Growth and Change in Asia and The Pacific

CHAPTER I. SOCIO-ECONOMIC TRENDS

Introduction

Asia represents the largest landmass on the planet. Geographically, it stretches from the Arctic wastelands of the polar regions to the islands and atolls in the tropics, and from the Urals to the Pacific. Within this geographical vastness are pictures of contrast: two of the largest populated countries and some of the smallest states can be found in the region; it contains the second largest economy on the globe together with some of the smallest; there are countries that are rich in resources and those that are poor; some are at the pinnacle of development and others are nomadic or agrarian. The diversity of countries making up Asia is greater than in any other region of the world. That diversity is in part a reflection of geography, climate, and natural resource endowments. In another sense, it reflects Asia's long history. As the birthplace of many ancient civilizations, it has contributed much by way of inventions and technological advancements.

Historically, Asia led the world in terms of wealth and development. Cross-national trade flourished as Asian goods were transported across the continent via the Silk Route and the southern seas. Science and technology were developed and its benefits were shared. In this sense, globalization was a phenomenon present and practised by Asia centuries ago. The last four centuries of the past millennium represented a period in which Asia declined as an economic power. The struggles of the 20th century, wars, civil struggles, famines, and natural disasters left Asia further weakened. Yet, Asia showed resilience in the last half of the 20th century as it once again worked toward economic and social development.

While, Asia is a geophysical definition of a region, its key and fundamental feature is its heterogeneity. All other continents are much more homogeneous in terms of ethnicity and stages of development. Because of its diverse features, describing Asia in statistical terms is, thus, virtually the same as describing the world.

Over the past five decades, development and modernization in Asia have surpassed other developing regions as more Asian countries have recorded faster growth and social change. Japan emerged as the second largest economy in the world. The People's Republic of China (PRC), the Republic of Korea, and parts of Southeast Asia became economic powerhouses. They traded their products and successfully competed with the more advanced nations outside the region. Rising incomes and lowered poverty have brought newfound prosperity and confidence to parts of Asia. Despite the setbacks caused by the 1997 East Asian economic crisis, optimism is high that Asia will have a bright and shining future as the world enters the third millennium.

This statistical volume captures the successes of developing Asian countries and also records the gaps that exist between the more affluent societies and those that have lagged in economic and social progress. The data offer lessons for charting the course of economic and social development for the future. This chapter attempts to highlight major economic and social trends; Chapter II addresses issues connected with the data itself, and the strategic choices necessary to improve data availability.

The Nature of Key Indicators

In assessing the current economic and social situation in different countries of the region, and in tracking progress or the lack of it at the country level, statistics that are current, comprehensive, and reliable are indispensable. In discharging its responsibilities as a multinational financial institution and a partner in development, the Asian Development Bank (ADB) has a vital interest in data for its operational and analytical needs. ADB has, therefore, taken a lead in gathering statistical information as part of its overall mission to promote and assist countries in pursuing their respective development goals. For over three decades, it has published The *Key Indicators of Developing Asian and Pacific Countries (KI),* the flagship statistical publication of ADB. It is a comprehensive annual compendium of statistics serving as an authoritative source for current and historical data on the developing member countries (DMCs) of ADB.

The volume meets the data needs of various users with interests in country–specific information and those desiring to make inter-country comparisons. Aggregations based on the data reported in the volume will permit users to obtain a composite overview of trends and the state of development of the region. The volume attempts to report the latest available information, in time-series form on the social, demographic, and economic conditions and the changes taking place in these countries. To present a comprehensive and up-to-date report, the *KI* draws upon all readily available data sources, both national and international. Annual questionnaires addressed to national authorities provide ADB updated data from its DMCs. Publications and websites of statistical contacts and the databases of other international agencies with mandates for collecting specialized data are also tapped.

While the data published in this volume provide a basis for broad assessments of trends and levels, users are cautioned against drawing detailed inferences or conducting exhaustive inter-country comparisons because of definitional differences that characterize the nature of the underlying

Box 1.1: Asia and the World

To analyze the diversity of the DMCs of ADB, and the variations in the patterns of developments reliable and comprehensive data are needed. Despite the inherent weaknesses and gaps in available data, however, some broad observations can be made about the state of development in Asia and its place in the world. While there is a need for caution against comparing data, a general view of Asia based on some statistics tells a gripping tale. Asia's place in the world can be described as follows:

- A little over half of the human race calls Asia its home; India and the PRC alone account for over 2.3 billion out of the global total population of about 6.0 billion.
- Although many countries in Asia, especially East Asia, have enjoyed high rates of sustained economic growth over extended periods, Asia generated a quarter of the world's total output of goods and services or gross national product (GNP), with Japan alone accounting for almost two thirds of the Asia's total. Thus developing Asia, excluding Japan, accounts for just over 9 percent of total global output of around US$30,000 billion.
- Of the global value added in manufacturing, Asia contributes (excluding Japan) approximately 20 percent. Asia's share of world exports, is 17 percent, a significant part of which are manufactures.
- In 1999, despite the ravages of the economic crisis, Asia attracted some US$66 billion in foreign direct investments (FDI), representing about 45 percent of all such flows to countries of the developing world.
- Overall savings rates in Asia are amongst the highest in the developing world, with rates in the PRC, the Newly Industrialized Economies (NIEs) and the high growth countries of Southeast Asia exceeding 30 percent.
- Asia, given its population size, and an expanding middle class has the potential to become one of the largest consumer markets in the world. This potential, coupled, with the region's ability to absorb new technologies, provides vast opportunities for investment.

Despite economic and social progress, wide disparities exist in living standards within Asia. The extremes of economic well being are best indicated by the levels of per capita income. Japan enjoyed an income level of US$32,030 per capita, whilst Nepal had US$220. While infant mortality has fallen globally to a low of 6 per 1,000 births in the advanced industrial countries, it is unacceptably high in the countries of South Asia where the rates average 71 per 1,000 births. About 57 percent of all females in that part of Asia are illiterate as against 17 percent in Southeast Asia — still intolerably high in comparison to levels in the advanced countries.

There are other stark statistics: one in five Asian adults is unable to read or write; only a fifth of Asians have access to a radio and less than one in 10 has access to a newspaper. Child malnutrition is pervasive, with as many as half of all children in some regions of the continent being either underweight or stunted.

data. Aggregated regional data can be a reference and help in addressing broad policy questions, but the data are rarely specific enough in aiding fuller or more detailed analysis. For such analysis, users are best served by datasets available at the national level.

Understanding the Data

This section reviews the data relative to the economic and social state of the DMCs and clarifies what these data can and cannot do.

The countries and the region as a whole have a story to tell: efforts through regional cooperation to achieve integration, the origin and handling of the 1997 East Asian economic crisis, the emergence of the Former Soviet Union (FSU) countries and their transition to becoming market economies, the growing economic reforms in India, the increasing integration of the PRC into the world economy, and the continuing stagnation in Japan that casts a shadow on the rest of the region. The stories are, however, best told in the specific context of the countries themselves, not in regional overviews such as in this volume.

The 1997 crisis, for example, primarily affected East Asian countries. It did not have a significant impact on other parts of the region such as the Central Asian Republics (CARs) or the Pacific island nations. In the other regions – such as South Asia, debt and defense spending were probably more important factors that impacted on the patterns of public spending and the resources allocated for health, education, poverty reduction, and other services. Thus linking trends to the crisis alone may not sufficiently explain the recent social and economic development.

Moreover, social statistics – even in developed countries – became available only with a lag, a major problem in the light of discussions on postcrisis outcomes. Thus, for the majority of DMCs, the most recent data are, at best for 1998 or 1999. Information for 2000 is sketchy and limited to very few countries, and for only a few indicators. Thus, data on the effects of the East Asian economic crisis, particularly social, are just beginning to be available. Therefore, a review of the crisis cannot yet accurately be made without relying on considerable anecdotal information.

In addition, social outcomes are best observed over a longer term, i.e. a decade or more. Many of the tables are thus structured with information for spot years without a continuous time series. This is particularly so for poverty data and its comparability over time. In any event, year-to-year changes, for example, educational attainment, health outcomes, or fertility trends mean little given the nature of the subject and the extent and quality of the data. At best, one can be a little more confident about public expenditures on social sector programs.

It is also useful to keep in mind the following caveats concerning social data:

- There is no magic number in the social arena – unlike Gross Domestic Product (GDP), there is no equivalent to measure well being in the social sense.
- Averages and aggregates conceal the range of circumstances and differences between and within countries.
- Investments in the social sectors have long gestation periods.
- It is difficult to link outcomes to policies as human behavior and responses are often unpredictable.

For these reasons, this chapter looks at the entire decade of the 1990's[1]. This allows the data to tell the story and put the events like the 1997 East Asian economic crisis in a longer-term context.

The 40 regional tables that make up Part 2 of the *KI* cover a wide range of social and economic information. They include basic demographic data (Tables 1-3), basic production data (Tables 16-20), basic trade data (Tables 27-30), and a wide variety of tables presenting social, financial, fiscal, and economic data. These regional tables present a summary overview and a broad basis for comparing country performance. Table I[2] summarizes the 40 tables according to the subject matter and themes covered.

In addition, the volume contains country tables that report data in more disaggregated forms. However, the number of indicators reported for each country varies, depending on data availability. Thus, for the statistically more advanced DMCs, the number of indicators exceeds 200; whereas, for the smaller and less advanced economies, the number of indicators shown is as few as 70. These country tables – while useful for assessing country circumstances and trends—are of limited value for purposes of aggregation across countries. The analysis has, therefore, been based largely on the data contained in the regional tables.

Many of the basic data sets in this volume have been collected by countries over a long time; they are the earliest types of data on human activity – number of people, amounts of crops produced, and type and amount of goods traded to and from other countries. As the science of measuring the state and change of peoples and countries has evolved, largely in the 20th century, more sophisticated types of information have been collected. Thus, national accounts are not in themselves directly measured but are built up from basic data. Prices have been measured for centuries, but only in recent decades have they been systematically organized to be meaningful on an aggregate basis. Similarly, fiscal data have long been collected, but have only been made comparable across countries in the past 20 years.

Table I. Statistical Tables

Regional Table No.	Subject Matter
1-3	Demographics
4-5	Labor force participation and employment
6-8	Poverty and related measures
9-10	Environment
11-15	Measure of the economy
16-20	Agricultural production
21-22	Energy use
23-25	Prices and money
26	Fiscal information
27-32	Foreign trade
35-36	External debt
33, 39	Foreign private capital flows
34, 37-38,40	Financing the balance of payments

As data have been used more and more to make decisions, both private and public, there has been a continuous demand not only for better data but also new and different information, based not only on existing data but often requiring the collection of new types of data. For example, national policymakers want to maximize the well being of the inhabitants of their countries – the question they face is how to measure well being. Do they measure it as a stock at a point in time or a flow over time? Do they measure it in terms of the physical well being of people or in terms of their material wealth? Measuring the income of the nation is a well-developed art, dividing this by population gives a measure of per capita income. However, this tells nothing about the distribution of this income across the population. Comparisons with other countries require the use of exchange rates and lead to a series of questions on whether the rates used are in equilibrium for the goods and services in the average individual's consumption. Purchasing power parity (PPP)

[1] In some cases the 1980s is considered as well. A fuller analysis going beyond these time horizons has not been attempted as there are discontinuities in the time series for several countries; in other instances, comparable data prior to the early 1990s is simply not available, such as in the transition countries.

[2] The tables in this chapter are identified with Roman numerals so as to avoid confusion with the 40 tables contained in this statistical volume.

methodologies have been developed to address this problem, but even after four decades of work, they are not without problems. Measures such as the Gini coefficient (Table 6 of Part 2) have also been developed but such measures require extensive surveys and do not give much normative guidance. Comparing countries give some indications; provided the underlying measures and methodologies of the two countries are similar.

National policymakers have at their disposal considerably more data and information, and thus can make decisions with a greater degree of reliability to enhance the well being of their inhabitants. Such data are, however, country-specific and are of limited use when considering other countries, sub-regions, or the region as a whole. Country specificity reduces comparability. Thus, the 40 regional tables of information presented in this volume represent a balance between availability, accuracy, and relevance. They are based on data that are routinely collected in most, if not all countries, and are of acceptable reliability. They represent the current state of the art in terms of data for analyzing and comparing across DMCs. They address the perceived concerns of peoples, enterprises, governments, and international aid agencies.

The question then becomes, what data can tell the stories of the 1990s? Some data sets are not yet sufficiently robust to be able to tell much of a story. One would suspect, for example, that the past decade would have been a difficult time for the environment. However, Tables 9 and 10 of Part 2, which show the best available information on the DMCs, are mainly point estimates, providing little meaningful insight on what has happened. Likewise, Table 6 of Part 2, which contains measures of income distribution while presenting data for many countries, thus providing the basis for future comparisons, has insufficient data to analyze trends.

In the analysis of trends in the DMCs over the past decade, the data contained in the regional and country tables were used. In a number of instances, data reported by other international organizations or data collected by ADB staff in the course of country operations have also been used. For comparisons with other developing regions of the world, other international sources, primarily the World Bank, were employed.

Building an Analytical Framework

DMCs differ in economic systems (market, transition, and semi-centrally planned), size of economies, resource endowments, economic structures, population density, performance, state of human development, and prevailing social conditions, contributing to the heterogeneity of the region. Data reported in this volume describe the multi-dimensional features of the countries and merely provide a background to the complex portrait. To read that portrait, the data need to be organized. The countries making up the region need to be grouped and classified into more homogenous groupings before assessing performance, highlighting contrasting patterns of development, and drawing inferences about the factors that have contributed to achieving development goals.

