workers or households, could help address these concerns.

As mentioned earlier, it is also important to understand how different policy instruments interact in stimulus packages. Except for situations where mutual reinforcement between instruments is likely, or when the instruments address different dimensions of a given problem, the introduction of overlapping instruments should be avoided. For example, although setting quantitative targets on renewables in the energy mix can help create a framework for private investment and innovation in renewable energy, these regulated targets may overlap poverty reduction targets. This can result in increased costs of action, without necessarily leading to any additional emission reductions unless governments use the higher renewable penetration as an opportunity to more rapidly generate employment. Thus, the use of potentially overlapping policy instruments should be limited to situations where they can be justified on other grounds, for instance as a way to boost innovation and technology deployment or to improve energy security.

## **Conclusions**

Globally, Asia is leading the way out of recession. Yet questions remain about whether there has been enough change to set the recovery on a truly environment-friendly and pro-poor course.

The crisis provides both an opportunity and an incentive to improve efficiency in the use of energy and eco-friendly materials, and to develop new green industries and business operations that can benefit both the environment and the poor. Over the longer term, moving toward a low-carbon, green economy can also help reduce poverty, increase energy security, and reduce vulnerability from climate change.

Still, new public and private sector investments will be needed to deal effectively with many of the most pressing environmental challenges, for example, in innovative, energy-efficient buildings and transport systems, alternative energy supplies, “smart” electricity grids, and pollution control, as well as key environmental infrastructure, such as increasing forest areas and implementing measures to protect coastlines or reduce flood risks. Investments will be needed to

facilitate adaptation to the climate change that is already locked in, to “climate-proof” infrastructure, and to protect urban areas. Investing in the environment is thus an important element of many of the stimulus packages being put in place by governments. Countries also need to ensure that the right policy frameworks are in place to encourage private investment flows that support environmentally sustainable, long-term growth.

The crisis can also be a spur for much-needed structural reform, and presents an opportunity for both environmental gains and poverty reduction. It provides an opportunity to reform or remove policies that may be expensive, socially inefficient, and environmentally harmful. Examples of immediate win–win policies that governments can adopt include:

- Formulating alternative energy policies that could achieve a given environmental objective more cost-effectively. In this context, the long-term cost-effectiveness of some renewable energy support policies should be carefully assessed. Such policies can be useful for encouraging technology development and deployment, but can also be costly in the short term.
- Cutting trade barriers to environment-friendly technologies. For example, barriers to trade in renewable energy hardware, energy-efficient waste treatment systems, and pollution-prevention technologies should be addressed, urgently.
- Remedying market failures that prevent the uptake of eco-products in socioeconomic systems. For example, where the failures are not already addressed through other sector policies, governments should strengthen environmental and energy standards governing products and services.
- Restructuring trade patterns and policies. For example, authorities should use appropriate environmental management systems and ensure fair trade that conserves exhaustible natural resources and stimulates a potential competitive advantage.
- Enhancing low-carbon, green-growth products and services. For example, introducing product service systems in high-impact sectors could both drastically reduce greenhouse gas emissions (compared to business as usual), while contributing to increased economic efficiency.

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# Green growth, climate change, and the future of aid: Challenges and opportunities in Asia and the Pacific

*Paul Steele and Yusuke Taishi*<sup>1</sup>

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## Introduction

This chapter reviews the opportunities and challenges for Asia and the Pacific in attaining “green growth,” in particular to mitigate and adapt to climate change. The recommendations for green growth are presented based on the framework of LIIFTT (discussed on p. 482). Together these add up to a low-carbon revolution and what is now called climate-resilient development.

On the mitigation front over the last 2 decades, there have been positive signs of reductions in greenhouse gas emissions per unit of economic growth—reduced carbon intensity—in the developing countries of Asia, particularly in the People’s Republic of China (PRC). This has historically arisen because of the generally high energy inefficiency of Asia and structural economic changes leading to a larger services sector. More recently, many countries, including the key economies of the PRC and India, are seizing opportunities to increase exports and jobs by shifting to low-carbon production. Nonetheless, overall emissions from the region are rapidly increasing, reflecting high economic growth. A low-carbon revolution would be required for the region to make a significant impact in climate change mitigation. The challenge is compounded by the very unequal distribution of emissions within countries. Urban areas in the region are becoming more significant in terms of emissions and the number of potentially affected populations.

The progress of a low-carbon revolution in Asia so far is mixed and varies by country. Asia needs to move fast if it wants to be a leader in the low-carbon revolution. Competition for low-carbon technologies is picking up in Europe and in the United States (US) as the private sector and governments start to proactively promote clean technologies.

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Asia has the skills, labor, technology base, and entrepreneurship to lead the low-carbon revolution. Asia's private sector can seize the opportunity to lead the revolution of decarbonization just as it has seized the opportunities in the race for globalization. But Asia's dynamic private sector needs governments to provide the enabling framework and incentives to make this happen.

In terms of adaptation and the crucial role played by ecosystems, almost all indicators of this aspect of green growth are moving in the wrong direction. Asia, like the rest of the world, is pursuing economic growth by liquidating its natural resource base. This will not only undermine the long-term economic growth potential, but also reduce the adaptability to extreme weather events of the poor, who tend to be already more vulnerable to climate change than any other groups in society. As their poverty and welfare are often strongly affected by and dependent on the surrounding environment and natural resources, these "environment-poor" people will be especially vulnerable to climate change.

Evidence suggests that, on the one hand, climate change is likely to contribute to the ongoing migration from rural to urban areas. On the other hand, there will be some people—the poorest of the poor and the most vulnerable—who lack the skills, networks, and ability to move away from rural areas. This dynamic transformation in mobility and immobility across different population segments requires support for those left behind, such as efficient and reliable remittance services and the facilitation of off-farm incomes, in order to reduce their dependence on an already distressed rural environment.

At the same time, while climate-induced migration may offer some initial escape to poor households from rural climate vulnerability, it is also likely to give rise to a new set of risks in urban areas directly through exposure to sea-level rise and extreme weather events, and indirectly through vulnerability to climate-induced food price rises and climate-induced vector-borne diseases.

In the face of high uncertainty over the extent of the impact and likely multi-dimensional consequences associated with climate change, the concept of green growth becomes all the more important. Green growth can address climate mitigation and adaptation together by enabling urban settlements to have lower carbon emissions per capita, reduced vulnerability to sea-level rise, and greater security from climate-induced food price impacts and health impacts. In rural areas, new technologies for food production for the cities will be crucial in the face of climate change ravages, and social protection and facilitated remittances will need to be provided to the chronic environment-poor people who remain in rural areas.



These actions to operationalize green growth will require funds, and for low-income countries, some transitional support will be required. This is best achieved by raising funds from internationally coordinated mandatory levies and then using agreed criteria to allocate these funds into the public budgets of eligible countries swiftly and with minimum bureaucracy. However, despite its role as one of the leading centers of trade, Asia's leaders have not fully contributed to the debate. If the PRC's currency eventually becomes a reserve currency like the dollar, the PRC's leaders need to develop and articulate a position on, for example, the Tobin tax on currency trading and other pressing financing issues. This paper seeks to contribute to this debate in the Asian context.

## **Green growth and climate change: Some definitions**

The term "green growth" is now widely used by policy makers. While it has many possible interpretations, in this paper it refers to making fundamental reforms in society both to minimize the impact of economic activities on the environment, especially in relation to climate change, and to maximize the resilience to adapt to climate change. The concept of green growth has long been discussed in relation to general economic growth and decoupling environmental damage from economic activity (see, for example, Daly 2005, and Lawn and Clarke 2008). This partly contributed to the trend that, until recently, the focus of climate change responses was largely on mitigation of the effects of climate change. However, the already visible threat of climate change gives significant impetus to the formulation of the green growth concept, which holistically addresses both climate change mitigation and adaptation. Available evidence suggests that disasters are increasing in numbers and intensity, and causing significant damage to the current generation of the planet's inhabitants, particularly in Asia.

As evidence accumulates, there has been growing understanding that ecosystem goods and services act as nature's "infrastructure" that underlies not only economic growth but also the ability of countries to adapt to a changing climate. The concept of green growth therefore embraces the promise of delivering continued prosperity while reducing the strains on the natural environment and maintaining an ecosystem that helps build resilience to climate change.

The ongoing economic crisis poses new challenges, yet it can be taken as an opportunity for "green recovery." Economic downturns in

general have both positive and negative environmental impacts. While slumped economies reduce the overall burden on natural resources with fewer emissions, the policy response of promoting economic activity may mean that environmental safeguards are overlooked in favor of increased investment and production. In the current crisis, the return of migrants to rural areas may increase some pressure on natural resources.

Whether Asian governments return to business as usual after the crisis or take it as an opportunity for reform has profound implications for achieving green growth. For attaining such growth, it is imperative that the recovery from the current crisis makes a diversion from the existing economic growth framework, in which economic growth comes only at the expense of natural resources, and takes a radical detour to a low-carbon-growth model—the low-carbon revolution. The PRC, for example, has made initial progress in this direction, and it has been estimated that 20%–30% of its huge fiscal stimulus package of nearly \$600 billion is focusing on low-carbon production (Barbier 2009). The challenge is how to ensure that the remaining 70%–80% of the stimulus package in the PRC (and those elsewhere) does not simply promote the old-fashioned ecosystem liquidation model of economic growth.

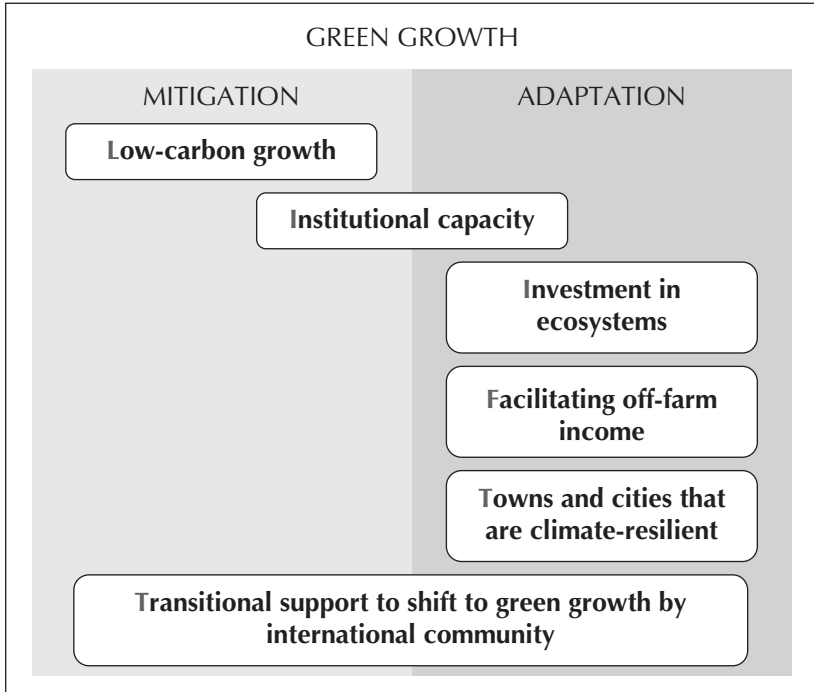
## **Operationalizing green growth for climate change mitigation and adaptation**

Operationalizing green growth is presented according to the LIFFTT framework developed by the authors (Figure 1), which presents some of the most important elements for achieving climate resilient development: **L**ow carbon growth, **I**nstitutional reform, **I**nterest in ecosystems and agriculture, **F**acilitation of rural and off-farm migration, **T**owns and cities that are climate-resilient, and **T**ransitional support to shift to green growth by the international community.

### **Low-carbon growth: Incentives and targets**

Climate change, typically viewed as a threat, presents an opportunity for Asia to lead the next industrial revolution as the world shifts to a low-carbon economy. Asia could dominate the world's politics and economics in the future by leading the shift away from fossil fuels toward low-carbon-emitting fuels and technologies. This shift to a low-carbon economy will not only help to avoid long-term

**Figure 1: LIIFTT framework**



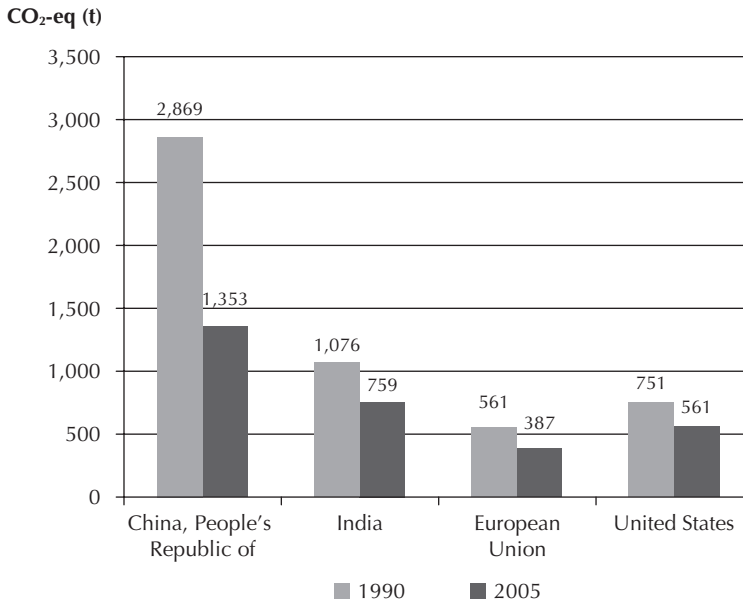
Source: Authors.

climate impacts, it will also create demand for new technologies and will open new markets.

Switches to a low-carbon economy in Asia show some positive signs. Carbon emissions per unit of economic output are falling globally, with the PRC showing the fastest falls (Figure 2). This is partly because the PRC is still very energy intensive per unit of output due to heavy dependence on manufacturing and heavy industry, frequently using older technologies. Carbon intensity will also decline as services grow and heavy industry declines. In other export-oriented economies such as Japan and the Republic of Korea, similar trends are observed, though to a lesser extent, as the private sector responds to opportunities and incentives to gain a comparative advantage in a competitive market.

The PRC already leads the world in many low-carbon technologies and the opportunities are increasing through strong policy signals. Investments there in clean energy technologies grew from \$170 million in 2005 to \$420 million in 2007 (Barbier 2009). The PRC is now

**Figure 2: Greenhouse gas emissions per unit of gross national product**



Note: Excludes land use emissions. Year 2000 prices.

Source: Climate Analysis Indicators Tool, World Resources Institute.

the largest producer of solar water heaters and produces 80% of the world's energy-saving lights. Its renewable energy sector produces output worth \$17 billion and employs a million people (Barbier 2009). These achievements have been encouraged by policy signals with targets for energy efficiency, renewable energy, and a focus on major industries.

In other countries, however, the shift to low-carbon has been slow and will likely be achieved through reforms for a more efficient and market-oriented economy. In countries that are less export-oriented, low-carbon export opportunities provide less incentive to move to a low-carbon economy and technology. For example, India and Pakistan, whose industries are typically less efficient and more focused on the domestic market than the PRC's, have been slower to move to invest in low-carbon technology.

