

**Inequality in Asia:**  
**a synthesis of recent research on the levels, trends, effects  
and determinants of inequality in its different dimensions**

**Arsenio M. Balisacan and Geoffrey M. Ducanes**

February 2006

The Inter-Regional Inequality Facility

Secretariat:  
Overseas Development Institute  
111 Westminster Bridge Road  
London SE1 7JD  
UK

This study was sponsored by the Inter-Regional Inequality Facility. The Facility exists to promote inter-regional dialogue and knowledge sharing on the issue of inequality – how it affects development, and how it can be addressed by policy – between Africa, Asia and Latin America. The Facility funds research, exchanges and advocacy activities which strengthen South-South dialogue on this issue, and help build a coalition in favour of a more equal and inclusive development process.

It is a collaboration between the African Development Bank, the African Union Commission, the Asian Development Bank, the Inter-American Development Bank, the New Partnership for African Development and the United Nations Economic Commission for Africa. It was established in September 2004, with initial funding from the UK Department for International Development. The Overseas Development Institute (ODI) in London is providing secretariat services to the Facility. More details about the Facility and its activities can be found at: [www.odi.org.uk/inter-regional\\_inequality](http://www.odi.org.uk/inter-regional_inequality).

Arsenio M. Balisacan is Professor of Economics, University of the Philippines, and Director of the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA).

Geoffrey M. Ducanes is Staff Consultant at the Asian Development Bank.

For correspondence, please contact: [ambalisacan@agri.searca.org](mailto:ambalisacan@agri.searca.org).

## **Acknowledgements**

The authors are grateful for the comments of Edward Anderson, Shiladitya Chatterjee, and participants at the Meeting of the Inter-Regional Inequality Facility held at the UK Department for International Development, London, on 26 April 2005.

ISBN: 0 85003 782 4

© Overseas Development Institute 2005

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publishers.

# Contents

<b>Executive Summary</b>	<b>iv</b>
<b>1. Introduction</b>	<b>1</b>
1.1 Aims and objectives	1
1.2 Methodological issues	1
<b>2. Levels of Inequality</b>	<b>4</b>
2.1 East Asia	4
2.2 South Asia	5
2.3 Southeast Asia	7
<b>3. Trends in Inequality</b>	<b>10</b>
3.1 East Asia	10
3.2 South Asia	11
3.3 Southeast Asia	14
<b>4. Effects of Inequality</b>	<b>17</b>
4.1 East Asia	17
4.2 South Asia	18
4.3 Southeast Asia	19
<b>5. Determinants of Inequality</b>	<b>20</b>
5.1 East Asia	20
5.2 South Asia	21
5.3 Southeast Asia	23
<b>6. Data and Measurement Issues</b>	<b>25</b>
6.1 East Asia	25
6.2 South Asia	26
6.3 Southeast Asia	27
<b>7. Conclusion</b>	<b>29</b>
<b>Bibliography</b>	<b>30</b>
<b>Annex 1: Institutional Sources</b>	<b>35</b>

## Executive Summary

This paper reviews the existing literature on inequality in most of the major Asian countries. Asia is an interesting focus for the study of inequality, not just because it accounts for the bulk of the world's population but also because of the variety of experiences of its constituent countries with regard to inequality and growth.

With the exception of China, the East Asian countries have a common history of having been able to achieve rapid economic growth while maintaining inequality at relatively low levels. Their actual experience runs counter to the view that increasing inequality is a natural consequence of economic growth, at least initially. This history of rapid growth shared equitably enabled Japan, South Korea and Taiwan practically to wipe out absolute poverty from their population. For all three countries, land reform and support to the agriculture sector, in terms of infrastructure development and price support, have mainly been credited for the achievement.

China has a starkly different experience from the other East Asian countries however. As a purely socialist country up to the late 1970s, China was seen to have the lowest level of inequality in East Asia. Since adopting market-oriented policies, the economy has grown very rapidly, and so have inequality levels. China is now the fastest growing country in the world but also has the highest level of inequality in East Asia. The rising inequality level has prevented its rapid growth from making as much of a dent in its poverty level as was the case in the three other East Asian countries. Market reforms, combined with restricted spatial labour mobility, are seen to have resulted in urban-rural inequality in the country being the highest in the world. Nonetheless, the rapid reduction of absolute poverty in China is phenomenal by Asian standards, owing mainly to its rapid growth.

For South Asia, the studies reviewed in this paper show all countries as having had recent experiences of rising inequality (India in the 1990s; Pakistan in the late 1980s; Bangladesh in the first half of the 1990s; Nepal from the mid-1980s to the mid-1990s; and Sri Lanka over the past three decades, according to limited data). For all five countries, many studies identify the same culprit for inequality increases: unequal (in some cases increasingly unequal) access to land and education, and increasingly unequal returns to these holdings. The wide disparity in landholdings is seen especially to adversely affect income distribution in rural areas where agricultural activities are the main source of income. On the other hand, educational disparity (higher education is seen to be afforded only by the rich) is seen to cause the unequal returns to labour, the main source of income in the urban areas. The caste system is also seen to perpetuate the inequality levels.

Growth-redistribution decomposition studies for all South Asian countries also show that the increase in inequality level experienced significantly reduced the poverty-reduction potential of their economic growth. This is particularly important for a country such as India, where every 1% reduction in poverty incidence is equivalent to more than a million people being lifted out of poverty.

Compared with the East Asian and South Asian countries, the Southeast Asian countries have more varied recent experiences. In the 1990s, Indonesia, Philippines and Vietnam experienced rising inequality. Thailand was the opposite, experiencing declining inequality from 1992 up to 1998 (although from 1980 to 1992 it experienced an almost monotonic increase in inequality). Malaysia, on the other hand, had stable inequality for the period.

Indonesia's relatively low inequality is credited to its widespread distribution of land and wide access to education, as well as the relatively low urban-rural income disparity in the country. Thailand's high urban-rural disparity is blamed for its high level of inequality. In the Philippines, the failure of agrarian reform and the uneven quality of education are two of the factors cited for

high inequality. Additional blame is placed on failed industrialisation as well as high fertility among the poor.

Indonesia's stable inequality is seen to have enabled the country to reduce poverty successfully, although the Asian crisis cut significantly into those gains. On the other hand, the increase in inequality in the Philippines from 1994 to 1997 – a rare occurrence of consecutive growth years in the country – has prevented it from further reducing poverty. Likewise, Thailand's increasing inequality through the 1980s to the early 1990s severely reduced its rate of poverty reduction, especially in the rural areas.

In Malaysia's case, the concern is less on overall inequality but rather on the observed stark inequality among the ethnic groups. The indigenous Malays are observed to be a lot worse off than the Chinese and the Indians. This has prompted the government to adopt a framework of development called the New Economic Policy, which has given special attention to the Malay ethnic group so that this group can catch up with the others. This policy has been deemed at least partially successful; now the emerging concern is inequality *within* ethnic groups.

There is therefore a fair amount of diversity in both levels and trends in inequality across the Asia region, as summarised in the table below. However, although internally quite diverse, inequality in these parts of Asia taken as a whole is considered to have been typically lower, and to have increased slower, than in other parts of the developing world such as in Latin America and Africa. A positive outcome of this is that growth in the region has been associated with a larger decline in poverty incidence – approximately 2% decline in poverty incidence for every 1% growth – compared with the other regions.

**Income Inequality Summary Table**

Country	Period Covered	Inequality Trend	Recent Gini*
Chinaa	1981–2000	↑	0.46
Korea, Southb	1986–1998	↑ ↓ ↑	0.34
Taiwana	1975–2000	→	0.33
Japanb	1986–1998	↑ →	0.32
Indiac	1983–2000	→	0.33
Pakistanb	1979–2002	↑ →	0.40
Bangladesha	1989–2000	↑ →	0.42
Nepala	1985–1996	↑	0.34
Sri Lankab	1970–2002	↑	0.47
Indonesiad	1981–1999	→ ↑ ↓	0.33
Philippinesb	1985–2000	→ ↑	0.51
Malaysiab	1979–1997	↓ →	0.46
Thailandb	1980–1998	↑ ↓ →	0.51
Vietnamc	1992–1998	↑	0.35

*Source:* various (see discussions below).

Notes: Gini based on: a) per capita income; b) household income; c) per capita expenditure; and d) household expenditure. \*Note that as the gini ratios are not all based on the same income measures, they are not strictly comparable.



# 1. Introduction

Inequality has only recently regained its rightful place as an important field of study. Years, and sometimes even decades, of relatively high and consistent economic growth for many developed and developing countries have reduced absolute deprivation to such an extent that the bigger concern now, it is believed, is relative deprivation.

Many studies contend that relative and absolute deprivation, or inequality and poverty, are strongly interdependent, making the study of inequality even more important. For any given level of any natural or human capital, the more inequitable its distribution the higher the poverty one could expect. Inequality is also seen to affect the growth rate of an economy – and, through this, poverty – through multiple transmission mechanisms: (i) its effect on redistributive policies and the possible inefficiencies those may bring; (ii) its potential to constitute a cause of socio-political instability or violence; (iii) its detrimental effect on the market size and aggregate demand; (iv) its effect on investment allocations, especially human capital; and (v) even its effect on the fertility rate.<sup>1</sup>

Outside its effect on growth and poverty, inequality is important in itself. First, it is easy to imagine that for many people inequality, in terms of how they stack up against other people, is an argument in the utility function and thus in the social welfare function. And secondly, inasmuch as inequality arbitrarily accords different opportunities to different people who may have nothing to do with the existing inequality, it is important to address it on ethical grounds.

## 1.1 Aims and objectives

This paper reviews the existing literature on inequality in most of the major Asian countries. Asia is an interesting focus for the study of inequality, not just because it accounts for the bulk of the world's population but also because of the variety of experiences of its constituent countries with regard to inequality and growth. On one extreme are Japan and the East Asian tigers – South Korea and Taiwan – which are widely heralded for accomplishing decades-long high economic growth and at the same time maintaining stable inequality levels. At the other end are countries like Pakistan and Bangladesh in South Asia, which have experienced the double whammy of relatively lower growth and increasing inequality. Then there are the more 'usual' occurrences, conforming to Kuznets' hypothesis, of countries experiencing high growth with increasing inequality, most typified now by China.

The next section discusses some methodological issues, such as the choice of countries included in the paper as well as data and measurement concerns that it is important to keep in mind. Sections 3 to 4 discuss levels and trends of inequality. Section 5 enumerates the effects of inequality that have been noted in the literature. Section 6 discusses the determinants of inequality. The last section provides concluding remarks.

## 1.2 Methodological issues

This paper focuses on three regions in Asia: East Asia (four countries), South Asia (five countries), and Southeast Asia (five countries). The 14 countries, selected based on population size weighted with other factors, such as the size of the economy, are China, Japan, South Korea and Taiwan for East Asia; India, Pakistan, Bangladesh, Nepal and Sri Lanka for South Asia; and Indonesia,

---

<sup>1</sup> See, for example: for (i) Perrson and Tabellini (1994), Knack and Keefer (2000), Alesina and Rodrik (1994), Deininger and Squire (1998) and Perotti (1996) for evidence or lack thereof; for (ii) Knack and Keefer (2000) and Alesina and La Ferrara (2004); for (iii) Murphy et al. (1989); for (iv) Bénabou (1996); and for (v) Perotti 1996.

Malaysia, the Philippines, Thailand and Vietnam for Southeast Asia. These countries account for more than 50% (around 3.4 billion in 2004) of the world's population and about 96% of Asia's. They also account for about 96% of Asia's GDP.

Table 1.1 shows some economic and demographic indicators for these countries. Standing out from the data are the large disparities in indicators between regions. The East Asian countries of Japan, South Korea and Taiwan have much higher per capita GDP than all the other countries. China has only a moderate level of per capita GDP now – roughly one-quarter of that of South Korea and Taiwan – but its rapid GDP growth, averaging over 9% a year in the past two decades, indicates it will soon catch up with the tigers. With the exception of Sri Lanka, the South Asian countries have the lowest per capita GDP levels, whereas the Southeast Asian countries generally lie in between those of East Asia and South Asia in terms of economic prosperity. China and India have population sizes many times bigger than the other countries, and India's prevailing high population growth will probably soon lead it to overtake China as the most populous nation in the world.

**Table 1.1 Descriptive Statistics for Countries Included**

Country	Per capita GDP PPP 2002 (US\$)	Annual GDP growth rate 1975–2003 (%)	Population in millions 2003	Annual population growth rate 1975–2003 (%)	Share in Asia GDP,* 2003 (%)
China**	4,580	9.7	1,298.8	1.2	15.7
Korea, South	16,950	6.9	48.6	1.1	6.0
Taiwan***	18,000	6.5	22.7	1.1	3.7
Japan	26,940	2.9	127.3	0.5	56.7
India	2,670	5.2	1,065.1	1.9	6.4
Pakistan	1,940	5.1	159.2	2.8	0.8
Bangladesh	1,700	4.6	141.3	2.4	0.6
Nepal	1,370	4.0	27.1	2.3	0.1
Sri Lanka	3,570	4.6	18.9	1.3	0.1
Indonesia	3,230	5.2	238.5	1.8	2.0
Philippines	4,170	3.2	86.2	2.3	1.0
Malaysia	9,120	6.5	23.5	2.5	1.1
Thailand	7,010	6.3	64.9	1.5	1.6
Vietnam****	2,300	7.3	80.3	1.9	0.4
All 14 countries	4,729	4.7	3,402.4	1.6	96.0

*Sources:* UNDP Human Development Report 2004 for per capital GDP, International Financial Statistics 2004 for GDP and population growth rates, US Census Bureau International Database for population levels, and USDA for share in GDP.