The aggregate for the DMCs is dominated by India and the PRC, thus a discussion for the region as a whole would be dominated by these two countries. ADB has a useful disaggregation in its *Asian Development Outlook* (ADO) and for the most part the analysis of this volume uses the same classification scheme; however, for some parts of the analysis it is useful to make a further breakdown. In addition, the ADO classification for Pacific Islands has been changed to include Maldives – whose

Table II. Country Groups

Newly Industrialized Economies	**Southeast Asia: Transition**
Hong Kong, China	Cambodia
Korea, Rep. of	Lao People's Democratic Republic
Singapore	Myanmar
Taipei,China	Viet Nam
People's Republic of China (PRC)	**Southeast Asia: Industrializing**
	Malaysia
Central Asian Republics, Afghanistan and Mongolia	Indonesia
Afghanistan	Philippines
Azerbaijan	Thailand
Kazakhstan	
Kyrgyz Republic	**Small Islands**
Mongolia	Cook Islands
Tajikistan	Fiji Islands
Turkmenistan	Kiribati
Uzbekistan	Maldives
	Marshall Islands
South Asia	Micronesia, Fed. States of
Bangladesh	Nauru
Bhutan	Papua New Guinea
India	Samoa
Nepal	Solomon Islands
Pakistan	Tonga
Sri Lanka	Tuvalu
	Vanuatu

economic issues are more similar to those of the Pacific island countries than they are to the rest of South Asia. Finally, for part of the analysis it will be informative to separate the Southeast Asia grouping into two parts, the former being transition economies and the latter, the "tigers" of the mid-90s. The grouping of Central Asian Republics (CARs) has been expanded to include Afghanistan and Mongolia. The choice in respect of Afghanistan was based on the linguistic, tribal and cultural links with some of its Central Asian neighbors. Mongolia has similar institutional, demographic and social characteristics as the CARs. Table II shows the country groups.

Major Trends in The DMCs

Reviewing the past decade of change in the DMCs, a number of key trends can be observed. With the exception of 1998, the region's GDP grew at over 6 percent per annum. This was a faster rate of growth than recorded by Latin America which grew at 3.4 percent and Sub-Saharan Africa at 2.4 percent. Most countries of the region shared in rising levels of GDP. The transition countries of Central Asia were the exception and recorded negative growth as they underwent painful adjustments from central planning towards becoming market economies.

The remarkable growth performance of the region was largely influenced by the continued dynamism of the PRC, the Newly Industrialized Economies (NIEs) and the Southeast Asian "tigers" and better performance in South Asia after decades of slow growth. While the 1997 crisis was a set back for the fast growing countries of Southeast Asia, their recovery in 2000 testified to their resilience.

The overall favorable economic performance of the region contributed to general improvements in living conditions. The social transformation that took place during the decade was aided by lowered population pressures. The slowing down in the growth of population to about 1.5 percent reflected the success of the PRC's population policies in lowering fertility; India, the second most populous country in Asia saw a slowing down of its rate to 1.7 percent per annum from an average of 2.1 percent in the previous decade. Declines were also recorded in the other populous countries of the region.

Towards Meeting the International Development Goals

The international community has established a set of International Development Goals for the year 2015. These include the reduction of poverty and human deprivation. These development goals are:

- Reduce the incidence of extreme poverty by half between 1990 and 2015;
- Attain 100 percent primary school enrollment by 2015;
- Eliminate gender disparities in primary and secondary education by 2005;
- Reduce infant and child mortality by two thirds between 1990 and 2015;
- Reduce maternal mortality ratio by three quarters between 1990 and 2015;
- Provide access for all to reproductive health services by 2015;
- Ensure that every country implements a national sustainable development strategy by 2005, and reverses the loss of environment resources by 2015.

How much progress has there been since 1990 against the goals enumerated above?

The message that emerges from a review of the data in this volume and from other sources is encouraging. Progress has indeed been made, even though not all groupings have recorded equal progress. The decade of the 1990s saw:

- Poverty incidence in the DMCs as a whole declining from 29 percent to 24 percent. Significant progress was made in the PRC with more than 100 million people lifted out of poverty.[3]
- By the end of the decade net primary school enrollment in South Asia had reached 77 percent, the PRC had already attained a net ratio of 100 percent.
- Available data indicate a reduction in gender disparities in education for most major countries in the region.
- Infant mortality rates fell in all sub-regions. In South Asia the decline was from approximately 80 to 75 per 1000 births; in the PRC it was from 33 to 31.
- Recent estimates for maternal mortality are not available. Wide disparities continue to exist between the groups of countries in the region. South Asia has a high rate of 368 maternal deaths per 100,000 live births with the NIEs recording a rate of 17 and the PRC, 55.
- Contraceptive Prevalence Rates in most countries of the region, for which data are available, have risen during the decade. Almost 40 percent of married women in South Asia have access to reproductive health services. In the PRC the percentage has risen from 71 percent to 85 percent during the decade.
- Limited data availability precludes an assessment of progress towards meeting the targets for a restoration of environmental resources.

[3] Based on the $1.08 poverty line a day at 1993 PPP. See WB, *World Development Report, 2000/2001*.

Life expectancy, as a proxy measure of health, continued to rise. Some countries in the region – Republic of Korea, Hong Kong, China, and Singapore – attained levels comparable to those prevailing in the developed industrial countries. India's male and female life expectancy rose to over 60 compared to just 54 a decade earlier.

Further evidence of social progress is portrayed by the sharp rises in adult literacy levels. In South Asia, there was a doubling of the rate of literate women from just a quarter to half of all adult women. Also, the PRC recorded an increase from just over half of adult women to three quarters of the adult female population.

These favorable changes, especially rising literacy levels amongst females, must be seen as precursors of change in the decades ahead. Educated women have lower fertility; are more likely to enter the labor market; and generally contribute to family welfare and well-being.

GROWTH — THE BASIS FOR SOCIAL DEVELOPMENT

Although the main focus of the current review of trends in the region is in relation to social change and progress, the review needs to factor in the setting against which such progress occurred. Sustained economic growth during the decade under review provided the underpinnings for improvements in living standards as measured by various social indicators. The region enjoyed remarkable economic growth during the 1990s. The DMCs, as a group, led all other developing regions of the world. The PRC together with the NIEs and the tiger economies of Southeast Asia grew at about 7.4 percent; South Asia grew at 5.7 percent. In contrast, the growth performance in Latin America was 3.4 percent per annum; the Middle East and North Africa region averaged 3.0 percent. In Sub-Saharan Africa, although growth accelerated from the low levels of the 1980's, it averaged only 2.4 percent.

Within the region, economic growth varied between the different groupings of countries as illustrated in Table III. The PRC, the NIEs and the "tigers" of Southeast Asia recorded remarkable and sustained growth for most of the decade until the crisis of 1997. Recovery from that crisis was fairly rapid, demonstrating the resilience of these economies and the favorable external environment that permitted strong export-led recovery. In South Asia, after sluggish growth at the beginning of the decade, growth picked up toward the end of the decade. The transition economies of Central Asia were severely affected by the breakup of the Soviet Union. Their economies contracted sharply as they went through a painful process of adjustment. Modest growth resumed in the middle of the decade, but these economies remain fragile as they implement programs to deepen reforms toward being market-oriented economies.

Table III. Growth Rate of GDP
(percent per year)

Country Group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Newly Industrialized Economies	7.3	7.9	5.8	6.2	7.4	7.4	6.3	5.8	-2.9	7.9	8.4
CARs, Afghanistan and Mongolia	0.1	-11.9	-14.7	-12.5	-20.2	-5.4	0.6	1.8	1.5	4.7	7.8
PRC	3.9	8.0	13.2	13.4	11.8	10.5	9.6	8.8	7.8	7.1	8.0
Southeast Asia	8.2	6.6	6.3	6.8	7.5	8.4	7.4	3.5	-9.0	3.1	5.1
South Asia	5.4	1.9	4.8	4.1	5.4	6.8	7.0	4.7	6.1	5.8	5.8
Small Islands	-0.4	6.4	8.4	11.8	1.4	-0.6	5.7	-2.9	-2.0	4.1	-1.8
Average	6.2	6.4	7.5	7.9	8.2	8.3	7.6	5.9	0.2	6.3	7.1

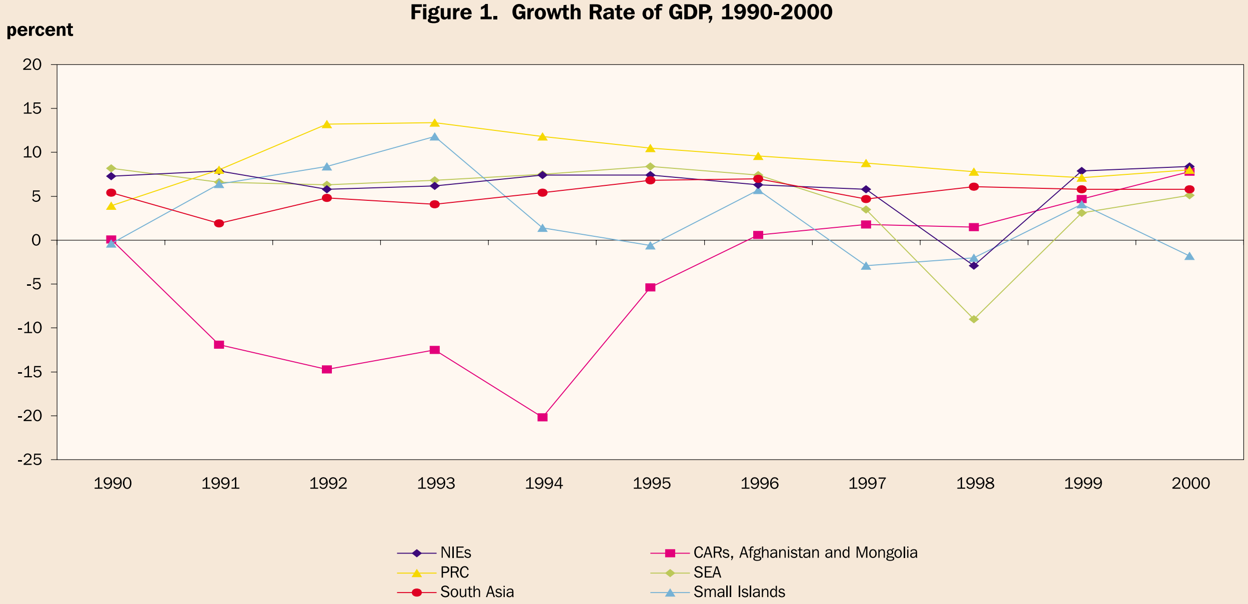
Source: ADB, *Asian Development Outlook 2001.*

The DMCs, particularly the PRC, several of the "tigers" of Southeast Asia and the NIEs , have recorded high rates of domestic savings over an extended period. These rates have ranged from 30 to 50 percent of GDP. Gross domestic savings rates in South Asia have been lower and averaged those of countries in Latin America, averaging about 20 percent, a rate well above that of Sub-Saharan Africa of 17 percent. The high savers were also the countries that had high growth.

Demographic and Social Trends

The analysis in this report begins by examining demographic trends over the past decade. These trends are very important as they set the stage for understanding other social trends and developments. At the beginning of the new millennium,

Figure 1. Growth Rate of GDP, 1990-2000



Source: ADB, *Asian Development Outlook 2001*.

Table IV. Asian DMCs, Population Growth, Size and Share, 1995-2000

Country Group	Annual Growth 1995-2000 (%)	Size 2000 (Mn)	Share 2000 (%)
Newly Industrialized Economies	1.09	80.2	2.5
CARs, Afghanistan and Mongolia	1.44	89.4	2.7
PRC	0.94	1262.5	38.6
Southeast Asia – Transition	1.91	144.1	4.4
– Industrializing	1.65	374.6	11.4
South Asia	1.76	1312.8	40.1
Small Islands	1.62	6.7	0.2
DMCs	1.45	3271.9	100.0

Source: Table 1 of ADB, *Key Indicators 2001*.

the DMCs contained approximately 3.27 billion people, representing over half of humanity.

Table IV shows the annual population growth rates over the 1995-2000 period, and the size and regional share as of 2000. While 39 percent of the region's population is in the PRC, and it has the lowest population growth rate; another 40 percent is in South Asia with one of the highest rates of population growth.