Total greenhouse gas emissions in Asia are predicted to more than double over the next 20 years as its economies continue to grow, undermining progress in reducing carbon intensity. Under business-as-usual assumptions, economic growth (and accompanying increases in

energy use) will more than offset efficiency gains in carbon intensity. For example, energy consumption in the PRC is currently growing at 12% a year (Barbier 2009), while production there is estimated to grow by 400% to 2020. This would significantly outweigh the PRC's 4.9% annual average decline in carbon intensity.

In the PRC and elsewhere, there are a number of ways to radically shift to lower energy and carbon intensity, but they require major changes. These include big increases in renewable energy generation and energy efficiency in industry, which is the largest energy user, as well as changes in household and transport energy patterns, whose share of energy demand will grow as the economy develops (Wang and Watson 2009).

Intra-country disparities reinforce the complexity of addressing climate change. National averages present a distorted picture in terms of the contribution to climate change. A recent study (Dodman 2009) compared per capita greenhouse gas emissions in 12 cities with their respective national averages and found that city dwellers in general have lower per capita emissions than the national average. The exception is the PRC, for the cities of Beijing and Shanghai (Table 1). Their contributions to climate change were comparable to other megacities such as New York or London.<sup>2</sup> A similar study from Bangkok suggests that its per capita emissions (7.1 tons of carbon dioxide equivalent) are higher than its national average (4.3 tons) and as high as those from London or New York (BMA et al. 2009). This implies that many developing Asian cities, where public transport networks are less developed, are likely to contribute more than rural areas to climate change. This is in line with an estimate that cities are responsible for as much as 80% of total greenhouse gas emissions (Tibaijuka 2009).

Another study estimates that by 2030, there will be 1,126 million high greenhouse gas emitters with about 39% based in Asia (Chakravarty et al. 2009). This includes 300 million in the PRC compared to 267 million in the US. Since this study is based on estimates of emissions, the calculation shows surprisingly small contributions from India and therefore it warrants further work. Nonetheless, it reinforces the view that Asia, especially a relatively small proportion of individuals concentrated in urban areas, will become an increasingly significant contributor to climate change in the next few decades.

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<sup>2</sup> The methodology used for this study is still under development and disaggregating the level of contributions by city dwellers from the rest of the country is subject to several caveats.

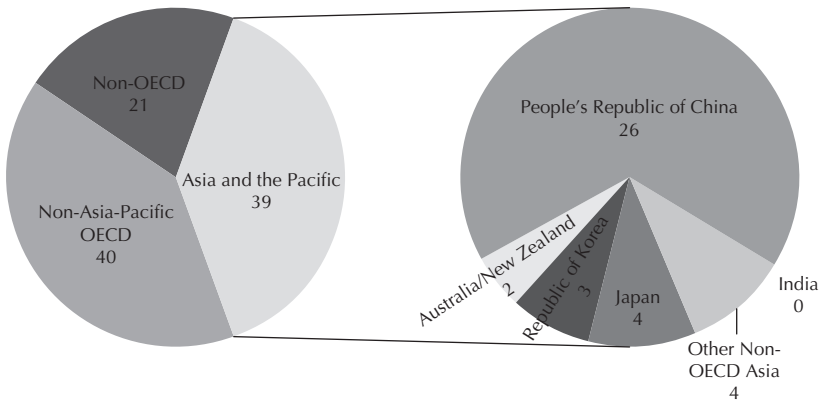
**Table 1: Greenhouse gas emissions, selected cities**

<b>City</b>	<b>Total emissions (million tons of CO<sub>2</sub> equivalent)</b>	<b>Per capita emissions</b>	<b>National per capita emissions</b>	<b>City per capita as share of national per capita emissions (%)</b>
Shanghai (1998)	n.a.	8.1	3.36 (1994)	241.1
Beijing (1998)	n.a.	6.9	3.36 (1994)	205.4
Seoul (1998)	n.a.	3.8	6.75 (1990)	56.3
Tokyo (1998)	n.a.	4.8	10.59 (2004)	45.3
New York (2005)	58.3	7.1	23.92 (2004)	29.7
London (2006)	44.3	6.2	11.19 (2004)	55.2
Barcelona (1996)	5.1	3.4	10.03 (2004)	33.9
Glasgow (2004)	12.5	8.4	11.19 (2004)	75.1
Washington, DC (2005)	11.3	19.7	23.92 (2004)	82.4
Toronto (2001)	37.1	8.2	23.72 (2004)	34.4
Rio de Janeiro (1998)	12.8	2.3	8.20 (1994)	28.0
São Paulo (2003)	15.7	1.5	8.20 (1994)	18.3

n.a. = data not available.

Source: Dodman 2009.

**Figure 3: Distribution of high greenhouse gas emitters, 2030 (%)**



OECD = Organisation of Economic Co-operation and Development.

Note: World total = 1,126 million individual emitters.

Source: Chakravarty et al. (2009).

## **Institutional reform for climate change and green growth**

Climate policy needs to be led by political and economic decision makers to determine a country's approaches to mitigation of, and adaptation to, climate change, and therefore set the path to green growth. Climate-sensitive planning and budgeting are needed to promote public investment in low-carbon technologies and climate-resilient infrastructure. As greenhouse gas emissions from households and the transport sector—"non-point sources"—gain relative importance as urbanization progresses, setting a proper institutional and policy framework will help make a smooth transition from a carbon-intensive to a low-carbon economy. Many governments in Asia have already established some institutional frameworks, such as National Adaptation Programs of Action, for climate. However, climate change is often perceived in isolation as "only" an environmental issue and so such programs' frameworks are often led by the ministry of environment alone, which is relatively weak in setting a country's policy though it can still play an important role in providing technical inputs.

It is essential that, in future, the climate institutional framework is led and coordinated by the president or prime ministers' office, ministry of finance, or ministry of planning. The PRC, India, and Indonesia are three countries that have made progress in this area. The PRC

has included climate under the leadership of the powerful National Development Reform Commission. In India, the Prime Minister's Council on Climate Change coordinates the cross-governmental strategy, while a similar role is played by the President's Office in Indonesia. In Indonesia, the United Nations (UN) has been requested to develop a joint UN program to promote green growth. Such initiatives enable governments to position climate change at the center of the country's decision making; they also signal the level of government commitment to the private sector to stimulate further private investment in low-carbon or adaptation technology.

## **Investment in ecosystems and agriculture**

Most Asian countries remain on a growth path that depends on *converting* ecosystems and natural capital, not *investing* in such capital. Natural capital is particularly important for growth in low-income countries, since it is estimated to account for 26% of the total wealth there, compared with 13% in middle-income countries and only 2% in industrialized countries (World Bank 2006). In Cambodia for instance, although agriculture accounts for only 31% of gross domestic product (GDP), it employs 75% of the labor force. In India, the figures are 17.6% and 60%. Moreover, primary production represents a much higher share of production, exports, and national income in developing countries than in industrialized countries.

Within a country, particular groups of environment-poor people have their poverty especially linked to the environment and natural resources—particularly those living in dryland, upland, coastal, or urban areas. These areas include the most marginal environments, and Asia is home to over half the 1.2 billion poor who live on fragile lands. These environment-poor people include 330 million people in South Asia and 469 million in East Asia and the Pacific (Barbier 2009). This compares with global estimates that 500 million people in developing countries live in arid regions without access to irrigation, another 400 million are on land with soils unsuitable for agriculture, 200 million are in slope-dominated regions, and more than 130 million live in fragile forest ecosystems (World Bank 2002).

These environment-poor people are also particularly vulnerable to climate variability, which will likely be exacerbated by climate change. Many people are already vulnerable to climate variability, and climate change will only magnify this vulnerability. Typically, those whose livelihoods are the most natural resource-dependent will be most exposed to climate risks, while the poorest will have the least ability to adapt.



Climate change will severely undermine availability of, and access to, food. It has been estimated that climate change will reduce global production of wheat, rice, and maize by 9%–11%, potentially increasing hunger (taken to mean undernourishment and malnutrition) by 10%–60% (Parry et al. 2009a). The relationship between climate change and food security depends on a number of biological, geopolitical, and socioeconomic factors. Food production is directly affected by changes in temperature and precipitation, and indirectly by water availability. Himalayan snow and ice, which are a vital lifeline for 1.3 billion people who live downstream, are shrinking at a fast pace (Chhibber and Schild 2009). Rainfed agriculture, which covers 61% of cultivated land in Asia, will be hit by too little or too much rain. Food prices are expected to rise with increases in temperature. Changes in availability of, and accessibility to, food will have an immediate, dire impact on the vulnerable, who have least financial and institutional resources to soften the impact of such an external shock. Green growth strategies need, therefore, to address the provision of effective social safety nets through better-targeted food security systems or conditional cash transfers, as well as the transfer of new technologies for food production and abatement of climate risks.

## **Facilitation of rural and off-farm migration**

Although many poor people live in rural villages, their incomes are not always from agriculture and natural resource-based sources. Off-farm revenue may provide up to 30% of incomes for rural dwellers in many countries. In many cases, people live off money sent as remittances from relatives in urban areas or abroad. In some of the most environmentally vulnerable, impoverished locations, these are the women and elderly who are left behind with the children when the men depart for better incomes. In other cases, the state may be providing significant income transfers to rural areas.

This trend to off-farm incomes is likely to increase. While natural resources may in some places and for some people currently be both the largest capital asset and the major source of income, will they remain so? The present dependence of the poor on natural resources is rarely the most reliable indicator of what the future will look like. Out-migration may still offer the best route out of poverty, especially in environmentally vulnerable areas.

Figures for climate migration are hard to predict, but climate variability has historically driven population movements. While climate and migration is an emotive topic, evidence suggests that migration from rural areas will only increase with climate change (Brown 2007). The

Norwegian Refugee Council (2009) estimates that 20 million people were displaced in 2008 due to climate-related disasters, and Asia was by far the most affected region in the world.

Evidence suggests that behind all those data for refugees and migrants are people—usually the very poor and vulnerable—who do not have enough resources, networks, or capacity to move (Tacoli 2009). As noted earlier, the rural poor are already dependent on fragile, less-productive environments. This underscores the importance not only of investing in the ecosystem as insurance for climate change adaptation, but also for establishing a framework that facilitates off-farm incomes for those left behind. Some measures include investment in human and physical capital to increase their opportunities and establishment of a more reliable and efficient remittance system, government social safety nets, or migrant workers' unions.

## **Climate-resilient towns and cities**

Half the world's population now lives in cities (UN-HABITAT 2008). By 2050 in developing countries, urban dwellers will likely account for 67% of the population, and Asia is at the forefront of urbanization. More than half the world's large cities (with a population of more than 1 million) are in Asia (UN 2008). This, coupled with an added inflow of migrants to cities due to climate change, will pose yet further challenges—and a compelling reason for—attaining green growth.

The first of these challenges centers on the fact that urban areas and Asian cities will need to have their high vulnerability to climate change reduced. Six of Asia's 10 megacities—Bangkok, Jakarta, Manila, Mumbai, Shanghai, and Tokyo—are located on or near the coast. The PRC has 40% of its population, 60% of its wealth, and 70% of its largest cities in coastal areas (Brown 2007). In the Philippines, sea-level rise poses a significant threat as 70% of the country's municipalities are along the coast (World Bank 2009). About 81% of the population is vulnerable to natural disasters and some 85% of the country's \$86 billion annual GDP is generated in risk areas. Nicholls et al. (2008) estimate that by 2070, globally, assets worth \$35,000 billion, or 9% of projected global GDP, will be at risk from the combined effect of climate change, subsidence, population growth, and urbanization.

Second, cities and urban populations may become exposed to climate-increased disease vectors such as malaria and dengue. Due to climate change, urban populations that have not been exposed before will now face these health risks.

Third, cities have often benefited from support programs for food security and nutrition and this will need to continue if climate change

pushes up food prices. The last few years has seen the impacts of rapid rises in food prices and accompanying political pressures. Traditionally, urban bias by policy makers led to food subsidies for urban populations (Lipton 1977). Many of these support programs have been dismantled over the last decade, but were reintroduced in the recent food price shocks. There is a need to review the effectiveness of such programs and how they can be made financially sustainable if climate change increases food prices.

## **Transitional support by the international community to shift to green growth**

A key dilemma in the current financing debate is the need to avoid perverse incentives. There is currently a dichotomy between those who want adaptation costs to be separate as a liability or compensation by the rich world to the poor world versus the need to truly internalize the costs of adaptation into every decision and process. Clearly the latter approach will be cheaper, but fairness and “north versus south” negotiating forums are pushing for the former stance. This tension needs to be resolved. The danger is that a stand-alone approach to adaptation financing will create the kind of tensions that arose with stand-alone health funds for HIV/AIDS, etc., which undermined incentives to invest cost-effectively in overall health systems.

A second danger is that a focus on stand-alone financing will lead to an attempt to separate development from climate adaptation spending. As said, there is clear evidence that poor people and poor countries are more vulnerable to climate change. So, any investment that reduces poverty will reduce climate impacts. For example, recent research has demonstrated that expenditure on female education is not only good for poverty reduction but is also vital for climate adaptation (Blankespoor et al. 2010).

While there is a need to see adaption investments on a continuum from general development to specific climate-related investment, there is little doubt that development will be more costly with a changed climate. Evidence is still being generated on the financing needs for adaptation. Recent research (Parry et al. 2009b) suggests that the costs of adaptation may be comparable to the costs of mitigation and possibly much higher. This is an added argument for mitigation, but it is also a wake-up call to think through what these adaptation costs will be and who will bear them. This research suggests that global adaptation costs could be two or three times as high as previous UNFCCC estimates of \$49 billion–\$171 billion a year, say in a range of \$100 billion–\$425 billion a year (Parry et al. 2009b). This compares

with similar costs of mitigation of \$200 billion–\$210 billion a year by 2030 (UNFCCC 2007) and \$400 billion–\$1,100 billion a year by 2050 (IEA/OECD 2008). Since UNFCCC's and more recent estimates of the costs of adaptation focus only on the additional cost of climate change, they do not include the cost of adapting to current climate variability, which is itself likely to be over \$200 billion (Parry et al. 2009b).

While there is growing evidence of the high costs of adaptation, there are also few incentives for the private sector to bear these costs, unlike mitigation where the private sector is now making massive investments in the context of new regulatory and public action. These additional costs are not only a moral demand from developing countries; they can also demand them as a legitimate payment to encourage them to reduce their own emissions. Unlike traditional official development assistance (ODA), which is essentially a voluntary decision by industrial countries, for climate financing, many developing countries are expecting this as a pay-off to ensure that they also reduce their emissions. So climate financing is no longer perceived by some as a voluntary donation to developing countries but rather as a payment for reduced emissions. This is why developing countries are demanding that climate financing, unlike traditional ODA, is a guaranteed stream of payments.