Notes: \* In 2000 US\$ (not PPP); \*\* for China, annual GDP growth refers only to period 1978–2000; \*\*\* for Taiwan, population growth refers only to period 1978–2003 and per capita GDP in PPP US\$ was obtained from CIA World Factbook; \*\*\*\* for Vietnam, annual GDP refers only to period 1989–2003.

We look at the different facets of inequality, subject to what is available in the literature. Since most inequality studies in Asia focus on income inequality based on representative household surveys, the bulk of our discussion will likewise be focused on in this direction.

There are some important considerations to keep in mind when considering income inequality. Income inequality measures may be based on either income variable or expenditure variable. There are various theoretical and practical reasons for preferring one to the other. For instance, proponents



of the expenditure variable highlight that it has a closer relationship than does the income variable to the concept of permanent income – the true standard of living. On the other hand, an accurate expenditure survey requires greater detail (i.e. more questions) than a similarly accurate income survey; as a result, for surveys that are not sufficiently detailed, proponents of the income variable say this is a better basis for measurement.

For the same country, inequality measures based on income are generally higher than those based on expenditure, as expected. For this and other reasons – such as the use of scale equivalence (e.g., whether individual or household is the unit of analysis), cost-of-living adjustments across space and over time, and differences in the definition of income or expenditure – inequality measures sourced from different studies are usually not comparable either across countries or over time for a single country. This is important to bear in mind when looking at the inequality figures for the different countries considered here. For a more comprehensive discussion of these and other data issues in Asia, see ADB (2004a).<sup>2</sup>

As to which actual measure of inequality is used, there are many. The most popular and most frequently used among the papers surveyed here is the Gini ratio. The Gini's popularity is not easy to justify based on purely conceptual grounds. In fact, it does not satisfy additive decomposability, which is considered a basic property of a good inequality measure (Cowell, 1995). Its popularity probably rests on the manner by which it can be easily illustrated using the Lorenz curve, as well as on its having a sort of first-mover advantage, having been used in inequality studies for a long time. The share of the deciles or quintiles and the Theil index are other measures often used in empirical studies, the latter especially in decomposition studies.

Other than the Gini coefficient, the quintile ratios and the Theil index, other measures of inequality often used in the empirical literature include the variance, the coefficient of variation, the log of variance, the variance of logarithms, Atkinson's index, Dalton's index, and Herfindahl's index. The properties of these measures are discussed elsewhere, particularly in Cowell (1995).

---

<sup>2</sup> See, in particular, the special chapter entitled 'Poverty in Asia: Measurement, Estimates, and Prospects.'

## 2. Levels of Inequality

### 2.1 East Asia

#### 2.1.1 *Income inequality*

The most recent (2000) estimate of the Gini ratio in China<sup>3</sup> (from Krongkaew, 2003, citing Tian He et al., 2003) is 0.46, putting it in the middle of the pack among countries in the whole of Eastern Asia (inclusive of Southeast Asia) and at the top in East Asia in terms of inequality (as measured by the Gini ratio for per capita income) in that period. Vis-à-vis other developing countries, the comparable Gini ratio was higher in the Philippines but lower in Indonesia, Malaysia and Vietnam. It has not always been this way. Prior to China's adoption of market-oriented policies beginning in 1979, China had the lowest inequality level in East Asia. In 1981, its Gini ratio was estimated at only 0.29. According to World Bank figures, at that time only Taiwan in East Asia had a comparable Gini level.

The National Statistics Office of South Korea puts the household income Gini of the country at 0.34 in 2004. As an alternative measure of inequality, it was estimated that the average income of the richest 20% of the households was about 7.35 times that of the poorest 20%, among the lowest in the region. In Taiwan, official measures put inequality in the country at 0.33 in 2000 based on per capita income Gini.

In the case of Japan, inequality measurement is confounded by the availability of different data sets, each yielding different estimates for the same unit of analysis (Bauer and Mason, 1992; the different data sets are discussed below). Using the data set that generally yields the highest inequality estimate, the household income Gini ratio in 1998 was 0.32, which is about average for industrialised countries (Shirahase, 2002).<sup>4</sup>

Looking at a particular group, Shirahase (2002), after dividing households into those composed only of the elderly (65 or older) and those that are either mixed (elderly and non-elderly) or without elderly, found that income inequality among elderly households is much higher, with a household income Gini ratio of 0.38 in 1998.

#### 2.1.2 *Non-income inequality*

In China, Song (2004) notes the large disparity in human capital stock among regions. He attributes this to the greater focus by the government on physical capital accumulation rather than education and, to the extent that educational policies are pursued, to a bias towards urban human capital investment rather than rural human capital investment.

In South Korea, a survey conducted by the Korean Development Institute showed that wealth inequality is much greater than income inequality. Compared with the income Gini of 0.40, the KDI survey obtained a Gini of 0.58 for personal wealth, 0.60 for real assets, and 0.77 for financial assets. It also found that 43% of wealth is in the hands of the top 10% of households, 31% in the hands of the top 5% of households, and 14% in the hands of the top 1% (Leipziger et al., 1992).

---

<sup>3</sup> This is based on income per capita.

<sup>4</sup> Kyoto University Professor Toshiaki Tachibanaki published a bestselling book in Japan in 1998 (in Japanese) *Nihonno Keizai Kakusa* (Japan's Economic Disparities), which presented estimates of inequality much higher than these. An expanded version of the book in English is set to be published this year.

In Japan, likewise, inequality in wealth is greater than inequality in income. The Gini of property ownership is estimated at 0.60 in 1996, and that for financial assets at 0.49 in 1995 (Ostrom, 1999). Bauer and Mason (1992) also note that a significant earnings gap exists between female and male workers, with the former earning on average only 57% of the wage paid to males. Furthermore, owing to the seniority system, wage across age groups, particularly for men, is highly unequal.

## 2.2 South Asia

### 2.2.1 *Income inequality*

The most recent (2000) World Bank estimate puts the Gini ratio of India at 0.33, based on unadjusted per capita expenditure. This is relatively low compared with other heavily populated countries such as China, Indonesia, Brazil and the USA.

UNDP's 2004 Human Development Report places the Gini coefficient of Pakistan at 0.33 based on consumption in 1999. This is not readily comparable with measures for other countries, however, since the report does not specify relevant information about the estimate such as the unit of analysis and the adjustments made to consumption (whether total or per capita and if adjusted for cost-of-living differences across regions). Jamal (2004) estimates the income Gini in Pakistan at 0.40 and the share of the poorest quintile in total income at 6.7% in 2002. He also does not discuss the particulars about the measure.

WB and ADB (2002), using real per capita expenditure, estimate the Gini coefficient in Bangladesh at about 0.31.5 Ahmed (2004) estimates it for 2000 at 0.42 using current total household income and 0.32 using current total household expenditure.

The government estimate of the Gini of per capita income in Nepal for 2000 is at a moderate 0.36 (UNDP, 2002). However, this is based not on actual data but rather on projections, as the most recent household survey data available for use is for 1996.<sup>6</sup> In 1996, the Gini was at 0.34 for per capita income and 0.57 for household income (NSAC, 1998). The wide disparity between per capita income Gini and household income Gini indicates a substantial difference in the average household sizes of rich and poor households; generally the latter is larger. Using an alternative measure of inequality, the NSAC report estimates that the bottom 40% of Nepal's population accounts for only 11% of total income, whereas the richest 10% accounts for 52%. The Department of Census and Statistics in Sri Lanka puts the household income Gini ratio in the country at 0.47 based on the Household Income and Expenditures Survey of 2002.

### 2.2.2 *Non-income inequality*

Ul Haq and Haq (1998) report that the primary gross enrolment ratio for girls is lower in South Asia than in East Asia, Latin America or the Arab States. Moreover, they report that, among all regions, South Asia has the widest gap between the primary enrolment rates of girls and boys. It is said that this reflects both cultural biases and the high opportunity cost of girls' home labour. This inequality in education affects not only girls but also other (overlapping) groups such as the poor, the minorities, nomads, refugees, and children. In rural India, for instance, the literacy rate varies from 41% for scheduled tribes and castes, to 49% for Muslims and 60% for Hindus. In Nepal, the literacy rate varies from 71% in Kathmandu to less than 30% in remote provinces. In Pakistan in 1994, the literacy rate was higher by 23% in urban than in rural areas. In Bangladesh, the comparable gap is

<sup>5</sup> Using regional poverty lines as the price index deflator of nominal per capita expenditure. They actually use two sets of poverty lines – lower and upper. The Gini is 0.31 using the former and 0.32 using the latter poverty lines.

<sup>6</sup> A new household survey was completed in 2003 but will only be available this year (2005).

25%. In India, the gross primary enrolment rate between landless peasants and medium-to-large scale landowners varies by 17%. The authors state that to solve these inequalities, special education facilities may need to be provided such as community-based schools, locally recruited teachers, use of native language, and the use of a more culture-appropriate curriculum.

In India, Gwatkin et al. (2000), using 1992/93 data, showed some striking cases of non-income inequality as summarised in Table 2.1. They divided households first into quintiles with respect to 'wealth' as proxied by ownership of durable goods, such as cars, televisions, and similar items, in addition to housing characteristics, such as flooring material, water supply, and type of toilet. As such, they showed that households in the lower quintiles were much deprived in terms of health and nutrition indicators as opposed to higher quintile households. Compared with the richest quintile, the infant mortality rate for the poorest quintile was 2.5 times as high, under-5 mortality rate almost three times as high, children underweight more than 2.5 times as high, total fertility rate for women 15–49 twice as high, and total fertility rate for women 15–19 three times as high.

Children in the poorest quintile are also about three times less likely to be immunised compared with children from the richest quintile. Expectant mothers are about four times less likely to get antenatal care from medically trained people and, when they give birth, are about seven times less likely to be attended by the same. Women in the poorest quintile are also twice less likely to use contraceptives than women in the richest quintile. Gender and urban-rural disparities further compound the quintile differences.

Sahn (2003) finds that there is a marked inequality in health outcomes across and within Indian states. He finds evidence, for instance, that health inequality is more serious in Bihar than in Maharashtra, and that it seems less of a problem in Arunachal Pradesh than in most other states. Moreover, he finds that health inequality changes significantly over time and in different ways for the various Indian states. Comparing the health inequality with the income inequality obtained by Deaton and Dreze (2002) for the Indian states, he finds a significant negative correlation (as much as -0.49 rank correlation), meaning that where income inequality is high there exists low health inequality. He states that this may be because different underlying factors determine income and health inequality, and because of idiosyncrasies in the measures used.

**Table 2.1 Health and Nutrition by Wealth Status, India, 1992–93**

Indicator	Wealth Quintile					Poor/rich ratio
	1st	2nd	3rd	4th	5th	
Infant mortality rate (per 1000)	109.2	106.3	89.7	65.6	44.0	2.48
Under-5 mortality rate (per 1000)	154.7	152.9	119.5	86.9	54.3	2.85
Children severely underweight	29.0	26.4	21.3	16.3	10.8	2.69
Ttl fertility rate (15–49) (births p/woman)	4.1	3.6	3.2	2.8	2.1	1.95
F. rate (15–19) (births p/1000 women)	135	140	117	84	45	3.00
Immunisation for common diseases (%)	17.1	21.7	34.7	48.2	65.0	0.26
Antenatal visits by trained person (%)	24.5	33.5	46.4	65.3	88.6	0.27
Delivery attendance trained person (%)	11.9	18.2	30.1	47.9	78.7	0.15
Use modern contraception: women (%)	24.9	27.5	36.1	42.0	50.6	0.49

Source: Gwatkin et al. (2000).

In Bangladesh, Anwar et al. (2004), in a study investigating the inequalities in the use of publicly provided maternal health care services, found that poorer households use the facilities significantly less than their better-off counterparts. They estimate the usage ratio between the best-off and worst-off 20% to be almost 3:1. The rising inequality in landholdings and education levels is also a growing concern in Bangladesh and is considered the proximate cause of rising income inequality (World Bank and ADB, 2002; Wodon, 1999a).

In Nepal, an ADB (2004b) report on gender inequality found that 'women have unequal access to food, education, and health care and suffer from long working hours and high levels of social exclusion from productive resources and community activities'. Chhetry (2004) likewise notes the large disparity in the gross enrolment rates in primary and secondary schools between Nepalese boys and girls, with the former having significantly higher rates. The ADB (2004b) report notes further that caste- and ethnicity-based discrimination exacerbates gender inequality. That is, in every caste or ethnic group, women are more disadvantaged than men, and in the lowest caste group, the dalit or untouchable women, it is estimated that all of them live below the poverty line. By area, Chhetry (2004) notes the large difference in infant mortality rates between urban and rural areas. Surveys conducted in 1991 and 1996 showed that the infant mortality rate in rural areas was more than 1.5 times higher than that in urban areas.