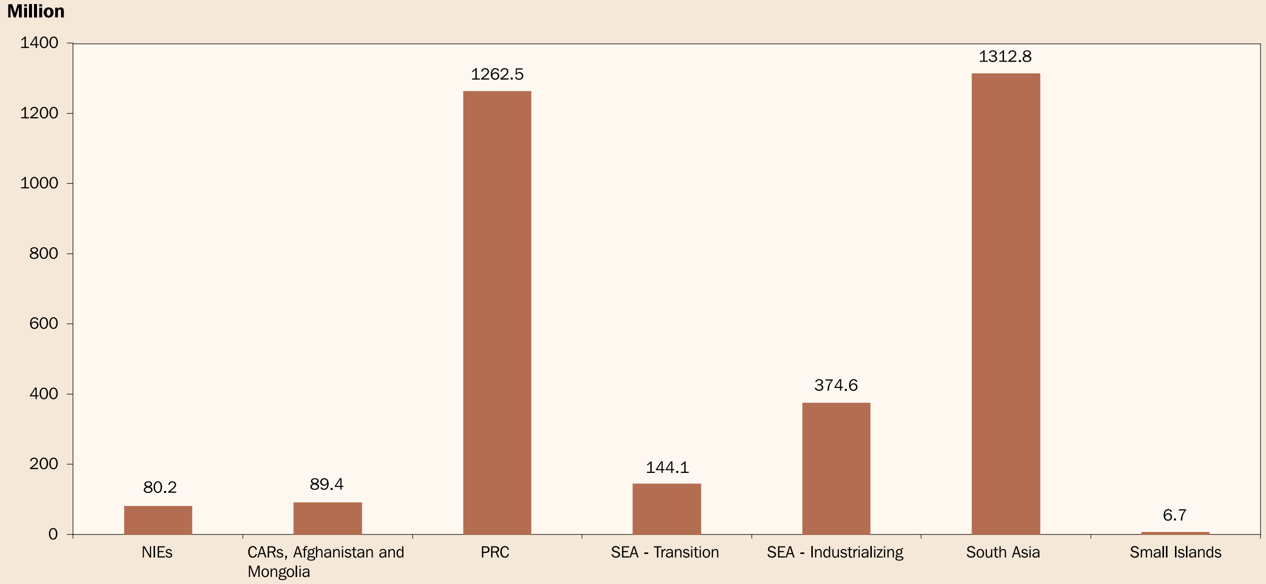
Even though the NIEs have low rates of population growth, they are not large enough to impact on the demographic outlook for the region as a whole. Similarly, the transition economies of Central Asia, with their moderate growth rates, are not large enough to change the outlook.

Elsewhere in the world, despite some slowing down, Sub-Saharan Africa and the Middle East and North Africa continued to record higher rates of population growth than the DMCs.

The marked slowing down of population growth in the DMCs during the decade of the 1990s can be attributed in part to rising levels of education, increased female labor participation, and greater access to and use of contraception. The changes were especially marked in South Asia and the PRC. Death rates continued to decline as better healthcare made its mark. Concurrently, life expectancy rose throughout the region by 7 percent. On the average, DMC citizens lived longer by three years.

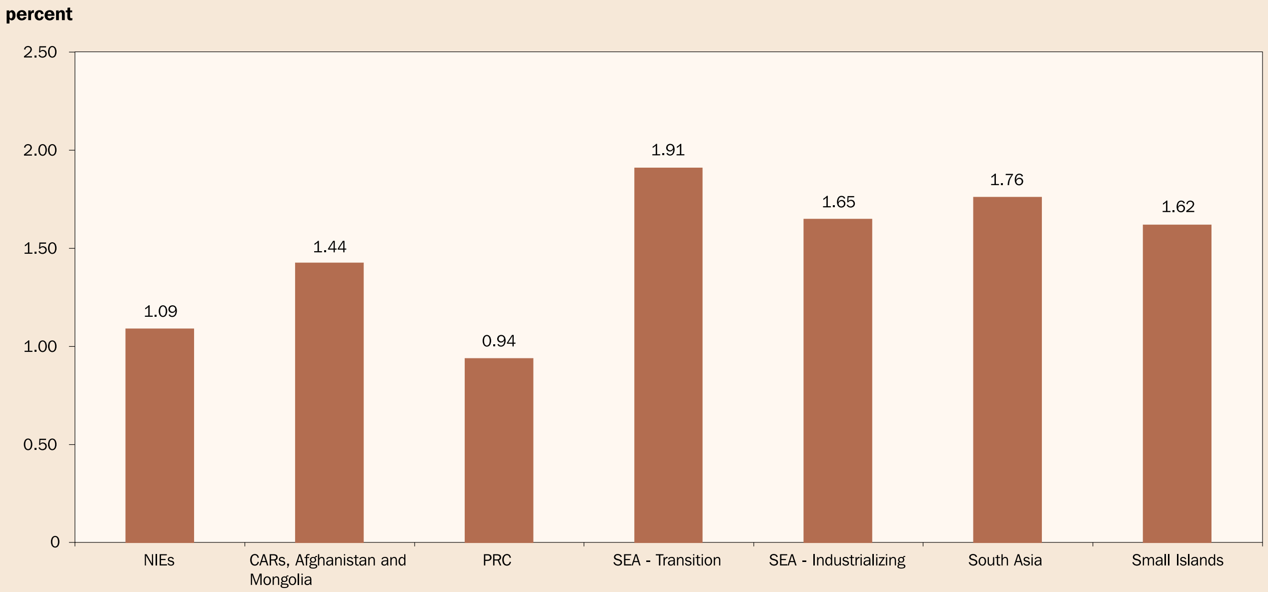
The changing demographic patterns, with declines in fertility, longer life expectancy are altering the age structure of populations. The share of the population under the age of 14 has been declining in most countries of the region. The percentage aged 65 or more has, however, been increasing. These trends indicate that the population in most countries is gradually aging. These demographic changes are likely to have longer term consequences for labor force growth, the need for long term health care, and appropriate arrangements for old age pensions and social security schemes. In the absence of adequate arrangements, the aged and the infirm are likely to emerge as a significant group amongst the poor.

Figure 2. Population, 2000



Source: Table 1 of ADB, *Key Indicators 2001*

Figure 3. Annual Average Population Growth, 1995-2000



Source: Table 1 of ADB, *Key Indicators 2001*.

Table V. Change in Cropped Land per Capita and Cereal Production, 1980 and 1998

Country Group	Cropped Land 1980 (Hectares per capita)	Cropped Land 1998 (Hectares per capita)	Cropped Land 1980-1998 (%)	Cereals 1985-1998 (%)
Newly Industrialized Economies	0.049	0.035	-28	-31
CARs, Afghanistan and Mongolia	0.526	0.391	-26	n.a.
PRC	0.100	0.108	8	15
Southeast Asia	0.219	0.184	-16	4
South Asia	0.210	0.150	-29	-1
Small Islands	0.282	0.228	-19	n.a.

Sources: Tables 10 and 16 of ADB, *Key Indicators 2001*.

A side effect of this population increase can be seen in Table V, which combines the data on population growth with that of cropped land (hectares per capita) in Table 10, and the output of cereals shown in Table 16 of Part 2. The cropped land per capita has changed quite dramatically in almost two decades. Only in the PRC has it actually increased because of land reclamation. In South Asia, where population is not only large but relatively rapidly increasing, the drop has been larger than elsewhere. There has clearly been a pressure on arable land as a consequence.

The drop in the cropped land per capita in the NIEs is expected as they become increasingly open to world trade and no longer entirely dependent on domestic crops, and as they convert more arable land to other uses in part because of rapid urbanization and the expansion of urban settlements.

The column showing the change in per capita cereal output takes into account productivity changes during the 1985-1998 period; the data on the transition economies and the small islands are not complete enough to include in the analysis. The cereals column makes it clear, however, that South Asia is falling behind in its ability to feed its people despite the positive effects of the Green Revolution. It also highlights that agricultural reforms have led to a shift from the production of cereals to cash crops, which generate larger cash incomes for rural dwellers. Industrialization has also contributed to a shift in employment from agriculture to services and industry. In 1980, 70 percent of employed males in the region were in agriculture; by 1990 this had fallen to 66 percent. In the NIEs, the percentage of males in agriculture had fallen from 20 to 13 percent; in the industrializing countries of Southeast Asia from 59 to 54 percent. In contrast, in the PRC it has decreased from 71 to 69 percent.

What do the data show about other demographic changes, which in turn impact on poverty and well being over the decade?

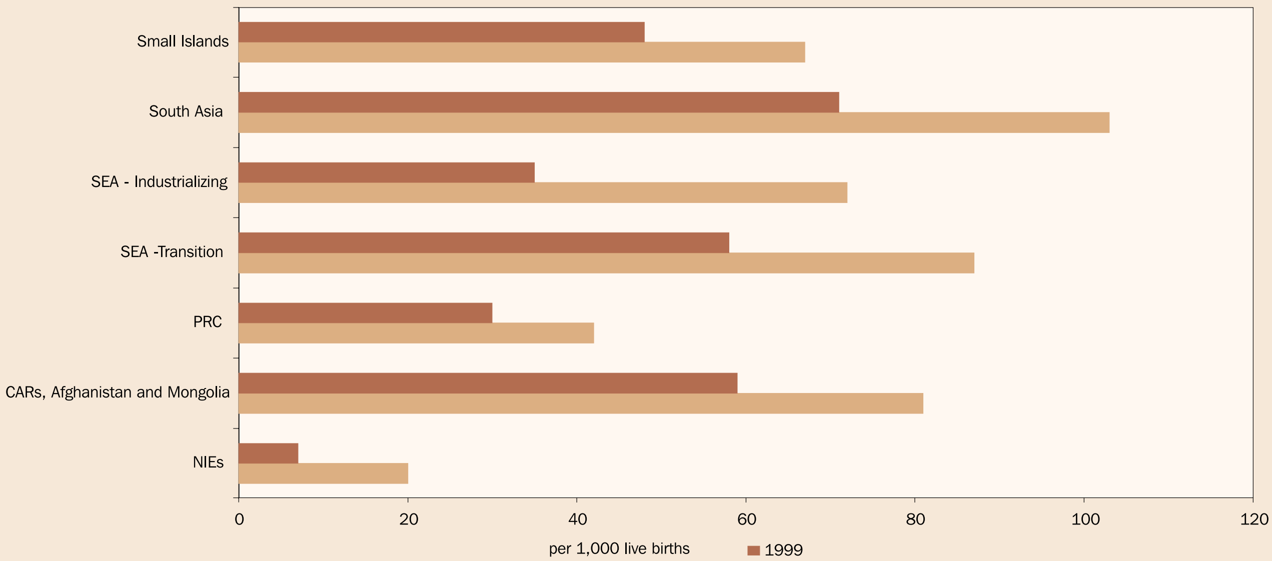
Table VI. Infant Mortality, 1980-1999

Country Group	1980 (per 1,000 live births)	1990 (per 1,000 live births)	1999 (per 1,000 live births)	Change 1980-1990 (%)	Change 1990-1999 (%)
Newly Industrialized Economies	20	10	7	-50	-30
CARs, Afghanistan and Mongolia	81	61	59	-25	-3
PRC	42	33	30	-21	-9
Southeast Asia – Transition	87	69	58	-21	-16
– Industrializing	72	52	35	-28	-33
South Asia	103	84	71	-18	-15
Small Islands	67	67	48	0	-28

Sources: Tables 1 and 2 of ADB, *Key Indicators 2001*.

Table VI and Figure 4 look at the changes in infant mortality in the 1980-1999 period. Infant mortality rates in all sub-regions declined, particularly in the NIEs. These aggregates, however, present some problems of interpretation. The small islands are dominated (in terms of population) by Papua New Guinea — excluding it, their infant mortality rate in 1999 was 28. Similarly, the industrializing countries in Southeast Asia are dominated by Indonesia; omitting it gives an average of 27 for the other three countries. The DMCs compare favorably in relation to the other regions of the world: Sub-Saharan Africa's infant mortality rates were more than double those in the DMCs,

Figure 4. Infant Mortality Rates, 1980 and 1999



Sources: Tables 1 and 2 of ADB, *Key Indicators 2001*.

Table VII. Maternal Mortality and Female Life Expectancy

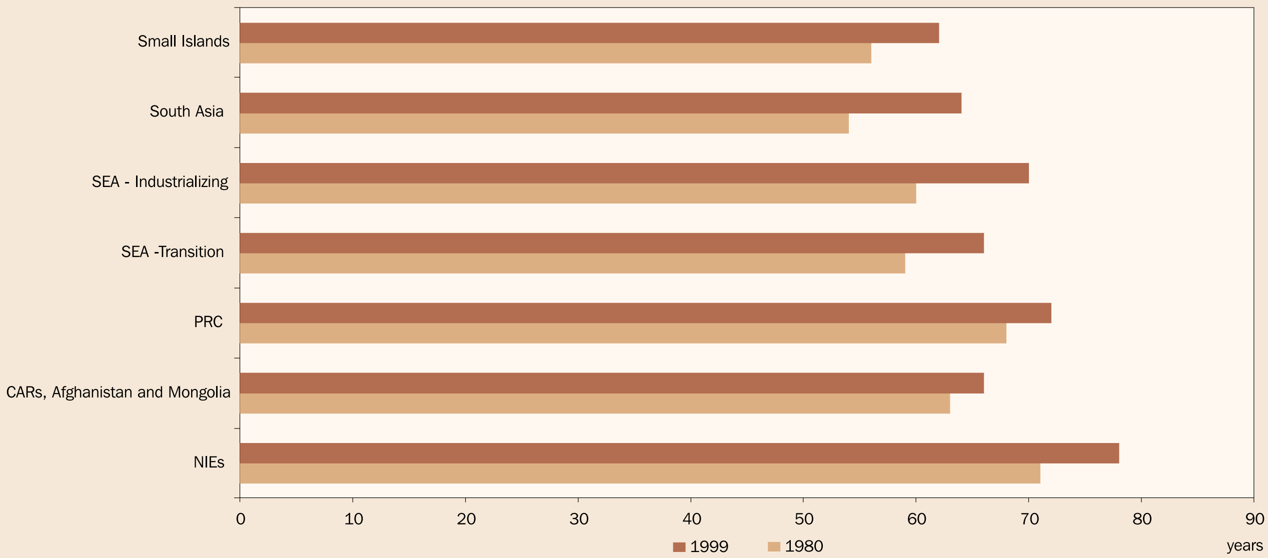
Country Group	Maternal Mortality 1990-99 (per 100,000 live births)	Female Life Expectancy (years at birth) 1980	1999	Change 1980-1999 (%)
Newly Industrialized Economies	17	71	78	10
CARs, Afghanistan and Mongolia	38	63	66	5
PRC	55	68	72	6
Southeast Asia – Transition	227	59	66	12
– Industrializing	299	60	70	17
South Asia	368	54	64	19
Small Islands	321	56	62	11

Sources: Tables 1 and 2 of ADB, *Key Indicators 2001* and WB, *World Development Indicators 2001*.

whereas the Latin American region had marginally lower rates than the DMCs.