Various schemes are being discussed to provide such guaranteed financing. These include voluntary contributions from governments, as well as different international levies on, for example, currency trading, as in the Tobin tax (see next page). The European Union and other authorities are starting to make commitments on voluntary contributions for climate finance. While this is needed to get the debate started, the danger is that as all government funds are fungible, it is impossible to ensure that such funds are truly “additional” and do not implicitly reduce the existing aid budget. For this reason, levies paid by consumers and producers rather than funds provided by national governments would seem preferable, as they avoid the aid fungibility problem and they are not subject to the political, commercial, and other conditions that have bedeviled the aid industry.

One emerging source of levies is on bunker oil, which is used in shipping and airlines, particularly as both remain unregulated under the Kyoto Protocol. Shipping produces around 3.3% of total man-made carbon emissions and is equivalent to the total emission of Africa (IMO 2009). Only six countries produce more greenhouse gases than international shipping. A carbon tax on emissions of bunker fuel could generate annual revenue of about \$4 billion–\$15 billion a year (UNFCCC 2008). A tax on airlines of \$6.50 per passenger flight could raise about \$13 billion a year (Müller and Hepburn 2006).

Another option gaining ground is a levy on the trading of currencies. This was first proposed in 1971 by the Nobel Prize-winning American economist, James Tobin. This proposal was intended to reduce currency market fluctuations and various uses have been put forward for the revenues raised, with climate as the latest suggestion. Such an approach could help resolve the need for climate funding while improving financial management in the context of the economic crisis. The Tobin tax is consistent with the economic logic of taxing global “public bads,” such as currency speculation, to finance global public goods, such as a low-carbon economy and climate-resilient development. A charge of 0.005% on global currency trading could raise at least \$35 billion (Schmidt 2007). In the short run, given the need for swift implementation, the International Monetary Fund could facilitate the tax while longer-term management arrangements are worked out.

So far the Tobin tax approach has been supported by a wide and growing list of politicians. However, despite its role as one of the leading centers for trade, Asian leaders have not fully contributed to the debate. If the PRC currency eventually becomes a reserve currency like the dollar, then PRC leaders may wish to develop and articulate a position.

The advent of new sources of guaranteed financing for climate-resilient development, which will likely dwarf traditional flows of ODA, also provides a once-in-a-generation opportunity to learn from the shortcomings of the aid business and to put in place new models of aid delivery. In a new context where developing countries can demand guaranteed funding, these developing countries can demand to have these funds delivered as they want, without many of the supply-driven modalities of traditional aid (such as intermediary institutions with unreasonably high transaction costs) and unfair conditions (such as tied aid).

These kinds of reforms are already emerging in the context of the globally agreed adaptation funds and, to a lesser extent, the management of funds pledged by the G8 group of countries. They are signs of the changes that will arise, leading eventually to a much more radical set of governance arrangements where developing countries ultimately control how funds are used—the reverse of the current aid business.

The most effective way to provide the financing is to allocate fair shares to each country as an annual lump sum payment and then allow the countries to decide how they want to program the funds. In some cases, they may require traditional aid bureaucracies, such as development agencies, to provide technical support, in others cases they may choose to program the funds through existing government, civil society, or private sector channels. Such direct access to climate financing

will ensure that development agencies become more demand driven and competitive, otherwise they will no longer be viable. This will essentially be the end of the traditional aid business as known over the last 65 years since the advent of the UN and Bretton Woods institutions.

Even with direct access to a pot of guaranteed global funds, the challenge remains of determining a fair allocation of funds for each country. This will no doubt require considerable debate and deliberation. While it is not possible to predict the final formulas, it is possible to suppose that some set of formulas will be developed using criteria to determine the extent of expected adaptation costs, which would include indicators such as population, income, and other measures of climate risk.

Once the funds are allocated to countries, the best option to incentivize their effective use is to provide the adaptation funds to the public budget. Essentially, externally funded adaptation funds can be thought of as external tax revenue, as the tax is raised internationally rather than domestically. Therefore, as with any fiscal revenue, the funds should then be captured in the national budget process. The formal budget process is where accountability for government spending decisions takes place, and indeed, one of the major problems with past environment financing such as the Global Environment Facility and the Clean Development Mechanism is that they have been off-budget. So, while budget processes are far from perfect, they are the best attempt each country has to be accountable to its citizens for public finances.

By contrast, any attempt to impose external conditions on adaptation financing has at least four drawbacks:

- It will replicate the shortcomings of ODA, which has created accountability to the donor rather than to citizens and has ignored the fungibility of external financing. This is why development agencies are now promoting budget financial support (into the national budget) and public financial management.
- It would replicate the shortcomings of the Global Environment Facility approach, with high transaction costs in time and money for monitoring and approvals, etc.
- It will replicate the shortcomings of National Adaptation Programs of Action in encouraging adaptation “projects,” while the objective is instead to include the additional cost of adaptation across the public and private investment portfolio.
- It would replicate the shortcomings of vertical funds for HIV and other global health issues, by not promoting system-wide improvements to cope with adaptation.

Thus, based on emerging good practice in development financing, the least-bad option seems to be to provide the adaptation funds to the public budget. It seems that the real challenge will be to overcome all the vested interests who want a role in managing these adaptation funds, such as other national governments and development agencies. It would seem that this is where the efforts should be—on demonstrating the clear economic, environmental, and governance rationale for providing funds directly to government budgets with no external conditions other than support for effective public financial management as provided by existing international support.

## **Conclusions**

Countries in Asia face different threats from climate change. In the Himalayan nations of Bhutan and Nepal, one of the immediate and urgent threats from climate change is glacial-lake outburst floods. In many Pacific nations, it is sea-level rise that determines the very existence of the nation. In some emerging economies, it may be the combination of shifting patterns in production and urbanization and their associated impacts on socioeconomic development. Thus, each country will necessarily take different paths to building resilience to climate change and green growth. Using the LIIFTT framework, which embraces some of the common elements that are essential to achieving green growth, this paper has presented some opportunities and challenges that confront countries in Asia—and how they can play a leading role in the discussions on the green economy, climate change, and the future of aid.

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# Measuring the environmental impacts of changing trade patterns on the poor

*Kaliappa Kalirajan, Venkatachalam Anbumozhi, and Kanhaiya Singh<sup>1</sup>*

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## Introduction

The 1997–1998 Asian financial crisis has been well documented. Its notable characteristic was that it was mainly a banking crisis and was strongly contagious within East Asia only. As the economies of Europe and North America were not affected, East Asia's recovery was quicker. In contrast, the present financial crisis that originated in the United States (US) has spread worldwide and hence recovery has been slow and unsteady across countries.<sup>2</sup> A major consequence has been that exports from several countries, particularly Asia, declined sharply, mainly due to declining private demand from US consumers, as many households were affected by the financial downturn due to their active participation in capital markets.

As trade has been the engine of growth for almost all countries in East and Southeast Asia, naturally, countries are tending to pursue various approaches to revive it. Learning from past mistakes should pave the way for innovations. One of the lessons that Asian countries may have learned from the present crisis is not to depend entirely on the US for export growth, but to diversify export destinations, which may have implications for changes in the composition of commodities traded. Why is that the case?

US consumers have been the main market for global imports for decades, and before the current crisis, US private consumption was estimated at around 18% of world output. Now those consumption levels have started to slide. Giavazzi (2009) argues that US private

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<sup>2</sup> For a detailed analysis of global financial crisis and its impact on the major Asian economies see, among others, Kawai (2009).

consumption was estimated at about \$10 trillion in 2008, or about 16% of world output, while estimates for Asian consumption stood at less than \$5 trillion. Thus, the downsizing of consumption by US consumers due to the subprime crisis has spread the financial crisis globally.

Giavazzi (2009) cites a study by Johns Hopkins University economist Christopher Carroll (2009), in which he has predicted that US households, affected by the recession, will improve their savings to about 4% of their disposable income. On the assumption that disposable income is about 70% of gross domestic product (GDP), a 4% increase in the household savings rate would translate into a fall of 3% of GDP in household consumption, or about \$0.4 trillion in 2008. Then the crucial question for policy makers in Asia is: How will Asia compensate for a reduction in global demand as large as 3% of US GDP?

In this context, the rebalancing argument toward greater domestic and regional demand is appealing. Two implications follow. First, contrary to environmentalists' arguments that export-led growth is unsustainable, the crisis has not washed away the export-led growth doctrine of Asian countries. However, that doctrine seems to have taken on the new name of "induced demand-led growth." Thus there appears to be a change in the pattern of trade in terms of emphasis from international to regional and domestic markets.

As a consequence, on the assumption that US demand may not recover to its normal level soon, there will be a change in the pattern of trade due to changes in demand emanating from countries other than the US with different levels of income. Such changes in global consumption will necessarily require changes in the composition of production. For example, as Kawai (2009) has argued, East Asia's manufacturing will undergo structural changes because exports, such as sophisticated high-end electronics and machinery, will decline dramatically, while the region's agricultural and services sectors are likely to gain from expanded domestic demand.

Second, there seem to be no signs that the changes in trade patterns will bring any changes to the means of production. The danger is that production that caters largely to domestic market demand may not follow environmental considerations closely, as it would for regional or international exports. This raises an important policy question: How do governments set right such market failures the answer to which has implications for the poor?

There are many factors that link the environment, trade, and the poor, including energy used in production; the scale of production, which has a bearing on the type of transport used in moving goods;

and the composition of goods produced, which can be influenced to create positive links through government policy reforms. Accordingly, this paper focuses on measuring the environmental impact of changing trade patterns on the poor through the analysis of these three factors of energy use, transport, and composition of goods.

## **Environmental impacts of trade patterns on the poor: Theoretical propositions**

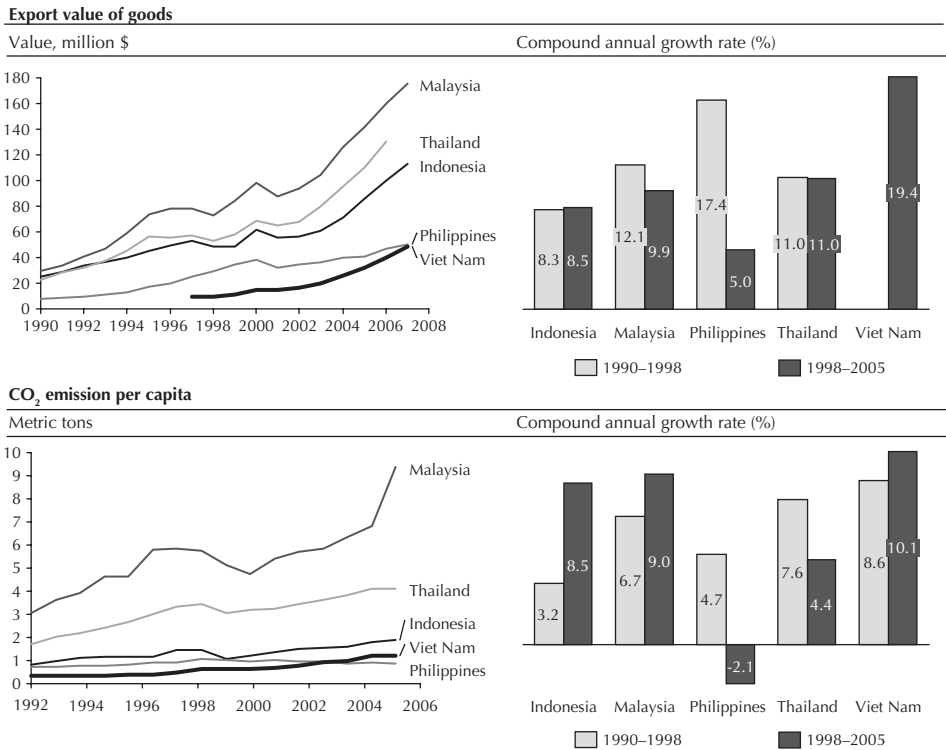
Drawing on the East Asian growth model of export-led growth, it is rational to argue that increased exports will increase national income. Though controversial, core trade theories such as Heckscher-Ohlin posit that trade influences growth by improving total factor productivity growth through increased deepening of both physical and human capital, while the Kuznets inverted “U” environmental curve emphasizes that, with higher national income, there will be more effort to improve environmental quality. Thus the link between trade and growth and then environmental quality appears to be logical.

However, it is difficult to conclude that increased exports and improved environmental quality will directly reduce poverty, unless one has information about the scale of production, the type of composition of production, and the type of technology used in production. Mass production and exports usually lead to increased pollution, but with energy-efficient technology the level of pollution can be reduced (Figures 1 and 2). When the composition of production is taken into account, the link between trade and the poor becomes clear. To achieve sustainable growth through trade and poverty reduction simultaneously, exports need to be focused on production of those goods in which the poor work predominantly.

However, if labor-intensive manufacturing were carried out with inefficient technology in terms of energy use and pollution, the benefits from exports to poverty reduction may be diminished because of the cost involved in cleaning up the damaged environment. In that case, trade without a sound environmental policy can increase pollution and encourage overuse of environmental resources, thereby degrading and depleting natural resources, which has a direct bearing on poverty. So, exports of labor-intensive goods combined with sound environmental policy have the potential to reduce poverty and reduce environmental damage.

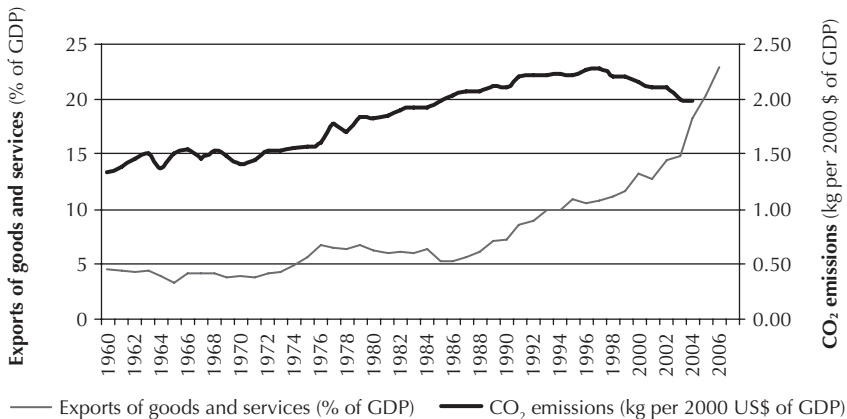
Policies are therefore needed to promote “safe” trade by internalizing environmental externalities in the production and consumption

**Figure 1: Relationship between export growth and carbon dioxide emissions growth, ASEAN**



Sources: UN Comtrade Database; World Bank's *World Development Indicator* database.