## 2.3 Southeast Asia

### 2.3.1 Income inequality

As measured by the Gini coefficient and using household expenditure, inequality in Indonesia was at 0.33 in 1999 (BPS et al., 2001). This is comparable with only two countries in Asia – China and

India– both of which have bigger populations than Indonesia for the same income definition and unit of analysis.<sup>7</sup>

Balisacan and Piza (2003) estimated inequality in the Philippines as measured by the Gini ratio of per capita household income adjusted for provincial cost-of-living differences at 0.51 in 2000. The Asian Development Bank (2005), using total household income but making no cost-of-living adjustments, estimated the Gini at 0.48 in 2000 and 0.47 in 2003. Either way, the measures point to a relatively high level of inequality in the country.

Inequality in Malaysia based on total household income Gini ratio was at 0.46 in 1997 (Roslan 2001). A striking feature of income distribution in the country, however, has been the inequality across ethnic lines. Among ethnic groups, in terms of income level, the Malays are generally the worst off, followed by the Indians, with the Chinese generally being the most prosperous group.

Income inequality in Thailand, as measured by the Gini ratio on total household income, was at 0.51 in 1998: relatively high and the same level as in the Philippines. In Vietnam, the Gini ratio of per capita expenditure was pegged at 0.35 in 1998, indicating a relatively low degree of inequality in real per capita expenditure.

### 2.3.2 *Non-income inequality*

In Indonesia, BPS et al. (2001) note a significant inequality in the access to health facilities between the poor and non-poor. Although Indonesia has established a network of health centres called the puskesmas, these are of poor quality and poorer families are additionally constrained by user charges, prescription charges, and other out-of-pocket expenses. They found that at the end of the 1980s, only 5% of the bottom decile of the population benefited from hospital treatment, compared with around 40% of the top decile (BSP et al., 2001). As of 1990, according to World Bank figures (as cited by BPS et al., 2001), hospital beds were in short supply and were only at 0.6 per thousand population, ranking the country among the lowest of all developing countries. Furthermore, these were unequally distributed, as the ratio was 1.24 per thousand population in Jakarta, but only 0.18 in Lampung (BPS et al., 2001).

The National Human Development Report of Indonesia (2004) reports a wide variation in the Human Development Index (HDI) across the country. The HDI is a weighted average of health, education and income sub-indices. Across provinces, it ranges from 58 in West Nusatenggara to 76 in Jakarta. By district (the smaller disaggregation), the disparity is even wider, from 47 in Jayawijaya in Papua to 76 in East Jakarta. Disparities could also be seen in the progress over time, as some districts, such as in Papua and Maluku, experienced declining HDIs whereas most have achieved improvements. Social conflict is a major reason for these declines.

In the Philippines, a large disparity in non-income measures of wellbeing has been widely documented across provinces (HDN, 2002; Collas-Monsod et al., 2004). This is true, for instance, with respect to the human development index and its components, such as life expectancy, literacy and enrolment rates, and also in infant mortality rates, maternal mortality rates, access to safe water and other social indicators. For the most part, the Muslim provinces in the southern part of the country are the ones lagging in these outcome measures.

In Thailand, Pasuk and Isra (2000) note the relatively high level of educational inequality in the country in terms of outcome and also access. From the secondary level and up, individuals from

---

<sup>7</sup> Sudjana and Mishra (2004) argue that this official estimate may be underreporting actual inequality owing to questionable data.

different social and economic backgrounds did not have equal opportunities for education. Moreover, poor households received a very low share of the direct benefits of government education expenditure compared with non-poor households. As a result, as of 1999, 69% of Thailand's labour force had at most elementary education.

UNDP (2003) reports a wide disparity in the HDI, the Gender-related Development Index (GDI) across regions in Thailand. The Bangkok metropolis and nearby areas are mostly better off in most indicators, particularly in health, income, housing and living conditions, transportation and communication, education and employment. On the other extreme is the northeast region, which is at the bottom in many indicators including housing, education, health, and transportation and communications.

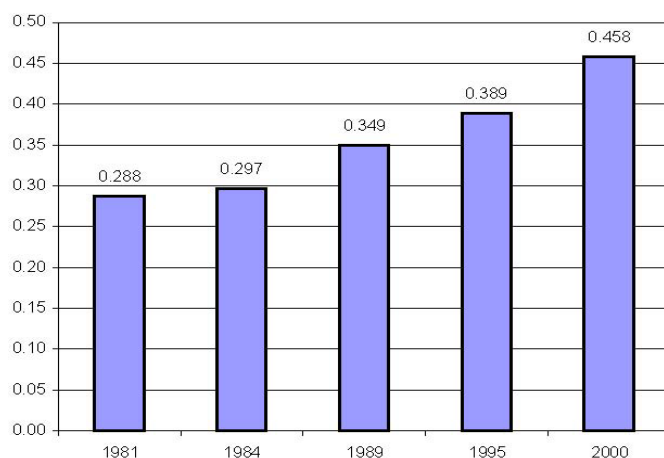
In Vietnam, Bhushan et al. (2002) find that the very poor have not sufficiently benefited from overall growth and social development. Whereas poor adults have seen little improvement in their nutritional status as measured by the body-mass index (BMI), the richest adults have seen marked increases in their BMI. In 1997–8, although the enrolment rate in secondary schools was nearly universal for children in the richest quintile, it was only 36% for those in the poorest quintile.

### 3. Trends in Inequality

#### 3.1 East Asia

Figure 3.1 shows the evolution of the Gini ratio for China at approximately five-year intervals, beginning in 1981 up to 2000. What is immediately noticeable is the increasing trend in the Gini for the two decades. The literature attributes much of this rapid rise in inequality to the widening income gap between urban and rural areas and also between coastal and land-locked provinces, which has arisen as a result of market reforms. According to Shi (2001) as cited in Lin (2003), China has possibly the largest income gap between rural and urban sectors in the world.

**Figure 3.1 Gini Ratio 1981–2000**



Source: Krongkaew (2003).

The World Bank divides the period 1981-95 for China into three different sub-periods differentiated by the growth-equity characteristic of the economy. The period 1981-4 is classified as *growth with equity* period, with equity as real mean income increasing by 12.6% a year during the period but the Gini ratio rising only marginally (refer to Figure 3.1). The period 1984-1989 is one of *inequality with little growth*, as overall real mean income increased by less than 1% a year and was very unevenly distributed. This is shown by the 2.8% a year increase in income of the top decile and the 4.5% a year decrease in income of the bottom decile. The latter is reflected in the jump in Gini for the period. Finally, the period 1990-5 (applicable up to the latter years also) is a period of *growth with inequality*, as both overall real mean income and the Gini ratio grew rapidly. However, income grew much faster for the top deciles than the lower deciles.

South Korea attained an enviable combination of rapid economic growth and stable or declining income inequality from the mid-1960s up to the mid-1980s (Leipziger et al., 1992). For this period, per capita consumption in the country was estimated to have grown at 5.6% per year; poverty incidence was estimated to have fallen from 40% in the beginning of the period to less than 10% by the end of the period. The prevalent view is that from the mid-1980s up to the end of that decade, income inequality increased in the country (Ahn, 1997, Leipziger et al., 1992). Then inequality improved slightly for most of the 1990s (Cheong, 1999, Ahn 1997) before deteriorating in the aftermath of the Asian Crisis (Cheong, 1999).<sup>8</sup>

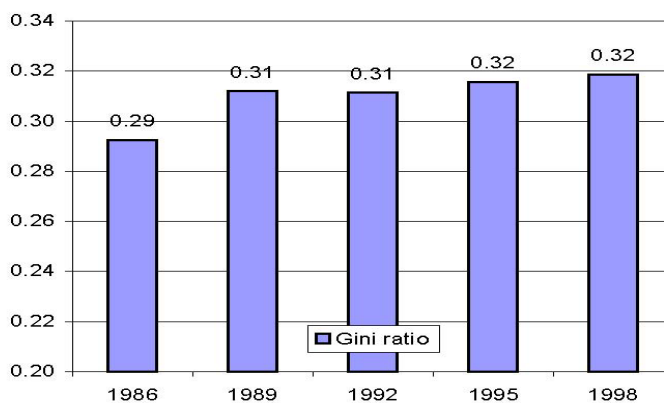
<sup>8</sup> Cheong's study actually looked only at urban households.



Taiwan, like South Korea and Japan, is considered a textbook example of a country able to attain high (even extraordinary) economic growth and yet maintain stable inequality levels for a long period of time (Lee and Mason, 2001). Actual measured levels differ for different studies but it is generally accepted that, from the 1970s up to the 1990s, inequality in Taiwan has remained at about the same level. Rao and Mukhopadhaya (2001) estimate that from the mid-1970s to the mid-1990s, when Taiwan managed to have double-digit annual GDP growth, the Gini ratio for income distribution was confined within the narrow range of 0.35-0.36. Schultz (1997) points out that income inequality from the three decades preceding 1995 is sensitive to whether per capita or household income is used. Whereas other studies note fluctuations in inequality when using household income, Shultz used per capita income and found that this eliminated the observed fluctuations

Japan was the first among the East Asian countries successfully to combine high economic growth with relatively low and stable inequality (Ostrom, 1999). However, the consensus is that inequality began increasing from the 1980s (period of the economic bubble) and was stalled only by the country's economic slump. Figure 3.2 below shows the household income Gini ratio for the period 1986 to 1998. After a noticeable increase from 1986 to 1989, the Gini has more or less remained the same at about 0.32.

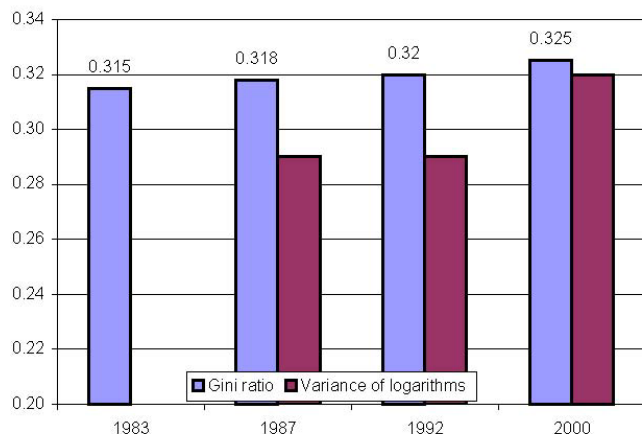
**Figure 3.2 Japan's Inequality 1981–2000**



*Source:* Shirahase (2002), using household income.

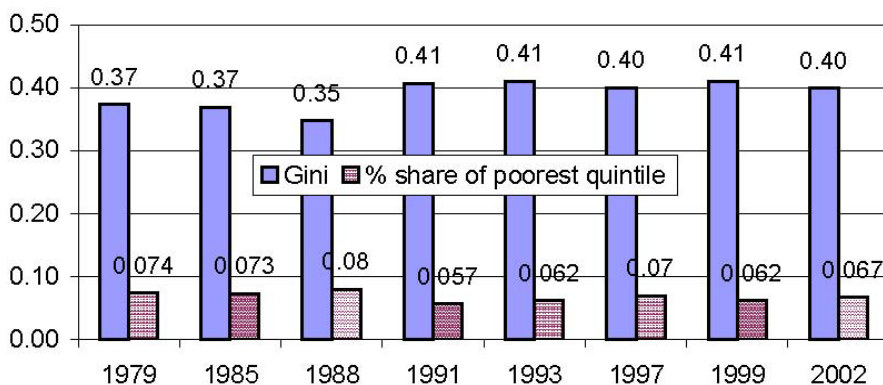
### 3.2 South Asia

Depending on the adjustments made to the data (more on this later), inequality in India as of 2000 may be only slightly higher or significantly higher than it was in the 1980s. Figure 3.3 shows two alternative measures of inequality – the Gini ratio and the variance of logarithms, the former for the period 1983-2000 and the latter for the period 1987-2000. Note that the two measures were made using differing data adjustments so that the difference in the trends exhibited by the estimates is a result less of the difference in the inequality measures used, and more of the difference in the underlying data. The Gini ratio shows only a marginal increase in inequality from the 1980s to 2000 whereas the alternative measures show a more marked increase. Deaton and Dreze (2002) observed that during the 1990s inequality within rural states remained more or less the same but inequality within urban states increased significantly.

**Figure 3.3 India's Inequality 1981–2000**

*Source:* Gini – Datt (1995) World Development Indicators (2004); variance of logarithms – Deaton and Dreze (2002).

Figure 3.4 shows the inequality in Pakistan from 1979 to 2002 based on two measures – the Gini coefficient and the share of the poorest 20% in total income. Jamal (2004) states that these are based on an inter-temporally consistent methodology. Based on both measures, what can be seen is that inequality in Pakistan increased noticeably from the end of the 1970s to the beginning of the 1990s and has been virtually flat since then. Adams and He (1995), using panel data for rural Pakistan from the late 1980s, classified rural inequality as moderate and estimated it at about 0.38 in terms of the Gini ratio.