In Table VII, maternal mortality and female life expectancy indicators reflect long-term trends. Potential decreases in health expenditures as a result of, for example, the East Asian economic crisis of 1997 will only affect these statistics over a decade or so. The NIEs clearly show the effects of higher levels of economic activity on these crucial social indicators. The relatively poor showing for the Central Asian Republics, including Afghanistan and Mongolia reflects the difficult conditions of Afghanistan and Mongolia. Excluding these two countries, the female life expectancy in Central Asia had been almost constant at about 72 years. This is remarkable in the light of the sharp decline in health care spending with the collapse of the socialist system. However, with the social legacy of the FSU, maintaining this level is uncertain. Indonesia (with a maternal mortality of 450) and Papua New Guinea (with 370) dominate their groups. Omitting these two countries

Figure 5. Female Life Expectancy, 1980 and 1999



Sources: Tables 1 and 2 of ADB, *Key Indicators 2001* and WB, *World Development Indicators 2001*.

gives a current female life expectancy in both groups of 72 years.[4]

How do the other regions of the world compare with the DMCs? Sub-Saharan Africa trails all other regions in respect of female life expectancy at birth with a figure of 52 years. In Latin America, female life expectancy is at 73.

Table VIII and Figure 6 look at the growing urbanization of the region. The NIEs are highly urbanized and growing even more so. The relatively high level of urbanization in the Central Asian Republics reflects their economic organization within the FSU, while the PRC's low but rapidly increasing urbanization reflects its own particular history. The industrializing countries of Southeast Asia are rapidly becoming urbanized; among them, only Thailand still has a fairly low rate of urbanization (22 percent).[5]

The rapid urbanization now underway, especially in the PRC and the countries of South Asia, is in part driven by changes in their economic structures, with industry and services providing a greater share of employment and relatively higher incomes. These trends have several implications. While rural poverty in the countries of the region is likely to decline as a consequence of economic development, the concentration of the poor is likely to increase in the cities, more especially if there is no commensurate and accelerated investment in urban infrastructure – housing, transportation, and water and sewerage services. Another concern is the impact on the environment, especially air quality. Thus, the national authorities will face several new challenges: the need for new and better targeted poverty redressal programs, a larger proportion of investment in urban infrastructure, the selection of market friendly policies to permit a bigger role for the private sector in urban development; and a generally different set of strategies for achieving balanced growth.

The DMCs remain relatively less urbanized than the other regions. In Latin America, almost two thirds of the population is to be found in the urbanized parts of these countries. Even Sub-Saharan Africa has more of its population, a third of the total, in urban areas than South Asia.

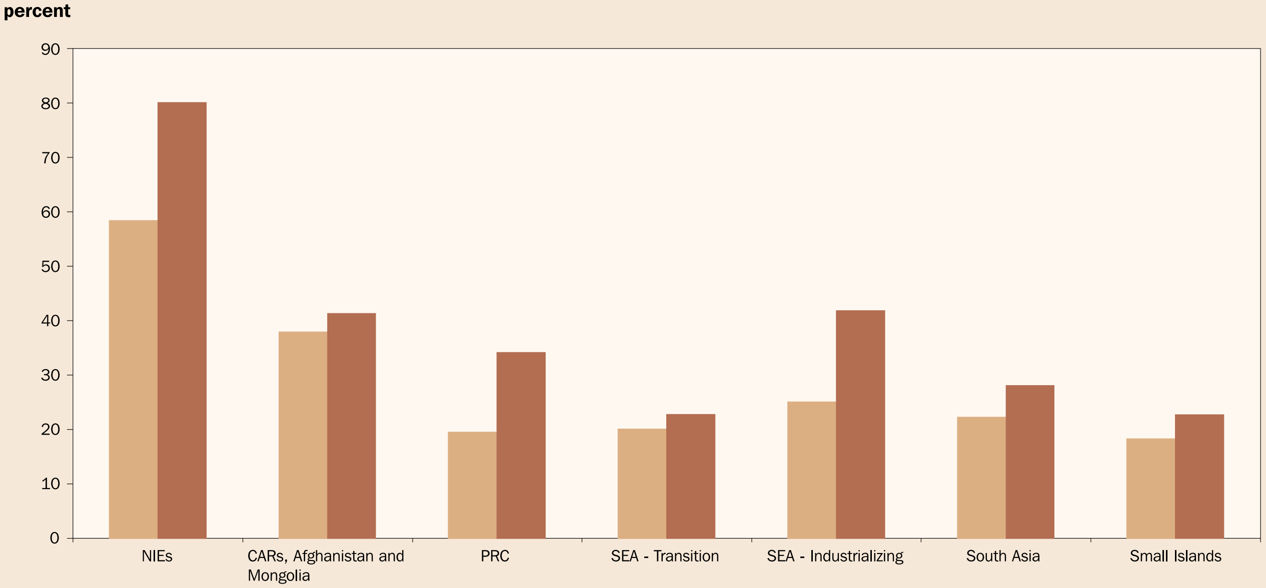
Poverty

Table IX presents data on poverty. Derived in part from Table 6 of Part 2 of the *KI*, it calculates the number of poor in each of the countries and in the DMCs as a whole. The numbers contained in Table 6 are those reported to ADB by the DMCs using nationally determined poverty lines. Based on the

[4] The heterogeneous nature of these particular statistics is a good illustration of the point made above that aggregation tends to obscure some trends and relationships. The tables of this volume have country-by-country and indicator-by-indicator information. They need to be studied in detail. The tables in this introduction can serve only to give general impressions. A further point that needs to be factored in is that even the country numbers represent overall averages and aggregates. They conceal the disparities between urban and rural areas and between sub-regions within a country. This is particularly so in the case of large countries such as the PRC, India, and Indonesia.

[5] A word of caution is in order concerning urbanization data. While there are UN recommended norms, countries tend to have their own definitions and thus aggregations and strict comparisons are subject to a certain degree of error.

Figure 6. Urbanization, 1980 and 1999



Sources: Tables 1 and 4 of ADB, *Key Indicators 2001*.

Table VIII. Urbanization, 1980 and 2000
(percent of population)

Country Group		1980	2000
Newly Industrialized Economies		58.6	80.3
CARs, Afghanistan and Mongolia		38.1	41.7
PRC		19.6	34.3
Southeast Asia	– Transition	20.2	22.9
	– Industrializing	25.2	42.0
South Asia		22.4	28.2
Small Islands		18.4	22.8

Sources: Tables 1 and 4 of ADB, *Key Indicators 2001*.

reported numbers, there are some 600 million people in poverty – 20 percent of the total population of the DMCs or one in five of the population fall below the poverty line on the basis of these national estimates.[6] Poverty lines differ from country to country. If they are simply defined by consumption, then they depend on the quality of income and expenditure surveys the country has undertaken and then further depend for international comparisons (and aggregation) on the exchange rates used to convert the defined line (often US$1 per person per day). Moreover, if they are defined in terms of a consumption basket, then they depend even more critically on the surveys taken, the prices observed, the nutrition equivalents, and the particular caloric line chosen for the country to define poverty.

The surveys used to derive these estimates were taken at different points in time. For many countries, the surveys refer to the mid and late 1990s.

The World Bank and other international agencies including the United Nations Development Programme have attempted to estimate the number in poverty by applying a standard poverty line that uses an expenditure of US$1 in PPP terms as the minimum expenditure to meet basic living needs. Application of this standard poverty line yields an estimate of the total number of poor in the DMCs for which the figures are available of approximately 787 million people. For purposes of comparisons, the numbers from national sources and the World Bank are presented in Table IX.

The largest number of the poor are in South Asia, particularly India; although the rate of poverty is lower in the PRC,[7] the sheer size of India implies that some 29 percent of the poor live there.

[6] The reader is advised to take a careful look at Table 6 in Part 2 of the KI and its footnotes. It must be stressed that the resulting estimates are not comparable and when aggregated understate the numbers in poverty across Asia. Country-specific poverty lines thus reflect each country's situation and are relevant for country-level analysis and guide country policy. But, such estimates are of limited value for regional or global analysis.

[7] Estimates of the number of poor in the PRC are based on the Urban and Rural Household Surveys conducted by the National Bureau of Statistics. The two surveys omit the so-called "floating population" estimated at 120 million people, a good proportion of these are likely to fall below the poverty line, however defined. Additionally, the estimates are based on a poverty line adopted by the PRC of Y 625.

Table IX. Poverty in the DMCs

Country	1990[a]				Latest Year			
	Based on less than US$1 a day[b]		Based on Country Poverty Line		Based on less than US$1 a day[c]		Based on Country Poverty Line	
	Incidence (%)	No. of Poor (Mn)	Incidence (%)	No. of Poor (Mn)	Incidence (%)	No. of Poor (Mn)	Incidence (%)	No. of Poor (Mn)
Hong Kong, China	…	…	…	…	…	…	…	…
Korea, Rep. of	2	0.9	4.5	1.9	…	…	7.4	3.5
Singapore	…	…	…	…	…	…	…	…
Taipei,China	…	…	0.56	0.1	…	…	0.6	0.1
People's Republic of China	29.4	333.7 [d]	…	79.2 [d]	18.5	233.6 [d]	…	55.4 [d]
Afghanistan	…	…	…	…	…	…	…	…
Azerbaijan	…	…	…	…	2	0.2	68.1	5.5
Kazakhstan	2	0.3	34.6	5.7	1.5	0.2	31.8	4.7
Kyrgyz Republic	18.9	0.8	43.5	1.9	…	…	53.3	2.6
Mongolia	…	…	36.3	0.8	13.9	0.3	35.6	0.9
Tajikistan	…	…	…	…	…	…	83.0	5.2
Turkmenistan	20.9	0.8	…	…	…	…	48.0	2.5
Uzbekistan	3.3	0.7	…	…	…	…	22.0	5.4
Bangladesh	…	…	47.5	51.7	29.1	37.9	44.7	58.2
Bhutan	…	…	…	…	…	…	…	…
India	52.5	438.4	35.97	300.4	44.2	442.9	26.1	261.6
Nepal	…	…	…	…	37.7	8.6	42.0	9.6
Pakistan	11.6	12.5	26.57	28.7	31	42.6	*32.2*	44.3
Sri Lanka	4	0.7	30.4	5.2	6.6	1.3	26.7	5.2
Cambodia	…	…	39	3.4	…	…	*35.9*	4.4
Lao PDR	…	…	46.1	1.9	26.3	1.4	38.6	2.0
Myanmar	…	…	…	…	…	…	…	…
Viet Nam	…	…	58	38.2	…	…	37.0	28.7
Indonesia	14.5	26.0	15.1	27.1	7.7	16.2	23.4	49.3
Malaysia	5.6	1.0	17.1	3.0	…	…	8.1	1.9
Philippines	28.6	17.7	45.3	28.1	…	…	36.8	28.9
Thailand	2	1.1	27.2	15.2	2	1.2	12.9	8.1
Cook Islands	…	…	…	…	…	…	…	…
Fiji Islands	…	…	25.5	0.2	…	…	…	…
Kiribati	…	…	…	…	…	…	…	…
Maldives	…	…	…	…	…	…	40.0	0.1
Marshall Islands	…	…	…	…	…	…	…	…
Micronesia, Fed. States of	…	…	…	…	…	…	39.5	0.0
Nauru	…	…	…	…	…	…	…	…
Papua New Guinea	…	…	…	…	31	1.6	37.5	1.9
Samoa	…	…	…	…	…	…	48.0	0.1
Solomon Islands	…	…	…	…	…	…	…	…
Tonga	…	…	…	…	…	…	…	…
Tuvalu	…	…	…	…	…	…	…	…
Vanuatu	…	…	…	…	…	…	…	…

[a] Refers to available data nearest the year indicated in the column heading.
[b] Percentage of the population living on less than US$1 a day at 1985 int'l prices, adjusted for PPP.
[c] Percentage of the population living on less than US$1.08 a day at 1993 int'l prices (equiv. to US$1 in 1985 prices, adjusted for PPP using rates from PWT).
[d] For PRC, the number of poor is the sum of urban and rural poor population as stated in the ADB Consultant's Report.

Sources: ADB, Statistical Database, WB, *World Development Indicators 2001* and WB, *Papua New Guinea: Poverty and Access to Public Service*, October 1999.

Divergences in the estimates of the number in poverty as determined by the application of national estimates of poverty versus those obtained using the PPP-based estimates highlight the issue of comparability. The nationally determined figures are non-comparable. Thus, regional comparisons and aggregations based on such calculations may create distortions. On the other hand, national authorities concerned with developing poverty reduction strategies and programs are likely to be less concerned with the comparability of the numbers. Their focus is more likely on the realities. Figure 7 summarizes the divergences.