**Figure 2: Relationship between export growth and carbon dioxide emissions growth, South Asia**



Sources: UN Comtrade database; World Bank's *World Development Indicators* database.

decisions of individuals. There are many ways to internalize, such as imposing a Pigouvian tax and carbon trading. Also, it is imperative to introduce and monitor the harmonization of technical standards and regulations to improve trade between countries, which also has a positive impact on environmental protection. This requires increased international cooperation and mutual recognition of technical standards and regulation across countries. Yet, environmental policy in the form of standards higher than international norms may affect market access and become nontariff barriers.

One may conjecture, drawing on the experience of, for example, efficient Japanese manufacturing, that it is possible to increase and sustain positive links between trade, the environment, and poverty reduction through promoting the “2Ts”— technology and transferability. A technology with less impact on the environment used in the production of goods that can be transported with little or no environmental degradation has the potential to transfer the benefits arising from exports of such goods into the process of poverty reduction.

Among other things, services-led growth and trade in environmental goods and services (EGS) provide avenues to achieve the above objective of promoting trade with little or no negative impact on the environment because trade in EGS is environment friendly and its impacts on the pace of poverty reduction can be significant (as discussed in the following pages). This does not mean that manufacturing-led growth should be neglected completely, as most of the manufacturing in developing countries is labor intensive. What it means is that the shares of services and trade in EGS in GDP should be increased from present levels, while environment-friendly technologies should be used in manufacturing.

## **Environmental impacts of trade on the poor: Empirical findings in Asia**

Given the complexity of the links between trade, the environment, and poverty reduction, it becomes necessary to focus on some specified areas of such links that require immediate attention. Researchers have argued that transforming into a low-carbon economy is a powerful means to effectively achieve the multiple objectives of providing energy security, mitigating the impact of climate change, and increasing the pace of poverty reduction (Kawai and Anbumozhi 2009). Hence, the research in this paper is restricted to the analysis of energy production and consumption, which are dependent on the type, scale, and method of production of goods and services; and to their impact on the environment and poverty.

Increased demand for exports and increased urbanization lead to increased production, which in turn raises the demand for energy. How is growing energy demand to be met? There are different kinds of energy resources, including coal, oil, gas, hydro, biomass, nuclear, and other forms of renewable energy. Of these, coal, oil, and gas emit greenhouse gases and change the climate; carbon dioxide is the dominant anthropogenic greenhouse gas.

Unfortunately, these three are the major sources of energy used in almost all countries around the world due to their availability. About 80% of primary energy supply comes from these three sources and their contribution is predicted to rise to 86% by 2030 (IEA 2009). Table 1 shows the actual total energy use and its projections to 2030. Among non-OECD Asian countries, the People's Republic of China (PRC) and India have been using more energy than other developing countries (IEA 2009). The PRC and India will account for about 20% of energy use in 2010 and their shares will increase to 28% by 2030, significantly exceeding the energy use of the US. The *World Energy Outlook 2008* shows that world energy demand may well increase by 45% from 2008 to 2030, with coal accounting for more than a third of the overall rise in demand (IEA 2008).

IEA (2007) has shown that global carbon dioxide emissions are likely to increase to 42 gigatons in 2030, which is about 57% above current levels, if countries fail to change their energy use policy. Besides the emission rate, cumulative emissions have long-standing damaging effects on the environment. The same source also shows that the PRC's cumulative energy-related carbon dioxide emissions from 1990 to 2030 will soon catch up with the US and European Union (EU). In the case of India too, there will be a significant accumulation from 2006 to 2030.

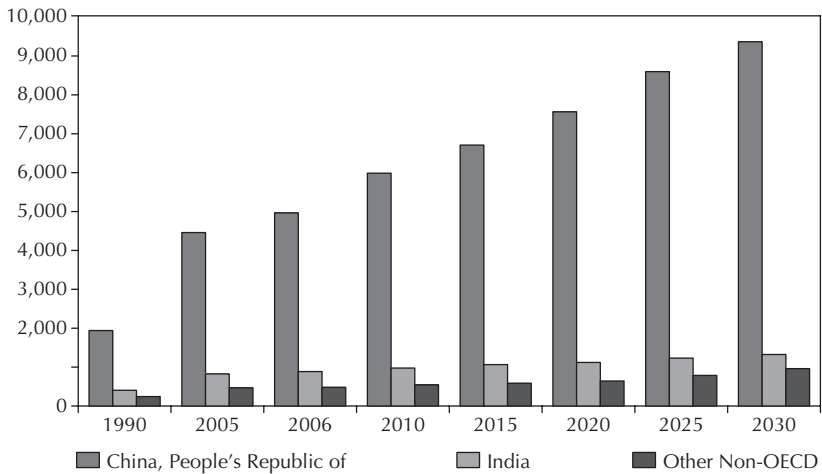
**Table 1: Energy use, actual and projected**  
(million tons of oil equivalent)

Year	Rest of				Total
	PRC and India	non-OECD Asia	United States	Rest of World	
1990	34.9	12.5	84.7	228.1	347.7
2000	50.6	20.7	99.0	248.3	397.9
2006	91.5	26.1	100.0	280.9	472.4
2010	109.6	29.6	99.9	298.8	508.3
2020	150.9	39.4	105.4	339.5	595.7
2030	188.1	51.5	113.6	376.6	678.3

OECD = Organisation for Economic Co-operation and Development, PRC = People's Republic of China.

Source: International Energy Agency 2009.

**Figure 3: Carbon dioxide emissions from coal use, selected Asian economies (million tons)**



OECD = Organisation for Economic Co-operation and Development.

Source: International Energy Outlook 2009.

The US Energy Information Administration (EIA) in its *International Energy Outlook 2009*, has predicted that the PRC will become the world's largest emitter as soon as 2010, and its emissions will be 41% greater than US levels by 2030. Emissions from coal use, which dominates as a source of energy generation, have been increasing, with the largest increase from the PRC. India's projected emissions from coal use for 2030 do not seem to be alarming when compared with the PRC's (Figure 3), and India's governments have argued that the country will keep its per capita emissions below the world average. In fact, the share of manufacturing in India's GDP is much lower than in the PRC, and has been for a decade. Still, coal is the major source of power generation in India. And as the PRC is the "factory of the world," that country may not find it easy to reduce emissions, although the government appears committed to controlling emissions, as may be seen from carbon-intensity projections.

IEA (2007) projections indicate that carbon intensity, measured as the ratio of carbon dioxide to total primary energy supply, will increase for the PRC, India, and Indonesia (among other Asian countries) from 2.9, 2.1, and 1.9 in 2005 to 3.0, 2.5, and 2.1 in 2030, respectively. Emissions of carbon dioxide from land-use change and forestry are made up of three categories of emissions: from biomass burning, from peat fires and decay of drained peat soils, and from decay of above-ground biomass that remains after logging and



deforestation (Garnaut et al. 2008). Total emissions from these sources seem set to grow slowly from 7.5 gigatons of carbon dioxide in 2005 to 7.6 gigatons in 2030.

It is expected that the number of people living in urban areas around the globe will double by 2030. The impact of such an expansion in urbanization will put pressure on already shrinking agricultural land, which is directly linked with rural poverty and with existing urban development areas, which in turn will hike dwelling costs. As most cities are not well planned, people working in cities tend to prefer living in places away from them, which then forces people to use private or public transport to commute.

Most on-road vehicles are inefficient in fuel use, and only very limited public transport in some developing countries has used environmentally less harmful liquefied petroleum gas. Consequently, the per capita and per unit of GDP transport carbon dioxide emissions will be large (Table 2).

In the absence of efficient use of fuel in the transport sector, developing countries—particularly the PRC and India—will add an enormous amount of carbon dioxide annually to the atmosphere through transport vehicles alone (Figure 4).

The climate change challenge is squarely on the means of energy production, as both the rates of emission of carbon dioxide and the accumulation of greenhouse gases have long-term global environmental impacts. Thus there is an urgent need for at least the stabilization of carbon dioxide emissions at present levels. Now, as Garnaut et al. (2008) have written, the question is whether it is feasible to stabilize carbon dioxide emissions without further damage to environment in the present context of changing trade patterns that demand changes in production structure, and to aim to increase the pace of poverty reduction. Among other things, services-led growth and trade in EGS provide avenues to achieve sustained poverty reduction without environmental damage.

## **Services-led growth and trade in environmental goods and services**

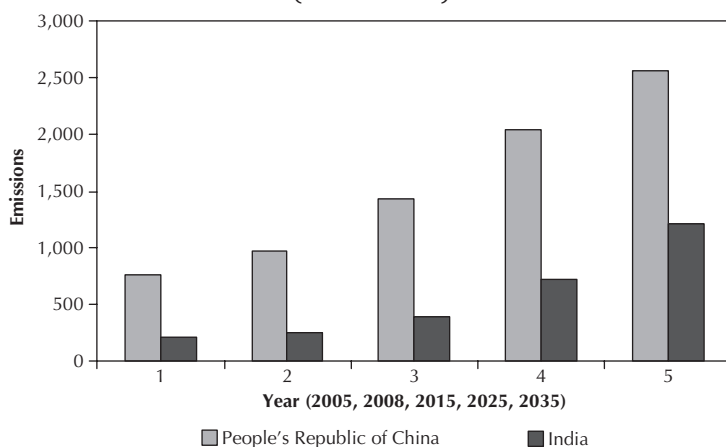
Traditional trade theories' suggested path of growth for developing countries has positive implications on poverty reduction through growth, but may have negative implications for the environment, if an efficient transport and telecommunications infrastructure is not put in place. Therefore, the importance of having an environmentally safe, pro-growth trade policy—one that minimizes the damage caused

**Table 2: Per capita and per unit of GDP transport carbon dioxide emissions, global and Asia, 2005**

<b>Region and/or Country</b>	<b>Per capita carbon dioxide emissions (kilograms)</b>	<b>Carbon dioxide emissions per \$ (2005 US\$) of GDP (grams)</b>
World	985	116
Asia (excluding China, People's Republic of)	196	57
Bangladesh	31	17
China, People's Republic of (including Hong Kong, China)	257	43
India	89	29
Nepal	31	22
Pakistan	170	81
Sri Lanka	279	68

Source: International Energy Agency 2007.

**Figure 4: Total on-road vehicle carbon dioxide emissions (million tons)**



Source: Asian Development Bank 2006, p. 6.

by environmental externalities arising from production and consumption decisions of individuals, and that increases the pace of poverty reduction—cannot be overemphasized. Such a policy can be sustained through the 2Ts.

Efficient energy-generating technologies, including those for renewable energy, assume primary importance in the context of mass

production of manufacturing goods for consumption nationally and internationally. These technologies, such as the ultra-supercritical pressure coal-fired power generation technology (USCT), which is an efficient and widely accepted power generation technology globally, can meet future energy demand without significantly increasing carbon dioxide emissions. This necessitates acceleration toward technology transfer from developed to developing countries. For example, only about 2% of the total capacity of coal-fire power generators in India is generated by USCT.

In addition, many developing countries may not view favorably the global carbon emissions trading scheme because the inflow of foreign exchange through the scheme into developing economies has the potential to lead to an appreciation of their real exchange rates relative to those of developed economies. This would lower their export competitiveness. Therefore, the scheme needs to be supplemented with a well-defined technology transfer policy and safety mechanisms that will not harm developing countries' export competitiveness.

With respect to wind energy, the National Development and Reform Commission in the PRC has stated that the country cannot produce a wind-power turbine larger than 1,000 kilowatts, and that the core technology of manufacturing big wind turbines is still imported from industrialized countries (NDRC 2008). In this context, the World Bank created the Clean Technology Fund and the Strategic Climate Fund in 2008 through multidonor trust funds within its Climate Investment Funds. The objective is to increase the pace of deployment of low-carbon technologies significantly, so as to achieve cost-effective reduction in the growth of greenhouse gas emissions in developing countries. Nevertheless, the funds should be further augmented and used effectively to help developing countries receive efficient technology from industrialized countries.

Though use of renewable energy sources needs to be intensified, expanding such sources in developing countries entails a high financial cost. For example, producing solar panels there is very costly due to lack of technology and intermediate inputs. Trade policies in some countries do not provide a favorable environment for importing parts for building renewable energy equipment. For example, import tariffs on large wind-power generation equipment are the main cause of the high cost of operating wind-power plants in the PRC. Although from January 2008 the PRC started to use a preferential tariff policy for such equipment, the system has several limitations, leading to rent seeking by firms and bureaucratic red tape.

The mass production of manufactures requires transport facilities both from production and export perspectives. Road transport dis-

charges more carbon dioxide emissions than shipping and air transport because of the huge number of vehicles involved. Integrated urban transport planning is necessary to reduce sizable emissions in the transport sector that is the backbone for moving people and goods. More research on fuel-efficient transport vehicles should be carried out either in developing countries or in collaboration with industrialized countries.

Government fuel subsidies need to be removed. But as such a move might hit the poor more, authorities need to provide some kind of safety net or concession. The money saved from abolishing the fuel subsidy may be used to carry out research and development of fuel-efficient transport systems.

Efficient technology transfer is central to promoting economic growth without seriously damaging the environment. Is it feasible to stop emissions from rising further significantly by changing the present commodity composition of exports? What will be the impact of such changes on growth? What are the ways to transfer growth benefits to the poor? Here, too, the role of the 2Ts facilities is important.

The latest report on services by the World Trade Organization (WTO 2009, p. 21) states that services represent the fastest-growing sector of the global economy, and that two-thirds of global output comes from services. Services constitute the largest share of South Asian GDP.

In terms of poverty reduction, contrary to general perceptions, researchers have proved empirically that services sector growth has significantly reduced poverty. For example, using India's state-level data, Ravallion and Datt (2002) showed that the services sector has significantly reduced poverty in India, while Ghani (2009) has obtained similar results using data from 50 countries. Increasing flexibility in developing countries' labor markets has played a role in this reduction.

Thus a services sector that benefits from technological development (such as information technology) can also transfer some of its growth benefits to the poor without causing any serious damage to the environment. However, efficient transfer of growth to the poor depends on governments' labor market policies, which facilitate easy market access to poor's participation. The problem of developing Asia's rural sector, where the majority of poor people live, is one of providing productive employment to the unemployed, underemployed, and seasonally unemployed labor force. Added to this, there is low productivity of both land and labor in agriculture due to various environment-related problems, such as soil erosion and water scarcity.

The cumulative impact of all these factors is that rural employment is inadequate either by time, productivity, or income criteria.

One effective way to help tackle this problem is to diversify the rural economy through the development of production and trade in EGS that helps climate-change mitigation. In urban areas, too, production of environmental goods is labor intensive. For example, environment-protection activities, such as carbon sequestration and the Clean Development Mechanism, create demand for environment-related consultancy services.

Some countries have good potential to export such services, and such export can be helped if demand for these services is created in the domestic market. Export growth will, nevertheless, to a large extent depend on quality assurance and the removal of possible obstacles to the provision of services in overseas markets, which requires public-private partnerships toward promoting entrepreneurial abilities in this area (OECD 1998).