**Figure 3.4 Pakistan's Inequality 1979–2002**

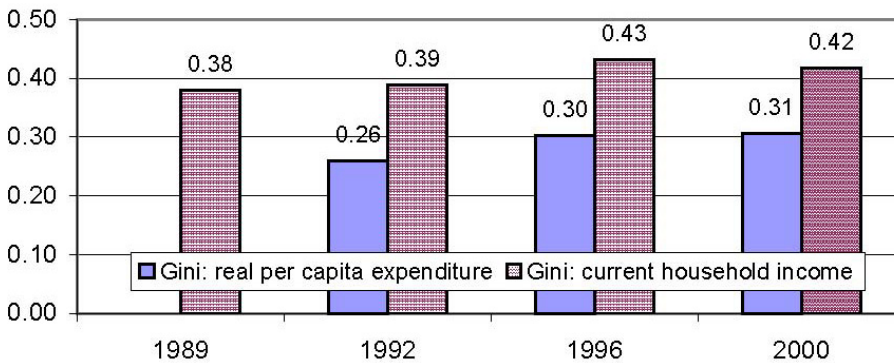
*Source:* Jamal (2004) citing Pakistan Economic Surveys, Integrated Household Surveys as well as previous studies.

Inequality in Bangladesh had been on an upward trend for the whole decade of the 1990s, as Figure 3.5 below shows using two different sets of estimates. In particular, a big increase in inequality was observed in the first half of the decade. The estimates based on current household income show a slight (and within margin of error) decline in inequality from 1996 to 2000, while real per capita expenditure-based estimates show a slight (and again insignificant) increase in inequality.

Both studies estimate Bangladesh urban Gini to be substantially higher than the rural Gini. The World Bank and ADB estimate the urban Gini for real per capita expenditure at 0.37 and the rural Gini for the same variable at 0.27. Ahmed (2004), in the case of total household expenditure, estimates the Gini at 0.34 and 0.28 for the urban and rural areas, respectively. In the case of total household income, the Gini is estimated at 0.45 for urban and 0.37 for rural. Both urban and rural inequality estimates for each variable showed increasing trends in inequality, especially in urban

areas where real per capita expenditure Gini was estimated to have gone up from 0.26 in 1992 to 0.31 in 2000 (World Bank and ADB, 2002).

**Figure 3.5 Pakistan's Inequality 1989–2000**



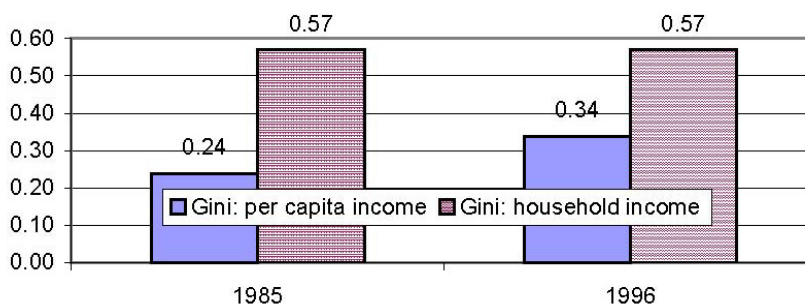
*Source:* World Bank and ADB (2000) and Ahmed (2004).

Note: there is no estimate for real per capita expenditure Gini for 1989.

In Nepal, based on the NSAC report, inequality either has increased substantially from 1985 to 1996 or else has remained the same, depending on whether one is using per capita income or household income (see Figure 3.6). The NSAC estimate based on per capita income has the Gini making the big leap from 0.24 to 0.34, while their household income-based estimate has it at the same level of 0.57. The same divergence in results is seen for both urban and rural areas, with the Gini in the urban and rural areas declining from 0.85 to 0.55 and from 0.55 to 0.51, respectively, based on household income. But based on per capita income, the Gini in the urban and rural areas increased from 0.26 to 0.43 and from 0.23 to 0.31, respectively.

Chhetry (2004), using household income, estimated urban Gini to have increased from 0.23 to 0.40 and the rural Gini from 0.26 to 0.46 from 1985 to 1996. Alternatively, his estimates show a 50% decline in the share of the poorest quintile in total income in urban areas and a two-thirds decline in the share of the rural areas for the period. The combined results of the NSAC and Chhetry studies indicate the likelihood of a significant increase in inequality in Nepal from 1985 to 1996.

**Figure 3.6 Nepal's Inequality 1985–1996.**



*Source:* NSAC (1998).

In Sri Lanka, household income Gini increased from 0.35 in 1973 (Bhalla, 1988) to 0.47 in 2002. It was during this period that the country implemented decentralisation and adopted open economic policies in order to shift from a closed and controlled economy to an outward-looking economy with a market orientation.

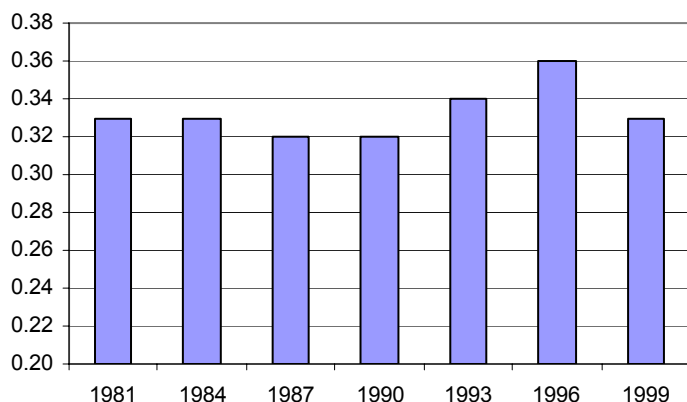
9 Such disparity in trend as a result of moving from per capita to household income is highly unusual (and unlikely) and may be a result of data or measurement inconsistencies.

### 3.3 Southeast Asia

Inequality in household expenditure has been more or less stable in Indonesia during the past two decades (see Figure 3.7). It fell slightly from the beginning of the 1980s to the end of the 1990s, then rose a little from the beginning of the 1990s up to the eve of the Asian crisis, and was back to the early 1980s level by 1999. The pattern in many of Indonesia's provinces matched this national picture (BPS, 2001). This pattern holds, whether one is looking at income or expenditure inequality (Asra, 2000).

Indonesia's urban-rural income disparity, while it exists, has historically been lower than in many other Asian countries including India, Malaysia and the Philippines (BPS, 2001). Inequality has been higher in urban than in rural areas. Between and within groups, Theil index decompositions show that, if grouped by province, inter-provincial expenditure inequality explains about 17-20% of total inequality (the rest, 80-83%, is explained by intra-provincial inequality); if grouped by urban-rural classification, 22-24% is explained by between-group inequality; if grouped by education of household head, 30-33% is explained by between-group inequality (Akita, 2002; Akita et al., 1999). Gender inequality, as indicated by male-headed and female-headed households, appears to be insignificant in Indonesia, since between-group inequality explains only 3% of total inequality (Akita, 2002, Akita et al., 1999).

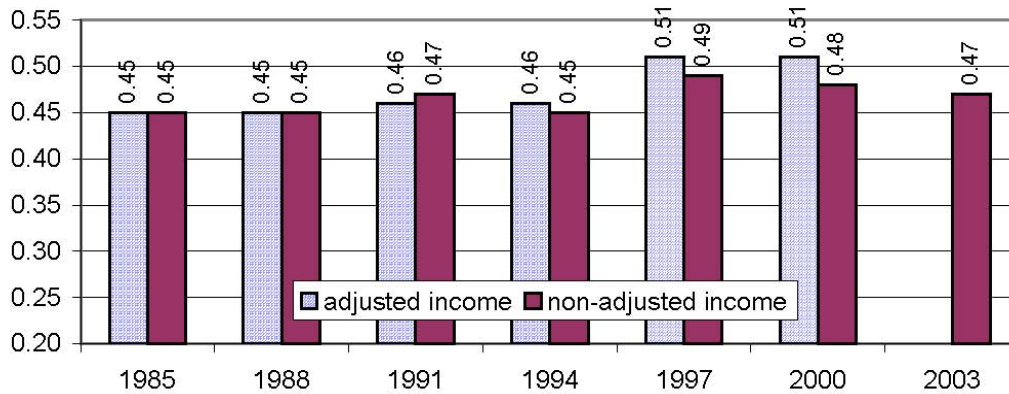
**Figure 3.7 Indonesia's Inequality 1981-1999 (Gini; on household expenditure)**



*Source:* BPS (2001) and Akita (2002).

Inequality in the Philippines had been more or less stable from the mid-1980s to the mid-1990s, but increased markedly during and immediately after the Asian crisis. Figure 3.8 shows this trend using both adjusted (from Balisacan and Piza, 2003) and unadjusted (from ADB, 2005) total household income, where the adjustment refers to deflating income by cost-of-living differences across provinces and over time. Note, however, the perceptibly higher inequality during and right after the Asian crisis when adjusted income is used. The ADB study also shows the Gini falling slightly in 2003 (although marginally and probably within the margin of error).

**Figure 3.8 Philippines' Inequality 1985-2003 (Gini; on total household income)**

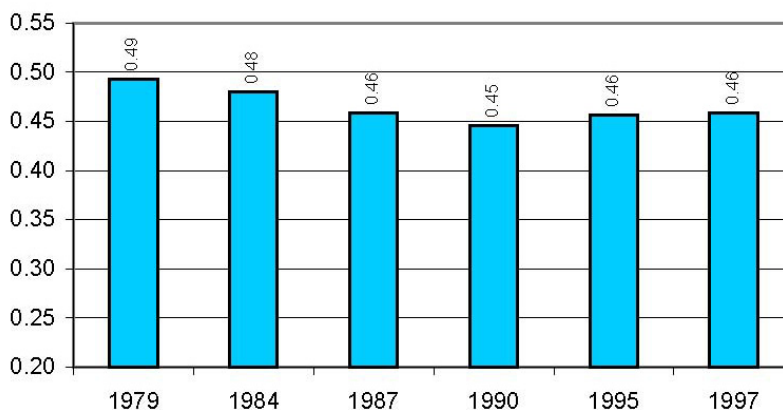


Source: Balisacan and Piza (2003) and ADB (2005).

Note: adjusted means adjusted for cost-of-living differences across space and over time.

In Malaysia, based on Roslan's (2001) culled Gini estimates from 1979 to 1997, inequality noticeably declined from 1984 to 1987, and afterwards remained more or less unchanged up to the end of the period (see Figure 3.9). Within ethnic groups, Roslan posits the likelihood that intra-group inequality has worsened for the Malays, and possibly also for the Indians and Chinese. According to the study, this intra-ethnic inequality is the new major challenge for Malaysia's policymakers.

**Figure 3.9 Malaysia's Inequality 1979-1997 (Gini; on total household income)**



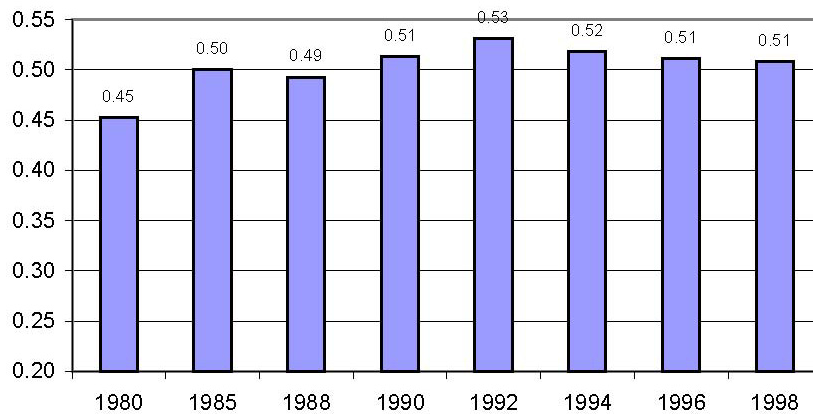
Source: Roslan (2001).

By general consensus, inequality in Thailand increased almost monotonically from the mid-1970s up to 1992 (Pasuk and Isra, 2000; Deolalikar, 2002; World Bank, 1996; Hutaserani, 1990).<sup>10</sup> Then, from 1992 up to the onset of the Asian crisis, inequality declined marginally (Pasuk and Isra, 2000; Deolalikar, 2002). These are illustrated using the Gini ratio in Figure 3.10. Pasuk and Isra (2000) note that initial evidence suggests inequality worsened again immediately after the crisis. According to the World Bank (1996), the initial trend (up to 1992) is robust in the sense that the same is seen even if one looks at consumption instead of income, and also if one uses either income or consumption and then adjusts for price differences across regions. Motonishi (2003) did between and within-group decomposition using Thailand's regions as the grouping variable and found that

<sup>10</sup> As a further illustration, World Bank (1996) notes that in the four-year period from 1988 to 1992, the ratio of the share of the top quintile to the bottom quintile increased from 12 to 15.

interregional inequalities (between group) are much smaller than intraregional inequalities (within groups). Intraregional inequalities explain about 70% of total inequality.

**Figure 3.10 Thailand's Inequality 1980–1998 (Gini; on total household income)**



*Source:* Pasuk and Isra (2000).