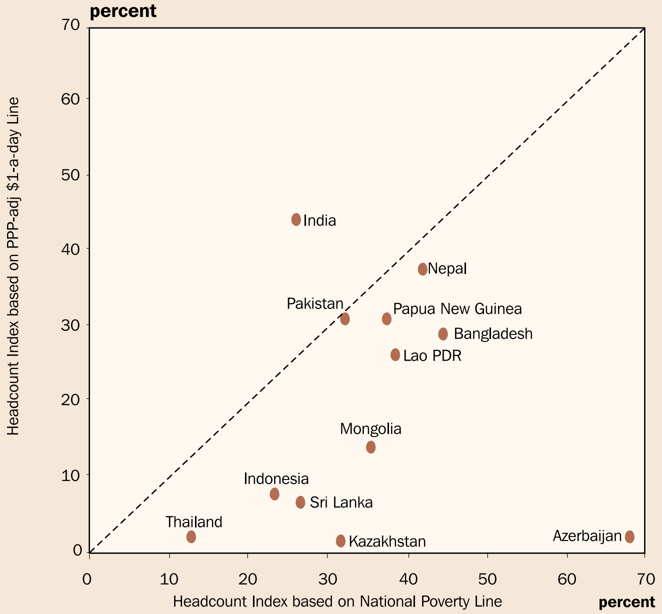
Over the past decade, most countries in the region have seen improvements. Based on the national poverty line, the percent of the poor in the PRC declined from 6.0 percent in 1996 to 4.6 percent in 1998; and in India the percentage declined from 36.0 percent in 1993/4 to 26.1 percent in 2000. In the countries most affected by the crisis of 1997, the rate of poverty reduction was interrupted. In Thailand for instance, poverty declined continuously from 32.6 percent in 1988 to 11.4 percent in 1996 but increased to 12.9 percent in 1998, indicating that more than 1 million people were pushed into poverty between 1996 and 1998. Indonesia's record in reducing poverty before the 1997 crisis was impressive; the incidence of poverty fell steadily for two decades between 1976 and 1996. However, as a consequence of the crisis, it rose from 17.6 percent to 23.4 percent by late February 1999.

Globally between 1990 and 1998 the share of the population in developing countries living below the US$1 poverty line fell from 29 percent to 24 percent. According to the World Bank[8] the rate of decline is insufficient for meeting the target of reducing extreme poverty by half by the year 2015. The World Bank, however, points to the remarkable decline of the number recorded in East Asia but at the same time the increase in South Asia, from 474 million to 522 million. In Sub-Saharan Africa the number in poverty moved upward from 217 million to 291 million.

Generally, improvements have been sharpest in countries that followed market-friendly policies, thereby taking advantage of the impact of globalization. These countries, the NIEs and the PRC in particular, benefited from the opening up of markets and increased trade and private capital flows, which contributed to a restructuring of their economies. Countries that did not take this path to development lagged. The small island states, handicapped by size and distance from major markets, were less able to take advantage of global changes.

The lessons that emerge also point to the important role of macroeconomic policies and the adoption of market-friendly measures to improve and expand the role of the private sector. Countries that have followed prudent policies have been rewarded with faster growth, rising income levels, and greater success in reducing poverty.

Figure 7. Poverty Incidence in DMCs



Source: Table IX.

Other Social Indicators

The adult literacy rate is a good indicator of the quality of human capital in the country and the general welfare of the population. The NIEs have very high rates of both male and female literacy, while the impressive increases in literacy rates in the PRC augur well for that country's future development.[9] High rates in Southeast Asia are also indicative of future success. While making significant gains, South Asia still has a way to go. Sri Lanka (see Table 7 of Part 2 of the *KI*) has high literacy rates, those of India are improving, but the other countries in that region lag behind. Table X shows the gender-disaggregated adult literacy rates.

In most of the Central Asian Republics and Mongolia literacy rates are fairly high, while Afghanistan's rates are poor. In the small islands group, many have not reported their literacy rate, thus the figures shown are largely those of Papua New Guinea.

While literacy rates are an indication of the stock of human capital, school enrollment rates indicate the additions to this stock. Table XI shows enrollment rates for 1980 and recent years, generally in the 1995-99 period. Note that

[8] See WB, *World Development Report, 2000/2001.*

[9] In Table 7 of Part 2, the PRC defines adults as the population aged 25 years or more. Other countries define this as 15 years or more. On this basis, the PRC's literacy rates would even be higher.

it is possible to have gross enrollments rates greater than 100 percent, particularly when countries are also catching up and educating their previously illiterate adults. Furthermore, some countries report enrollments on a net basis while others use a gross measure, thus limiting comparability.[10] As above, the CARs, including Afghanistan and Mongolia, are skewed by the poor performance of Afghanistan; the other republics have fairly high rates, inherited from the FSU.

The performance of South Asia is also quite clear. While Sri Lanka is doing well with primary gross enrolment ratios of over 100 (see Table 7), others, particularly Bangladesh and Nepal continue to lag behind. In India where male primary enrollment rates are about 100, female rates are only 83 percent.

Health and nutrition data are too sparse and heterogeneous to provide much useful information at the aggregate level. Caloric data, for example, when aggregated give average daily totals ranging from 2,250 to 2,950, seemingly sufficient for all. This hides the poor supply in Afghanistan (1,774) and the bounty of Hong Kong, China (3,200), and the marginal supplies in Mongolia and Nepal. Table 8 of Part 2 also shows data on child malnutrition and safe water and sanitation. Clearly, more information is needed in these areas of critical human needs.

Table X. Adult Literacy Rates
(percent)

Country Group	1980		Latest Year[a]	
	Female	Male	Female	Male
Newly Industrialized Economies	88	92	95	97
CARs, Afghanistan and Mongolia	4[b]	12[b]	63	70
PRC	53	79	78	91
Southeast Asia – Transition	67	82	83	91
– Industrializing	68	83	86	93
South Asia	24	52	43	66
Small Islands	49	61	61	74

[a] Mid to late 1990s
[b] Figures include only Afghanistan and Mongolia.

Sources: Tables 1 and 7 of ADB, *Key Indicators 2001* and WB, *World Development Indicators 2001*.

Table XI. Gross Primary School Enrolment
(percent)

Country Group	1980		Latest Year[a]	
	Female	Male	Female	Male
Newly Industrialized Economies	110	109	99	98
CARs, Afghanistan and Mongolia	55	67	71	82
PRC	104	121	123	123
Southeast Asia – Transition	104	111	112	119
– Industrializing	101	111	95	98
South Asia	61	91	83	100
Small Islands	67	78	46	39

[a] Mid to late 1990s

Sources: Tables 1 and 7 of ADB, *Key Indicators 2001* and WB, *World Development Indicators 2001*.

Economic Trends

Turning now to economic information, Table XII shows income per capita in 1980, 1990 and 1999 in constant 1996 US dollars. There are insufficient data to show time trends in the Central Asian Republics including Afghanistan and Mongolia or in the transition economies of Southeast Asia, and the only information for the small islands is for Papua New Guinea. It is interesting to observe that income per capita steadily increased only in the NIEs– a result of the combination of modest population growth and high economic growth. Elsewhere, the 1980s saw a decline in income per capita before the resurgence in growth of the 1990s which brought about some measure of improvement. It should be noted, however, that converting economic data into a common denominator of the US dollar brings exchange rate changes into the equation. Internally, in their own constant currencies, countries have done somewhat better.

Table XIII presents recent unemployment rates, selected on the basis of availability of data. Keeping in mind that unemployment data vary in definition from country to country, and thus that the numbers themselves may not be comparable, the trends in each country are revealing. The impact of the 1997 East Asian economic crisis appears in the data for four Southeast Asian Industrializing countries, and in the Republic of Korea. It also seems to appear in Hong Kong, China and Singapore, although the rise in Hong Kong, China may well have been also related to the uncertainties connected with its reunification with the PRC in 1999. However, South Asia, with its less dynamic economies appears unaffected. It should also be noted that

[10] See technical notes.

Table XII. Income per Capita
(US$, 1996=100)

Country Group	1980	1990	1999
Newly Industrialized Economies	3,464	7,419	10,987
PRC	508	428	744
Southeast Asia – Industrializing	1,031	985	1,050
South Asia	409	391	418
Papua New Guinea	1,367	994	773

Source: Country tables of ADB, *Key Indicators 2001*.

Table XIII. Unemployment Rates in Selected Countries, 1995-2000
(percent)

Country	1995	1996	1997	1998	1999	2000
Hong Kong, China	3.2	2.8	2.2	4.7	6.3	5.0
Korea, Rep. of	2.0	2.0	2.6	6.8	6.3	4.1
Singapore	2.7	3.0	2.4	3.2	4.6	4.4
Taipei,China	1.8	2.6	2.7	2.7	2.9	3.0
PRC	2.9	3.0	3.1	3.1	3.1	3.1
Indonesia	7.2	4.9	4.7	5.5	6.4	6.1
Malaysia	3.1	2.5	2.4	3.2	3.4	3.1
Philippines	8.4	7.4	7.9	9.6	9.4	10.1
Thailand	1.1	1.1	0.9	3.4	3	2.4
Pakistan	5.4	5.4	6.1	5.9	5.9	5.9
Sri Lanka	12.3	11.3	10.5	9.2	8.9	7.7

Source: Country tables of ADB, *Key Indicators 2001*.

official unemployed status requires the individual to be without work and to be actively seeking employment. In many countries there are countless people who are discouraged from registering for employment or who work in unrecorded jobs. Thus, the true state of unemployment in many DMCs, particularly the lower–income ones, is understated. Thus even trends do not show the real picture.

A related issue is that of the relative share of females in the labor force. In the PRC, the NIEs and the Southeast Asian "tigers" there has been a marginal increase in the share of females as a percentage of the labor force from 43 percent to 45 percent over the past two decades. On the other hand, in South Asia the proportion has remained largely unaltered at about a third. In Latin America the female proportion of the labor force increased from 28 to 35 percent. Sub-Saharan Africa recorded no change at 42 percent over the same period. Increased female shares in the labor force are indicative in one sense of greater empowerment as economies grow. In the DMCs there is a likelihood of further increases, especially in South Asia, in the years ahead.

Turning next to the issue of how governments in the region have expended resources and have positioned themselves in terms of expenditures on social services, Table XIV presents available data on social sector expenditures (as a share of GDP) by central governments. Again, data gaps for some countries (India and Pakistan being good examples) means that not all are represented. Such expenditures typically include outlays on health, education, housing and other social goods provided by governments. In many countries, regional and local authorities make substantial portions of such expenditures not directly by the central government. The data in the table suggest that there is not much consistency in such expenditures and no basis for comparing the steady rise in such expenditures in Nepal with the fall in the PRC. The high numbers for Mongolia also suggest that there is a very different definition of such expenditures there than in its neighbor, the PRC.

Table XV presents that same data, but only for the education component. Here again the implication is that other factors must also be at work. What is somewhat surprising is the apparent low level of expenditure in Indonesia. It also leads to the observation that public sector expenditure data are difficult to interpret.[11]

Trade and openness have contributed to both overall economic growth and the reduction of poverty levels in the region. Table XVI shows the importance of trade for the DMCs. The data show “openness”, defined as the sum of imports and exports as a percentage of GDP. For countries like Singapore and Hong Kong, China trade is very important; consequently, their ratios are well in excess of 200 percent. Similarly, the small islands, being generally quite small, cannot produce what they need and must trade. Even Papua New Guinea, with its large landmass and relatively low population, still has a ratio which until recently was twice that of its neighbor, Indonesia. At the other extreme is Myanmar, which two decades ago had a ratio of 20 percent but because of progressively shutting itself off from the rest of the world, now has a ratio of less than

[11] It should also be remembered that fiscal data are for the purpose of recording and managing a government’s business. They reflect the administrative and political requirements of the nation and are not designed with ex post economic analysis in mind.

Table XIV. Share of Social Expenditure of Central Government to GDP
(percent)

Country	1982	1990	Latest
Hong Kong, China	8.9	8.8	14.7
Korea, Rep. of	6.4	7.0	9.1
Singapore	7.3	7.0	7.7
Taipei,China	2.8	3.7	8.5
Mongolia	…	25.6 [a]	19.8
PRC	5.0	4.3	2.2
Indonesia	3.1	2.6	4.5
Malaysia	12.9	8.2	8.6
Philippines	3.5	4.1	5.0
Thailand	5.7 [b]	4.4 [b]	7.8
Bangladesh	2.8	2.6	4.0
Nepal	4.3	4.7	5.7
Sri Lanka	4.1	8.6	8.3
Papua New Guinea	10.7	10.9	10.3

[a] 1991 data for 1990
b Data refer only to social security and welfare.

Sources: Country tables of ADB, *Key Indicators 2001*.

Table XV. Share of Education Expenditures of Central Government to GDP
(percent)

Country	1982	1990	Latest
Hong Kong, China	2.7	2.8	4.2
Korea, Rep. of	3.6	3.2	3.7
Singapore	4.1	4.3	3.7
Taipei,China	0.7	1.1	2.4
Mongolia	…	10.8 [a]	7.5
PRC[b]	4.6	4.0	2.0
Indonesia	1.1	1.0	0.9
Malaysia	6.5	5.5	5.9
Philippines	2.1	3.1	3.6
Thailand	…	…	4.5
Bangladesh	1.2	1.4	2.1
Nepal	1.7	1.7	2.3
Sri Lanka	2.6	3.0	2.5
Papua New Guinea	6.2	7.3	6.8

[a] 1991 data for 1990
[b] Data include health expenditures

Source: Table 26 and Country tables of ADB, *Key Indicators 2001*.