EGS is an important means to promote the sustainable development goals laid out in the Millennium Development Goals and different multilateral environmental agreements, and enhancing the mutual supportiveness of trade and environment. An important factor in employment and productivity in EGS is technology—one of the 2Ts. About half of the total EGS to be used by 2030 are, it is argued, yet to be created, which emphasizes the urgent need for funding and research and development to produce and transfer the technologies to developing countries (OECD 1998).

The value of output in the global environment industry is estimated at over \$650 billion and trade in EGS is estimated to be only around \$65 billion. The three dominant market players are US with a share of 37%, Western Europe (30%), and Japan (18%) (Jha 2008). The United Kingdom's Joint Environmental Markets Unit estimates the market share of developing countries at about 20% in 2010. Among ASEAN countries, Indonesia, Malaysia, the Philippines, and Thailand are major consumers of EGS, and their demand primarily concerns solid-waste handling and disposal services, and filtration and purification equipment for water and wastewater.

However, there are a few issues that need to be resolved at the WTO, which may be the reason for nonactive participation by Asian developing countries (apart from the PRC and the Republic of Korea) in EGS trade. For example, there is no clear distinction between goods intended solely for environmental use and goods intended for both environmental and nonenvironmental use. This raises concerns among developing countries about the dumping of a broad range of industrial goods on them by industrialized countries, which may have implications for their domestic industries and employment. This issue needs to be sorted out quickly.

## **Conclusions and policy suggestions**

It is possible to sustain and increase positive links between trade, the environment, and poverty reduction through promoting the 2Ts. A technology with minimal negative impact on the environment in the production of goods has the potential to transfer the benefits arising from exports of such goods to the poor, and effectively.

Among other areas, services-led growth and trade in EGS provide avenues to achieve the above objective of promoting environmental friendly trade with significant benefits accruing to the poor. The global crisis has created an opportunity for governments in Asia to draw up development policies aimed at inclusive growth through increased public spending, which has a direct bearing on achieving the first Millennium Development Goal of poverty reduction. Governments need to keep this momentum going.

However, such momentum is dependent on effective cooperation between developing and industrialized countries because of the importance of the 2Ts for sustaining growth in developing countries. Multinational organizations, such as the World Bank, ADB, and WTO, need to play active roles in strengthening this cooperation.

Specific policy suggestions are as follows:

- Developing countries need to contribute to international public goods such as efficient and environment-friendly technologies through research collaboration.
- Industrialized countries should provide easy access to efficient technologies to developing countries.
- As inflows of foreign exchange (due to the global carbon emissions trading scheme) into developing economies may cause their real exchange rates to appreciate, the scheme needs to have a well-defined technology transfer policy and safety mechanisms.
- To promote and sustain a low-carbon economy, tariff and nontariff barriers on EGS should be eliminated.
- Governments need to promote public–private partnerships in nurturing competitive industries in the production of EGS.

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# Poverty, climate change, and the economic recession

*Benoit Laplante*<sup>1</sup>

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## Introduction

In 2008, more than 900 million people in Asia and the Pacific lived in absolute poverty (defined as less than \$1.25 a day in 2005 prices), and an additional 900 million lived in moderate poverty (defined as less than \$2 a day). In other words, approximately one of every two individuals—or 1.8 billion people—remains poor in the developing member countries of the Asian Development Bank (ADB) (Bauer et al. 2008). Furthermore, almost half the world's absolute poor live in South Asia (ADB 2008). If it is true that income is a key determinant of climate resilience,<sup>2</sup> then Asia and the Pacific is particularly vulnerable to the expected forthcoming onslaught of changes associated with global warming.

Perhaps for the very first time in the history of humankind, issues pertaining to both climate change and economic recession are simultaneously occupying front interest and concerns. It is generally argued that the existing global recession may significantly hamper the achievements of the poverty reduction goals set forth in the Millennium Development Goals. Given the poor's vulnerability to climate changes, the global recession, despite being of relative short duration when measured against the long-term impacts of climate change, may thus significantly indent achieving climate resilience in the region.

In this paper, we briefly explore the relationship between economic development and climate resilience, and then assess the potential impacts of the global economic recession on achieving climate resilience for the poor.

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<sup>1</sup> Benoit Laplante is a consultant at the Regional and Sustainable Development Department of ADB. I wish to thank Jay Roop (environment specialist, ADB) for his advice and comments, and Marjelou Realuyo-Castillo for her research assistance. The views expressed in this paper are those of the author and do not necessarily reflect the views and policies of ADB's management, Board of Governors, or the governments they represent. Any remaining errors as well as opinions are those solely of the author.

<sup>2</sup> Broadly defined as the capacity of a community to withstand the impacts of climate change.

Capital investment in adaptive infrastructure will undoubtedly be a source of economic benefits (given the expected climate change projections), which may be targeted to the poor if it is designed with this objective in mind (pro-poor infrastructure). Investment in rural economies and slums upgrading, for example, may contribute to short-term economic growth and to poverty reduction and simultaneously may increase climate resilience. However, we suggest that investment in education, particularly in female education, should become or remain a key budget priority in times of economic recession as more education, especially female, will contribute significantly not only to poverty reduction, improved living standards, and sustainable economic growth, but also to building a climate-resilient Asia.

## **Economic development, climate resilience, and impacts of natural disasters**

During 1960–2007, the number of people affected by droughts, floods, storms, and extreme temperatures increased approximately tenfold.<sup>3</sup>

**Table 1: Number of people affected by extreme weather events, 1960–2007**

	<b>1960–1969</b>	<b>1970–1979</b>	<b>1980–1989</b>	<b>1990–1999</b>	<b>2000–2007</b>
Drought	117,899,704	263,706,885	592,746,376	309,913,523	631,553,213
Flood	42,374,639	207,877,106	468,400,647	1,436,005,223	845,939,199
Storm	30,244,783	52,539,673	141,405,617	224,336,097	333,244,475
Extreme temperature	–	600	40,202	7,134,684	5,376,889
<b>Total</b>	<b>190,519,126</b>	<b>524,124,264</b>	<b>1,202,592,842</b>	<b>1,977,389,527</b>	<b>1,816,113,776</b>

– = no data.

Source: Estimates are based on the International Disaster Database EM-DAT maintained by the Centre for Research on the Epidemiology of Disasters (CRED), available at [www.em-dat.net](http://www.em-dat.net). The database covers 210 countries. See Dasgupta et al. (2009a) for more details.

The Intergovernmental Panel on Climate Change (IPCC) concluded in 2007 that climate change and the warming of the earth is without doubt happening and that in all likelihood (90% probability) this warming is primarily caused by human activity (IPCC 2007). Furthermore, recent observations show that some climate indicators (such as sea

<sup>3</sup> This increase in the number of affected people cannot be accounted solely by an increase in population. Over the same period, the world population approximately doubled, from 3.2 billion to 6.5 billion.

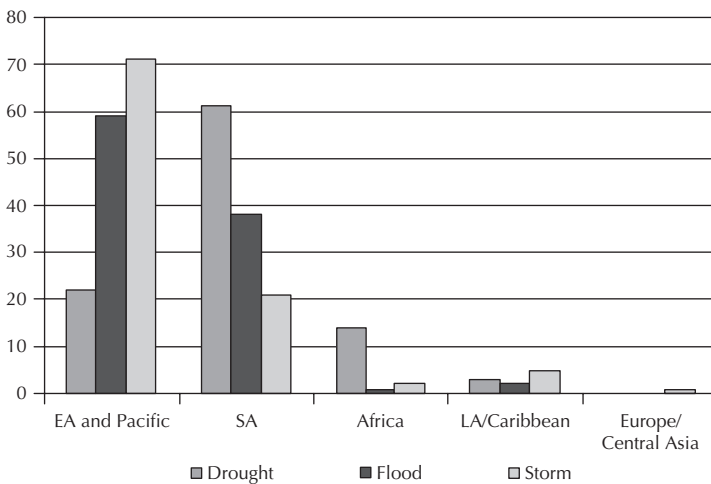
level) are near or beyond the upper range of the IPCC projections of 1990 (Rahmstorf et al. 2007).

The warming of the earth is expected to result in a wide range of impacts associated with higher temperatures and changes in precipitation patterns leading to both drier and wetter weather, more frequent, and/or more severe extreme weather events (storms, floods, droughts, and heat waves), and rising sea levels.

The East Asia and Pacific and South Asia regions are expected to bear a significant share of the impacts associated with these events (Dasgupta et al. 2009b). Indeed, historically, more people in Asia and the Pacific have been affected by floods, droughts, and storms than in any other region of the world: 83% of all people affected by droughts, 97% of all people affected by flood, and 92% of all people affected by storms over the period 1960–2007 resided in the East Asia and Pacific and South Asia regions (Figure 1).

While these changes are expected to be a source of significant environmental and social disruption, the equity dimensions associated with these changes are of equal concern: different groups of people within countries, and different groups of countries, will experience the impacts of climate change differently. In particular, climate change will impact the poor (households and countries) disproportionately.

**Figure 1: Distribution of people affected by floods, droughts, and storms, 1960–2007 (%)**



EA = East Asia, SA = South Asia, LA = Latin America.

Source: Estimates are based on the CRED International Disaster Database EM-DAT.

The actual demonstration of a possible relationship between income (or more generally economic development) and the impacts resulting from natural disasters (some of which being arguably related to global warming) is not necessarily simple, and ranges from anecdotal (yet strongly suggestive) to rigorous empirical testing.

Natural disasters of similar intensities (e.g., earthquakes or cyclones) cause much greater damages and casualties in low-income countries than in high income countries. For example, while the Japan's Great Hanshin earthquake of 1995 resulted in 6,000 deaths, an earthquake of approximately similar intensity in 2005 in Kashmir left 75,000 people dead. The IPCC (2001) has reported that 65% of world deaths from natural disasters between 1985 and 1990 took place in nations with income below \$760 per capita. Also, although the 50 poorest countries are exposed on average to only 11% of the annual world's natural hazards, they suffer 53% of deaths from disasters each year. On the other hand, countries with high levels of human development account for only 1.5% of the death from disasters, despite being exposed to 15% of all hazards (UNDP 2004).

While suggestive of a relationship between income and damages, such statistics do not strictly allow for such a conclusion, because the impacts of other variables need to be controlled for when one attempts to establish the relationship between income and weather-related damages. In recent years, various studies have addressed this issue and empirically tested the relationship between income and the impacts of natural disasters.

Using the Centre for Research on the Epidemiology of Disasters (CRED) EM-DAT database comprising 151 countries<sup>4</sup> over the period 1960–2003, Toya and Skidmore (2005) unambiguously find that both the total number of deaths and the extent of economic damages caused by natural disasters decrease as per capita gross domestic product (GDP) increases. Controlling for the impact of income, the study also finds a significant role for education in reducing vulnerability, through better choices in areas ranging from safe construction practices to assessment of potential risks and better location decisions.

Kahn (2005) used a database comprising 73 nations over the period 1990–2002 to test hypotheses concerning the role of income and institutions in mitigating death counts from natural disasters.

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<sup>4</sup> While the CRED EM-DAT database includes 210 countries, for the purpose of their analysis, the authors included only those countries that had experienced natural disasters over the period of analysis.

Controlling for the number and intensity of natural disasters, the study unambiguously finds that richer nations suffer fewer deaths from natural disasters than poorer nations: Statistically, a nation with a population of 100 million would suffer 764 fewer natural-disaster deaths on average per year if it were to experience an increase in GDP per capita from \$2,000 to \$14,000. The study also finds that the institutional improvement that accompanies economic development also plays a significant role, through enhanced public sector capability to organize disaster prevention and relief.

More recently, Blankespoor et al. (2009) have also identified this relationship and empirically estimated that an increase in GDP per capita results in fewer people killed or affected by floods and droughts.

Both the anecdotal and empirical evidence strongly support the hypothesis that the lower a household's level of income, the greater the likelihood of being adversely impacted by natural disasters.<sup>5</sup> At a country level, the same evidence supports the hypothesis that the lower GDP per capita and economic development (all other things being equal), the greater the number of deaths and the number people affected by natural disasters and extreme weather events.

A number of factors may explain the nature of this relationship.

First, the livelihood of the poor is known to depend significantly on natural resources. When natural disasters disrupt the flow of goods and services provided by these resources and more generally by ecosystems, the poor find themselves in a precarious situation. Furthermore, when natural disasters destroy capital (be it machinery, cattle, or otherwise), the poor typically lack access to financial resources to restore the level of capital to its pre-disaster level. Second, increases in income enable individuals and households to respond to increased risk (including risk associated with natural disasters) by employing additional costly precautionary measures.<sup>6</sup> Third, the poor are often located in areas that are more susceptible to high variability in temperature and rainfall, such as hilly and steep slopes, and flood

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<sup>5</sup> The relation between level of income and the impacts of natural disasters has also been empirically observed in developed countries. For example, in the United States, Deschenes and Moretti (2007) show that one day of cold temperature increases daily mortality by 0.2174 deaths per 100,000 people in the richest counties (top 10% of the income distribution), and by 0.3696 per 100,000 people in the poorest counties (bottom 10% of the income scale).

<sup>6</sup> Both the demand for security and the private capacity to invest in security (through better access to financial capital and private savings) increase as income increases.

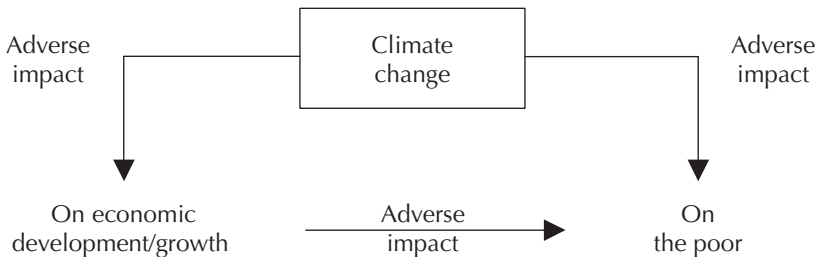
plains.<sup>7</sup> Finally, richer societies are more resilient societies as a result of the positive correlation between income and education, openness, financial development, and greater institutional capacity.

In other words, wealth and economic development are significant determinants of the climate resilience of households as well as of countries. In simple words, richer households and societies are safer households and societies. This evidence suggests that poverty reduction, among other measures, must be an integral component of an effective climate change adaptation strategy in countries of the region. A region free of poverty will also be a region with enhanced capacity to withstand the impacts of climate change.

## **Economic growth, poverty reduction, and climate change**

In the above section, it was shown that the existing empirical evidence clearly demonstrates a positive correlation between poverty (or economic development) and the impacts of natural disasters (some of which are related to climate change). In this section, we argue briefly that climate change could also impact the poor indirectly via its adverse impact on economic development (Figure 2).

**Figure 2: Direct and indirect impact of climate change on the poor**



<sup>7</sup> "Ninety percent of the disaster victims worldwide live in developing countries where poverty and population pressures force growing numbers of poor people to live in harm's way on flood plains, in earthquake prone zones and on unstable hills. The vulnerability of those living in risk prone areas is perhaps the single most important cause of disaster casualties and damage." (Secretary General of the United Nations Kofi Annan, 1999.)