Inequality in Vietnam, based on only two sample points (1992/93 and 1997/98), increased moderately with the Gini for real per capita expenditure increasing from 0.33 to 0.35 (Liu, 2001). This was the period when the country extensively pursued market reforms. At the same time, the gap between the urban and rural sectors and among regions is also widening (Liu, 2001; Heltberg, 2003). Minot et al. (2003) note that there appears to be a weak U-shaped pattern relationship between poverty and inequality among the districts of Vietnam, where the highest level of inequality is found in the poorest and the richest districts.

## 4. Effects of Inequality

### 4.1 East Asia

In China, poverty incidence for the period 1985-2001 fell more than 42 percentage points from 58.9% to 15.4%. Poverty gap fell more than 15 percentage points, from 19.0% to 3.4%. Poverty severity fell more than seven percentage points, from 8.4% to 1%. Using poverty decomposition approach, Lin (2003) estimates that were it not for the increase in inequality for the period, poverty incidence would have decreased by 5.4 percentage points more, and poverty gap and poverty severity would have been almost negligible. Table 4.1 below shows his computations.

Song (2004) identifies the continuous net migration from the poorer western regions of China to the better off eastern regions, especially since the mid-1990s, as another effect of income disparity in the country.

In South Korea, looking at the years immediately before and after the Asian crisis, Kakwani et al. (2003) note that economic growth in the country had been pro-poor, resulting in a large reduction in poverty incidence relative to the economic growth rate for that period. However, since the crisis, growth has favoured the rich more than the poor. In other words, the increased inequality that followed the Asian crisis has dampened the effect of economic growth on poverty reduction.

In Taiwan, the stable inequality level has enabled economic growth to have a major impact on the level of poverty. From being 'quite poor' in the 1950s (Lee and Mason, 2001), the country is estimated to have a poverty incidence of about 1% today. The growth and poverty reduction were accompanied by an increase in life expectancy for both males and females and a reduction of fertility rates (ibid.).

**Table 4.1 Poverty Impact Decomposition for Rural PRC**

Period	Total change in poverty (%)	Growth component (%)	Inequality component (%)	Ratio of inequality component to growth component
<b>Headcount Ratio (H)</b>				
1985-1990	-17.77	-18.88	1.12	-0.06
1990-1995	-14.61	-16.62	2.01	-0.12
1995-2001	-10.04	-13.81	3.77	-0.27
1985-2001	-42.41	-47.79	5.38	-0.11
<b>Poverty Gap</b>				
1985-1990	-7.25	-8.18	0.93	-0.11
1990-1995	-4.86	-6.21	1.34	-0.22
1995-2001	-3.47	-4.83	1.36	-0.28
1985-2001	-15.58	-19.12	3.54	-0.19

Period	Total change in poverty (%)	Growth component (%)	Inequality component (%)	Ratio of inequality component to growth component
Foster-Greer-Thorbecke class (FGT)				
1985-1990	-3.62	-4.26	0.64	-0.15
1990-1995	-2.19	-2.99	0.80	-0.27
1995-2001	-1.53	-2.13	0.60	-0.28
1985-2001	-7.34	-9.56	2.22	-0.23

Source: Lin (2003).

In Japan, the long period in which the country was able to combine high growth and high inequality has enabled it practically to wipe out poverty. Poverty incidence in Japan is estimated at less than 1%, and this is using Japan's relatively high level of minimum standard of living.

## 4.2 South Asia

In India, Deaton and Dreze (2002) estimate that, were it not for the increase in inequality from 1993 to 2000, poverty would have declined for the entire country by about 1.5% more. This is significant, given the country's large population. They find that this is truer for urban areas than rural areas.

In Pakistan, using time series regression<sup>11</sup> for data from 1979 to 2002, Jamal (2004) finds that the level of inequality significantly affects the degree of poverty as well as the growth elasticity of poverty. He estimates the elasticity of poverty to growth to be at -3.51, and the elasticity of poverty to inequality as measured by the Gini to be much higher, at 8.37.<sup>12</sup> In other words, if the level of inequality in Pakistan has remained at its 1979 level, poverty would have been much lower than it currently is. The large inequality in landholdings in the country is self-perpetuating, as it results in agricultural growth mainly accruing to those households that own land and are the richer households (Adams and He, 1995).

In Bangladesh, if not for the rise in inequality in the 1990s, there would have been a much bigger gain in poverty reduction (World Bank and ADB, 2002; Wodon, 1999a). From 1989 to 1996, Wodon (1999a) estimates that poverty would have gone down by 10% instead of 6%, had it not been for the large increase in inequality observed for that period. If growth had been more broad-based, the World Bank and ADB study estimates that the cumulative decline in poverty for the entire decade would have been much greater than the 9% drop observed. By locality, the inequality increase was more harmful to poverty reduction in the urban rather than rural areas. Growth in rural areas was more broad-based than in urban areas; in the latter, growth rates were higher, but so was the increase in inequality (World Bank and ADB, 2002). The reports note, however, that significant net rural-urban migration over the decade, itself in large part a by-product of urban-rural income inequality, likely also contributed to comparatively lower rates of poverty reduction in urban areas.

In Nepal, using growth-inequality decompositions of the changes in poverty-head count index, UNDP (2001) estimates that were it not for the increase in inequality, poverty incidence would have

<sup>11</sup> Jamal interpolates his poverty and inequality measures to get estimates in between survey years.

<sup>12</sup> Using alternative measures of inequality, such as the share of the bottom 20% and the quintile ratio, the elasticity of inequality was measured at the lower figures of -6.66 and 3.72, respectively.



gone down 1% for every 1% increase in real GDP per capita. Instead, poverty has only gone down 0.46% for every 1% increase in real GDP per capita.

### 4.3 Southeast Asia

Indonesia's high economic growth of more than 5% per annum over the past three decades, accompanied by the relatively stable inequality level, has enabled the country to be quite successful in reducing poverty. Poverty incidence in Indonesia declined from about 70% in the 1970s to 18% by 1996, although it went up again to 32% in the aftermath of the Asian crisis in 1998 (BPS, 2001). Because of the country's comparatively stable and low income inequality, the growth-poverty nexus seems significantly stronger than in the Philippines (Balisacan et al., 2003). This may be explained by the higher growth of agriculture in Indonesia, which is also likely to have been more employment-generating.

In the Philippines, Balisacan (2000), using growth and redistribution decomposition of changes in poverty, finds that were it not for the increases in inequality, especially during the high growth period of 1994-7, the poverty level in the country would have been significantly less. Balisacan (2003) also finds that the initial distribution of assets, particularly land, partly explains the differences in provincial growth rates of mean per capita income, i.e. provinces with higher initial inequality in land tend to achieve lower growth rates.

The inequality in Malaysia, in particular among ethnic groups, has compelled the government to undertake proactive steps toward its amelioration, as evidenced by its New Economic Policy, aimed especially at the development of the Malay ethnic group.

In Thailand, the increasing trend of inequality from the 1970s to the early 1990s, a period of high growth for the country, prevented a sharper decrease in the poverty levels for that period (World Bank, 1996). Decomposing urban and rural poverty changes into growth and redistribution components, the World Bank finds that from 1988 to 1992 poverty incidence would have been 3% lower in urban areas and 15% lower in rural areas, if not for the increased inequality. Deolalikar (2002) notes that the combination of a negative growth rate and worsening income inequality has sharply increased the poverty incidence in the country in the aftermath of the Asian crisis. Kakwani et al. (2003) also note that growth in Thailand has not been pro-poor, in the sense that the poverty reduction achieved for each unit-growth in overall income is quite low historically. In addition, he finds that the ultra-poor were even more adversely affected by the crisis, so that in effect the crisis increased inequality.

In Vietnam, van de Walle and Gunewardena (2000) find that ethnic minorities suffer from inequality. Minorities tend to be concentrated in remote areas and have lower living standards than the ethnic majority. Ethnic minorities live in less productive areas, with difficult terrain, poor infrastructure, and lower accessibility to the market economy and off-farm work.

## 5. Determinants of Inequality

### 5.1 East Asia

In China, inequality began to rise in 1978 following the government's introduction of individual incentives (also known as the household responsibility system) and market forces. This system immediately began to increase returns to capital and land, diversify employment, and increase factor mobility (World Bank, 1997). The adoption of social policies that favour urban over rural areas and economic policies that favour the coast over the interior, together with the lack of labour mobility, have further contributed to this inequality (World Bank, 1997; Song, 2004). The household responsibility system initially resulted in rural income growth surpassing urban income growth. This trend, however, soon reversed as agricultural productivity hit the ceiling and rural income fell farther behind urban income. Rural per capita income was 38.9% of urban per capita income in 1978, 53.8% in 1985, and was down to 35.9% in 2000 (Lin, 2003). Inequality decompositions show that the rural-urban income gap explained one-third of total inequality in 1995 and one-half the increase in inequality since 1985. This does not even include the set of publicly provided services – housing, pensions, health, education and other entitlements – that augment urban incomes by an average of 80%. When official data are adjusted, rural-urban disparities account for more than half of total inequality in 1995 and explain even more of the increase since 1985 (World Bank, 1997). Lin (2003) gives a tabular summary of the differing effects of the different policies on urban-rural inequality as well as within rural inequality, which is given as Table 5.1 below.

Inter-provincial inequality also increased, particularly between coastal and interior provinces. Coastal provinces benefited from their proximity to world markets, better infrastructure, and educated labour force as China opened to the outside world (World Bank, 1997). Inter-provincial inequality accounted for a quarter of total inequality in 1995 and explained a third of the increase since 1985. In 1985, residents of interior China earned 75% as much as their coastal counterparts; by 1995, this had dropped to 50% (World Bank, 1997).

**Table 5.1 Effects of Economic Growth, Reform and Policy on Income Inequality**

	Rural Inequality	Urban and Rural Inequality
Economic Reforms/Institutional Changes		
Price reform in favour of rural areas	-	-
Household responsibility system in rural areas	+	-
Internal flow of rural labour	+	-
Other reforms supporting agricultural development	-	-
Allowing private sector development	+	+
State-owned enterprise reforms		+
Rent-seeking activities and corruption	+	+
Policy Choices		
Low purchasing price for agricultural products	+	+
Net taxation of the rural sector	+	+
Rural taxes and fees	+	+
Subsidies to urban residents		+

Source: Lin (2003).

Note: + represents increase in inequality; - represents decrease in inequality. Some effects on inequality are difficult to assess and have been left empty.

As regards rural poverty and inequality in China, Lin (2003) posits that, unlike other developing countries, individual and family characteristics appear less important in explaining poverty (and inequality). He gives various reasons for this, such as the egalitarian access to economic assets that accompanied collective production, which are distributed equally, especially land-use rights, and also the compulsory basic education that enables most children to become literate.

In South Korea, the high growth/low inequality situation attained by the country from the mid-1960s to the mid-1980s was credited to the drastic land reform implemented after the Japanese occupation and the concurrent urbanisation and growth of the manufacturing industry, which has raised wages across a broad spectrum of society (Leipziger et al., 1992). Land distribution (again), this time its unevenness, is identified as the culprit for the increase in inequality from the start to the end of the 1980s. Ahn (1997) and Leipziger et al. (1992) point to 'skyrocketing' real estate prices and resulting large capital gains, combined with the skewed distribution of its ownership, as the most important cause of the higher inequality. In 1989, capital gains from landownership were estimated to have exceeded GNP (Leipziger et al., 1992). The Asian Crisis resulted in a surge in unemployment and a proportionately greater loss of income for the poor, hence the rise in inequality in its aftermath (Cheong, 1999).

Taiwan's success in attaining a high growth/stable inequality combination, especially in its initial stages of development, has been attributed to a mixture of well focused and well timed policy measures. Fei et al. (1979) count among these measures the initial prioritisation of agriculture, land reform, and infrastructural investments, and the attention paid to relative prices before commercialisation. For the more recent period, one reason for the continued low level of inequality is the favourable distribution of work among households owing to the increase in the proportion of adults living in extended (or multigenerational) households (Jacobs, 2000; Lee and Mason, 2001). This increase may result from the increase in life expectancy and decrease in fertility, both of which have resulted in more parents living with their mature children (in the latter case, because parents have fewer alternative children to live with) (Lee and Mason, 2001). Jacobs (2000), comparing Britain and Taiwan, points out that those out of work, the relatively young, women and the elderly are relatively more likely to live with employed people in Taiwan than in Britain. Chen and Hsu (2001), looking only at inequality in wages and returns to college-educated workers, claim this has risen since 1980 because of government policies that have caused rapid expansion in the supply of new college graduates, resulting in the depression of the returns to labour of the youngest batches of college graduates relative to the older ones.

Japan's success in inequality reduction for most of the post-war period is credited to several factors, e.g. the narrowing of the earnings differential as growth occurred and a progressive income tax system was set up (Bauer and Mason, 1992). The rural sector was not left behind by the urban sector, even as industrialisation took place, because effective land reform took place and farm households enjoyed price supports (e.g., it was estimated that producer price for rice is six or seven times world level (*ibid.*)). Looking at a particular group, Shirahase (2002), dividing households into those comprised only of the elderly (65 or older) and those either mixed (elderly and non-elderly) or without elderly, found that income inequality among elderly households was much higher with a household income Gini ratio of 0.38 in 1998.