Table XVI. Openness[a]
(percent of GDP)

Country	1982	1990	1999
Hong Kong, China	142.2	217.7	222.5
Korea, Rep. of	70.4	59.4	77.4
Singapore	320.5	308.5	265.6
Taipei,China	95.1	88.5	92.7
Mongolia	53.4	47.1	89.0
PRC	14.9	29.8	36.4
Cambodia	…	10.8	86.3
Laos	55.4	30.5	69.2 [b]
Myanmar	19.9	5.6	1.5
Viet Nam	…	…	97.0
Indonesia	48.5	49.0	62.2
Malaysia	110.5	146.9	217.8
Philippines	46.5	60.8	101.3
Thailand	47.5	75.8	102.9
Bangladesh	29.5	19.7	31.9
Bhutan	59.2	60.5	75.7 [b]
India	15.3	16.7	23.8 [b]
Nepal	30.4	31.6	53.0
Sri Lanka	74.9	69.1	77.8
Fiji Islands	92.9	129.1	108.2
Maldives	127.1	194.2	276.7
Papua New Guinea	97.3	89.6	95.6 [b]
Solomon Islands	109.1	86.1	97.3 [b]

[a] Openness is total trade or the sum of exports and imports.
[b] 1998 for Laos, Bhutan, India, PNG. 1996 for Solomon Islands.

Sources: Country tables of ADB, *Key Indicators 2001*.

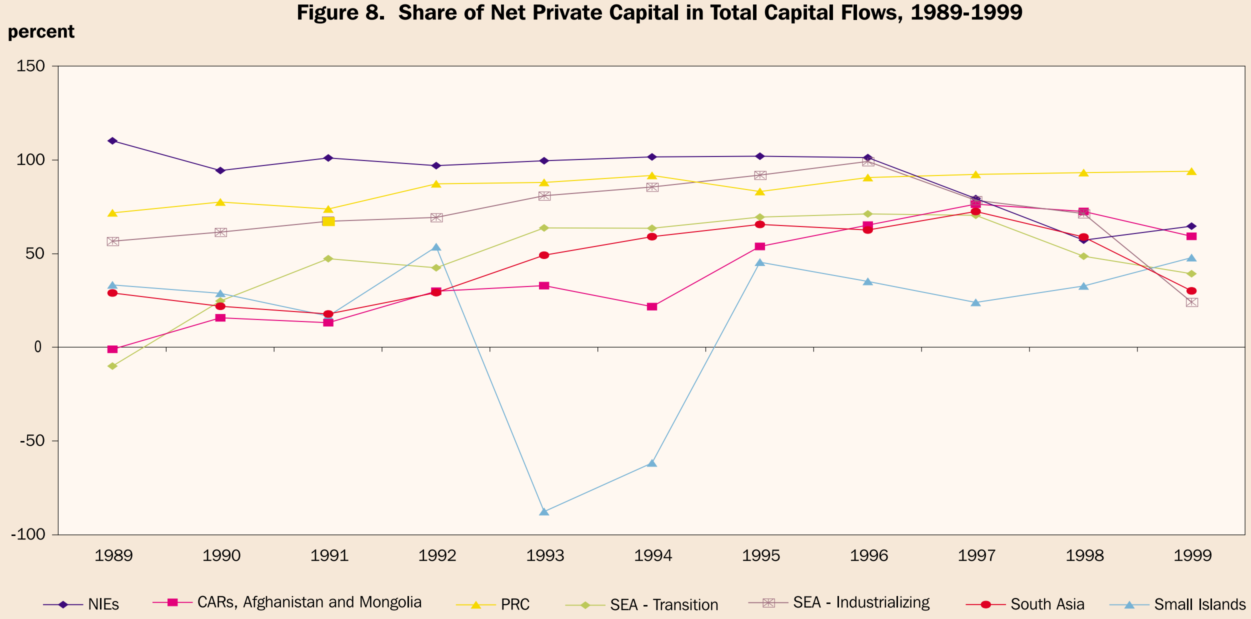
2 percent. In terms of performance, Hong Kong, China and Singapore now have per capita incomes that are 20 to 30 times that of Myanmar; in 1970, they were only ten times greater. Note that the PRC has been steadily increasing its share in trade, while in most of South Asia, there has been little real change. India has only recently taken significant steps to open up, while Indonesia's ratio stagnated at 50 percent until 1998 when the ratio jumped to 92 percent before falling back to 62 percent in 1999. This surge was partly the result of the devaluation effect that led to a sudden rise in rupiah– denominated export values. It remains to be seen whether the new trade regime will be permanent. In the Philippines and Thailand, there has been a similar, but not as dramatic increase, from the 75 percent range in the mid 90s to close to 100 percent by the decade's end. Malaysia experienced a larger surge from an already higher ratio than its nearest neighbors. The remarkable trade performance of these countries contributed to a fairly rapid

recovery from the crisis of 1997, sustained domestic economic activity, and employment. This, in turn, enabled these countries to prevent a serious erosion in living standards and sharp increase in levels of poverty. In brief, trade has played an important role in the patterns of development in the region–both in terms of growth and in weathering the crisis brought about by volatile capital flows.

Figures 8 and 9 present a picture of capital flows in the 1989 – 1999 period. In the beginning of the period, the majority of capital going to developing nations around the world was in the form of official loans and grants from governments and international agencies. By the end of the period, the majority of these flows were private. The decade showed, and the DMCs were a good example, that private capital is important not only to achieve successful growth but also to ensure that good, pro-growth policies are maintained. The 1997 East Asian economic crisis in part resulted from a failure of key countries to maintain good policies; and the imperative from the rest of the world and market players, is to reform policies to resume private capital flows.

Figure 8 shows private capital flows, including foreign direct investment (FDI) to resume as a share of total capital flows. As would be expected, the NIEs had far higher ratios of private capital than the rest of the country groups, particularly in the early period.[12] The drop in 1997 and 1999 reflects the impact of the 1997 East Asian economic crisis. The PRC's high and steady influx of private capital reflects its immense need for capital and thus the necessity of relying on private capital. In addition, it reflects the market–friendly environment, attractive to foreign investors. The industrializing nations of Southeast Asia also maintained a relatively high proportion of private capital and suffered a sharp downturn in 1997-1998, but even then it only fell to 73 percent of the total. The steady rise in the share for the CARs[13] reflects an opening up or shift from dependence on the FSU to dependence on the rest of the world. The record for South Asia and the transition countries of Southeast Asia is mixed, reflecting the continuing dependence on official capital and the reluctance of private capital to go to countries that are slow in adopting pro-growth policies. The small islands, because of their special circumstances, reflect their continuing need for official assistance; the sharp dip of private capital in 1993 and 1994 reflects the disturbances in Papua New Guinea.

Figure 8. Share of Net Private Capital in Total Capital Flows, 1989-1999



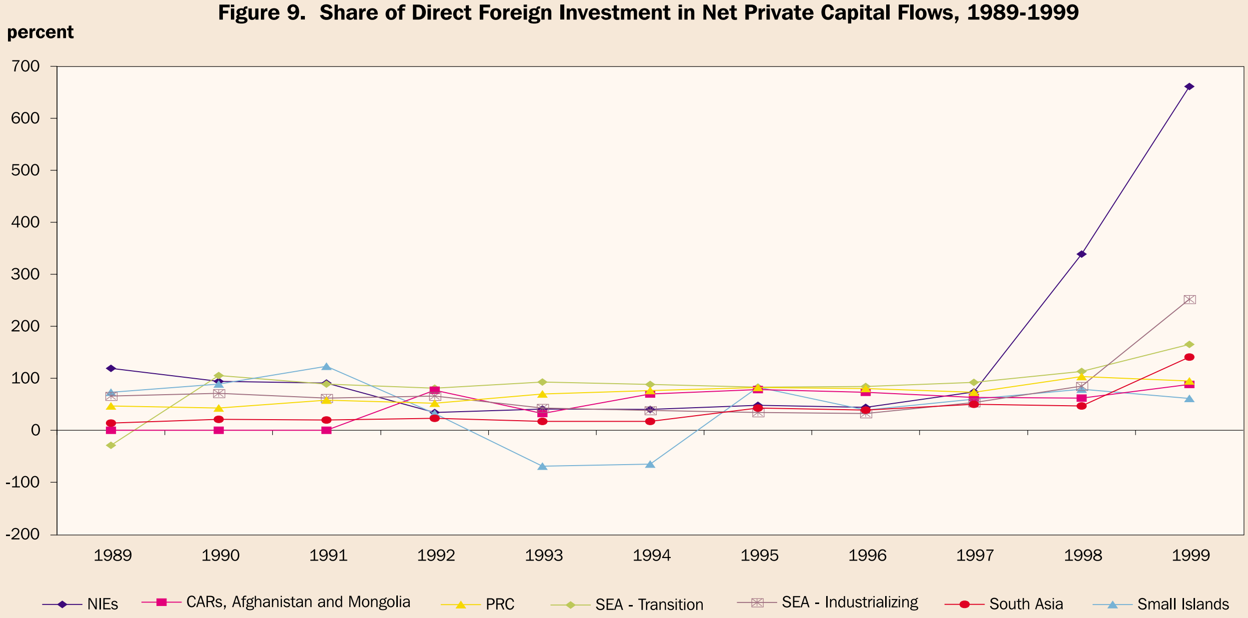
Sources: Tables 37 and 39 of ADB, *Key Indicators 2001.*

Figure 9 shows the composition of private capital – the share of FDI in net private capital flows. This is important for long–run development, as it is more permanent than capital, which flows into portfolios and in consequence, flows out at the first sign of a crisis. The table shows that in 1997 and 1998, when overall private capital flows were falling, the FDI share went up, reflecting its relative immobility and also the acquisition of assets by foreign firms through mergers and acquisitions. The only surprise in this figure is

12 A phenomenon even more remarkable, given the fact that for much of the period private capital flows in Taipei China were negative (i.e. net investment elsewhere), with sizable investments being made in the PRC and Southeast Asia.

13 A large portion of this increase occurred in two countries, Kazakhstan and Azerbaijan and was directed at the oil and gas investments.

Figure 9. Share of Direct Foreign Investment in Net Private Capital Flows, 1989-1999



Sources: Tables 33 and 39 of ADB, *Key Indicators 2001.*

the relatively high share of FDI in the transition countries of Southeast Asia. This, however, is largely Viet Nam's and the particular nature of its capital flows.

A salient point is the close linkage between flows of private capital, especially FDI, and the surge in exports. Countries that experienced such developments were also the countries that recorded higher growth and a sharper decline in poverty.

The DMCs compare most favorably in relation to other regions of the world. In 1998 despite the effects of the East Asian economic crisis they received almost a little under 30 percent of the total flow of FDI to developing countries. Latin America was the recipient of roughly half of such flows. Sub-Saharan Africa accounted for just $3.4 billion out of the total net flows of FDI of $260 billion.

One of the key issues in development, and in particular external financing, was debt. The burden of external debt was the central theme in the 1960s and 1970s. It is not, however, the big story of the new millennium. Countries that adopted pro growth policies and welcomed external capital have found that new capital flows can more than compensate for older debt obligations. But this is a two–edged sword, with poor policies including the critical management of external capital inflows, the flows can quickly reverse and their concomitant debt burden on the country intensify. The East Asian economic crisis of 1997 clearly demonstrates the stark nature of capital volatility and the devastating effects of such volatility on macroeconomic stability, growth and efforts for maintaining social stability and reducing poverty. Tables XVII and XVIII illustrate this issue.

Over the past two decades the NIEs have sharply reduced the importance of debt. The CARs have an increasing share, as they open to the rest of the world, and the same is true in the transition countries of Southeast Asia and the PRC. In contrast, South Asia has long been a focus of official development lending and its share, while larger than in 1980, has actually declined in the late 1990s.[14] A similar story pertains in the small islands.

Table XVIII shows the experience of the five countries that were most severely affected by the crisis of 1997. The countries took in foreign capital to further their growth needs; by the mid-90s, the debt service burdens (except in the Republic of Korea) had gone over 5 percent of GDP.[15] After the crisis these ratios have gone up sharply, even in the Republic of Korea, because of the massive borrowings by several countries. The ratios also rose because of the increase in spreads linked in part with the currency devaluations, as debt is usually denominated in dollars. A devaluation increases the local currency obligation. Another factor is that post-crisis investors see a higher country risk and thus, demand higher interest rates and shorter maturities. In the process of settling and re-negotiating external debts after the crisis, private debts, which were not previously covered or recorded often get included as country (as well as individual) obligations.

[14] Most of this is the result of gradual economic reform in India.
[15] In a simplistic Incremental Capital Output Ratio (ICOR) growth model, 5 percent of GDP invested in new capacity rather than repaying old debt would yield 1-2 percent future growth in GDP.

Table XVII. External Debt Service as a Share of GDP
(percent)

Country Group	1980	1985	1995	1997	1998
Newly Industrialized Economies	3.1	4.9	1.2	1.5	2.6
CARs, Afghanistan and Mongolia	0.0	…	1.2	2.4	3.2
PRC	…	0.6	2.0	1.9	1.8
Southeast Asia – Transition	…	1.0	2.3	3.0	3.5
– Industrializing	3.5	7.6	6.1	6.8	11.3
South Asia	0.9	1.4	3.2	2.9	2.6
Small Islands	3.5	9.6	8.3	7.0	3.5

Sources: WB, *Global Development Finance 2001* and *World Development Indicators 2000*.