**Table 2: Estimates of the welfare impact of climate change**

Study	Warming (°C)	Impact (% of GDP)	Worst-off region	
			% of GDP	Name
Nordhaus (1994)	3.0	-1.3		
Fankhauser (1995)	2.5	-1.4	-4.7	PRC
Tol (1995)	2.5	-1.9	-8.7	PRC
Nordhaus and Yang (1996)	2.5	-1.7	-2.1	Developing countries
Plamberk and Hope (1996)	2.5	2.5	-8.6	Asia (excluding PRC)
Mendelsohn, Schlesinger, and Williams (2000)	2.5	0.0	-3.6	Africa
Nordhaus and Boyer (2000)	2.5	-1.5	-4.1	Africa
Tol (2002)	1.0	2.3	-4.1	Africa
Maddison (2003)	2.5	-0.1	-14.6	South America
Rehdanz and Maddison (2005)	1.0	-0.4	-23.5	Sub-Saharan Africa
Hope (2006)	2.5	0.9	-2.6	Asia (excluding PRC)
Nordhaus (2006)	2.5	-0.9		

GDP = gross domestic product, PRC = People's Republic of China.

Source: Tol 2009.

Demonstrating the possible impacts of climate change on economic development or economic growth has followed two different approaches.

A first approach, most notably used by Stern (2007) and more recently by ADB (2009), relies on the use of “integrated assessment models” (IAMs).<sup>8</sup> These models aim to assess the impacts of climate change on specific sectors of the economy (e.g., agriculture, energy, forestry), and then to aggregate these sector-specific effects accounting for the possible interaction that may exist across sectors. Despite the recognized limitations of these models,<sup>9</sup> estimates are that climate change may significantly impact future economic development.

<sup>8</sup> The IAM used by both Stern (2007) and ADB (2009) is known as PAGE2002.

<sup>9</sup> “Making such estimates is a formidable task in many ways. It is also a computationally demanding exercise, with the result that such models must make drastic, often heroic, simplifications along all stages of the climate-change chain. What is more, large uncertainties are associated with each element in the cycle. Nevertheless, the IAMs remain the best tool available for estimating aggregate quantitative global costs and risks of climate change.” (Stern 2007, p. 145).

This appears to be particularly the case in countries of the region. In a business-as-usual scenario, Indonesia, the Philippines, Thailand, and Viet Nam are projected to suffer an average loss of 2.2% of GDP by 2100 on an annual basis, if market impact alone is considered (mostly related to agriculture and coastal zones). This loss could reach an average of 5.7% of GDP each year by 2100 if nonmarket impact is included (ADB 2009). Other studies of a similar nature are summarized in Table 2.

A second approach relies on estimating the effects of changes in temperature and precipitation directly on economic growth. Dell et al. (2008) show large, negative effects of higher temperatures on growth, *but only in poor countries*. In poorer countries, the authors estimate that a 1°C rise in temperature in a given year reduces economic growth in that year by about 1.1 percentage points. Extrapolating these results to the long-run under a climate change scenario, Dell et al. find that a permanent 1°C increase in temperature would reduce aggregate GDP in poor country by 11%.

Though the precise magnitude of the expected impact of climate change on economic development remains a source of investigation, its direction is certain. In a business-as-usual scenario, climate change will reduce economic growth and adversely hamper economic development. This in turn would constrain achieving poverty reduction targets.

The importance of this result is perhaps best illustrated by the impacts of the existing global recession as noted in the recent *Millennium Development Goals Report* (UN 2009). Worldwide, the number of people living in extreme poverty in 2009 is expected to be 55 million–90 million higher than expected before the global economic crisis. The global recession may jeopardize or postpone achieving some of the Millennium Development Goals.<sup>10</sup> More poor implies more households vulnerable to the vagaries of climate change; more poor implies a less climate resilient community, and society.

## **Building climate resilience for the poor: The role of education, particularly for females**

In the above sections, it was argued that future climate change is likely to adversely impact the poor both directly by impacting the dominant

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<sup>10</sup> In 2000, leaders of 189 nations agreed on the Millennium Declaration which includes, among seven other goals, reducing by half the proportion of people living in extreme poverty (defined as less than \$1.25 a day) by 2015.



activities of the poor, threatening livelihoods, and negatively affecting natural resources, and indirectly by reducing economic growth and development—when assessed against a no-climate change scenario. Climate change is thus a serious risk to poverty reduction programs and poverty reduction goals.

Measures to reduce climate change vulnerability and increase climate resilience have been devised at sector levels (ADB 2009), and at a broader level to sustain economic development (Table 3).

**Table 3: Adaptation options for selected sectors**

	<b>Reactive/Responsive</b>	<b>Proactive/Anticipatory</b>
Water	<ul style="list-style-type: none"> <li>• Protection of groundwater resources</li> <li>• Improved management and maintenance of existing water supply systems</li> <li>• Protection of water catchment areas</li> <li>• Improved water supply</li> <li>• Groundwater and rainwater harvesting and desalination</li> </ul>	<ul style="list-style-type: none"> <li>• Better use of recycled water</li> <li>• Conservation of water catchment areas</li> <li>• Improved system of water management</li> <li>• Water policy reform including pricing</li> <li>• Development of flood controls and drought monitoring</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Erosion control</li> <li>• Dam construction for irrigation</li> <li>• Changes in fertilizer use and application</li> <li>• Introduction of new crops</li> <li>• Soil fertility maintenance</li> <li>• Changes in planting and harvesting times</li> <li>• Switching to different cultivars</li> <li>• Educational and outreach programs</li> </ul>	<ul style="list-style-type: none"> <li>• Development of tolerant and/or resistant crops</li> <li>• Research and development</li> <li>• Soil and water management</li> <li>• Diversification and intensification of food and plantation crops</li> <li>• Policy measures, tax incentives and/or subsidies</li> <li>• Development of early warning systems</li> </ul>
Forestry	<ul style="list-style-type: none"> <li>• Improvement of management systems</li> <li>• Promotion of agroforestry</li> <li>• Development and/or improvement of forest fire management plans</li> <li>• Improvement of carbon storage in forests</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of parks, protected areas, and biodiversity corridors</li> <li>• Identification and/or development of species resistant to climate change</li> <li>• Better assessment of ecosystem vulnerability</li> <li>• Development of seed banks</li> <li>• Forest fire early warning systems</li> </ul>
Coastal	<ul style="list-style-type: none"> <li>• Protection of economic infrastructure</li> <li>• Public awareness</li> <li>• Building sea walls and beach reinforcement</li> <li>• Protection of coral reefs, mangroves, sea grass, and littoral vegetation</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated coastal zone management</li> <li>• Better coastal planning and zoning</li> <li>• Development of legislation for coastal protection</li> <li>• Research and monitoring of coasts and coastal ecosystems</li> </ul>
Health	<ul style="list-style-type: none"> <li>• Public health management reform</li> <li>• Improved housing and living conditions</li> <li>• Improved emergency response</li> </ul>	<ul style="list-style-type: none"> <li>• Development of early warning systems</li> <li>• Better or improved disease and/or vector surveillance and monitoring</li> <li>• Improvement of environmental quality</li> <li>• Changes in urban and housing design</li> </ul>

Source: ADB 2009.

Capital investment in adaptive infrastructure will undoubtedly be a source of economic benefits (given the expected climate change projections), which may be targeted to the poor if designed with this objective in mind (pro-poor infrastructure). For example, investment in rural economies and slums upgrading may contribute to poverty reduction and simultaneously increase climate resilience.

While numerous analysts have pointed out that low levels of education (and in particular of female education) are a key impediment to adaptation and climate resilience, the implications of it, with a few exceptions,<sup>11</sup> have not been fully internalized: Investing in education, and particularly in female education, should be a key component of the set of investments aimed at increasing a society's resilience to climate change. This proposition has been empirically estimated by Blankespoor et al. (2009).

In their study, the authors first demonstrate that over the period 1960–2002, female education was a key determinant of the number of people affected by extreme weather events. For a given level of income and extreme weather intensity, the more females are educated, the fewer people affected or killed by extreme weather events. The authors then use this relationship to estimate how many more women in developing countries over the period 2010–2050 would have to be educated in order to offset the impacts of climate change, i.e., to maintain the number people affected or killed by extreme weather events as if there had not been climate change. These numbers are estimated using two Global Circulation Models (GCMs) producing the wettest and driest projections at the global level.<sup>12</sup>

The results indicate that by mid-century, neutralizing the impact of extreme weather events requires educating globally an additional 18 million–23 million young women at a cost of \$11 billion–\$14 billion annually. For the period 2010–2050 as a whole, both GCM scenarios entail about \$110 billion in additional expenditures at the global level.<sup>13</sup> Given the expected population of Asia and the Pacific and the projections that the region will be most impacted by climate change,

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<sup>11</sup> A notable exception is Eriksen et al. (2007), and to some extent ISDR (2009).

<sup>12</sup> The driest overall is CSIRO's Mk 3.0 model, which was transmitted to the IPCC's data collection center in 2005. CSIRO is Australia's Commonwealth Scientific and Industrial Research Organization ([www.csiro.au/](http://www.csiro.au/)). The wettest is NCAR's Community Climate System Model (CCSM), version 3.0, which was released to the public in 2004. NCAR is the US National Center for Atmospheric Research. For a detailed description of the CCSM program, see [www.cesm.ucar.edu/about/](http://www.cesm.ucar.edu/about/)

<sup>13</sup> In present value terms, using a 3% discount rate.

a large proportion of these required increases in education and expenditures take place in the region. By mid-century, South Asia would have to educate 6 million–10 million more women (in addition to the projected number of women in primary and secondary schools by mid-century), at an aggregate cost for the period 2010–2050 of \$31 billion–\$46 billion. For East Asia and the Pacific, the aggregate cost would amount to approximately \$22 billion.

Achieving such incremental education (above and beyond what the country would do) will require significant additional commitment of resources. To put the numbers in some perspective, ADB's total amount of education sector loan, technical assistance, grants, and equity approved over the entire period 2000–2008 reached approximately \$2.6 billion.

Yet, in times of economic downturn, governments often restructure (reduced) budget allocations to up-front capital investment so as to offset the reduction in private capital investment and consumption. As a result, an economic slowdown typically puts strong pressure on education systems in developing countries. There is indeed empirical evidence (albeit limited) that fiscal adjustment in times of crisis is particularly detrimental to the poor (Ravallion 2004).

Moreover, slower growth or reductions in household incomes reduce the ability of parents to send and keep children in schools. As part of an overall strategy to protect existing living conditions (which may include acquiring more debts, and selling productive assets), children are taken out of school both to save money and then to increase household earnings. There is clear empirical evidence that schooling tends to decline in times of economic crisis in low-income countries (Ferreira and Schady 2008). These adjustments are difficult to reverse: It has been shown that once students drop out of school for longer than 12 months, the return rate is very small (World Bank 2009).

Welfare losses resulting from even a short-term economic downturn are not time-framed by the duration of the downturn itself: these losses typically last considerably longer. In this context, the most significant long-term impact of the existing global economic downturn may be that students cannot enroll in school or are forced to drop out from school without prospect of returning—often girls from poor families.

The economic downturn may therefore have unanticipated long-term implications. As shown above, a less educated population is a population that will be less resilient to climate change.

Effective policy instruments to keep children in school (including during economic downturns) are relatively well known and include conditional cash transfer programs, school feeding programs, student fellowships, and block grants to schools. If budget allocation to such

programs were determined on the basis of their costs and benefits, adding “enhancing climate change resilience” as a key benefit of education would call for a significant increase in the resources allocated to keeping children at school in times of economic downturn.

## Conclusions

Given its degree of exposure to natural disasters and extreme weather events, as well as its high population and its large number of poor, Asia and the Pacific is particularly vulnerable to the expected forthcoming onslaught of changes associate with global warming. Building climate resilience in the region will require a vast amount of resources at national planning level as well as sector and local levels. Some of these resources will target specific capital (infrastructure) investments that in times of economic downturn may accomplish multiple objectives: stimulating short-economic growth, poverty reduction, and climate resilience. However, we have argued in this short paper that education can contribute significantly to the building of a climate resilient region.

We thus conclude by suggesting that investment in education, particularly in female education, should become or remain a key budget priority in times of economic recession as more education—especially for females—will contribute significantly not only to poverty reduction, improved living standards, and sustainable economic growth, but also to building a climate-resilient Asia.

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# Alternative energy options of Asia in crises

*Kaoru Yamaguchi and Miki Yanagi*<sup>1</sup>

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## Introduction

The global recession is casting a shadow over Asia. But the nature of the economic, social, and political problems in Asia is different from those in countries of the Organisation for Economic Co-operation and Development (OECD), as is the response. Still, the nature of renewable energy is the same for all countries—it is renewable and abundant. Reflecting national circumstances of existing energy resources, the increasing importance of renewable energy is also a consideration for energy security.

This chapter focuses on this increasing importance of renewable energy in Asia as an alternative energy option for its sustainable development. However, renewable energy is a double-edged sword. It can create jobs and new industries, increase incomes, promote local and regional development, and contribute to energy security. However, it is expensive to develop and commercialize, and requires government support to overcome financial and technological hurdles. Moreover, renewable energy can compete with the living resources of the poor who depend on local, renewable products such as firewood and food.

## Background

### Energy demand growth in Asia

Two recent studies predict that, if current patterns do not change, Asia will be the center of the world's growth of carbon dioxide emissions. Asia's increase in renewable energies will be too slow to change the growth trend of fossil fuel consumption.

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The first, the *World Energy Outlook 2009* (OECD and IEA 2009), in absolute terms expects Asian demand for fossil fuels to double from 2007 to 2030, at the same time as the use of fossil fuels in Latin America and Africa remains relatively insignificant, and that of the OECD decreases. Use of renewables in Asia is expected to grow in this “business-as-usual” case by 1.5%, but that is only half the growth rate of fossil fuels.

The same features are captured by a study from the Asian Development Bank (ADB) (2009). Primary energy demand in Asia and the Pacific is projected to increase from 4,000 million tons of oil equivalent in 2005 to 7,200 million tons of oil equivalent in 2030, an annual growth rate of 2.4%. Coal will maintain the biggest share of primary energy, at 38% in 2030, followed by oil at 27%, natural gas at 15%, others (mainly new and renewable energy sources, including biomass but excluding hydro) at 11% (down from 14% in 2005), nuclear power at 7%, and hydro electricity at 2%. The decline of renewables’ share is due to replacement of traditional biomass by fossil fuel-based commercial energy sources.

The study shows that even with this extraordinary growth of energy demand, per capita electricity generation of 1,800 kilowatt-hours (kWh) in the region is still, in 2030, 37% below the world average of 2,870 kWh. Access to modern forms of energy is a necessary condition for economic development and a high standard of living, but in Asia in 2005, about 930 million people did not have access to electricity. Hence countries need to promote renewable-energy policies and improve energy efficiency to enhance their energy security.