## **5.2 South Asia**

In India, Deaton and Dreze (2002) ascribe the increase in inequality to the regional imbalances in the patterns of growth, with the western and southern states of India generally doing better than the northern and eastern states. The authors view this as a cause of concern, as the latter states were poorer to begin with. Further contributing to the rising national inequality is the widening gap between urban and rural per capita expenditures, and the rising inequality within urban areas in

most states. This is related to the diverging patterns of real wages for different occupation groups. For instance, real wages of agricultural workers, mostly in rural areas, were observed to be growing more slowly than per capita GDP; those of public sector employees, mostly in urban areas, were growing faster. Ravallion and Datt (2002) point to the low educational attainment of the poor, which retards their capacity to participate in the opportunities that come with economic growth; they see this as an important cause of their not catching up. Inequality in access to land, and its self-perpetuating nature, is another proximate cause (Jayaraman and Lanjouw, 1998).

Hoff and Pandey (2004) offer an interesting behavioural explanation for the lingering inequality in India. They posit that belief systems rooted in historical conditions of extreme inequality (the caste system in India's case) give rise to expectations of prejudicial treatment and hence to behaviours that tend to reproduce the inequality. In other words, those in the lower castes and lower income classes often lack the motivation to try to do better for themselves because they do not expect to be treated fairly, hence reinforcing the initial inequality. The results of the authors' behavioural experiments with participants from different castes supported their hypothesis. Kumar and Mitra (2004), using a survey of slum dwellers, found that though caste and socioeconomic divisions often coincide, they have not reached the level where one can use castes to target programmes to address the socioeconomic divisions.

In Pakistan, Jamal (2003), after decomposing the change in poverty into growth and redistribution effects, found that the increase in poverty from the late 1980s to the early 1990s was mainly a result of low growth, especially in the rural areas. Using regression analysis to find the structural correlates of inequality, he further found that macroeconomic factors such as inflation, the sectoral wage gap, and terms of trade in favour of manufacturing, tend to worsen inequality in Pakistan. The negative correlates of inequality in the country include progressive taxation, investment, and development expenditure on social services.

On a more micro level and looking only at the rural sector, Adams and Alderman (1992) and Adams and He (1995), after breaking down income into five parts (non-farm, agricultural, transfer, livestock and rental), found that agricultural income was the largest contributor to rural inequality. They estimate agricultural income to account for 35-45% of overall rural income inequality. The main reason for this difference is land, which is very unequally distributed in Pakistan (Adams and He, 1995) as well as the large inequality in labour returns (Adams and Alderman, 1992). Labour returns are highly unequal because education is highly unequally distributed and can be afforded only by the rich (Adams and He, 1995).

The rise in inequality in Bangladesh has been attributed to the widening disparity in landholdings and education levels as well as the rising inequality between the urban and rural sectors (World Bank and ADB, 2002; Wodon, 1999b; Khan and Sen, 2001). Landholdings are particularly important in explaining within group inequality in rural areas, while education is important in explaining within group inequality in urban areas; each explained 30% of the Gini in their respective areas (Wodon, 1999b). The WB and ADB study (2002) reported an increasing incidence of landlessness in rural Bangladesh and a growing number of small and marginal farms. Citing the 2002 Household Income and Expenditures Survey, the study reports that almost half of the country's rural population, mostly from the poorest families, are virtually landless and own at most 0.05 acre of land.

In Nepal, the Nepal HDR of 2001 (UNDP, 2002) partly ascribes the increase in inequality to a lack of labour mobility. Although Nepal's economy had decent growth from the 1980s to the 1990s, this growth came mostly from the non-agricultural sector, thus transforming the structure of the economy. However, no similar change has occurred in the employment structure of the country, in the sense that 80% of the workforce continues to be employed in the agricultural sector (ibid.).

Another factor perpetuating inequality is the highly fragmented ownership of land – the most dominant productive resource of the country (NSAC, 1998). According to NSAC, the bottom 40% of agricultural households in Nepal operates only 9% of the total agricultural land area, whereas the top 6% occupies more than 33%.

In Sri Lanka, Arun and Borooah (2004) found in his estimation of an earnings function that urbanisation and education explain much of the variation in earnings in the country, but that spatial differences are also an important source of inequality. Tudawe (2000) finds that, in contrast with other South Asian countries, there is no significant difference in the level of poverty among ethnic groups (Indian Tamils, Sinhalese, Sri Lankan Tamils, and Moors) in Sri Lanka.

### 5.3 Southeast Asia

Indonesia's National HDR credits the relatively equitable distribution of income in the country to the widespread distribution of land and the wide access to education. Landholding in Indonesia has been, and continues to be, highly fragmented (BPS, 2001). The agricultural census of 1973 found that 46% of landholdings in the country as a whole were less than half a hectare. Indonesia has also made big strides in terms of primary school enrolment rate. Starting from a low base of about 70% in 1965, primary school enrolment rate has grown rapidly to reach more than 100% by 1990, exceeding those of Malaysia, Thailand, and the Philippines, all of which started with a higher enrolment rate. Indeed, the country's achievements in human development during the past quarter-century are impressive, especially when seen against the performances of South Asia and other low and middle-income countries (Balisacan et al., 2003). This has been made possible by a rise in development expenditures on education as a proportion of the development budget, as the government engaged in a massive school-building programme (BPS, 2001).

In the Philippines, Balisacan and Piza (2003) identify several reasons for the persistently high level of inequality in the country: (i) slow pace of structural change, as manifested by the still large proportion of the labour force in agriculture, where remain the bulk of the low-income families; (ii) relatively high population growth, especially among the poor, which reduces the share of each person in the increase in economic output; (iii) failure of the agrarian reform programme; (iv) existence of price distortions; and (v) uneven quality of schooling in the country. A between- and within-group decomposition of inequality and regression analysis carried out by the same study shows that the high level has come mainly from income differences within groups (whether geographic boundaries, economic sectors, or demographic subgroups) and not from differences in mean incomes between groups.

Using regression analysis, Balisacan and Fuwa (2003) likewise find that spatial inequality is becoming less important in explaining national inequality; instead, the focus should be on inequality within a given geographic area. The study also finds that some of the other important determinants of the variation in income are the education level (of the household head), household composition, the economic sector of income sources, and access to infrastructure.

Looking only at the crisis period of 1997-8, Datt and Hoogeveen (2000), using counterfactual experiments, posit that the crisis had minimal impact on overall inequality in the Philippines. They, however, used a different data set – the Annual Poverty and Indicator Survey, whereas Balisacan and Piza (2003) and ADB (2005) used the Family Income and Expenditures Survey. They divided the crisis into the El Niño (agricultural drought) shock and the labour market shock and found that the former was regressive (inequality increasing) while the latter was progressive (inequality decreasing). They found that ownership of land made households more susceptible to the El Niño shock, whereas higher levels of education made households more vulnerable to wage and employment shocks.

In Malaysia, the observed improvement in inequality in the 1970s and 1980s is partially attributed to the government's intervention under the New Economic Policy, which placed special focus on the development of the Malay ethnic group, enabling them to catch up partially with the two other ethnic groups (Roslan, 2001; Bakar and Hassan, 2003). Meanwhile, Bakar and Hassan (2003) argue that globalisation has also resulted in greater income inequality in Malaysia between developed and less-developed states, with the former reaping more of the benefits since trade, manufacturing activities, and foreign direct investments are concentrated there. Milanovic (2001) cites a reduction in earnings inequality between 1984 and 1989, roughly the same period when overall income inequality declined. In fact, he estimates earnings inequality to have remained stable from 1989 up to 1997, which is, in turn, mirrored by the overall income inequality.

In Thailand, for the period 1988-92, the World Bank (1996), using decomposition over time of income sources, finds that wages and salaries and entrepreneurial income contributed most to the increase in overall inequality, whereas farm incomes actually had strong equalising effects. On the other hand, Motonishi (2003), using regression analysis on a regional (five-regions) panel from 1975 to 1998, finds that agricultural factors are responsible for Thailand's inequality changes. He also finds (weak) evidence that educational disparity and financial development are important factors in explaining the country's inequality changes. For example, he finds that financial development decreases inequality.

Pasuk and Isra (2000), citing previous studies, ascribe the changes in overall inequality to changes in urban-rural or equivalently agriculture-non-agriculture disparities. When these disparities increase, as in the period leading to the early 1990s, so does overall inequality; when they go down, as was the case after the early 1990s as rural to urban migration took place, then overall inequality goes down also. By source of income, they identify business profits and returns to agriculture as the main determinants of inequality.

In Vietnam, Heltberg (2003), using regression analysis, finds that the most important determinants of the recent rise in inequality are spatial factors, and the growing returns to higher education and white-collar occupation. Heltberg also comes up with the interesting result that in Vietnam, assets, including land, are not an important factor in inequality, contrary to results in most countries. Liu (2001), on the other hand, attributes the greater inequality to the increase in between-regions disparity during the period. After carrying out between and within-region inequality decompositions, she found that the portion of inequality explained by between-region inequality grew from 21% to 30% from 1992 to 1998.

## 6. Data and Measurement Issues

### 6.1 East Asia

In China, the primary source of inequality data is household surveys carried out by China's Statistical Bureau. There are several important concerns about these surveys in relation to coverage, definitions, and processing after data collection (World Bank, 1997; Ravallion and Chen, 1998).

They are as follows:

The surveys were based on the registration system (*hukou*) and, thus, did not capture the migrants in urban areas without *hukou*. Few migrants acquire resident status, so this omission is serious.

Urban and rural surveys were based on incompatible definitions of incomes, reducing comparability and hindering aggregation into a national distribution.

The data do not account for spatial differences in the cost of living. Thus, neither regional income differences within the urban and rural surveys nor national rural-urban differences can be treated systematically.

Urban household surveys excluded in-kind income such as housing, health care, and education benefits. Also, the surveys appear to be geared toward recording labour income, and so missed many of the newly affluent.

Summary urban data in the China Statistical Yearbook for 1989-95 suffer from aggregation problems that understate urban inequality.

Until 1990, rural household surveys valued in-kind grain income at official prices, understating rural income considerably. After 1990 and until recently, own-grain consumption was valued at the weighted average of official and market prices, but practice varied by province. Both distortions make it difficult to analyse trends over time and across provinces.

Definitions of residence and income have changed over time. Urban residency was extended to some pre-urban areas in 1985, and pensioners were included in income surveys starting only in 1985.

While partial adjustments were made to correct for some of these shortcomings, no systematic corrections have been done. Ravallion and Chen (1998) showed that data correction could significantly affect the results. Using micro data for four rural provinces, they find that two-thirds of the conventionally measured increase in inequality between 1985 and 1990 vanishes when market-based valuation methods are used and allowances are made for regional cost-of-living differences.

In South Korea, data related to income, consumption, and even wealth-distribution come mainly from two surveys: the City Household Income and Expenditure Survey (CHIES) conducted by the National Statistical Office and the Farm Household Expenditure Survey (FHES) conducted by the Ministry of Agriculture, Forestry and Fisheries (Leipziger et al., 1992; Ahn, 1997). The CHIES covers the urban areas whereas the FHES covers the rural areas. The problem with these data is that the CHIES does not include income data for the self-employed and employer households; the FHES does not include non-agricultural households and single-person households, which together account for about 40% of Korean households (Leipziger et al., 1992; Ahn, 1997). This possibly biases the inequality estimates obtained from the data. The Korea Development Institute (KDI) conducted its own survey in 1988 attempting for a more comprehensive sample and found its inequality estimates much higher than those obtained using government data.

In Taiwan, data used for inequality measures were obtained from the Family Income and Expenditure Survey. The FIES has been conducted every year since 1970. The 1998 survey covered 14,031 households, comprising 52,610 individuals. An important feature of the FIES is that household income is assigned to members of the household (as opposed to just a total for the whole household), with a residual category for income that cannot be assigned to an individual (Lee and

Mason, 2001). Rao and Mukhopadhaya (2001) favourably note the availability of these data on an annual basis, their swift publication, and the high degree of agreement between the survey and national accounts-based aggregated income, the latter being more the exception than the rule for the other countries.

Japan has many household surveys from where inequality measures can be based. The most prominent among these are: (i) the National Survey of Living Conditions (NSLC) conducted by the Japanese Ministry of Health, Labour and Welfare Services and held every year, but with larger samples and more detailed questionnaire every three years; (ii) the Employment Status Survey (ESS) conducted every five years; and (iii) the Family Income and Expenditures Survey (FIES) conducted every year, but which excludes single person households and agricultural households (Shirahase, 2002; Bauer and Mason, 1992). The FIES is criticised for its high refusal rates, particularly among low-income and high-income households, thus possibly underestimating inequality (Bauer and Mason, 2002). The ESS and the NSLC have lower refusal rates; between the two, Bauer and Mason (2002) believe the NSLC is more reliable. The Gini, when measured using the NSLC, generally falls within 0.30 and 0.35; with the FIES, it is about 0.20.

## 6.2 South Asia

Inequality and poverty measures for India are computed from the National Sample Survey (NSS) quinquennial rounds. The last of these, the 55th round in 1999-2000, was controversial because of the changes made in the questionnaire which affected its comparability with previous NSS rounds. The 55th round NSS introduced different recall periods for different classes of goods, in addition to the traditional '30-day recall' questionnaire. The following discusses these data issues as summarised from Deaton and Dreze (2002).