Table XVIII. External Debt Service as Share of GDP in Selected Industrializing Countries
(percent)

Country	1980	1985	1995	1997	1998
Korea, Rep. of	5.1	7.7	1.8	2.3	4.6
Indonesia	3.6	5.8	7.5	8.4	17.8
Malaysia	2.8	16.3	6.4	5.9	7.8
Philippines	3.4	5.0	6.2	4.7	7.4
Thailand	3.9	6.6	4.2	6.5	10.4

Sources: WB, *Global Development Finance 2001* and *World Development Indicators 2000*.

Lessons and Challenges

In conclusion, what stories have the data been able to tell? The central theme is that the region has recorded strong economic growth over the past decade. The exceptions were the Central Asian Republics, Afghanistan and Mongolia. The tiger economies of Southeast Asia and the NIEs suffered a temporary setback as a consequence of the 1997 economic crisis but made a rapid recovery. Thus the crisis is not the only story nor is it the most important. Only when the analysis came to the capital flows did the crisis really show in the data, and even then it was only in the four Southeast Asia industrializing countries and in the Republic of Korea. The main story is that despite the crisis, the decade of the 1990s was a period of change. Growth led to reductions in the incidence of poverty; living conditions improved, albeit slowly.

A number of broad conclusions can be drawn:

- Growth is critical to achieving poverty reduction.
- Sound macroeconomic policies do matter. Change has been greatest in countries that have followed sound policies, adopted an export-led development strategy, and attracted foreign direct investment. These countries achieved significantly higher and sustained GDP growth, growth in employment, and a rise in real earnings. Taken together, these countries achieved sizable reductions in the number of poor. The PRC, the NIEs and the Southeast Asian "tigers" fall into this category. Growth clearly was a significant factor contributing to poverty reduction. The continuing economic reforms in the PRC and its progress are perhaps the bigger stories.
- The success story of the countries of Southeast Asia is in terms of high growth and remarkable progress in poverty reduction. It is built upon an opening up of the external sector containing a cautionary lesson about the need for effective policies to mitigate against the dangers posed by volatile capital flows.
- Countries that did not take the export-led path to development, primarily in South Asia, have recorded lower growth, experienced limited progress in poverty reduction, and only modest improvements in living standards. Many South Asian countries did not see a decline in poverty levels as relatively high population growth and low economic growth impeded poverty reduction efforts. India's economic reforms and its recent role in exploiting the information and communication technology (ICT) revolution foretell the prospects for stronger growth in the period ahead.
- The opening up of the CARs after decades of dependency, on what proved to be an unsustainable economic system, is an interesting story. It is coupled with the gradual fall of living standards in those countries as the productivity of their labor forces proved to be less than the living standards to which they had been accustomed to under the FSU. The economic and social disruptions caused by the collapse of the FSU, resulted in lower economic growth, and an increase in poverty levels.
- The small island states, showing a high degree of openness to the rest of the world, continue to be vulnerable to global market movements.

The numbers presented in this volume, however, do not conclusively settle all of the long-standing debates concerning the optimal package of policies that ought to be followed. The diverse circumstances prevailing in the individual DMCs preclude the emergence of a magic potion that would address all policy dilemmas or show the way forward.

More important, however, is the realization that even after half a century of economic progress, there are still one in four of the 3.27 billion people who are below the internationally defined poverty line. The data in these tables present a score card on a wide range of social and economic variables, but they indicate clearly that the game is not over.

The new millennium brings with it both opportunities and challenges to address the overarching goal of poverty reduction. The international community has adopted a set of international development goals for the year 2015. The DMCs have made progress towards some of these goals.

While Asia continues to show great diversity in performance, both economically and socially, there is every likelihood that the future will see further economic and social gains. The region's growing middle class and the emergence of consumer societies holds promise of an expansion of markets.

High domestic saving rates, coupled with an ability to absorb technology make the DMCs attractive for investors. Sustained economic growth is likely to contribute to further improvements in living standards and a reduction in the incidence of poverty. Monitoring progress towards the attainment of these goals will demand a coherent and systematic flow of statistical information. Making such data available will require concerted and coordinated efforts on the part of the partners in development, the international community and national governments, to improve the flow of data. How best that is achieved is discussed in Chapter II.

While it is generally recognized that household surveys must constitute the main vehicle for collecting a broad range of social and demographic statistics, many DMCs have not been able to implement a coherent strategy. Resource constraints have prevented many countries from launching a balanced program of household surveys to collect the full range of data required for poverty analysis, tracking social trends, and measuring demographic changes. The general pattern of work has focused on household expenditure surveys conducted, periodic labor force surveys, and other ad hoc surveys covering themes such as health, nutrition and education. While the approach adopted has provided some policy-relevant data, the absence of a coherent and balanced program has only generated point estimates and permitted some partial measurement of trends. User dissatisfaction with the outputs generated, particularly in relation to the time taken to process survey results, has contributed to the vicious cycle of having less allocation of resources and creating general disenchantment with survey outputs. Statistical offices, under user pressure, have spread available resources thinly across multiple surveys which strain and stretch available capacities. Thus, social statistics are not as developed as economic statistics in most DMCs. Continuing the current approach is unlikely to improve significantly the availability of data.

CHAPTER II: STATISTICAL CHALLENGES

The State of Statistical Development in the DMCs

In Chapter I of this volume references were made to data gaps and the lack of comparability of many statistical measures across countries. In Chapter II, issues that are relevant to understanding the circumstances surrounding the statistical development and capacities in the DMCs will be presented. As with patterns of overall development, there are a variety of country situations. The stage of statistical development has been influenced by history, economic orientation, and the extent to which countries have been exposed to external influences. In the broadest level, all DMCs have made progress in developing their statistical capabilities; some have recorded faster progress while others have been slower in adapting to change. All countries in the region have shown a desire for improving their statistical systems. Translating that desire into viable statistical programs demands resources, both national and external. Often these are limited.

Although most DMCs have made attempts to overcome these challenges, the broad scene in the region is characterized by: (a) under investment in statistical infrastructure; (b) inadequate budgetary resources for current expenditures linked to statistical operations, reflecting the low priority accorded to statistics by the budgetary and policy authorities; and (c) the less than full adoption of sound management practices, coupled with frequent changes in leadership of national statistical systems.

Some DMCs continue to lack the basic statistical infrastructure in terms of adequate sampling frames, business registers, and advanced data processing capacities. For these countries, the digital divide continues to be a major barrier to the application of new ICT. A general lack of specialized and trained core staff continues to hinder some national statistical systems in adopting new methodologies. It is clear that overall resource constraints faced by governments have led to under investment in developing their statistical services. In almost all countries in the region, the national statistical services face severe skill shortages arising partly from the loss of staff to other sectors of their economies where reward systems are more attractive. In addition, several countries in transition to market-oriented economic systems have faced the added challenge of adapting to new international standards, replacing those that were rooted in central planning.

Sampling frames and business registers are the basic foundations for carrying out sample surveys of households and enterprises. National statistical offices lacking firmly grounded survey infrastructure often have limited capacity to conduct well-designed sample surveys, which provide the basis for basic statistics. In addition, the underlying survey methods and concepts are outdated. In such circumstances, the current surveys yield data that are weak and lacking in depth and comparability. The second main mechanism for data collection – administrative sources – is equally flawed because of the overall weaknesses in administrative structures. Thus, key data on vital events, external trade, and enterprise activities based on administrative records suffer from under-reporting.

Although rapid advances in ICT and hardware price declines have permitted most DMCs to acquire ICT hardware, the digital divide continues to affect the poorer and smaller DMCs. They continue to lack the resources to obtain ready access to both hardware and software. Thus, these DMCs continue to be constrained in processing, storing, and disseminating data as rapidly as the more advanced countries in the region. These factors partly explain the less than timely availability of data at the national and international levels.

In some countries of the region, attention to the issue of data dissemination is inadequate. These countries have tended to treat data as proprietary and meant for largely official purposes. Failures in timely dissemination or full and comprehensive disclosure of the underlying methods and concepts, and a general lack of transparency have led to doubts on the accuracy of official statistics.

The Pacific Island DMCs and Maldives have their own unique statistical challenges. Their size and remoteness vitally constrain them from establishing fully functioning statistical systems. As in other areas of development, they remain handicapped by their size. The data collected and reported by them are inherently limited, less than timely, and weak in terms of coverage of topics. Other low-income countries in Asia also face difficulties in establishing viable statistical systems. These difficulties are partly rooted in low levels of literacy and numeracy, which affect response rates, geography, and weak administrative systems, which limit the range and quality of data collected.

An issue common to almost all DMCs is the orientation of the statistical system. The systems view government agencies as their primary users. Inadequate attention is paid to the needs of the emerging private sector, now a key player in the process of development. Statistical systems have not kept pace with the emergence of the private sector, under economic reforms, as an important data user.

National statistical systems are poorly funded to mount surveys and collect new types of data. Indeed, the inadequacy of resources impacts heavily on the range of data traditionally collected and also leads to a lowering of standards, thus contributing to a deterioration in data quality.

A further issue of considerable importance is how most statistical systems are managed and organized. They are governed by public service rules and management processes. Several DMCs have moved beyond these systems of management by emulating some of the more successful advanced countries that have adopted modern management and corporate business practices. Statistical advancement in the future will demand reforms that will lead to the adoption of sound management practices and more investment in statistical infrastructure and augmented

Box 2.1: The Transition from Centrally Planned to Market Economies

Transition economies in the region face unique problems as they grapple with managing and upgrading their statistical systems. The statistical systems in these countries were designed to serve the needs of an economy that relied upon central planning as the basis for economic management. Thus, all statistical information was collected for central planning, target setting, allocating resources, monitoring performance, and assessing the achievements of the state. The data collection systems in place were based on centrally established standards and methodologies developed in large part by the Soviet Goskomstat. Prescribed concepts, classifications, and modes and frequency of collection, in most cases, differed considerably from those used in market economies in the rest of the world. The underlying conceptual basis for all economic statistics was provided by the net material product system of economic accounting, a system based on Marxist economic theory.

Since all production in the centrally planned economies was carried out by state-owned enterprises, the statistical system was geared toward obtaining comprehensive information from enterprises through standardized forms. All enterprises reported in detail inputs of labor, raw materials used, along with the volume of output. An elaborate system of complete reporting on a monthly, quarterly, and annual basis was in place.

Since prices were set centrally, they did not feature prominently in the collection. The economic accounts of the nation were compiled based on the net material product system. The system treated most service activities as nonproductive and, thus, excluded their contributions to national output.

Apart from the population census carried out every 10 years, all current social statistics were compiled from registers and administrative records maintained in great detail at the local levels by agencies of the Government such as health clinics and schools. Almost all the statistics were generated by administrative processes and represented complete coverage of events and transactions.

Sample surveys were rare, except for a household expenditure survey. However, this survey was not a conventional survey of the type canvassed in market economies. The underlying methodology varied from the one used in the non-socialist world. Households were selected from lists of employees, thus omitting the institutional population in hospitals, prisoners, and elderly peoples' homes. Furthermore, the emphasis was on cash expenditures, not taking into account consumption out of own production. Measures of income were limited to cash receipts. Additionally, the selected households remained on the panel for extended periods of time. Thus, the data generated by the survey were somewhat biased, and did not conform to international standards and concepts.

Certain common indicators regularly compiled in market economies were not attempted in the Soviet Union, as they were not relevant to their circumstances. A case in point was the absence of series such as the unemployment rate, consumer price index, and estimates of public spending in the manner done in market economies.

With the collapse of central planning and the advent of markets, the existing statistical systems were found to be inappropriate. For the past decade, the countries in transition have endeavored to restructure their statistical systems, adapt international standards, and launch new collections of data to reflect better their new circumstances. Progress has been somewhat uneven and much remains to be done.

resources for carrying out a more rounded and policy-relevant program of data collection.

In brief, some countries of the region need to move beyond current paradigms and look to new approaches on addressing statistical needs of users, both public and private. Globalization and the ICT revolution demand that countries review how best they organize their statistical services to serve better the overall goals of economic and social development.

Consequences of Poor Data

Data are important and critical in decision-making at all levels of society. Governments require data to monitor economic and social trends and to craft policies. Macroeconomic data are critical to economic management; social and demographic statistics are essential for measuring living standards and targeting benefits to the most vulnerable groups in a nation. Enterprises are equally dependent on statistical information in decision-making concerning investment, marketing, and other business decisions. Foreign investors and lenders demand reliable and timely data to assess risks and the state of an economy before committing financial resources. Consumers require information in exercising choices.

The East Asian economic crisis of 1997 illustrates the consequences of poor data availability. It was in some respects a reminder of the need for timely and policy relevant data for effective economic management in a globalized world economy. The authorities in the affected countries were for the most part unaware of the build up of nonperforming loans on the books of commercial banks. The available data were inadequate to indicate the serious situation being created in certain sectors of the economy. Foreign investment fund managers were largely in the dark concerning the economic fundamentals. The lack of transparency in the corporate sector, with weak reporting of performance, lulled markets. Data on large corporate foreign borrowings, high gearing ratios, and earnings data were not readily available to regulators and markets. The International Monetary Fund's (IMF) surveillance and monitoring mechanisms failed to anticipate the looming crisis, a fact now acknowledged by governments, markets, and the IMF itself. Indeed, it is more broadly acknowledged that inadequate information flows not only contributed to a failure to anticipate the crisis but also aggravated the magnitude of the crisis. Investment fund managers acted in herd-like fashion, in part because urgently needed data to make sound decisions were simply not available.