## **Renewable energy in Asia**

Renewable energy comprises the energy that originates from naturally renewable sources, including hydro, solar, wind, biomass, and geothermal. They are carbon neutral and often ubiquitous, although that obviously depends on location and climate.

Asia is blessed with a diverse climate from tropical to temperate, including geologically active regions. In fact, the traditional use of firewood for cooking and micro-hydro for electric power has supported the life of the local poor for a long time. Geothermal has been used for power generation and heat in the People’s Republic of China (PRC), Indonesia, Japan, and the Philippines. The recent emergence of wind power and solar photovoltaic industries in the PRC and India has proved the potential of wind power and of renewable-energy industrialization in developing Asia. However, “new” renewable energy forms, especially solar photovoltaic, wind power, and biofuels, have been unable to compete with fossil-fuel energies without government support.



Traditionally, the lives of local residents are directly connected with the use of renewable energy, especially for biomass, since renewable energy use affects the local economy and social welfare. Therefore, unsustainable use of renewable energy will result in more serious outcomes to the local poor than fossil fuels. Moreover, oversupply of renewable energy can lead to environmental destruction and disturb the markets for basic needs like food and water.

Therefore, the promotion of renewable energy has to be carefully guided to maximize the advantages of these gifts of nature. Well-planned and well-managed promotion of renewable energy, given the nature of renewables as distributed energy supply and the potential for income generation and job creation, can lead to social and economic development in a sound manner.

Renewable energy has been a core source of rural development for some time. Several decades ago in the PRC, the Agricultural Law of 1973 stated that agricultural and rural economic development must expand the use of renewable and clean energy in a sustainable way (Liming 2009). In India, too, the importance of renewable energy had policy recognition in the early 1970s and that country's program for renewable energy was the largest in the world: the Ministry of Non-Conventional Energy Sources (now the Ministry of New and Renewable Energy) is a dedicated ministry for the application of alternative energies, particularly renewables. Notable, too, is the establishment of a dedicated financing agency, the Indian Renewable Energy Development Agency, in 1987.

## **Past crises and the role of renewable energy**

### **Asian financial crisis**

The Asian financial crisis started in mid-1997. It was a coincidence that the United Nations Framework Convention on Climate Change (UNFCCC), third session of the Conference of the Parties (COP3), was held in Kyoto in December 1997. The idea of renewables as an alternative to fossil fuel had gradually spread to policy makers with the help of the Clean Development Mechanism<sup>2</sup> approach.

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<sup>2</sup> This is a financial incentive for developing countries to reduce greenhouse gases through trading emission reductions between developing and industrialized countries (or their companies).

## Impact on renewable energy

Ironically, the Asian crisis accelerated the promotion of renewables. Because of the sudden depreciation of currencies in many countries, the price of imported food and services climbed by two to four times, causing very high inflation in countries such as Indonesia, the Philippines, and Thailand. The impact was especially serious for those who financed domestic projects in foreign currencies (often dollar and yen). Many plans to expand infrastructure suddenly stopped, and governments reduced their budgets. A steep drop in national income and high inflation were typical outcomes of the Asian crisis.

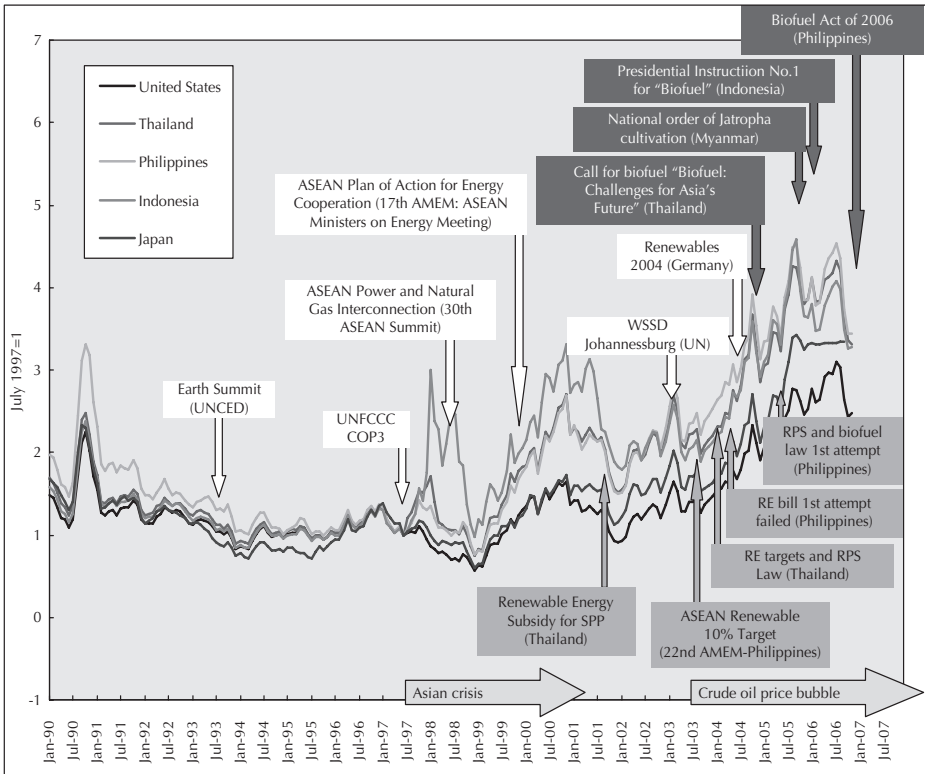
In terms of renewable energy, the fall in income can have two conflicting outcomes—decreased consumption of renewables in the short term, and increased consumption of renewables in the long term. Those who can access subsidized energy, like electricity and kerosene, will increase their consumption because of the slow price adjustment. In effect, domestic energy prices relative to other commodity prices fall to low levels. Sadorsky (2009) shows that, during 1993–2003 for developing economies generally, renewable energy income elasticities were much larger than electricity income elasticities: a 1% change in income had a much bigger effect on increasing renewable energy consumption than on increasing electricity consumption. The outcome stems from the relative increase of subsidized energies—typically fossil fuels—and the relative decrease of renewables.

However, for those who cannot access subsidized energy, or as a long-term consequence, the demand for cheap domestic renewables from forests, such as firewood, increased and seemed to cause environmental degradation.

For renewable energy, the strongest impact resulted from the depreciation of the currency and the real increase of the prices of fossil fuels compared to domestically available resources. Figure 1 shows changes in crude oil price indexes. Nominal international crude oil prices (for West Texas Intermediate) were converted into domestic currencies for Indonesia, the Philippines, Thailand, and Japan. These prices are then inflation-adjusted and converted to indexes, with July 1997 as 1.

The lines in Figure 1 show relative changes of international crude oil prices in domestic currency. By the end of 2000, in comparison with Japan and the US, the relative prices of the other three Asian countries increased significantly to almost three times their July 1997 level. In other words, by 2000, the relative cost competitiveness of domestic energy sources in these three Asian countries had increased to the level of 2006 or 2007 when OECD countries began to be aware of the serious impact of the crude oil price bubble. This experience of the Asian crisis prompted energy policy in these countries to move

**Figure 1: Evolution of crude oil price indexes**  
 (July 1997 = 1, nominal value of \$1 in each local currency)



AMEM = ASEAN Ministers on Energy Meeting, ASEAN = Association of Southeast Asian Nations, COP3 = Third Session of the Conference of the Parties, RE = renewable energy, RPS = renewable portfolio standard, SPP = small power producers, UNFCCC = United Nations Framework Convention on Climate Change, WSSD = World Summit on Sustainable Development.

Source: International Monetary Fund, International Financial Statistics; Kaoru Yamaguchi.

to domestically available and cheaper green energy. Indonesia and Thailand, for example, introduced subsidy programs for small power producers, and the Philippines began to look into assisting the poor through rural electrification, using renewables.

**Impact on the environment**

The negative impact on the environment of the Asian crisis was often seen in greater land degradation as pressure increased to clear forests for firewood, timber, and agricultural use. Financial difficulties delayed investments in clean energy and development. However, a positive impact was a decrease in economic activity, which reduced consumption

of fossil fuels and discharge of pollutants (Siddiqi 2000). Indeed, according to several studies, the overall impact of the crisis on the environment was positive (for example, Gellert 2005 for Indonesia).

## **Oil price bubble**

The relative price of crude oil reached bottom by 2002, but it began to creep up from 2003, surging to over \$60 per barrel in 2006 and topped out at way over \$100 per barrel in mid-2008. This was a real increase in international crude oil prices and economic recovery from the Asian crisis could not offset it.

## **Accelerated responses toward renewables and the biofuel boom**

The oil price bubble accelerated efforts for energy security through renewable energy. One difference from the Asian crisis was that the bubble also hit the PRC and India; another was that oil-exporting countries such as Brunei Darussalam and Malaysia enjoyed windfall benefits.

Before 2004, the general concern was to promote renewable energy. In 2003 and 2004, various renewable promotion initiatives were introduced, including a 10% target for ASEAN (in 2003), renewable portfolio standards in Thailand, and the Renewable Energy Bill in the Philippines. But as crude oil prices continued to run up into 2005, policy priority shifted to biofuels—which can replace crude oil and oil products, and can create new industries with the potential to directly generate income for rural farmers and the poor—such as the call for biofuels in Thailand in 2005, and in 2006 a jatropha cultivation order in Myanmar, a presidential instruction for a national biofuel team in Indonesia, and the Biofuel Act in the Philippines.

The Asian responses to rising crude oil prices reached a summation in the Second East Asia Summit in Cebu, Philippines in January 2007, with the Cebu Declaration on East Asian Energy Security. The clear message was that energy security was in danger. In terms of renewable energy, a promising solution was biomass, especially in the form of biofuels. Recognizing the importance of this approach, Japan announced an energy cooperation initiative titled Fueling Asia—Cooperation Initiative for Clean Energy and Sustainable Growth. One of the core activities is cooperation for promoting biomass use in Asia.

Table 1 shows the share of crops that can be used as first-generation biofuel (i.e., using agricultural residue and/or products). Asia accounts for 90% of global production of palm oil, which can

be converted to biodiesel, with lower shares of rapeseed and sugarcane. The PRC and India have exceptionally strong potential, although their populations' food needs are also huge. Among ASEAN countries, Indonesia and Malaysia are the largest producers of palm oil. The Philippines, Thailand, and Viet Nam are among the top 20 producers of sugarcane and cassava, which are sources of bioethanol.

Biofuels can be categorized into two main types: one is biodiesel, which can replace mineral diesel oil; the other is bioethanol, which can replace gasoline. At the current level of commercially competitive technologies in Asia, the region can produce biodiesel and bioethanol using first-generation technologies.

The problem, however, is that the agricultural residue and products for biofuel are also used for food, including that for people and livestock. In fact, most biodiesel in Asia is from palm oil (Indonesia and Malaysia) and coconut oil (the Philippines), and most bioethanol is from sugarcane (India, the Philippines, and Thailand). The fear is that the increased price of biofuel will increase the supply of biofuel, decreasing the land available for food. The anticipated outcome is a shortage of food and consequent price increases. Therefore, a criticism by the famous scientist, Lester Brown (2006), that the "boom in bioethanol is a competition between the 800 million people in the world who own automobiles and the 3 billion people who live on less than \$2 a day" is a serious challenge to the cause of poverty reduction through the promotion of biofuel.

Although the needs and problems of biomass for food security and sustainable environment are well documented, policy implications from an Asian perspective should be noted. Most Asian countries are agrarian and have a strong agricultural export base. The emergence of biofuel as an agricultural product has a strong impact on agriculture in terms of increased value-added potential: even if this increases the price of food, it will generate economic benefits to farmers and traders. The most vulnerable, though, are the urban poor—not the rural poor—who cannot access the benefits of increased value added in agriculture. The challenge is not price hikes for agricultural products, but income redistribution.

## **Crisis response**

The experiences of the Asian crisis, the crude oil price hike, and the environment-sustainability debates suggest multiple crisis-response dimensions, including energy prices, food prices, exchange rate adjustment, and environmental pricing (the value of the environment measured by the cost to protect it).

**Table 1: Top 20 countries for the production of potential biofuel crops**

	Used for Ethanol Production		Used for Biodiesel Production		Rapeseed	billion ton soy oil	
	Sugarcane	Cassava	Com	Palm Oil			
1 Brazil	420,121	Nigeria	280,228	1 Indonesia	China, People's Republic of	United States	82,820
2 India	232,320	Brazil	132,645	2 Malaysia	15,350	Canada	50,195
3 China, People's Republic of	88,730	Indonesia	34,860	3 Thailand	850	India	38,300
4 Thailand	49,572	Thailand	20,500	4 Nigeria	810	Germany	16,900
5 Pakistan	47,244	Chongo, Democratic Republic of	14,974	5 Colombia	770	France	6,600
6 Mexico	45,127	Ghana	9,739	6 Papua New Guinea	380	United Kingdom	1,914
7 Colombia	39,849	Angola	8,606	7 Ecuador	340	Poland	1,434
8 Australia	38,246	Iranzania	7,000	8 Côte d'Ivoire	320	Australia	1,125
9 Philippines	31,000	India	6,700	9 Costa Rica	285	Czech Republic	775
10 United States	25,804	Mozambique	6,150	10 Congo, Democratic Republic of	175	United States	680
11 Indonesia	25,500	Viet Nam	5,700	11 Cameroon	165	Pakistan	401
12 South Africa	21,725	Uganda	5,500	12 Honduras	165	Denmark	358
13 Argentina	19,300	Paraguay	4,910	13 Guatemala	155	Hungary	295
14 Guatemala	18,000	China, People's Republic of	4,216	14 Ghana	120	Russian Federation	285
15 Egypt	16,335	Benin	3,100	15 Brazil	110	Ukraine	270
16 Viet Nam	15,000	Malawi	2,600	16 Philippines	60	Slovakia	250
17 Cuba	12,500	Madagascar	2,191	17 Angola	58	Bangladesh	225
18 Venezuela	8,800	Colombia	2,125	18 Nigeria	54	Lithuania	200
19 Peru	7,100	Philippines	1,630	19 Thailand	4,180	Guinea	199
20 Iran	6,500	Côte d'Ivoire	1,500	20 India	3,951	Romania	154
Share of Asia (%)	38		29	27	90		43

Source: Food and Agriculture Organization of the United Nations 2005. <http://faostat.fao.org/site/339/default.aspx>.

The environmental aspects of biofuel production are crucial, and will remain so. The debates over the environmental and social benefits of biofuels are now converging on the issue of the sustainability criteria of biomass production. The concept is that biomass and biofuel use can benefit the environment and society as long as they are produced sustainably, in terms of the environment, food, and the economy. Sustainable methods include technological advances (second- and third-generation technologies) and sustainable land use (bringing in infertile or unused farm land). Another solution is to improve plant species and increase yields. Still another is developing nonedible energy sources and employing non-land-intensive clean power sources, such as plankton, seaweed, fuel cells, micro hydropower, pico hydropower, and wave energy.