The one-week recall period was implemented for food, pan, and tobacco, while a 365-day recall period was used for less frequently purchased goods such as clothing, footwear, educational and institutional medical expenditures, and durable goods. Prior to the 55th round, the traditional '30-day recall' questionnaire and the experimental questionnaire were administered to different (and independent) samples of households. These alternative questionnaires produced two independent series of expenditure estimates, with a fairly stable 'ratio' of the lower estimates based on the traditional questionnaire to the higher estimates based on the experimental questionnaire. In 1999-2000, the 30-day recall and 7-day recall periods for food, pan, and tobacco were used for the same households, in two adjacent columns on the same pages of a single questionnaire.

This effectively 'new' questionnaire design led to a sudden 'reconciliation' of the results obtained from the two different recall periods, perhaps reflecting efforts to achieve 'consistency' on the part of investigators and/or respondents. This reconciliation is likely to boost the expenditure estimates based on 30-day data, and therefore to pull down the official poverty counts, which are based on these 30-day expenditures. In addition, only the 365-day questionnaire was used for the less frequently purchased items, and this abandonment of the traditional 30-day recall for durables and other items also brings down the poverty count. Indeed, most people report no such purchases over 30 days, but report something over 365 days. The bottom tail of the consumption distribution is thereby pulled up, reducing both poverty and inequality compared with the previous design. For this reason, as well as because of possible reconciliation between 7-day and 30-day reports, the latest headcount ratios are biased down compared with what would have been obtained on the basis of the traditional questionnaire.

In Pakistan, data on household income and consumption come from the Federal Bureau of Statistics, which has been conducting household surveys since 1963. The interpolation done by Jamal (2004) to construct his annual data from what is available is somewhat arbitrary and not a



widely accepted practice in inequality studies. The studies of Adams and He (1995) and Adams and Alderman (1992) are based on a three-year panel survey of 727 households in three provinces of rural Pakistan. They used a comprehensive definition of income, including both cash and income received in kind. No adjustments were made to account for household composition (differing needs of household members or spatial cost-of-living differences).

In Bangladesh, the data sets used for inequality studies were different rounds of the nationally representative Household Expenditure Surveys of the Bangladesh Bureau of Statistics. Both the World Bank and ADB study and those of Wodon adjusted expenditure for spatial cost-of-living differences as well as intertemporal price changes. As noted earlier, the study by Ahmed uses only current unadjusted values of income and expenditure. Khan and Sen (2001) argue that official estimates of personal income and its inequality are wrong because income in the HES is erroneously defined. After making their own data adjustments, Khan and Sen find that the level of inequality and the increase over time are underestimated in official data.

In Nepal, three nationwide household surveys since 1976-7 are the only bases for the inequality (and poverty) estimates so far (Chherty, 2004). In 1976-7, the National Planning Commission (NPC) conducted the Employment, Income Distribution and Consumption Survey covering 4,969 households. In 1984-5, the Nepal Rastra Bank (NRB) conducted the Multipurpose Household Budget Survey covering 5,323 households. In 1995-6, the Central Bureau of Statistics (CBS) conducted the Nepal Living Standard Survey (NLSS) on 3,373 households. A new round of the NLSS was conducted in 2003 but will only be available starting in 2005.

The three surveys do not have identical definitions of household income. In particular, the NPC survey does not include imputed income in computing for household income, whereas the two others do (Chhetry, 2004). As to consumption, the CBS survey had much wider coverage in terms of items included than the two other surveys. Chhetry (2004) notes that large discrepancies have been observed between per capita income/consumption as estimated from the surveys, and the per capita GDP/privation consumption as obtained from the national income accounts.

For Sri Lanka, inequality measures are based on the Household Income and Expenditures Survey conducted by the Department of Census and Statistics.

### **6.3 Southeast Asia**

In Indonesia, inequality (and poverty) measurements are based on the National Socio-Economic Surveys (Susenas) conducted regularly by the Central Bureau of Statistics (BPS). The Susenas is geared more toward expenditure than income data. Some criticisms of the Susenas are the following: non-food expenditures are progressively understated by larger-income households, especially in urban areas, resulting in the possibility of underestimation of expenditure inequality; the Susenas' different surveys are conducted at different months, thus seriously affecting data comparability over time; there is also a wide discrepancy between personal consumption expenditure estimates from the Susenas and from the national income accounts<sup>13</sup> (Akita 2002). Sudjana and Mishra (2004) add that the Susenas tends to exclude a high proportion of high income households that cannot be reached by the enumerators, and that even when such data are obtained, they are often treated as outliers and excluded.

The inequality measures used in the studies cited above did not apply any spatial or intertemporal price adjustments. In other words, only current expenditure data were used. Assuming that price

---

<sup>13</sup> This discrepancy between estimates based on household surveys and national income account estimates for personal consumption expenditure, however, is common for many countries.

levels or price increases vary widely across different provinces of Indonesia, this approach could have a significant impact on the measured level of inequality and also on the trend of inequality (Asra, 2000; Friedman, 2002).

In the Philippines, the main source of income and expenditure data is the Family Income and Expenditures Survey (FIES) of the National Statistics Office. The FIES is conducted every three years, with the most recent one held in 2003. The survey captures a wide range of implicit expenditures, such as use value of durable goods (including owner-occupied dwelling units), consumption of home-produced goods and services, and gifts and assistance or relief in goods and services received by the household from various sources. The urban and rural areas of each province are the principal domains of the FIES. Another source of nationally representative data on income and expenditure is the Annual Poverty Indicator Survey (APIS), which is supposed to be conducted during years when the FIES is not done.<sup>14</sup> The APIS, however, does not provide income and expenditure data which is as detailed and robust as the FIES. This is particularly so for household expenditures, in which the expenditure items in the survey instrument were reduced to just two pages (27 expenditure lines), compared with over 20 pages (over 400 expenditure lines) in the FIES (Balisacan, 1999).

In Malaysia, income inequality measures are based on the data from the Household Income Survey (HIS), conducted by the Department of Statistics. The HIS defines household income to cover both money income and income in kind and regularly recurring receipts that accrue to the household or to members of the household. The HIS covers only private households and does not include the population staying in institutional households. The extent to which this causes bias in the inequality estimates is not known.

In Thailand, household income and expenditure data come from the Socio-Economic Survey (SES), conducted by the National Statistics Office (NSO). The SES has been conducted every two years since 1987, but prior to that it was conducted every five years beginning in 1968 (Motonishi, 2003). In the most recent surveys, the sample typically is around 25,000 households (Deolalikar, 2002). The NSO also conducted a special SES comprising a smaller sample than usual in 1999 to survey the effects of the Asian crisis.

In Vietnam, data for inequality measures are based on the Vietnam Living Standards Survey, which was conducted in 1992/93 and then in 1997/98.

---

<sup>14</sup> The APIS was not held in 2001 for lack of budget.

## 7. Conclusion

This paper has reviewed the recent experience on inequality in Asia, looking at 14 countries found in East, South, and Southeast Asia, comprising about 96% of the economy and population of the continent. Data comparability problems confound comparison of inequality patterns between countries and even within countries. Nonetheless, it is safe to conclude from the evidence that there is no homogenous inequality level or trend in the Asian region. In general, Kuznets' hypothesised inverted-U relationship between growth and inequality does not hold true in Asia; the countries with the lowest inequality levels are currently and historically those in East Asia like Japan, Taiwan and South Korea, which also happen to have the highest per capita income levels. The developing countries in South and Southeast Asia have had typically both higher inequality and lower per capita income. China is the interesting case at present because of the rapid growth of its economy and the rapidly widening income disparity among its population.

Many factors affect the evolution of inequality. Among the more important ones identified here are demographic dynamics, trade and industrial policy regime, labour market policies, and taxation (particularly on assets) and social expenditure policies. We should also add social structure, in particular the existence of castes, which is an important source of inequality in many Asian countries. Rapid population growth and poor quality education, particularly among lower income groups, everything else remaining the same, are bound to perpetuate and even worsen inequality levels as they put downward pressure on wages for unskilled labour. On the other hand, trade and industrial policies can alleviate inequality if they can raise the relative profitability of labour-intensive sectors and thus the wages of unskilled lower-income workers. Poor governance structure also adversely affects distribution. A concrete example, is the experience of South Asia in agriculture, where 'a lack of public investment in rural infrastructure (irrigation, roads, electrification and communications), social infrastructure (basic education and health care), and agricultural research and extension services have variously led the agricultural sector to perform below its potential' (Mellor, 2000). It is partly because of this that conditions hostile to inequality, such as unequal land distribution and human capital stock, remain prevalent (ADB, 2004a). In turn, these inequalities in ownership of physical and human capital adversely affect the ability of people, particularly the poor, to participate in economic growth and their chances of alleviating the inequalities.

There is no single way in which to address inequality in Asia. Policy responses are bound to be different across countries, not only because political and institutional factors matter in the search for viable solutions but also because the fundamental causes and sources of inequality vary considerably across countries and over time within countries. In the case of China, the government undertook market reforms with the knowledge that these would result in inequality, even deeming this necessary for growth. China has now attained rapid growth, but its inequality level is close to becoming the highest in the region. However, for as long as the poor are still able to participate in growth, and for as long as growth holds, as appears to be the case at present, a good case can be made for China tolerating relatively high levels of inequality. The same cannot be said for the other countries, such as most of those in South Asia and some in Southeast Asia, where poor economic performance is accompanied by high or even increasing inequality. In this case, there is a clear need for policies to address income disparity. What form these policies take, however, will depend on the specific characteristics of the country. For instance, in many South Asian and Southeast Asian countries, the politically sensitive issue of caste, which is an important factor affecting inequality, needs to be considered.

## Bibliography

- Adams, R. Jr and H. Alderman (1992) *Sources of income inequality in rural Pakistan: a decomposition analysis*, World Bank Policy Research Working Paper No. 2859, Washington, DC: World Bank.
- Adams, R. Jr and J. He (1995) 'Inequality and poverty in rural Pakistan', IFPRI Research Report.
- Ahmed, F. (2004) *Practices of poverty measurement and poverty profile of Bangladesh*, ADB Economic Research Division Working Paper No. 54, Manila: ADB.
- ADB (2004a) *Poverty in Asia: measurement, estimates and prospects, key indicators*, Manila: ADB.
- ADB (2004b) 'Report and recommendation of the President to the Board of Directors on a proposed loan to the Kingdom of Nepal for the gender equality and empowerment of women project'.
- ADB (2005) *Poverty in the Philippines: income, assets and access*, Manila: ADB.
- Ahn, K. (1997) 'Trends in and determinants of income distribution in Korea', *Journal of Economic Development*, 22(2): 27–56.
- Ahuja, V., B. Bidani, F. Ferreira and M. Walton (1997) *Everyone's miracle? Revisiting poverty and inequality in East Asia*, Washington, DC: World Bank.
- Akita, T. (2002) *Income inequality in Indonesia*, IUJ Research Institute Working Paper No. 2002-2, Niigata, Japan: IUJ RI.
- Akita, T., R. Lukman and Y. Yamada (1999) 'Inequality in the distribution of household expenditures in Indonesia: a Theil decomposition analysis', *The Developing Economies*, 37(2): 197–221.
- Alesina, A. and E. La Ferrara (2004) *Ethnic diversity and economic performance*, NBER Working Paper No. 10313, Cambridge, MA: NBER.
- Alesina, A. and D. Rodrik (1994) 'Distributive politics and economic growth', *Quarterly Journal of Economics*, 109: 465–89.
- Anwar, I., J. Killewo, M. Chowdhury and S. Dasgupta (2004) *Bangladesh: inequalities in utilization of maternal health care services: evidence from MATLAB*, HNP Discussion Paper, Washington, DC: World Bank.
- Asra, A. (2000) 'Poverty and inequality in Indonesia: estimates, decomposition, and key issues', *Journal of the Asia Pacific Economy*, 5(1/2): 91–111.
- Bakar, N. and A. Hassan (2003) 'Globalization and inequality: the case of Malaysia', Paper presented at UNU/WIDER Conference on Sharing Global Prosperity, Marina Congress Centre, Helsinki, Finland, 6–7 September.
- Balisacan, A. (1999) 'What do we really know – or don't know – about economic inequality and poverty in the Philippines?' in Balisacan and Fujisaki.
- Balisacan, A. (2000) 'Growth, redistribution, and poverty: is the Philippines an exception to the standard Asian story?', *Journal of the Asia Pacific Economy*, 5(1&2): 125–40.
- Balisacan, A. M. (2003) 'Poverty and inequality', in A. M. Balisacan and H. Hill eds *The Philippine economy: development, policies, and challenges*, New York: Oxford University Press.
- Balisacan, A. and S. Fujisaki (eds) (1999) *Causes of poverty: myths, facts and policies – a Philippine study*, Quezon City: University of the Philippines Press, in cooperation with the Institute of Developing Economies, Tokyo.
- Balisacan, A. and N. Fuwa (2003) 'Is spatial income inequality increasing in the Philippines?' Paper prepared for the UNU/WIDER Project Conference on Spatial Inequality in Asia held in the United Nations University Centre, Tokyo, 28–9 March.
- Balisacan, A. and E. Pernia (2002) *Probing beneath cross-national averages: poverty, inequality, and growth in the Philippines*, ADB Economic Research Division Working Paper No. 7, Manila: ADB.
- Balisacan, A. and S. Piza (2003) 'Nature and causes of income inequality in the Philippines', Background Paper for the EADN Income Distribution Project.
- Balisacan, A., E. Pernia and A. Asra (2003) 'Revisiting growth and poverty reduction in Indonesia:

- what do subnational data show?', *Bulletin of Indonesian Economic Studies*, 39(3): 331–53.
- Bauer, J. and A. Mason (1992) 'The distribution of income and wealth in Japan', *Review of Income and Wealth*, 38(4): 403–28.
- Bénabou, R. (1996) 'Inequality and growth', in B. Bernanke and J. Rotemberg eds, NBER Macro Annual 1996, Cambridge, MA: MIT Press.
- Bhalla, S. (1988) 'Is Sri Lanka an exception? A comparative study of living standards' in T. N. Srinivasas and P. K. Bardhan eds, *Rural poverty in South Asia*, Delhi, Oxford: Oxford University Press.
- Bhushan, I., E. Bloom and N. Thang (2002) *Unequal benefits of growth in Vietnam*, ERD Policy Brief No. 3, Manila: ADB.
- BPS-Statistics Indonesia, BAPPENAS and UNDP (2001) *Indonesia human development report 2001-. Towards a new consensus: democracy and human development in Indonesia*. Jakarta: BPS, BAPPENAS and UNDP.
- BPS-Statistics Indonesia, BAPPENAS and UNDP (2004) *Indonesia human development report 2001-. The economics of democracy: financing human development in Indonesia*. Jakarta: BPS, BAPPENAS and UNDP.
- Chen, B. and M. Hsu (2001) 'Time-series wage differential in Taiwan: the role of international trade', *Review of Development Economics*, 5(2): 336–54.
- Cheong, K. (1999) *A note on the interpretation and application of the Gini coefficient*, Working Paper No 99-1R, Manoa: University of Hawaii.
- Cheong K. (2001) 'Economic crisis and income inequality in Korea', *Asian Economic Journal*, 15(1): 39–60.
- Chhetry, D. (2004) *Practices of poverty measurement and poverty profile of Nepal*, ERD Working Paper No. 57, Manila: ADB.
- Collas-Monsod, S., T. Monsod and G. Ducanes (2004) 'Philippines' progress: towards the Millennium Development Goals: geographical and political correlates of sub-national outcomes', *Journal of Human Development*, 5(1): 121–49.
- Cororaton, C. (2003) *Analysis of trade reforms, income inequality and poverty using microsimulation approach: the case of the Philippines*, PIDS Discussion Paper No. 2003-09, Makati City: PIDS.
- Cowell, F. A. (1995) *Measuring inequality*, London: Prentice Hall-Harvester Wheatsheaf.
- Datt, G. (1995) 'Income inequality in India', mimeo.
- Datt, G. and H. Hoogeveen (2000) *El Niño or El Peso? Crisis, poverty, and income distribution in the Philippines*, World Bank Policy Research Paper No. 2466, Washington, DC: World Bank.
- Datt, G., and M. Ravallion (1999) *When is growth pro-poor? Evidence from the diverse experience of India's states*, World Bank Policy Research Working Paper No. 2263, Washington, DC: World Bank.
- Deaton, A. and J. Dreze (2002) *Poverty and inequality in India: a re-examination*, Delhi School of Economics Centre for Development Economics Working Paper 107, Delhi: CDE.
- Deininger, K. and L. Squire (1998) 'New ways of looking at old issues', *Journal of Development Economics*, 57(2): 259–87.
- Deolalikar, A. (2002) *Poverty, growth, and inequality in Thailand*', Asian Development Bank ERD Working Paper No. 8, Manila: ADB.
- Department of Statistics (1996) 'Overview of the household income survey in Malaysia', Conference Paper presented at Expert Group on Household Income Statistics, Canberra, 2–4 December.
- Fei, J., G. Ranis and S. Kuo (1979) *Growth with equity: the Taiwan cases*, Washington, DC: World Bank.
- Friedman, J. (2002) *A regional analysis of poverty, inequality, and growth in Indonesia, 1984–1999*, RAND Working Paper.

- Gwatkin, D., S. Rutstein, K. Johnson, R. Pande and A. Wagstaff (2000) 'Socio-economic differences in health, nutrition and population in India', Prepared for the Health, Nutrition and Population/Poverty Thematic Group of the World Bank.
- Heltberg, R. (2003) 'Spatial inequality in Vietnam: a regression-based decomposition', World Bank Research Paper.
- Hoff, K. and P. Pandey (2004) *Belief systems and durable inequalities: an experimental investigation of Indian caste*, World Bank Policy Research Working Paper No. 3351, Washington, DC: World Bank.
- Human Development Network/UNDP (2002) *Philippine human development report 2002*, Manila: UNDP.
- Hutaserani, S. (1990) 'The trends of income inequality and poverty and a profile of the urban poor in Thailand', *TDRI Quarterly Review*, 5(4): 14–19.
- Jacobs, D. (2000) *Low inequality with low redistribution? An analysis of income distribution in Japan, South Korea and Taiwan compared to Britain*, London School of Economics CASE Paper No. 33, London: LSE.
- Jamal, H. (2003) 'Poverty and inequality during the adjustment decade: empirical findings from household surveys', *Pakistan Development Review*, 42(2): 125–48.
- Jamal, H. (2004) 'Does inequality matter for poverty reduction? Evidence from Pakistan's poverty trends', Social Policy and Development Center Research Report.
- Jayaraman, R. and P. Lanjouw (1998) *The evolution of poverty and inequality in Indian villages*, World Bank Policy Research Working Paper No. 1867, Washington, DC: World Bank.
- Kakwani, N., S. Khankder and H. Son (2003) 'Poverty equivalent growth rate: with applications to Korea and Thailand', Mimeo.
- Khan, A. and B. Sen (2001) 'Inequality and its sources in Bangladesh, 1991/92 to 1995/96: an analysis based on household expenditure surveys', *Bangladesh Development Studies*, 27(1): 1–49.
- Kim, Y. (2004) 'Short-run versus long-run income inequality', Paper presented at the KDI-KAEA Conference, Seoul, 10 August.
- Knack, S. and P. Keefer (2000) *Polarization, politics, and property rights: links between inequality and growth*, Policy Research Working Paper No. 2418, Washington, DC: World Bank.
- Krongkaew, M. (2003) 'Income distribution and sustainable economic development in East Asia: a comparative analysis', Paper presented at the Annual Meeting of the East Asian Development Network, Singapore, October 10–11.
- Kumar, N. and A. Mitra (2004) 'Social and economic dualism: caste, employment and poverty in Delhi slums', Paper written for the Institute of Economic Growth.
- Kuznets, S. (1995) 'Economic growth and income inequality', *American Economic Review*, 45:1-28.
- Lee, S. and A. Mason, 2001. "Aging, Family Transfers, and Income Inequality," University of Hawaii Department of Economics Seminar Paper.
- Leipziger, D., D. Dollar, A. Shorrocks, and S. Song, 1992. The Distribution of Income and Wealth in Korea. World Bank.
- Lin, B. (2003) 'Economic growth, income inequality, and poverty reduction in the People's Republic of China', *Asian Development Review*, 20(1):105–24.
- Lin, C. and P. Orazem (2004) 'A re-examination of the time path of wage differentials in Taiwan', *Review of Development Economics*, 8(2): 295–308.
- Liu, A. (2001) 'Markets, inequality and poverty in Vietnam', *Asian Economic Journal* 15(2): 217–65.
- Mellor, J. W. (2000) *Defining faster more equitable growth: agriculture, employment multiplier, and poverty reduction*, CAER II Discussion Paper No. 70, Cambridge, MA: HIID.
- Milanovic, B. (2001) 'Inequality and determinants of earnings in Malaysia', Paper presented at the Asia and Pacific Forum on Poverty: Reforming Policies and Institutions for Poverty Reduction, to be held at the Asian Development Bank, Manila, 5–9 February.
- Minot, N., B. Baulch and M. Epprecht (2003) 'Poverty and inequality in Vietnam: spatial patterns and geographic determinants', IFRI Research Paper.

- Motonishi, T. (2003) *Why has income inequality in Thailand increased?* Asian Development Bank ERD Working Paper No. 8, Manila: ADB.
- Murphy, K., A. Schleifer and R. W. Vishny (1989) 'Industrialization and the big push', *Journal of Political Economy*, 97(5): 1003–26.
- Nepal South Asia Centre and UNDP (1998) *Nepal human development report 1998*, Kathmandu: UNDP.
- Ostrom, D. (1999) 'Rich and poor in Japan: how wide is the gap?' Japan Economic Institute Report No. 37A.
- Pasuk, P. and S. Isra (2000) 'Globalization and inequality: the case of Thailand', Paper prepared for OECD conference on Poverty and Inequality in Developing Countries, Paris, 30 November – 1 December.
- Perotti, R. (1996) 'Growth, income distribution, and democracy: what the data say', *Journal of Economic Growth*, 1(2): 149–87.
- Persson, T. and Tabellini G. (1994) 'Is inequality harmful for growth?' *American Economic Review*, 84(3): 600–21.
- Rao, V. and P. Mukhopadhaya (2001) 'The miracle of low income inequality: Taiwan, 1976–97', *Journal of Income Distribution*, 10(1/2): 83–115.
- Ravallion, M. and S. Chen (1999) *When economic reform is faster than statistical reform*, Washington, DC: World Bank.
- Ravallion, M. and G. Datt (2002) *Is India's economic growth leaving the poor behind*, World Bank Policy Research Working Paper No. 2846, Washington, DC: World Bank.
- Roslan, A. (2001) 'Income inequality, poverty and development policy in Malaysia', Conference Paper for Poverty and Sustainable Development, Université Montesquieu-Bordeaux IV, Bordeaux, France, 22–23 November.
- Sahn, D. (2003) 'Equality of what? Evidence from India', Paper presented at Poverty, Inequality and Development: A Conference in Honor of Erik Thorbecke, Cornell University, New York, 10–11 October.
- Schultz, T. (1997) *Income inequality in Taiwan 1976–95: Changing family composition, aging, and female labor force participation*, Yale University Economic Growth Center Discussion Paper No. 778, New Haven, CT: Yale University.
- Shirahase, S. (2002) 'Japanese income inequality by household type in comparative perspective', National Institute of Population and Social Security Research Paper presented at the RC28 meeting at the University of Oxford, April.
- Song, L. (2004) 'East Asian experience: China', Mimeo, Australian National University.
- Sudjana, B. and S. Mishra (2004) *Growth and inequality in Indonesia today: implications for future development policy*, United Nations Support Facility for Indonesia Recovery Working Paper No. 02/08, Jakarta: UNSFIR.
- Tudawe, I. (2000) *Chronic poverty and development policy in Sri Lanka: overview study*, Chronic Poverty Research Centre Working Paper No. 9, Manchester: CPRC.
- Ul Haq, M. and K. Haq (1998) *Human development in South Asia*, Oxford: Oxford University Press.
- UNDP (2002) *Nepal human development report 2001: poverty reduction and governance*, Kathmandu: UNDP.
- Van de Walle, D. and D. Gunewardena (2000) *Sources of ethnic inequality in Vietnam*, Policy Research Working Paper No. 2297, Washington, DC: World Bank.
- Wodon, Q. (1999a) *Growth, poverty, and inequality: a regional panel for Bangladesh*, Policy Research Working Paper No. 2072, Washington, DC: World Bank.
- Wodon, Q. (1999b) *Microdeterminants of consumption, poverty, growth, and inequality in Bangladesh*, Policy Research Working Paper No. 2076, Washington, DC: World Bank.
- World Bank (1996) 'Thailand, growth, poverty and income distribution', Country Operations Division Report No. 15689-TH.
- World Bank (1997) *Sharing rising incomes*,. Washington, DC: World Bank.

World Bank and ADB (2002) 'Poverty in Bangladesh: building on progress', Report submitted to Poverty Reduction and Economic Management Sector Unit South Asia Region of the World Bank.



## **Annex 1: Institutional Sources**

Academia Sinica, Taipei  
Asian Development Bank  
Australia National University  
Bangladesh Institute of Development Studies  
Center for Chinese Agricultural Policy, Beijing  
China Academy of Sciences, Beijing  
Delhi School of Economics  
East Asia Development Network  
India Institute of Economic Growth  
Institute of Developing Economies, Japan  
Institute of Southeast Asian Studies, Singapore  
International Food Policy Research Institute  
International University of Japan Research Institute  
Japan Economic Institute  
Korea Development Institute  
Nepal South Asia Centre  
Philippine Human Development Network  
Philippine Institute of Development Studies  
Pakistan Institute of Development Economics  
Social Policy Development Centre, Pakistan  
Thailand Development Research Institute  
United Nations Development Programme  
United Nations Support Facility for Indonesia Recovery  
University of the Philippines School of Economics  
World Bank  
Yale University Economic Growth Center