In the aftermath of the crisis, a wide consensus has emerged on the need to strengthen monitoring and surveillance based on better and more timely information. The search for better and more detailed early warning indicators has also been redoubled. The IMF has taken a lead in further developing the Special Data Dissemination Standards (SDDS)[16] as a framework for data standards. In crafting the New International Financial Architecture, the role of data takes center stage. ADB for its part has redoubled its efforts in collecting new data sets from member countries to track the recovery from the crisis of 1997 and provided technical assistance to countries. In addition, several governments in the region have begun new statistical initiatives.

Aside from the need for data to anticipate future crises and better manage those that occur, there is greater recognition that the process of globalization demands more and better data in a timely fashion. Investors and financial markets seek greater data transparency before committing their resources in particular markets. Because private capital flows are the main engines for growth, countries that ignore such demands for data are invariably punished in terms of reduced flows, and in more extreme circumstances, by capital flight.

The consequences of poor data go well beyond the macro and financial fields. Weak data on social conditions and labor markets have hindered the design of well-targeted safety net programs to cushion the impact of the crisis. Beyond crisis management, a larger issue is how weak data on poverty incidence and income inequalities has influenced the ability of governments and the multilateral financial institutions from moving rapidly toward the design of new and innovative programs to address poverty. Past failures in poverty reduction programs can, at least in part, be attributed to poor project design and the inadequacy of monitoring mechanisms. Data availability has played a role in both these aspects linked to poverty reduction strategies.

Investing in Data

There can be little debate on the need for investing in data. Governments must include such investments in their priorities and strategies for development. Investing in data needs to be part of creating the infrastructure necessary to underpin the development effort, improve governance, and enhance accountability and transparency. It is incumbent on governments, therefore, to allocate appropriate resources for developing statistical systems; failure to do so will likely marginalize countries in the face of challenges posed by ICT-driven globalization.

Some governments in the region and elsewhere are now more attuned to the need for investing in data systems. These governments are investing in strengthening statistical infrastructure such as acquiring ICT equipment, building registers and sampling frames, and upgrading human resource skills. More attention is also being directed to adopting and adhering to international standards and methodologies. Some governments are also allocating additional resources for recurrent costs of conducting statistical surveys. External assistance in grant form from both bilateral and multilateral donors continues to fund part of the statistical modernization effort. However, the grants channeled to statistical development remain modest and fall far short of needs. A new trend seems to be emerging as a handful of governments, recognizing the importance of investing in data, are now turning to the multilateral financial institutions for loans to support national efforts to strengthen their statistical systems[17]. While external assistance can and does play a catalytic role, committing national resources is vital and critical to reforming statistical systems. The countries that have embarked on statistical reforms are largely middle-income countries, more open to the rest of the world with a commitment to overall economic reforms.

Although both bilateral and multilateral donors[18] have contributed generously toward strengthening national statistical systems through technical assistance programs, the impact has been modest at best. Two main factors explain these outcomes. Technical assistance has been characteristically ad hoc and directed toward specific data collection efforts of interest to a donor, thus not contributing to an overall strengthening of institutional capacities. The second feature worthy of mention is the absence of assistance in efforts to improve management and more effective use of resources. A further contributing factor has been inadequate donor coordination.

However, some small states and the low-income and transition countries continue to hesitate embarking upon a

[16] The SDDS has been conceptualized and formulated as an early warning system after the Mexican crisis. It has evolved to become the vehicle for best practice in the field of economic statistics. Some 50 countries have subscribed to these standards. The IMF has developed a broader standard, the General Data Dissemination Standards,which has an expanded coverage, including socio-economic data.

[17] The Russian Federation has obtained a loan from the World Bank; similar loans are under consideration to other countries that include the India and Ukraine.

[18] ADB has played a significant role by providing Technical Assistance Projects (in Statistics) to more than 16 DMCs. In addition, it has initiated 21 Regional Technical Assistance Programs.

radical restructuring of their national statistical systems. Some countries are pursuing piece meal reforms and introduction of new statistical activities. These efforts are unlikely to lead to a significant change.

While external resources play a critical role, they are by themselves an inadequate force for reform and change. A more critical issue is that of developing a focused overall work program that incorporates policy-driven statistical priorities. An equally critical requirement is that statistical services in the DMCs adopt modern management practices to maximize the use of available resources to deliver outputs. Some DMCs in the region have indeed benefited from adopting such practices, thereby making them better geared to deliver increased outputs with a given quantum of resources. This requires the urgent attention of the national statistical systems in the region. In addition, desirable institutional arrangements are needed for sharing responsibility between agencies for gathering data.

Toward a Policy-Driven Statistical System

Any serious efforts to strengthen statistical systems must start with a strategic view of data needs, not only of governments but also of the entire economy. Defining a work program, consistent with the national policy objectives and goals, represents a first and critical step. A medium-term strategic plan, developed in close collaboration with all users in the public and private sectors, is not a luxury but an imperative. Once a plan is in place, it is incumbent on governments to provide adequate resources for investments and operational budgets. These actions by themselves are unlikely to lead to meaningful improvements in the availability of data and its quality. Such improvements are only likely to emerge if further actions are taken to inject better management practices into national statistical systems. Overall public and civil service reforms to which many governments are committed, have not yet improved

Box 2.2: The 1993 System of National Accounts as a Framework for Data Compilation

The *1993 SNA* extended the production boundary, redefined assets, and extended the scope of the accounts. Both the *1993 SNA* and preceding versions had an overriding goal of providing an integrated accounting framework to capture transactions between economic agents within an economy and its transactions with the rest of the world. The accounts are also designed to measure the output of goods and services, the use of that output through consumption, investment, and trading transactions with the rest of the world. The accounts also help identify shares of the overall value of output accruing to the different factors of production engaged in generating the gross domestic product of the nation. The *1993 SNA* has been accompanied by a revision of industry and commodity classifications. The *1993 SNA*[19] embodies many new features. Aside from updating, clarifying, simplifying and harmonizing the system, the new system provided criteria for delineating the asset and production boundary and introduced the concept of institutional sectors into which the economy can be derived.

The full *1993 SNA*, although ambitious and comprehensive in scope, is flexible and can be adapted to the needs of countries — large or small, and statistically advanced or in transition. The *1993 SNA* looks at an economy as consisting of six major institutional sectors, namely: i) corporate nonfinancial sector, ii) financial corporate sector, iii) households, iv) government, v) rest of the world, and vi) non-profit institutions serving households.

The total output of the above institutional sectors, make up gross domestic product (GDP), a key aggregate measure of economic activity. Thus data gathering can be linked to these institutional sectors and organized appropriately.

Two other major features of the *1993 SNA* merit comment. The system permits disaggregation within each subsector by industry categories in accordance with the International Standard Industrial Classification; it also permits the preparation of the full sequence of accounts covering current, capital, and financial transactions. In most countries, national statistical services rely on a combination of data sources made up of administrative sources, censuses, and sample surveys to compile value added.

Based on this classification, statistical collections can be appropriately organized. For estimating the government's contribution to GDP, the revenue/expenditure and development budgets of the government represent the primary data source. For the non-financial corporate sector made up of all incorporated business — irrespective of size and type of sector activity — most countries obtain data either from tax returns or special surveys of enterprises. The data for the corporate financial sector are generally obtained from statutory returns filed with the central bank. In estimating the contribution or share of households to GDP, most countries rely on a combination of tax records and household surveys of expenditure. The rest of the world accounts are based on the balance of payments, compiled from a combination of data from administrative records and special surveys.

[19] In addition, the *1993 SNA* incorporates several other features such as comprehensive view of the economy by incorporating balance sheets for the economy. The framework is also applicable to all circumstances, irrespective of the stage of economic development. *The 1993 SNA* has emerged as the single unified system for national accounting. The system provides flexibility by permitting variations in the level of detail that countries incorporate in the accounts. By exercising choices, countries can highlight those aspects of their economic features that are important from their viewpoint. However, the *1993 SNA* retains the feature of being an integrating framework for collecting and compiling data. The new system increases the analytical power of statistics.

Box 2.3: Integrating Household Surveys

Households have been conventionally viewed from two perspectives; first as consumer units and second as social entities. As a consequence, statisticians have been driven to carrying out three distinct kinds of surveys. The first of these has taken the form of household expenditure/ consumption surveys, the results of which have yielded estimates of household consumption — used in partial analysis of poverty — and weights for consumer price indices. A second major survey has been directed at collecting labor force data to monitor employment/ unemployment levels. A third group of surveys, mostly ad hoc, have attempted to collect information on issues of interest that include health, education, migration, access to social services, and housing.

The *1993 SNA*, with its emphasis on institutional sectoring, reinforces the dual role played by households as both consumers and producers of goods and services. Fulfilling the data demands of the *1993 SNA* requires that statisticians broaden the scope of the existing household expenditure surveys to obtaining information on household production and income along information on consumption. The broadened content would represent the core elements in an integrated household survey. To meet the need for data on the social dimensions, additional modules dealing with social themes and topics could be incorporated. Several countries in the region have adopted integrated household surveys of the kind outlined above.

The modular structure of the integrated household survey permits the collection of a vast range of social information and enhances the ability to analyze poverty in its various dimensions in greater depth, to permit identification of vulnerable groups, a process necessary in designing safety net programs and targeted assistance for the purpose of eliminating absolute poverty. While countries do have flexibility, as to which modules ought to be canvassed and at what frequency, several countries have included modules on dwellings and amenities available, including activities connected with the collection of fuel wood, and water for household use, access to social facilities, an inventory of items owned, land and livestock holdings, migrant remittances, health and morbidity, and education. These and other modules, reflecting emerging priorities, could generate adequate measures of social changes and permit poverty monitoring.

Most countries carry out labor force surveys (LFS). The LFS, if used as a complementary tool to the integrated household survey described above, represents a powerful vehicle for collecting other data of policy relevance by adding modules that could be rotated. For instance, modules dealing with internal migration, access to social amenities, and social issues could be added to ongoing LFS inquiries without unduly burdening the workload. The LFS, thus, provides a mechanism for collecting policy-relevant data in a cost-effective manner by reducing the need for special ad hoc surveys. A consolidation of the survey programs would yield sizeable saving, which could be utilized to strengthen the overall survey infrastructure, provide resources for better supervision, and result in data improvements.

national statistical systems because statistical services are viewed as a low priority in the allocation of resources.

In formulating strategies for the future development of national statistical systems, the first and foremost step should be articulating a clear set of goals and objectives. The key and central consideration should be that the statistical system generates data that are policy relevant and meet the needs of all stakeholders – government, private sector, researchers, and the public at large. The system should be transparent, cost-effective, and responsive to changing circumstances and needs. These are the hallmarks of a well-functioning statistical system in market economies.

In most DMCs, there is a need to move away from the earlier concept of a statistical system designed to serve solely the needs of government. There has to be a greater understanding of how a modern market economy functions and in which the role of government is to manage the macroeconomic environment, monitor trends, and create the appropriate conditions for a vibrant and healthy private sector. In a market system, it is the private sector that makes key decisions about investment, production, and marketing; and, therefore, the need for extremely detailed data for micromanagement by the government is no longer present. Accordingly, the government's needs for data must be reassessed and reformulated. At the same time, the statistical system must address the needs of other stakeholders. The statistical system has also to pay close attention to the issue of costs. Not just the data gatherers incur these costs but also data providers who need to maintain records to meet the data requests made by the statistical system.

Formulating an integrated statistical work program in the circumstances prevailing in many DMCs presents challenges. Managers of the statistical system, along with the major stakeholders on the user side, need to agree upon a common agenda. The *1993 System of National Accounts* (SNA) offers a broad framework to establish a detailed work plan covering the range of economic statistics. The framework articulates the types of data required for the compilation of the accounts.

While the *SNA* provides a comprehensive framework for economic statistics, there is no comparable overall framework for collecting the social, demographic, and other data sets that are needed. To meet these needs, separate collection arrangements have to be established. For most demographic statistics, the data can be obtained from the census of population and vital registration. Social statistics-health, education, welfare, and living conditions - are for the most part also derived from administrative records supplemented by survey data. Collecting labor market information, vital to measuring trends in employment and unemployment and hours worked, requires special surveys.

While it is generally recognized that household surveys must constitute the main vehicle for collecting of a broad range of social and demographic statistics, some DMCs have not been able to implement a coherent strategy. Resource constraints have prevented some countries from launching a balanced program of household surveys to collect the full range of data required for poverty analysis, tracking social trends, and measuring demographic changes. The general pattern of work undertaken has focused on household expenditure surveys, periodic labor force surveys, and other ad hoc surveys covering themes such as health and nutrition, and education. While the approach adopted has provided some policy-relevant data, the absence of a coherent and balanced program has only generated point estimates and permitted some partial measurement of trends. User dissatisfaction with the outputs generated, particularly in relation to the time taken to process survey results, has contributed to the vicious cycle of having less allocation of resources and creating general disenchantment with survey outputs. Statistical offices, under user pressure, have spread available resources thinly across multiple surveys which strain and stretch available capacities. Thus, social statistics are not as developed as economic statistics in most DMCs. Continuing the current approach is unlikely to improve significantly the availability of data.

A new strategy, based on integrating data collection from households that economizes on resource use, offers the best prospect of significantly improving data availability. Integration will also lead to the ability for more sophisticated and focused analysis of the socioeconomic scene, permitting the evolution of better policy tools. That strategy calls for a program of integrated household surveys and incorporates flexible use of modules.