The preferred solution under the sustainable criteria in Asia using the prevalent first-generation technologies is the use of nonedible oils. One source is a plant called *jatropha*, which can grow in a harsh environment and does not compete with food because of the toxin in it. Expectations for this plant have been so high that initiatives for biofuels in Indonesia and Myanmar were based on relatively weak evidence. In fact, as of 2006, there were no proven plantations of *jatropha* to produce biodiesel commercially. But nearly 4 years after the introduction of the plant, there are still many hurdles for it to compete with other alternatives like palm oil and coconut oil. However, on infertile lands and in a harsh environment, successful cases have been reported, by UNEP (n.d.) among others. If cash crops for food are difficult to cultivate and it is difficult to access oil products, this nonedible oil could at least supply valuable biofuel as an alternative to oil products such as kerosene and diesel.

Other nonedible oils from sources such as *pongamia* (India) and algae (Japan) are also promising, though of course the most productive energy crops by country depend on climate and species endemism.

## **Emergence of renewable energy industries**

The central concern thrown up by the oil price bubble was energy security, as seen in the Second East Asia Summit with the PRC and India among the most worried, in view of their increasing demand for energy. Therefore, it was natural that the PRC should begin to focus on renewable energy, as demonstrated at the Beijing International Renewable Energy Conference of 2005. (It was around this time that India changed the name of its relevant ministry to the Ministry of New and Renewable Energy.)

Both the PRC and India have long experience of renewable energy for rural development. Now energy security and a potential market for advanced technologies were added reasons for promoting renewable energy. The result has been the success of wind-power industries in the PRC and India (Figure 2) in fulfilling the demand of the domestic market (not export markets). The success of the solar photovoltaic industry in the PRC (and Taipei, China) should also be noted. But in the solar photovoltaic case, success stemmed from export markets, especially Germany and Spain, through strong policy initiatives of feed-in tariffs (a price guarantee system). These examples prove that renewable technologies are not beyond the reach of developing countries and that they can be competitive even in such cost-sensitive countries as the PRC and India.

Appropriate policy measures can stimulate internationally competitive industries. In India, the role of local government and international cooperation for technology transfer was critical for the country to take advantage of its vast wind power potential. In the PRC, the government has given high priority to renewable energy as part of a future sustainable-electricity system. Soon after the 2005 conference, it introduced a renewable energy law.

## **Global financial crisis, 2008–?**

### **Links to Asia**

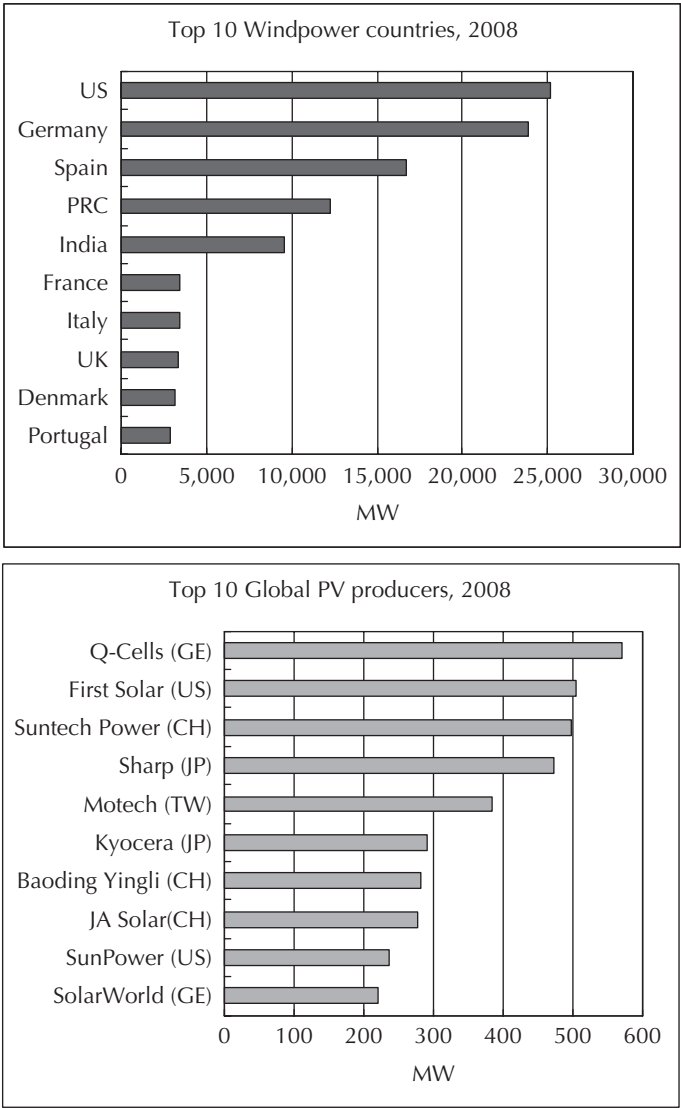
There are different views of the impact of the crisis on developing Asia. One is that the impact is serious and will be long lasting (Hong and Tornell 2005). Another—often put forward by proponents of “decoupling”—implies that the crisis in the West will not have a major impact on developing Asia, and that the region will recover soon, as already seen in the cases of the PRC and India (Fidrmuc and Korhonen 2009). Another view sees the impacts on developing Asia as small because of the different financial systems in the US and Europe from Asia (Liming 2009). The present authors’ view is that for Asian countries, the current crisis is not purely financial, since it is hitting export revenues, and the more pertinent issue is the impact of the slowdown on global demand growth and the brakes applied to global investment in green alternative energy.

### **Implications for alternative energy development and the environment in Asia**

The main environmental concern stemming from the current crisis is that investment in clean environmental technologies, including



**Figure 2: Top 10 wind-power countries and top 10 solar photovoltaic (pv) companies**



CH = People's Republic of China, GE = Germany, JP = Japan, MW = megawatt, PRC = People's Republic of China, UK = United Kingdom, US = United States, TW = Taipei,China.

Source: World Wind Energy Association and PV News (April 2009).

renewable energy, could slow. As with the 1997–1998 Asian crisis, this will be the net result of a slowdown in environmental degradation (due to slower economic activity) and of decreasing investment opportunities for clean development.

Generally, given the higher growth rate of GDP and the higher elasticity for energy, recessions in Asia seem to have positive outcomes for the environment, as with the Asian crisis. However, Asia's economic recovery without further investment in clean development will continue damaging the environment.

The prospects for biofuel depend not only on the crude oil price, but also on the prices of source crops. Although crude oil prices have recently fallen, policy initiatives for biofuels will continue. One reason is that crude oil prices of \$60–\$70 per barrel are still at 2006 levels, when biofuel became a serious agenda item. Furthermore, the prices of source crops decreased with other agricultural prices. As a result, more farmers are willing to sell their products for biofuels when food prices go down, as seen with palm oil in Malaysia.

The largest impacts of the global recession will be on exporters in the renewable energy industry, such as solar photovoltaic cell makers in the PRC and Taipei, China. Because of the recovery of the European renewable energy market (the largest export destination), prospects are improving. Although exports are the key driver for the industry, the fast recovery of the PRC relative to OECD countries is now turning out to be a big opportunity to expand the domestic market with the help of initiatives from the Government of the People's Republic of China.

## **Asian approach to a “Green New Deal”: Turning rural areas into growth centers**

### **Framework and financing**

Numerous studies outline types of finance for the poor, such as microfinance and microcredit, and application of revolving funds for renewable energy; the most comprehensive is Liming (2009). That study focuses on the PRC and India, as the countries most experienced in rural electrification and renewable energy, and concentrates on the issue of finance as key for successful implementation. The study shows that favorable regulatory, legislative, and policy conditions are critical for financing renewable, rural energy.

According to Liming, the regulatory framework has been crucial for the PRC. The 1998 Energy Conservation Act is one element. It emphasizes the importance and strategic role of using renewable energy to reduce carbon dioxide emissions and to protect the environment. The Renewable Energy Law, effective 2006, is the latest piece in the framework. It aims to increase renewable energy capacity to 15% by 2020 with a commitment of \$180 billion in funding for renewable energy by then. Most important, it requires grid operators to purchase

resources from renewable energy producers, and offers financial incentives to foster renewable energy development, including subsidized loans and a range of tax breaks. The PRC's electricity grid operators are obliged to purchase all the electricity generated, but they can pass on to customers the cost of purchasing this power.

In India's regulatory framework, the most important item is the Electricity Act of 2003. It has several provisions favorable to renewable energy, including rural electrification. It provides for local generation and distribution of electricity by a legal community, rural franchisees. Most important, it empowers state electricity regulators to promote renewable energy and to specify purchase of electricity from renewable energy sources.

In terms of finance for rural renewable energy investments, India is the most experienced country in Asia. The key institution is the India Renewable Energy Development Agency, which is the main national provider of finance for renewable energy projects. (Although the PRC's financial incentive system is not as developed as India's, the government itself has provided support to the sector since the 1950s.) The major financial incentives in India today are subsidies, tax measures, and favorable customs duties.

Because the promotion of renewable energy has evolved from a government mission for rural development (as seen in the PRC and India, and developing countries generally), the most important financing source is the government, often with international funding. Funding tools are grants, renewable energy service companies, concessional loans, joint ventures, asset financing, venture capital, subsidies, and tax reductions.

## **Role of finance for broader deployment of renewable energy**

In a stalled economy, the catalytic function of public finance for private projects is vital. Means include concessional loans, guarantees, equity participation, and international trade insurance, both as financial support but also as a message of government vision, especially for renewable energy in its infant stage. For instance, the World Bank Climate Investment Funds aim to deploy new technologies for renewable energy. They are guided by UNFCCC deliberations on a prospective climate regime, through the Clean Technology Fund for scaling up investments in low-carbon technologies and diffusion of renewable energy, and through the Strategic Climate Fund for supporting various programs to test innovative approaches to climate action.

Another technology transfer fund is the Global Environment Fund, which has a catalytic function among the private sector, and regional and

multilateral agencies, with an operational strategy and long-term program for promoting energy efficiency and renewable technologies. The bureaucratic procedures of this fund may be open to criticism, though.

For commercial diffusion of renewable technology, the following conditions are required from the macro development standpoint: government leadership; well-prioritized strategies; and frequent communication among industry, research institutions, governments, and financial partners. From the project developer's standpoint, there are many challenges. Some subsidies to fossil fuels are economic obstacles to renewable energy, with their "lock-in" mechanisms. Removing fuel subsidies would contribute to global emissions reduction of more than 6% of carbon dioxide (OECD 2000, Table 5).

## **Innovative financing and stimulus for distributed energy**

Investment in renewable energy in rural areas is essential. The distributed energy system in rural areas is key to solving the problems of energy security, a clean environment, and the global recession.<sup>3</sup> All these are national problems originating from movement toward sustainable development, and require national actions to solve them.

One innovative approach is to integrate financial tools for rural development, environmental protection, energy security, advanced technologies, and job creation into the finance required for renewable energy. This cross-cutting approach is increasingly important, as underlined in a study by the Institute for Global Environmental Strategies for innovative finance.<sup>4</sup>

Stimulus spending for these causes has been tried in Asia. One example, as explained above, is jatropha cultivation. This policy was innovative in the sense that multiple dimensions of financial requirements, such as rural development, energy security, and renewable energy, were integrated into one policy. The strategy aimed to support the supply side (farmers) to increase the supply of biodiesel. However, the achievements are arguable, since the policy does not elaborate on the measures for the demand side (who buys?). In addition, public education is crucial. New technologies like biofuels are relatively new to the public, and therefore commercial markets, even if it takes several years, have to be secured through education.

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<sup>3</sup> Distributed energy refers to energy supplied from small-scale, "distributed" locations, such as solar energy and wind power.

<sup>4</sup> [www.iges.or.jp/APEIS/RISPO/p\\_report\\_2nd/06\\_3\\_2\\_1\\_innovative\\_financing\\_for\\_renewable\\_energy.pdf](http://www.iges.or.jp/APEIS/RISPO/p_report_2nd/06_3_2_1_innovative_financing_for_renewable_energy.pdf)

The carbon market is also a source of innovative funding. As represented by the Clean Development Mechanism, international pressure and agreements to reduce carbon dioxide emissions give price signals to renewable energy investors. In fact, renewable energy projects account for nearly 60% of the mechanism's projects.

## **Limitations**

Any approach has limitations in its generalization of applicability. A society may not prioritize economic growth. Equally, a renewable energy industry in the community may not be appropriate for all renewable energy sources. For example, although palm oil is relatively easy to exploit in terms of technology, rice husks and sugarcane require high-technology and well-managed systems for pollution control. There are also gaps in education and skills, often between rural and urban areas. The concept of a rural energy industry has to be addressed locally, not generally.

## **Conclusions**

Asia is rich in renewable energy, and the investment reward is expected to be substantial in the long term, meaning that the financial crisis will have had major implications for Asia to move toward green energy to secure energy security, drive economic growth, and shift rural areas from centers of poverty to centers of growth.

Living conditions of local residents are directly connected with the use of renewables, especially for biomass, and the effects on the local economy and social welfare are very high. These conditions justify government intervention and support to the energy sector to promote renewable energy. However, cases have been both successful and unsuccessful. Stimulus for a nonexistent market (like jatropha) is risky. Proven market commodities like sugarcane and palm oil are more suitable for government money (research and development aside).

It would also appear that, as in many other areas, consistent and determined policy works better than untested innovative approaches. A current challenge to promoting renewable energy is in cross-cutting approaches in energy, agriculture, infrastructure, transport, finance, and distributed energy and/or rural development. These approaches require strong political leadership with public support to be integrated from the various functions of present government structures. Finally, an appropriate institutional structure for promoting the diffusion, development, and expansion of clean technology is increasingly important.

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## Poverty and Sustainable Development in Asia Impacts and Responses to the Global Economic Crisis

On 28–30 September 2009, the Asian Development Bank, the governments of the People’s Republic of China and Viet Nam, and the ASEAN Secretariat jointly organized a high-level Asia-wide conference in Ha Noi on the social and environmental impact of the global economic crisis on Asia and the Pacific, especially on the poor and vulnerable. The conference also served as the 3rd China-ASEAN Forum on Social Development and Poverty Reduction and as the 4th ASEAN+3 High-Level Seminar on Poverty Reduction. It was supported by various development partners.

This book features selected papers from the Ha Noi conference. It is designed with the needs of policy makers in mind, utilizing field, country, and thematic background studies to cover a large number of countries and cases. It is complemented by a website comprising more information about the conference, and all the papers presented there: [www.adb.org/Documents/Events/2009/Poverty-Social-Development/default.asp](http://www.adb.org/Documents/Events/2009/Poverty-Social-Development/default.asp).



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